

ABSTRACT

Michael Purser, PUMP UP THE VOLUME: AMPLIFYING STUDENT DIALOGUE IN 21ST CENTURY ELL CLASSROOMS (Under the direction of Dr. Matthew Militello). Department of Educational Leadership, March 2019.

Purpose: This Focus of Practice aimed to create a new, equitable classroom environment for English Language Learner (ELL) students at the Thai Chinese International School. The study sought to: (1) create classrooms that are full of lively discussions, respectful conversations, and based in rich literature; (2) cultivate democratic and equitable classroom structures that encourage an atmosphere where students' voices are used, heard, acknowledged, and respected; and (3) employ appropriate technologies toward the goal of increasing student communication, collaboration, critical thinking, and creativity. Research Methods: Using the participatory action research method over three cycles of research, I memoed my observations; collected artifacts of work including journey lines, videotapes, and ThinkTrix Templates; and I transcribed dialogue with students, ECU professors, and the TCIS administrators. The project's data that were qualitatively analyzed included: interview transcripts, observations, dialogical and artifact feedback, surveys, and Socratic Seminar mappings. Findings: The study revealed that middle school literature teachers of ELL students can foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century learners. Implications for Practice: These goals can be accomplished by devoting time to building bonds with the ELL students and encouraging them to build bonds with each other. Perhaps opening circles are the most dynamic way I found to build those relationships. Academic interaction around literature can also be improved through the use of dialogue in both small and large group settings. Specifically, talk that uses ThinkTrix questions in small groups and Socratic Seminars in large groups improve dialogue and academic interaction. Finally, using technologies like the

ThinkTrix Template, Flipgrid, and Google Docs helps students to dig deep into literature and develop roots that feed higher level critical thinking and evaluation skills. During three cycles of PAR research, relationships flourished, student dialogue exceeded expectations, student understanding of literature was augmented, and I matured as a teacher and leader who models, coaches, and teaches these new skills to colleagues.

PUMP UP THE VOLUME:
AMPLIFYING STUDENT DIALOGUE IN 21ST CENTURY ELL CLASSROOMS

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education in Educational Leadership

by

Michael Purser

March, 2019

©Copyright 2019
Michael Purser

PUMP UP THE VOLUME:
AMPLIFYING STUDENT DIALOGUE IN 21ST CENTURY ELL CLASSROOMS

by
Michael Purser

APPROVED BY:

DIRECTOR OF DISSERTATION: _____
Matthew Militello, PhD

COMMITTEE MEMBER: _____
David Siegel, PhD

COMMITTEE MEMBER: _____
Lynda Tredway, MA

COMMITTEE MEMBER: _____
Marjorie Ringler, EdD

CHAIR OF THE DEPARTMENT OF EDUCATIONAL LEADERSHIP:

Marjorie Ringler, EdD

DEAN OF THE GRADUATE SCHOOL:

Paul Gemperline, PhD

DEDICATION

This PAR Dissertation is dedicated to Dr. Frank Lyman. His work in metacognition gave me new insight on how to become a better practitioner. His willingness to offer feedback and assistance throughout my EdD journey was invaluable to me.

ACKNOWLEDGEMENTS

Many people have earned my gratitude for their contribution to my time in graduate school. Specifically, I would like to thank four groups of people, without whom this dissertation would not have been possible: my advisors, my co-practitioner researchers, my colleagues, and my family.

My Advisors and Mentors: I would like to express my sincere gratitude to Dr. Matthew Militello and Professor Lynda Tredway. Their continuous support, advise, patience, guidance, motivation, and knowledge helped me to become a better educator, leader, and researcher. I cannot imagine better guides for this extraordinary journey.

My Co-Practitioner Researchers: I would like to thank 19 amazing young 7th Grade students who agreed to take this journey with me and inspired me every day. I will be forever blessed to have taken this journey with such a remarkable group of learners.

My Colleagues: I would like to thank my Head of School, Dr. John McGrath, for his unwavering support of this project and countless hours of advice and guidance. Also, Mr. Thomas English, High School Principal, for being a constant supporter, sounding board, the voice of reason, and friend.

My Family: I would like to thank my family: my mother, my aunt and my sister for supporting me spiritually in my education and my life in general. From humble roots in Alabama, they always put education first and helped me in high school, college and graduate school. Last but not least, I want to thank my long-term companion Prem for his patience during this long journey. This dissertation would not have been possible without him.

TABLE OF CONTENTS

	Page
TITLE.....	i
COPYRIGHT	ii
SIGNATURE.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES	xv
LIST OF FIGURES	xvi
CHAPTER 1: NAMING AND FRAMING THE FOCUS OF PRACTICE	1
Focus of Practice	3
Rationale for Focus of Practice.....	4
Influence of Place on the Project	5
Overview of Assets and Challenges	6
Primary and Secondary Drivers for Project Success	11
Theory of Action	13
Significance of the Focus of Practice	14
Focus of Practice Research Questions.....	16
Action Research Design Overview	17
Summary.....	18
CHAPTER 2: LITERATURE REVIEW	20
Re-imagining Schools for Active Democratic Spaces	22
Criteria of Experience	24

Intuitive Learning.....	26
Dialogic Thinking	28
Discovery Learning.....	29
Creativity	30
Democracy.....	31
Current Technology Landscape	32
International Standards for Technology.....	34
Global Competencies	39
Communication.....	41
Collaboration	42
Critical Thinking.....	42
Creativity	43
21 st Century Learners' Capacities.....	45
Technology Use in Schools.....	47
The Pros and Cons for Learning Technology in School.....	49
Challenges of the New Technology: Teacher Capacity.....	54
Talk, Dialogue, and Conversation.....	57
Academic Discourse	58
Socratic Seminars.....	59
ThinkTrix.....	63
Flipgrid	65
Google Docs	66
Conclusion	67

CHAPTER 3: CONTEXT	69
Place.....	72
Leadership Focus	73
Governance Concerns	74
Student Achievement and Opportunities.....	76
Personal Education History.....	77
Evidence of Focus of Practice.....	81
Political Environment	83
Action Research Group.....	85
Wisdom of People	87
My Role	90
CHAPTER 4: ROOTED IN PAR.....	92
Theory of Action	95
Action Research Design.....	96
Cycles of Action Research.....	97
Cycle One: Fall 2017	97
Cycle Two: Spring 2018	101
Cycle Three: Fall 2018.....	101
Participants	103
Data Collection	103
Memos.....	103
Artifacts of Work.....	104
Interviews	105

Observations	105
Data Analysis	106
Role of Reflection/Praxis	108
Confidentiality and Ethical Considerations	108
Summary	109
CHAPTER 5: PARTICIPATORY ACTION RESEARCH CYCLE ONE: BUILDING THE FOUNDATION	110
Cycle One Actions.....	110
Building Relationships with Students.....	110
Building Relationships with Adults	117
Building Academic Discourse Skills	121
Conclusion.....	124
Building Communities Aimed at 21st Century Learning.....	124
Choice Leads to Increased Trust to Take Academic Risks.....	125
Choice Encourages Students to Work Together More Cooperatively.....	126
Choice Leads to Decreased Behavior Issues	128
Building Lifelong Readers	129
Regular Sustained Reading Times	129
Introducing Literal, Inferential, and Critical Thinking Skills.....	132
Accelerated Reader	135
Building Critical Thinking Skills.....	136
Encouraging Student Dialogue and Voice: Flipgrid.....	136
Encouraging Student Dialogue and Voice: The ThinkTrix Template	137
Encouraging Student Dialogue and Voice: Socratic Seminar	139

Technology Supports Critical Thinking	142
Summary	146
Employing Interactive Technologies to Increase Student Dialogue.....	146
Employing Technology that Transfers to Classroom Discussions	148
Engaging Adults to Improve my Own Educational Leadership Skills	150
Conclusion	151
CHAPTER 6: PAR CYCLE TWO: MÉLANGE OF EMERGENT INTELLECTUAL CURIOSITY	153
Cycle Two Actions: Relationships for Deeper Learning.....	153
Strengthening Academic Discourse Through ThinkTrix, Socratic Seminars and Online Reading	154
ThinkTrix.....	154
Socratic Seminars.....	154
Online Reading Programs	155
Technology	155
Mélange of Skills Converging	155
Strengthening Relationships with Students.....	156
Daily Greetings	156
External English Class Activities	157
Student-Teacher Conferences.....	159
Clarifying Use and Understanding of ThinkTrix.....	159
Goal-setting	161
Building Relationships with Adults	162
English Department Novel Selections	162

The TCIS Speech Contest	163
Importance of Relationships	164
Key Emergent Findings: Tectonic Shifts for Listening and Questioning.....	164
Strengthening Academic Discourse Skills	165
ThinkTrix and Flipgrid: Supporting Students’ Thinking	165
Socratic Seminar One: Deeper Connections and Enhanced Academic Discourse	175
Seminar One (January): Evidence of Active Engagement.....	177
Socratic Seminar Two: Evidence that Deeper Discussions Augment Participation.....	184
Summary of Strengthened Academic Discourse Skills in Cycle Two	187
Analysis of the Evidence: A Journey into the Mind.....	188
Humanizing Conversations	188
The Importance of Choice in Academic Dialogue	189
Importance of Social Interaction in Academic Discourse.....	191
Importance of Technology in Academic Discourse.....	192
Importance of Suitable Literature in Academic Discourse	193
Importance of Combining Deep Dialogue, Student Choice, Various Technologies and Rich Literature.....	195
I Have Something to Say: Exploring Voice with Teachers at the TCIS	195
Top Down Approach to Leadership at the TCIS	196
Bolman and Deal’s Four Frames	198
Contemplating the Four Frames in Relation to the TCIS.....	199
Structural and Human Resources Frames at Odds at the TCIS	201
Importance of Voice in Organizations	205

Transformations in Leadership: Adults and Students.....	206
Transformations in Leadership with Adults	206
Transformation in Leadership with Students	208
Mélange of Emergent Intellectual Curiosity.....	209
CHAPTER 7: TRANSFERENCE	211
Equitable and Democratic Spaces Provide Sustenance for Strong Relationships	211
Circles Strengthen Gracious Voices	212
Co-Creation of Documents Augments Democratic Space and Student Equity	218
A Garden of Gracious Dialogue Begins to Grow	220
Reading Comprehension Crucial for Cultivating Lifelong Learners	233
Conclusion: Relationships Blossom, Leaders Grow, and Seeds for Change Planted	239
CHAPTER 8: AMASSED DIALOGUE.....	241
Digging into the Findings: Understanding and Reanalysis of Findings.....	244
Creating Democratic Space	245
Honoring Different Types of Thinking	247
The Power of ThinkTrix.....	248
Relationships Should Come First	251
Conversations Improve Reading Comprehension	253
Dialogue is Imperative in ELL Classrooms	254
Summary	257
Assertions from the PAR Project	258
Theories of Transformational Changes at the TCIS.....	263
Re-Informed Framework 1	264

Re-Informed Framework 2	267
The Progression of Transformation from the Original Research Questions	270
Summary	271
Implications	272
Practice	272
Policy.....	275
Future Research	276
PAR Research Questions, Redux	283
ECU Framework, TCIS Context, and Limitations	287
ECU EdD Framework.....	287
TCIS Context.....	287
Limitations.....	289
Summary	290
Conclusion	290
REFERENCES	293
APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER.....	312
APPENDIX B: PERMISSION LETTER.....	313
APPENDIX C: TECHNOLOGY TOOLS AND THEIR USES	314
APPENDIX D: I'M BECOMING AN EXPERT AT THE TCIS HYPERDOC.....	315
APPENDIX E: THE ONE WORD HYPERDOC	316
APPENDIX F: ONE WORD HYPERDOC CREATED ON PADLET	319
APPENDIX G: JOURNEY LINE OF READING	322
APPENDIX H: JOURNEY LINE OF TECHNOLOGY	328

APPENDIX I: THE REIMAGINED THINKTRIX TEMPLATE	335
APPENDIX J: ENJOYMENT OF READING.....	341
APPENDIX K: ACCELERATED READER POINTS GOAL FOR QUARTER 1	343
APPENDIX L: FLIPGRID DISCUSSION OF LITERAL, INFERENTIAL AND CRITICAL THINKING SKILLS –TRANSCRIPTIONS	344
APPENDIX M: THINKTRIX STUDENT RESPONSE AFTER READING THE GIVER.....	351
APPENDIX N: SAMPLE FLIPGRID VIDEO TRANSCRIPTIONS FROM JANUARY 2018.....	352
APPENDIX O: NEWSELA DATA FROM 2017-2018	353
APPENDIX P: TCIS ENGLISH REQUIREMENTS FOR 2018-2019.....	354
APPENDIX Q: STUDENT EXAMPLE OF TEXT ANNOTATION.....	356

LIST OF TABLES

1. Logic Model.....	98
2. Linking Research Questions to Data Collection.....	107
3. Journey Line of Reading Themes	116
4. Socratic Seminar Student Response Memos	140
5. Socratic Seminar Student’s Changed Opinions After the Discussion.....	143
6. Daily Student Greeting	158
7. ThinkTrix Flipgrid Video Questions January 2018	167
8. ThinkTrix Flipgrid Video Questions April 2018	168
9. One Word that Best Describes Independent Reading Novel.....	171
10. ThinkTrix Flipgrid Video Questions September 2018.....	226
11. One Word Comparison.....	228

LIST OF FIGURES

1. Fishbone diagram	7
2. Framework for focus of practice	10
3. Driver diagram	12
4. Roadmap for literature review	23
5. International society for technology in education: Seven standards	36
6. Partnership for 21 st century skills: 4Cs	40
7. Circle of resources and support: Assets.....	89
8. Action research cycles	102
9. One-word HyperDoc from Padlet	114
10. Student reading for pleasure increases	131
11. Example of LIC annotations	133
12. Themes and codes	176
13. Socratic seminar in action.....	178
14. Socratic seminar character chart.	180
15. Socratic seminar of <i>The Hobbit</i> seminar discussion	182
16. Socratic seminar map of <i>The Lorax</i>	185
17. Examples of student document book journey.....	235
18. Book goals for new year	236
19. Member check for growth as a reader.....	238
20. Re-informed framework for 21 st century democratic classroom space.....	265
21. Re-informed framework for metacognition.....	269

CHAPTER 1: NAMING AND FRAMING THE FOCUS OF PRACTICE

The traditional classroom once was, and too often still is, a place in which the teacher is the sole giver of information, sharing this information with students in lectures and limited discussion (Tyack & Cuban, 1995). As computer technology has been introduced into classrooms, the role of the teacher has slowly started to change. The ideal teacher of the 21st century is not the holder or keeper of information who then disseminates it to students but one who facilitates students in gathering, analyzing, and creating representations of their own knowledge in multiple ways. According to Dewey (1938), involving learners in their own education and direction in their studies is vitally important to the learning process because it gives them a stake in their learning; it authorizes them as learners and, in turn, that growing autonomy ensures that they are informed citizens in a democracy. However, teachers must be knowledgeable of different pedagogical approaches and fully understand how students learn, enabling them to choose appropriate technologies for stated outcomes and subject matter; teachers also should be comfortable in learning and teaching these technologies to students as needed. Classroom instruction that views teachers as facilitators and students as informed and inquiring participants in the learning supports more equitable classroom dialogue as a foundation of the learning. And, particular technologies like asynchronous video and synchronous writing tools can be helpful in English literature classrooms to encourage the equitable communication behaviors among students that are the foundation of equity and excellence in 21st-century schools (Equity and Excellence Commission, 2013).

As more teachers implement supplementary technology and start to take a more facilitative role in the classroom, abandoning their position as authority and embracing roles as guides and co-learners with students, it is important to ensure that all students' voices are heard

and that every group experiences its views as respected and acknowledged. The best teachers co-construct knowledge in the classroom and give students an active voice that make them a participant in their studies (Vygotsky, 1978). Freire (1970) expressed that learning is a social act where teacher and student converse and create knowledge together. To engage contemporary students, who are much involved with social uses of technology in their daily lives, teachers must move from the traditional classroom environment to one that both engages critical thinking strategies and that encourages students to think deeply, share their voices, and improve communication of what they learn. Freire's social learning concepts give support to teachers putting communication and collaboration at the forefront of their classrooms.

With the advances in technology for educational settings, groups like the Partnership for the 21st Century (2016) were established to help teachers prepare students to be successful in their studies and their future workplaces. If teachers wish to adequately prepare students for the 21st century, there are certain skills students need for success. Among these skills are the ability to communicate, collaborate, critically think, and create, and to do these using technology when useful (Partnership, 2016). By putting building blocks in place that facilitate the advancement of 21st-century skills, administrators and teachers can encourage students to share their voices in a respectful and collaborative manner.

I chose this Focus of Practice because I have spent years watching second language learners struggle, and I believe that supporting middle school students at the Thai-Chinese International School (TCIS) in Bangkok, Thailand with key tools that improve their chances of success, currently as students in middle school and later as successful adults, can be accomplished. Furthermore, from an administrative position as a new Principal and past Curriculum Coordinator at this school, I believe that the English teachers with whom I

collaborate can benefit from the use of such tools with their students as well, creating a need for specific professional development workshops and outcomes.

Focus of Practice

The title of the action research project is “Pump Up the Volume: Amplifying Student Dialogue in 21st Century ELL Classrooms.” The Focus of Practice is to implement democratic structures in the classroom that support collaborative, inquiring, and equity-driven learning that engages student dialogue in genuine and thoughtful ways to prepare students as 21st-century learners. The purposes of this action research project are:

1. to create a classroom environment that is full of lively discussions, respectful conversations, and based in rich literature;
2. to cultivate democratic and equitable classroom structures that encourage an atmosphere where students’ voices are used, heard, acknowledged, and respected;
3. to employ appropriate technologies toward the goal of increasing student communication, collaboration, critical thinking, and creativity.

Thus, the purpose of this study is to create a classroom environment that promotes active and equitable dialogue by cultivating students understanding of literature through the use of communication, collaboration, critical thinking, creativity, and technology.

Equitable dialogue is defined as dialogue that is respectful and kind and that demonstrates students listen to their classmates. Collaborative documents are defined as documents in which a small team of students work on at the same time. The study is particularly well-suited for the TCIS because the students are from two different cultures (i.e., Thai and Taiwanese/Chinese, hereafter known only as *Taiwanese*) and do not always behave and speak respectfully to their peers from the other culture; additionally, this study is well-suited to the

TCIS because students' reading comprehension, conversational skills, and writing skills (both individual and cooperative) are major areas of concern for the school overall.

Rationale for Focus of Practice

I chose this Focus of Practice because (1) educational settings often are largely teacher-centered, and I want to ensure that my classrooms become more student-centered; (2) most classroom dialogue is teacher-directed and seldom student-driven; and (3) although many educational settings use technologies to encourage students' uses of their voices and ways to collaborate, the TCIS does not adequately use such technology to create opportunities for dialogue in the classrooms. Therefore, the students are missing critical thinking and interaction skills needed to be productive citizens in the 21st century. I have an interest in this Focus of Practice because I value providing choice to students and encouraging them to feel more comfortable utilizing their voices in small-group and whole-class discussions. I also have an interest in technology, having worked for over fifteen years in the technology industry, and I see the usefulness of having technology integrated in classroom and students using technology to support student thinking and dialogue. When I returned to teaching five years ago in Thailand, I was disappointed to find that technology that aids communication skills outside education was not being applied in my school or in other international Asian schools with which I have become acquainted. In addition, I have recently become acutely aware of the ways that technological applications can support more democratic and equitable spaces for student learning. Particularly, I decided to examine how critical thinking strategies and certain educational technologies can create more equitable discussions in my classroom and how that helps shift the typical teacher-student dialogue to a more student-created approach in which students direct their own dialogue.

Another reason that I chose this Focus of Practice is that when I started teaching at the TCIS in August 2016, I noticed there was little consistency in classroom dialogue or with using technology to support dialogue in the school. The teachers at the TCIS were not consistent when it came to integrating educational technology, and while many did use some form of technology—like email, for example—in the classroom, the clear majority used very little to no technology in their classrooms. I interviewed several teachers in the middle school and learned that some teachers and administrators are resistant to change, and some believed that technology actually interferes with learning. Specifically, one teacher stated that if students use their laptops that they may play games instead of doing assigned work. A few teachers at the TCIS and other Asian international schools are traditional and indicated that they believe the “old school” method of teaching by lecture is sufficient, and they do not need to incorporate new strategies in the classroom.

Influence of Place on the Project

However, the “old school” method does not address what some experts believe are skills needed for 21st-century learners (Partnership, 2016), and it does not give students the active learning space they need to be independent thinkers and learners (Bruner, 1960; Cuban, 2016; Labaree, 2008). As someone who not only is technology savvy but who embraces new technology, I wanted to find a way to help myself and teachers learn new things that they can utilize in their classes. As an English teacher and as the Head of the English Department, I believe it is my responsibility to champion student discussion, the critical thinking needed for it, and the use of appropriate technology to encourage increased, interactive student dialogue in all my classrooms and in my department overall.

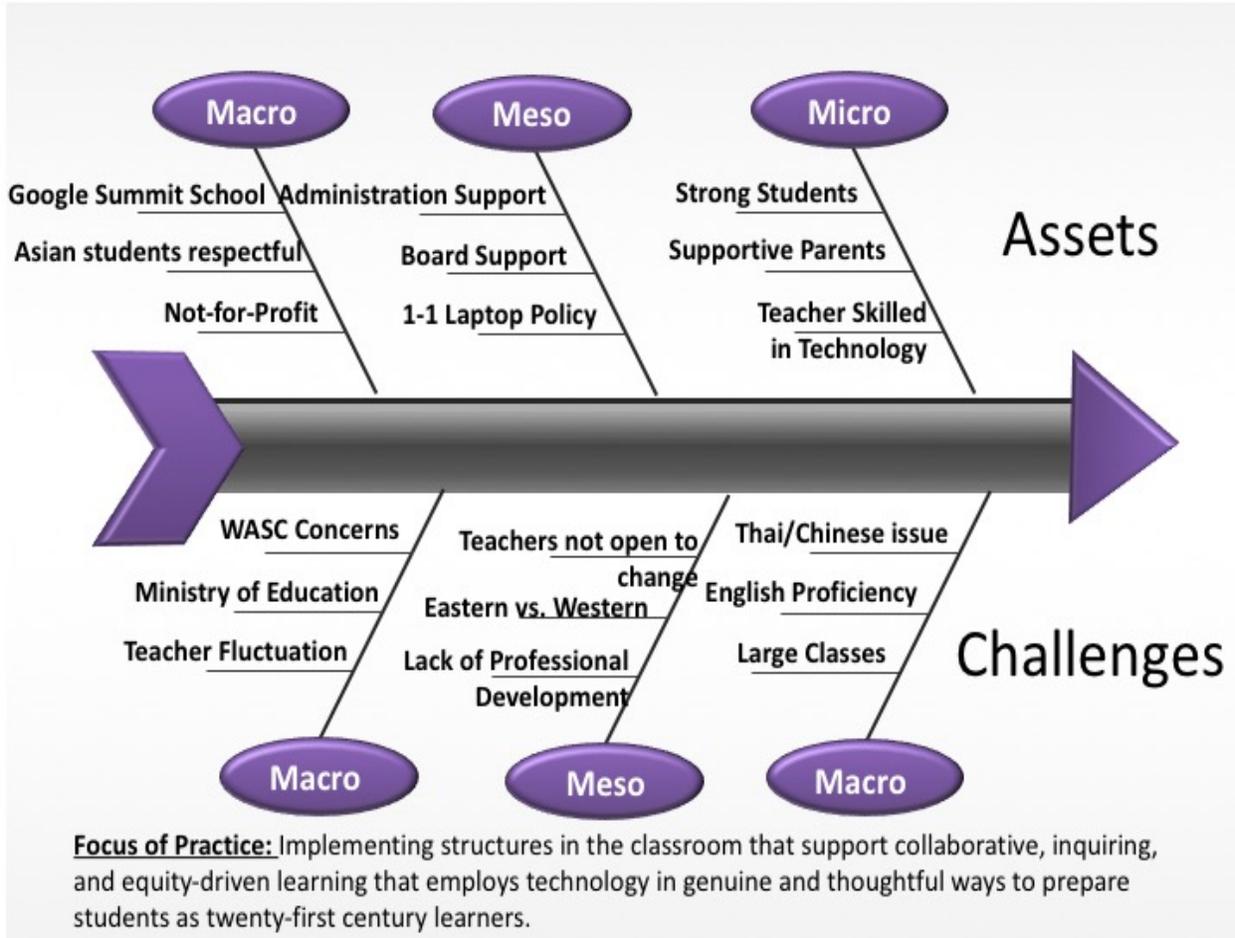
The TCIS is the location for the Focus of Practice. It is a second-tier, international school in the Bangkok suburbs. The students are mostly from middle-class families. The school touts itself as being the best school in Thailand when academics and costs are compared. It is comprised mostly of Thai nationals, but about 35% of the students are of Taiwanese descent. As I have observed during class interactions, there exists cultural differences between the Thai and the Taiwanese students, sometimes exhibited by spoken and physically expressive disregard for Thai classmates by the Taiwanese students. Equity issues about how students view themselves or others influence these students in the classroom and is discussed in greater depth in Chapter 3, which focuses specifically on the context of the study. Students in this school are multilingual in Thai, Chinese, and English. I teach them as English Language Learners (ELL) as they are students who are learning the English language in addition to his or her native language.

Taiwanese nationals manage the Board of Directors, and they make all decisions in the school. All financial expenses must be approved by the Board of Directors, and they adhere to strict budget constraints that are approved one year in advance. It often takes this board one or two years to debate and decide before approving any changes or expenses. Technology changes very fast, and the lag time for the board to make decisions often prohibits the use of current technology unless it is free of cost. The issue of cost is one reason that I chose two particular software for this study; both Flipgrid (flipgrid.com on a basic subscription) and Google Docs are free to students and educators.

Overview of Assets and Challenges

Several assets and challenges have influenced the success of the project (see Figure 1). I have needed to be concerned about the micro level at the classroom and in the English department, but there are organizational or meso-level factors that influenced my action space.

Fishbone Diagram



Note. Adapted from Bryk, Gomez, Grunow, & LeMahieu, 2015.

Figure 1. Fishbone diagram.

At the micro level, my experience of fifteen years in the technology industry and as a longtime classroom teacher is an asset because I bring together two knowledge and skill sets (i.e., teaching English literature and comfort with technology) that are useful to the project. However, teaching in a student-centered classroom has not been something I fully understood or did prior to this project. As other assets, the TCIS has generally strong students and good administrative support, but sometimes the general tendency to fall back on traditional teacher-centered classrooms is overwhelming. Lack of professional development in the school and large class sizes were potential challenges for the study. Another challenge was that in our informal conversations, TCIS teachers have expressed reluctance to change the ways they teach, how they structure classroom discussions, and whether they would use educational technologies. In a connected circumstance, the TCIS has a Technology Unit, but the budget changes from year to year and the unit rarely offers professional development for teachers other than the Google Summit held in Bangkok each year. Finally, unforeseen political challenges in schools at the meso level almost always affect change projects, and there was the chance that such challenges would negatively affect my ability to support other teachers in learning about classroom dialogue and technology to help develop strong classroom dialogue. While I did not expect macro influences to affect this project, I was concerned that any budgetary decisions about introducing new software must be approved by the board, which, as stated earlier, influenced my decision to use no-cost software for this study.

When I started at the TCIS in 2016, there was no required curriculum in place to be passed on to new teachers although basic guidelines and some general unit suggestions for completion were provided. As new teachers arrived, they designed their own curricula and specific units of instruction. There were no new textbooks for the English Department, and class

sets of books were limited. The library did have classroom sets of English textbooks, but these were from 2001 and had been used by at least fifteen different year groups. The library had class sets of novels, but most of them were old, in poor condition, and several were missing pages. Missing from the collection were current books that middle school students should have been studying. New teachers were told to teach the standards for the Common Core English Language Arts (2010) strands and given leeway on how to teach those specific parts of the Common Core standards, but they were not offered particular materials when I started teaching in 2016.

Technology was not often integrated into TCIS classrooms in a way that encouraged equitable dialogue and collaborative work. By this, I mean that when teachers used Google Docs, they typically used limited functions of this application. For example, the collaborative aspects of Google Docs were not fully utilized to take advantage of collaboration tools that the program affords for improving equitable dialogue. The primary goal of this study was to create a classroom environment that promotes active and equitable dialogue by cultivating students' understanding of literature through the use of communication, collaboration, critical thinking, creativity, and technology.

Figure 2 represents the conceptual frameworks that influence this study and may be resonant in some of the assets and issues of the fishbone. As an action research project entails creating change inside the school and in the community, the framework diagram illustrates how the philosophical, socio-economic, psychological, economic, and political frames may affect the community. From the philosophical perspective, this project is important to the development of students' morals and ethics. It places importance on both interdependence among students and independence of the students. From the sociocultural framework, this project provides students with concrete mechanisms or strategies to develop interconnectedness with peers. It places

Framework for FoP

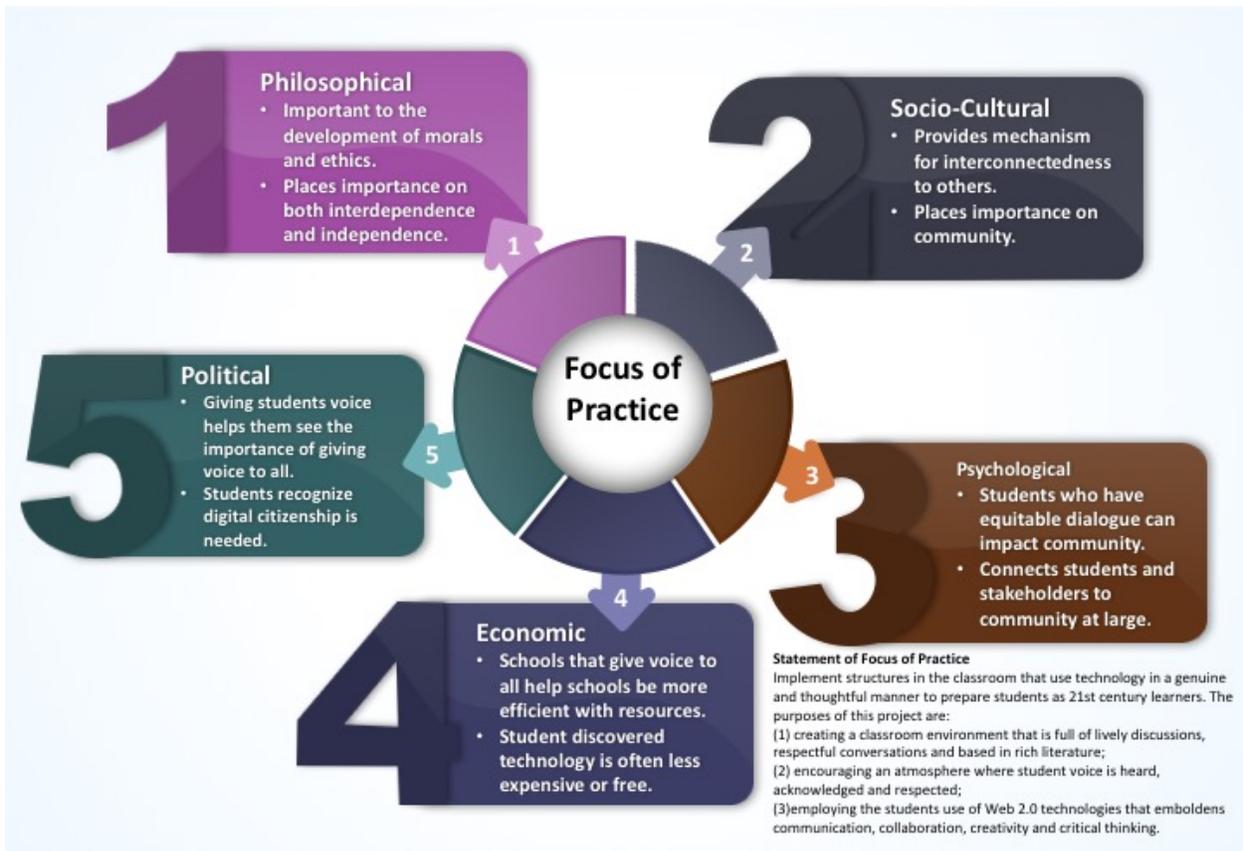


Figure 2. Framework for focus of practice.

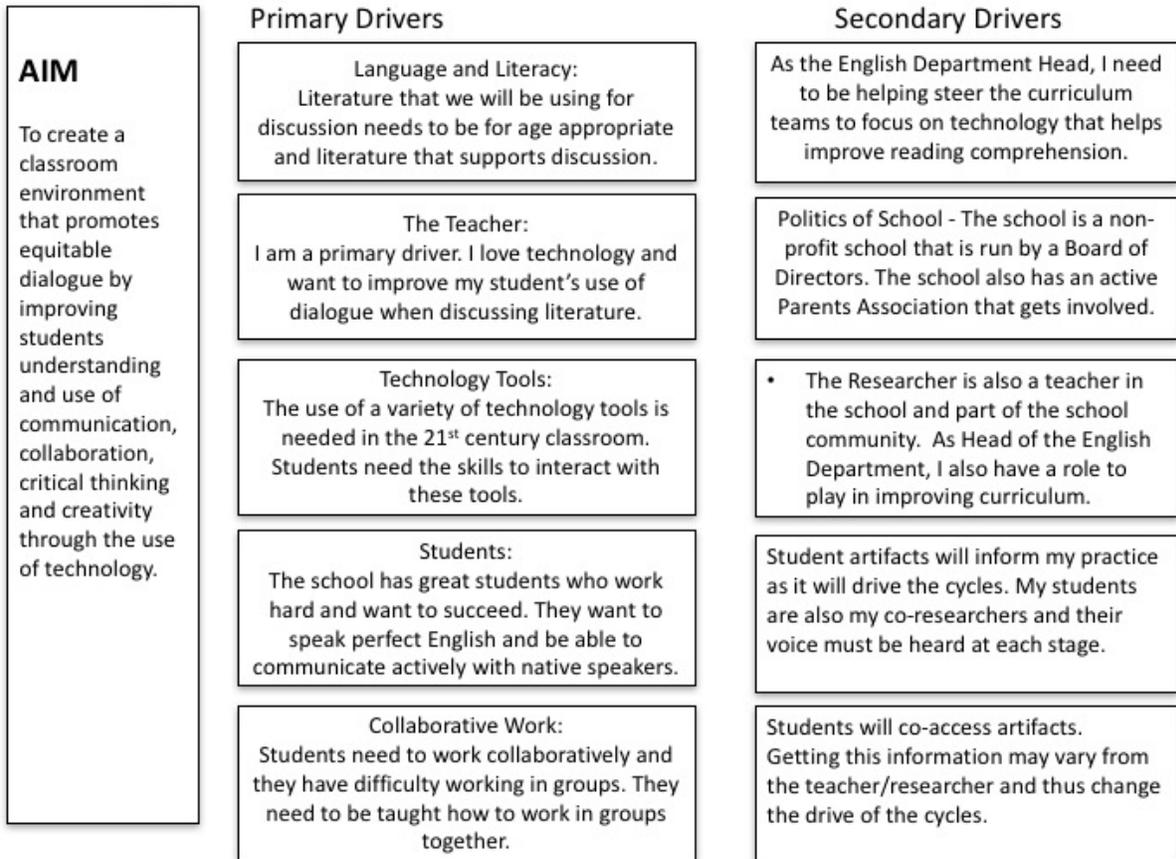
importance on the community (as well as the individual while not detracting from the individual). From the psychological perspective, this project poses the belief that those students who can interact in an equitable dialogue can impact the classroom community as a whole. Psychologically, students and other stakeholders are connected outside the school to society at large. From the economic perspective, when a school encourages all students to use their voices, theoretically the resources can be more efficiently used. When students are engaged to look for useful educational technologies, they may find ones that are less expensive or even free of cost. Finally, from the political perspective, the experience of have a voice and opportunities to use it can encourage students to see the benefit of everyone having such an opportunity. As a bonus, when technology is used in developing opportunities to express oneself, students may recognize the value and necessity of digital citizenship. Figure 2 illustrates how that this project's particular Focus of Practice can greatly benefit the TCIA students, school and community.

Primary and Secondary Drivers for Project Success

Concerns about the potential challenges that might arise aside, the TCIS was an excellent environment to conduct a research study using technology to improve student voice in the classroom in part because school colleagues were pleased to support the study. The TCIS is supportive of teachers working toward advanced degrees, possibly because the current Board of Directors requires that their upper administration all have doctorates, and they have stated that providing space at the school to conduct research is one of their goals.

In the Driver Diagram (see Figure 3), there are several primary and secondary drivers that are in play that necessitate this study at the TCIS. One of the primary drivers is me. As a researcher and a Grade 7 and Grade 8 teacher at the TCIS, I spent one year observing students in the school, and I observed that they enjoy using technology but their laptops often sit inside their

Driver Diagram



Note. Adapted from Bryk, Gomez, Grunow, & LeMahieu, 2015.

Figure 3. Driver diagram.

desks because many teachers do not take advantage of it for appropriate and useful educational purposes such as to improve dialogue and foster equitable classrooms. This driver is especially important because in an action research project, my role will be that of a *catalyst* for change rather than an *imposer* of change on the setting; a catalyst stimulates people to change rather than requires it of them (Stringer, 2013). When I asked my students what they would like to see change in the school many said that they wished to use their laptops and mobile devices in more classes. When questioned about how many other teachers used Google Classroom, my students stated that most have a Google Classroom but they rarely used it after the first week of the year to view the class syllabus. Other primary drivers include language and literacy learning, technology tools, the students themselves, and collaborative work. Secondary drivers include my administrative work as the English Department Head, the school's overall politics, my dual role as researcher/teacher, the need to gather student artifacts, and the specific uses of technology to enable students to co-create and co-access those artifacts. Of particular importance as a secondary driver, the school's curriculum needs to be in place for all teachers to encourage technology integration. As the Head of the English Department at the TCIS, I want to start embedding current useful technologies into the curriculum.

Theory of Action

I believe that fostering democratic classrooms structures is one of the more important goals of education (Dewey, 1938; Labaree, 2008). As such, I became committed to analyzing dialogue in the classroom and how the use of new critical thinking approaches and technologies could be an asset to students and teachers in creating student-centered classrooms. Beneficial technologies enable students to learn and demonstrate equitable dialogue, and I perceived that collaborative education would benefit my TCIS Grade 7 students and the entire school

community. Creating an equitable learning environment that empowers students to take more direction in their learning enables students to use their newly learned critical thinking skills, practiced in part through technology, potentially fostering this dialogue and transferring it to all classroom discussions. I reasoned that if I could facilitate democratic classroom pedagogical methods and engage educational technology that foster dialogue among students, the students would assume collaborative ownership for academic tasks, demonstrate their ability to engage in cross-cultural groups to complete projects and tasks, and assume responsibility for maintaining equitable classroom dialogue. Finally, I thought that if I could analyze and share the pedagogical and technological practices with fellow teachers, more English teachers at the TCIS would adjust their teaching practices to include student-centered learning and dialogue and use some educational technology effectively in their teaching.

Significance of the Focus of Practice

When I walk into school each day, I am normally one hour early. Over 40 students are there waiting for school to start. Each of them is using a laptop, mobile phones, tablet, or game device. They wake up and go to bed answering email and surfing the Internet. However, many teachers have yet to tap into the interest students have in technology to connect them to learning, and, by so doing, changing the traditional methods of teaching and learning. It is patently obvious that students learn differently than they did twenty years ago, and the role of teacher needs to shift from the purveyor of information to the role of facilitator (Dewey, 1938). However, many schools and classes rely on the same teacher-centered approach to schooling that was used in the nineteenth- and twentieth-centuries: desks in rows, teacher lecture to student note taking, teacher-generated questions. Nonetheless, practices of critical thinking applied to dialogue and uses of educational technology allowing instant communication are important to

students whose social lives revolve around technology; these should be a consistent part of their academic lives, too.

Furthermore, in a global world, all students deserve to learn in ways that we know increases their knowledge and their capacities as self-directed learners who are not only national citizens but global citizens. Educators have known the value of high-level academic tasks and cooperative learning for a long time, but they continue to teach as they were taught and hope for different outcomes. Instead, I want my students to see the value of using meaningful classroom dialogue through pedagogies that strengthen their ability to think, read, speak and write as well as use 21st-century technology tools in their learning. I want to persuasively demonstrate that student-centered classrooms are possible and better, share that knowledge with teachers, and show exactly how that type of learning can be a creative force for change not only at the TCIS but also as we send students as effective communicators and global citizens into high school and the world beyond. Specifically, this project is significant because it engages students as key persons who can engage in reflection to act. They co-created knowledge and understanding with me; and they shared how new pedagogical processes contributed to their learning, their sense of themselves as learners, and their relationships with each other.

In this study, I fostered dialogue and tested how different technologies that were new to my Grade 7 and Grade 8 TCIS students or were new in how students used them promoted dialogue and empowered student voices. Grade 7 students had not used Flipgrid before this study and their use of this technology was new to them. Students were familiar with Google Docs as the TCIS is a Google Education school. However, they had not used Google Docs in a collaborative environment to co-create documents. While I implemented technology, I also modeled appropriate communication strategies in group and individual settings. I evaluated the

end projects and determined at each stage whether more modeling was needed. Once I gave students a chance to practice something new, I met with them to learn whether and how the new skill was useful to them and something they believed advanced their educational goals.

Both critical thinking and the educational technologies that can foster it often are underutilized in schools, and sometimes students are introduced to new pedagogies without the necessary framework for success; in such cases, failure may be inevitable. School administrators should be willing to see what enhances learning in classes and offer training to staff to learn about them. One of my hopes for this study is that TCIS Administrators and the Board of Directors would be prepared to invest in new technology that will deliver success for students.

Overall, this project has potential significance for the students in the classroom as they had opportunities for engaging and directing their own learning. At its conclusion, I am hopeful that the project has encouraged the English Department teachers and others to consider deeper dialogue and additional uses of appropriate educational technology in their classrooms. In addition, this project has significance for education research since, as I detail in Chapter 2, there is limited research on how to use technology effectively to create critical thinking, dialogue, and collaboration in the classroom and how to transfer the skills to other forms of classroom dialogue.

Focus of Practice Research Questions

Overarching Question: How can middle school literature teachers of ELL students foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century learners?

Sub-Questions:

- Relationships: To what extent do democratic classroom practices foster relationships?

- Academic Interaction: To what extent do dialogical strategies, specifically ThinkTrix and Socratic Seminar, improve ELL student dialogue?
- Deeper Understanding: To what extent do dialogical strategies lead to deeper understandings of literature for ELL students?
- Self: To what extent has the researcher transformed his own practice and become a leader to help others engage students with dialogical strategies?

Given these research questions, the major tasks that I undertook included modeling for students how to communicate effectively, ask probing questions, and have meaningful academic dialogue. We used individual reflections and discussion to ascertain which areas of technology were working for students and which areas needed to be modified. I viewed and analyzed the Flipgrid videos, looking for evidence of equitable dialogue; furthermore, I modeled such dialogue to help students speak to each other in more equitable manner. I also prepared them for collaborative writing using Google Docs by teaching them how to work in teams in the classroom.

Action Research Design Overview

Qualitative research is good for in-depth analysis of complex processes (Miles, Huberman, & Saldaña 2013; Stake, 2010), and a full discussion of the study's methods appears in Chapter 4. Creswell (2003) indicated that qualitative methods follow in the "traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes works, reports a detailed view of informants, and conducts the study in a natural setting" (Creswell, 2003, p. 15). As a result, the research design employed for this study was an action-based, qualitative study (Creswell, 2003; Thomas, 2003; Yin, 2009). This complex, holistic picture in a natural setting was a Grade 7 classroom at the TCIS, and I used an embedded study design. This design allowed me to understand the actions of involved students.

The analytical approach allowed me to discover the meaning and theories of dialogue and technology that applied to the study through an in-depth investigation that included a diverse collection of data and continuous data analysis allowing me to make incremental revisions throughout the project (Gawande, 2017). The project was divided into three cycles of inquiry (Schmoker, 1999) consisting of Fall, 2017, Winter-Spring, 2018, and Fall, 2018. The evidence from each cycle informed the next iteration of the action research.

Summary

Students need proficiency in collaboration and communication to be life-long learners in a technologically sophisticated world (Partnership, 2016). They must be able to use technology in a variety of ways including using it to develop dialogue. Unless educators embrace educational technology and use its affordances to encourage students to have an active voice in the classroom, teachers are steering them to the past and not toward the future. In this chapter, I outlined my Focus of Practice and the need for this specific Focus of Practice at the TCIS.

In Chapter 2, I discuss the literature that supports studying the Focus of Practice. The chapter explores theories of learning, technology, 21st-century skills, collaboration, and theories of equitable voice. In Chapter 3, I provide a detailed account of the TCIS and the students with whom I conducted this action-based, qualitative case-study research project. In addition, I describe the school context in which the study took place as well as the diagnostic information I gathered in preparation for designing the project. In Chapter 4, I provide information on the research method, the study design, and the interventions I used throughout the study. In Chapters 5, 6, and 7, I describe three cycles of inquiry and the study findings and an analysis of those findings. Especially in Chapters 5 and 6, which are Cycles of Inquiry 1 and 2, the evidence directed subsequent cycles of inquiry. I provide a vivid description of the activities I engaged in

with the students. Additionally, I provide data from my Co-Practitioner Researchers (CPRs), emails and video calls from my East Carolina University mentors, and memos written as reflections on what I have learned. Finally, in Chapter 8, I examine the findings and make recommendations for other practitioners based on this research.

CHAPTER 2: LITERATURE REVIEW

Students are the *sine qua non* of education. That is, the core purpose of schooling is students' learning in social, cultural, academic, and cognitive terms. Yet, conspicuously missing from most elements of school at the TCIS are the voices of students themselves about their learning. By voice, I mean students engaging in classroom dialogue in ways that helps them develop the skills to direct their own education and to talk with each other in respectful ways. Middle school students at the TCIS typically do not have input into learning content, and they generally have not been given the necessary skills in classroom dialogue needed to ensure their voices are heard and that they can interact appropriately. The second issue, that of appropriate interaction, is problematic in that there are cultural differences between the Taiwanese students and those from Thailand; those cultural differences lead to some students expressing that they are better than others, a view that does not support democratic dialogue in the classroom. Such communicative issues interfere with many students' expressing themselves comfortably and confidently, thereby experiencing their voices as heard by others.

The primary purpose of this dissertation study was to better understand how strategies of critical thinking, collaboration, and educational technology can offer students opportunities to develop and use stronger academic voices in the classroom. Such technologies as Flipgrid and Google Docs are intended to allow students to share their voices in a variety of ways. As such, they are important factors in helping students to develop a sense of their voices; being able to collaborate and communicate about their learning options is an important skill that students need at all educational levels in the 21st century. This study aimed to investigate the following overarching question: How can middle school literature teachers foster relationships, improve

academic interaction, and support deep understanding of literary content for 21st-century learners?

I work in Thailand at a middle school, where I am the Head of the English Department and a teacher English Language Arts. In this setting, students are trilingual in English, Chinese, and Thai. Their classes typically are taught in traditional, didactic, lecture-based ways in which the teacher is the sole giver of knowledge (Tyack & Cuban, 1995). Educators at this school typically do not enable students to prepare for the 21st century and the skill sets they need to acquire for success in the future, despite having provided laptop computers to each student. With the end goals of supporting them to develop dialogic capacity to use their voices, use technology in educationally appropriate ways, and enhance their ability to think critically using higher level reading techniques, this study was designed to improve students' general skills in using their voices both inside and outside the classroom

Boote and Beile (2005) explained that research demands the aptitude to advance the collective understanding of what has been done before, to evaluate the pros and cons of current studies, and to understand what researchers might need to pilot their own studies. As a result, this chapter reviews scholarly literature in historical and contemporary conceptual/theoretical, empirical, and dissertation studies related to technology in the classroom, 21st-century skills, and how these might be used to enable democratic and respectful uses of one's voice among students and their teachers. I begin this literature review by examining how technology supports key tenets of schooling: the role of democracy in education as a place for preparing citizens for their roles in society and looking at what educators know about learning theory that supports the ways technology will be useful. To this end, I examine the national and international standards for students to become global citizens as defined by the Partnership for the 21st Century (2016), and

I detail the most recent advancements for the use of technology in schools. Next, I turn to the challenges new technologies have in and out of the Grade 7 middle school classroom. This focus includes both a review of anxieties students may experience when sharing their voices as well as how changes in technology may impact classroom teachers. In the last section, the literature review incorporates the strengths of student dialogue, reflection in the classroom, and how technology supports and generates more equitable discourse patterns for students.

As Figure 4 indicates, this chapter is organized into four sections, each of which addresses the concerns outlined above. Section 1 includes reimagining schools for active democratic spaces. Section 2 addresses the current technology landscape. Section 3 considers how technology is used in the schools. Finally, section 4 addresses talk, dialogue, and the importance that ThinkTrix (Lyman, 1987) and Socratic Seminars play in improving dialogue. All four sections lead to the overarching goal of creating equitable classrooms facilitated through dialogue and educational technology. Each section is relevant to concerns that my Thai international middle school Grade 7 students may experience. Understanding the literature supports the grounding for this study in dialogue and voice, especially when infused with and enhanced by technology, which together may promote an equitable environment that empowers student voice. In this next section, I discuss the importance of democratic schools and classrooms and how such theory helps to create equitable democratic space for all students.

Re-imagining Schools for Active Democratic Spaces

Despite the efforts of many teachers and principals, learning at any level can be stagnant, prescribed, and teacher-dominated. However, many educators value principles from progressive education and learning theory to foster democratic spaces for active learning (Bruner, 1960; Csikszentemihalyi, 2009; Cuban, 2016; Dewey, 1938, 2013; Freire, 1970; Gutmann, 1987;

**SECTION 1: RE-IMAGINING
SCHOOLS FOR ACTIVE
DEMOCRATIC SPACES**

**SECTION 2: CURRENT
TECHNOLOGY LANDSCAPE**

**SECTION 3: TECHNOLOGY
USE IN SCHOOLS**

**SECTION 4: TALK,
DIALOGUE, AND CONVERSATION**

**GOAL: CREATING 21ST CENTURY
DEMOCRATIC CLASSROOM
SPACE WITH LIVELY DISCUSSIONS**

Figure 4. Roadmap for literature review.

Labaree, 2008; Nachmanovich, 1996; Vygotsky, 1978). Educators have known these principles for decades, yet they may find them difficult to enact in the classroom. Some educators, instead, have augmented the teacher as sage on the stage by using technology in ways that advances “sit and get” teaching that thwart dialogue that could expand and deepen learning experiences for children and youth. Yet, certain technologies especially can foster Dewey’s (1938) criteria of experience and the necessary intuitive free play of Nachmanovich (1996); these may extend the dialogue central for learning and acting in Vygotsky (1978) and Freire (1970). Attention to the ways that changing classroom discourse patterns and using technologies that enhance communication use can help students respond to the benefits of discovery learning (Bruner, 1960) and creativity (Csikszentemihalyi, 2009) to achieve democratic schooling for the 21st century (Cuban, 2016; Gutmann, 1987; Labaree, 2008). This section focuses on six theories that foster active learning. These six theories are Dewey’s (1938) criteria of experience; Nachmanovich’s (1990) theory of intuitive learning; Vygotsky (1978) and Freire’s (1970) dialogue; Bruner’s (1960) constructivism; Csikszentemihalyi’s (2009) creativity theory; and Labaree (2008), Gutmann (1987; 2008), and Cuban’s (2001)’s 21st-century learning skills approach to democracy. These six theories ground this dissertation study.

Criteria of Experience

The first theoretical frame I discuss is Dewey’s (1938) criteria of experience. Educators tend to consider Dewey (1938) the father of progressive education. His book *Experience and Education* (1938) summarized his theory of experience and put him at the forefront of the progressive education movement. Dewey contended that two principles explain the nature of experience: (1) continuity and (2) interaction; every experience incorporates that particular experience but also affects the quality of all future experiences. He stated, “The principle of

continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after” (Dewey, 1938, p. 35). For example, such experience might look like a student who learns how to create video blogs but progresses or grows to be able to create videos that teach others how to create successful videos. Dewey (1938) further stated that, “all human experience is ultimately social: that it involves contact and communication” (p. 38). By this statement, he meant that for students to learn properly, they needed to be engaged with others and not taught in an isolated manner. The importance that Dewey placed on social experiences as crucial to learning helps educators to understand the significance that social experiences play in educational growth. Students do not need to learn by being given facts from a teacher, but they should learn by being given a problem and then working together with their peers to find the solution because the act of finding a solution with their peers helps them to develop new experiences and grow from things they have learned in the past.

Dewey (1938) postulated that every experience leads to a growth of knowledge and is “a moving force” that has ripple events on future experiences (p. 38). Therefore, it can be understood that traditional education sanctions the teacher being the sole purveyor of information while progressive education defers emphasis on problem solving, critical thinking, collaborative group work, and the development of social skills. As a proponent of inquiry and project-based learning such as those encouraged by advocates of 21st-century learning skills, Dewey believed that projects should emerge from the students’ socio-cultural context (Gutierrez, 2016). He expressed that these types of experiences lead to new experiences based on what the individual desires to learn. Such educators as McTighe and Lyman (1988) and Zwiers (2008) have taken Dewey’s ideas and used them for enhancing voice in various learning approaches. McTighe and

Lyman (1988) stated that there are many tools that can be used in the classroom to aid thinking, and “in the complex and distracting dynamics of school, the concreteness of tools reminds teachers and students to use what they know to enhance thinking” (p. 28). Zwiers (2008), on the other hand, believed that academic language must be taught in order to enhance students’ abilities to develop problem solving skills.

For the purposes of this dissertation study, Dewey’s theories were applicable to Grade 7 students at the TCIS; at this age and given their complex linguistic understanding as trilingual speakers, they are curious and open to new learning experiences. In my work with them, I have observed that they thrive on social interaction with technology and media, which may be helpful means to approach a progressive learning scenario. In later sections of this literature review, I take Dewey’s notion of social experience a step further and place it in the context of 21st century skills regarding how educational technology may enhance social experiences.

Intuitive Learning

The second theoretical frame is that of intuitive learning. In *Free Play: Improvisation in Life and Art*, Nachmanovich (1990) stated that schools can nurture creativity in students, yet he believed that often they not only do not nurture it, but they destroy it. He defined free play as the act of creation, destruction, and recreation, and he suggested students must be able to reach inside their inner self to truly improvise and be creative because these practical extensions are needed for students to thrive in schools. The purpose of his book was “to propagate the understanding, joy, responsibility and peace that come from the full use of the human imagination” (Nachmanovich, 1990, p. 5). Ideally, he believed, schools exist to “give children the tools with which they may create the future. At worst, they produce uniform, media-minded grown-ups to feed the marketplace with workers, managers and with consumers”

(Nachmanovich, 1990, p. 116). By this statement, he was indicating the conformity that society starts to push on students can be seen in many educational settings, and it continues into university and the workplace. This conformity is part of a devolutionary process that drives back from the creativity and inquisitive nature people had when they were children. Nachmanovich thought that children learn by exploring every nook and cranny and always being open to discovering new things. However, at some point in most schools, teachers begin to stifle this desire for exploration and instead concentrate on rote learning so that students recite information given to them by the “keeper of knowledge” in the classroom, the teacher (Nachmanovich, 1990). In his review of the book, Cousins (1979) said, “Stephen Nachmanovitch has produced a celebration of human uniqueness. What it amounts to is a guide for getting the most out of whatever is possible.” The concept of getting the most out of whatever is possible is an important concept for teachers to embrace, and it is important at the TCIS as often students do not have access to the types of activities that other more modern and more technologically advanced schools have.

Nachmanovich’s (1990) theory of free play and how he believed it could engage with students’ natural capacity for joy and discovery potentially speaks to how the Grade 7 students at the TCIS, in my experience, still enjoy exploring and learning new things. Many of them are classical musicians, and the Thai culture places a high value on music and art. High School students at the TCIS win international music and art awards, and the school consistently scores in the top schools worldwide for Advanced Placement Art. It is this enjoyment for play and creativity that may allow Grade 7 students to engage with and experiment with Flipgrid and Google Sites to help them understand literature more critically and speak more confidently and dialogically in a literature-rich classroom. The use of new technology and in-depth academic

discussions may help Grade 7 TCIS students to use their full imaginations when discussing literature.

Dialogic Thinking

The third theoretical frame is dialogic thinking. While Nachmanovich (1990) concentrated on the importance of free play and the role of trusting intuition, two other educational thinkers—Vygotsky (1978) and Freire (1970)—evolved more particular theories related to dialogue, which is important in helping students to be high-level thinkers. Their work suggests that students who become comfortable with dialogue can engage more deeply in thoughtful discussions of literature and in respectful interactions with each other. Vygotsky (1978) and Freire (1970) both believed that dialogue as social interaction has an important role in the development of student success. According to Vygotsky (1978), social interaction plays an important role in the development of cognition. He stated: “Every function in the child’s (cultural) development appears twice: first on the social level and later on the individual level—first between people (interpsychological) and then inside the child (intrapsychological)” (Vygotsky, 1978, p. 56). He termed this function *intersubjectivity*. For students to grow intellectually, they need to develop communication skills that allow them to socialize effectively, and it is language use that leads to internal cognitive growth. This idea of socializing effectively is important to helping students develop appropriate interaction skills that demonstrate respect when talking to one another about school subjects.

However, just being able to communicate is not enough. To gain knowledge, students must have dialogue among themselves and with their teacher, and then they need opportunities to act together upon that dialogue, which may move them to further action and critical reflection (Freire, 1970). In other words, Freire did not believe that dialogue is about understanding; rather,

it is about making connections and developing actions that enable students to make a difference in the community and the world. Likewise, Vygotsky (1978) believed that dialogue was needed to make connections but also needed in order to develop needed interaction skills.

Students at the TCIS are service-oriented, and they appear to want to make a difference in their community as evidenced by the projects they do for the local community. However, Grade 7 students have trouble having a dialogue with other students about the world other than the basics of who, what, when, and where. Part of this problem is language-based as they are ELL students; part of it may be because of the cultural distinctions between Taiwanese and Thai people in that some people see themselves as better than others because of their nationalities. It was my hope that focusing on the ways that students could talk to each other and helping them develop the skills of the high-level questioning techniques with other students would enable meaningful dialogue and thus help students be better prepared to make a difference in the world around them (Lyman, 2015). According to Lyman (2015), a strategy in which teachers and students create questions together allows for “meaningful, motivating classroom discourse” (p. 10).

Discovery Learning

The fourth theoretical frame is that of discovery learning. In a video interview, Bruner said that the main thing about teaching is that it “opens up a wider range of possibility and what’s possible. You teach them about something in the past or the present, but you hope that your teaching will have the proper effect of leading them into the world of possibility. That is where intelligence lies” (The Brainwaves Video Anthology, 2014). The primary objective of teaching and educating is to go beyond the provided information to search for the possibilities. Schools were developed as the repository of stored knowledge so that students could access it,

but it is the going beyond this knowledge where true learning occur (Bruner, 2014). With the Internet and technology available, it is easier to move students beyond they think is possible by expanding their knowledge base and by connecting them with other learners digitally, and it is in such ways that real learning occurs.

Students at the TCIS seem to enjoy using technology to explore the world. However, they often do not take their discussions to the next level of depth and critical thinking. By using Brunner's theory of discovery learning, students may be encouraged to move beyond the basic knowledge they receive and into the realm of broad possibility. I believed this study could help them to move forward to at least seeing something more than direct knowledge and to making relationships and connections they did not see before. My thinking is that when students have dialogue with other students from different cultures and from different perspectives, they are able to make different connections and understand various relationships that were not previously in their own personal experiences.

Creativity

While Bruner (2014) encouraged teachers to allow students to search for possibilities, Csikszentmihalyi (2009) suggested that these opportunities need some amount of creativity actually to fulfill those possibilities. Regarding this fifth theoretical frame of creativity, he stated: "It is easier to enhance creativity by changing conditions in the environment than by trying to make people think more creatively. And a genuinely creative accomplishment is almost never the result of a sudden insight, a light bulb flashing on in the dark, but comes after years of hard work" (Csikszentmihalyi, 2009, p. 1). Csikszentmihalyi suggested that educators should set up classrooms in a way that allows students to be creative and to be open to possibilities. He also said that one aspect of creative people is that "they love to make connections with adjacent areas

of knowledge. They tend to be—in principle—caring and sensitive” (Csikszentmihalyi, 2009, p. 10).

Csikszentmihalyi’s work is relevant to this dissertation research project because as the teacher/facilitator, I needed to be open to change and willing to create an environment that fosters creativity and encourages it. Specifically, with regard to dialogue and technology, I needed to provide an environment in which students were allowed to be creative and open to different space and encouraged to make connections to other areas of knowledge.

Democracy

Progressive theories on education have exploded since Dewey (1938) started exploring alternatives. From Freire (1970) to Csikszentmihalyi (2009), researchers have been encouraging change in schools and in the ways students are taught. Perhaps, at this juncture, the movement that is most encouraging change involves people pushing for 21st-century skills to be the forefront of education, which is the sixth theoretical frame. Labaree (2008), Gutmann (1987), and Cuban (2001) asserted that democracy in schools and the ability for students to direct their learning should be allowed in schools, thereby encouraging students more opportunity to improve those skills that are valued in the 21st century. Labaree (2008) expressed that “modern Western societies have shown an increasing tendency to educationalize social problems” (p. 447). However, putting all of society problems on schools and the education system is problematic. Instead of asking schools to fix all of society’s problems, I contend that instead educators should teach students how to solve problems and how to find solutions using their own creativity and higher levels skills; then, they might be able to solve the problems in society. To be successful in this goal, teachers must learn to step back from a teacher-led approach to more pupil-centered practices (Cuban, 2001). In Shaull’s forward to Friere’s (1970) *Pedagogy of the*

Oppressed, Shaull said that educators must take a stand on the role of education as there is no neutral education process. He continued:

education either functions as an instrument which is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it, or it becomes the practice of freedom—the means by which men and women deal critically and creatively with the reality and discover how to participate in the transformation of their world. (p. 34)

This spirit of transforming my school and the local community inspired this research project.

In every classroom, I visited at the TCIS prior to beginning this project, the teacher has been the giver of information, and the classes were all teacher led. I hoped to accomplish new approaches where students would lead the conversation and learning. With the help of particular educational technologies, I wanted to encourage students to take the lead in the classroom. My goal was to help all Grade 7 students at the TCIS to take a more self-directed approach to their learning by using dialogue and communication with the aid of current technologies to facilitate them becoming more comfortable using dialogue in equitable and respectful ways.

In this section, I have discussed learning theories that aid in understanding how schools might be used as active democratic spaces. These theories are applicable to my project because I used them as the foundation to co-create a more equitable environment for students to have rich academic discourse. In the next section, I discuss the literature regarding the current technology landscape that is relevant to understanding this landscape more completely.

Current Technology Landscape

Recently, I used a computer to book flights for a trip to the USA, a phone to video conference with my sister, the car GPS to eliminate one hour of Bangkok rush-hour traffic, a sous-vide precision cooker for my perfectly cooked steak, and a watch to track the calories I burned walking. While growing up with the Jetson's on television, I always envisioned the days

when technology would flourish and make people's lives easier. In recent years, technology has indeed flourished and not just in daily life but in schools and classrooms as well. What I can do in one day is just the tip of the iceberg compared to what students are able to do in the classroom with such tools as laptops, iPads, mobile devices, and Smartboards. Specifically, in this action research project, with Grade 7 students at the TCIS, I used two specific types of educational technology, Flipgrid and Google Docs, to improve their academic discourse and collaborative experiences with improving writing. As technology constantly changes, educators must not only use the tools currently available like Flipgrid and Google Docs, but they also must be open to technological advances that improve on these technologies in order to promote collaborative, equitable learning and dialogue in the classroom.

Both technology standards as defined by the International Society for Technology in Education (ISTE, 2000) and standards related to 21st-century learning as global citizens as defined by the Partnership for the 21st Century (2016) are useful for understanding the broad framework that educators need to advance the appropriate and meaningful use of technology in the classroom. Specifically, for this study, I leveraged technology to allow students to demonstrate competency in their learning goals as well as to encourage students to use technology to seek feedback from one another. Using both Flipgrid and Google Docs, I asked them to collaborate and communicate with each other by dialoguing in different technology environments, thereby allowing them to demonstrate that learning can take place in a variety of ways (ISTE Standard 1). Students in Grade 7 at the TCIS learned to use computers and mobile devices to access Flipgrid for conversations with collaborative groups regarding reading and understanding literature on a more sophisticated level. Students also used Google Docs to write and share writing with each other and the teacher, and then publish that writing in class required

digital portfolios, thus moving the focus from teacher-centered to student-centered and creating a more equitable classroom.

Because particular technologies change rapidly, teachers and students must hone their skills constantly to keep up with technological modifications. Generally, however, the form of the technology changes such that there may be many brands to choose from, but the general purposes of the technologies remain the same: to communicate or compose asynchronously or synchronously (Hewett, 2014). However, the use of technology is not without its own set of issues, including its fast pace of development, building teacher capacity to use them well, and the ironic danger of cultivating increased individualism as opposed to group collaboration when concurrently engaged in building a democratic classroom. Speaking more than 50 years ago, Intel founder Gordon Moore (1965) stated, “every 12 to 18 months, computers double their capabilities, and so do the information technologies that use them.” That said, in addition to learning applications and because technology needs to ensure that 21st-century standards of cooperative learning and teamwork are a part of their experiences, educators concurrently need to learn how to make good choices about which platforms, programs, or applications are useful to building a classroom environment dedicated to helping students develop a sense of voice in their dialogue with each other and their writing. In this section, I first discuss technology standards. Then I look at 21st-century learning capacities, at the pros and cons of technology use as a support for learning rather than centerpiece of the learning, and finally, at the speed at which technology changes.

International Standards for Technology

The world is fast-paced, and technology permeates every aspect of daily life for most people. From smart phone, iPhones, and iPads to laptops to gaming systems to online delivery of

groceries to apps that break down social barriers, there is no doubt that technology has changed the world and it will continue to change at a fast pace. As the world changes because of technology, so too do schools and classrooms change, and teachers must keep up with those changes or quickly become obsolete. As technology is being incorporated into more classrooms and assignments, there must be some basic standards to which educators adhere in order to implement these technologies successfully. It is because of the need for these standards that several organizations have developed design standards for the use of technology.

The International Society for Technology in Education (ISTE) (2016) listed seven standards that students needed to be prepared for the 21st century. Figure 5 illustrates my perception that when the seven ISTE standards are used, they enable exceptional intellectual and personal growth. In short, according to these standards, students should become:

1. Empowered learners
2. Digital citizens
3. Knowledge constructors
4. Innovative designers
5. Computational thinkers
6. Creative communicators
7. Global collaborators

Moving through the ISTE standards for teaching one at a time (see Figure 5), empowered learners use technology to advise and achieve their goals in ways that elicit feedback, and they use their knowledge of technology to explore emerging technologies. Such students would be able to showcase their learning via digital portfolios, Flipgrid videos, and group-created Google Documents that show understanding of rich literature. For example, discussing rich literature via

International Society for Technology in Education

Seven Standards Needed to Prepare Students for Twenty-First Century

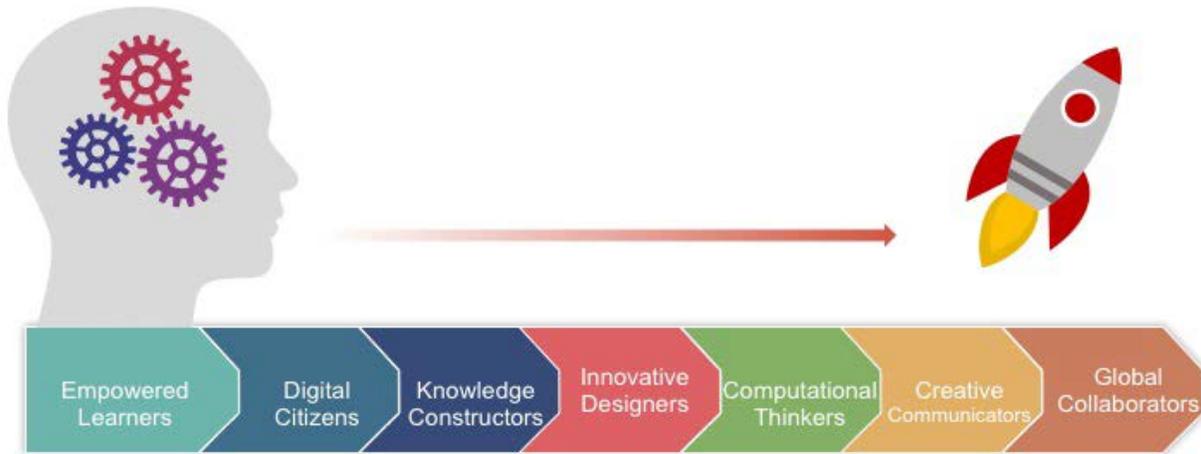


Figure 5. International society for technology in education: Seven standards.

asynchronous video and via reflecting on the literature through synchronous writing technology empowers learners, creates digital citizens, allows for knowledge to be constructed in groups, creates creative communicators, and encourages global collaboration. These goals particularly ground my study and adhere to the International Technology Education Association's standards for technology.

Digital citizens have skills that enable them to manage their online identity safely and positively wherein they understand the rights and obligations of using online intellectual property. Students appear to feel safe in front of their computer screen at school and at home; however, they must be taught that when online, they are in a public place (Bolkan, 2014). They are citizens of the world in that they will be able to maintain their online presence when using technologies that are available to others but can do so in a manner that protects themselves and their classmate's security and online presence while honoring the works of others. Educators that use technology realize that controlling what students do is often an onerous task but teaching students digital citizenship is more effective (Bolkan, 2014). A good digital citizen treats others with respect and dignity, and my research project encouraged these behaviors.

Students are knowledge constructors when they can use a variety of resources to build knowledge and produce artifacts that make learning meaningful to themselves (ISTE, 2016). Such students would be able to use a variety of resources and synthesize them into a representation of their understanding. For example, when using Google for searches, instead of doing a basic search, students should be knowledgeable of advanced search features that allow them to narrow down their topic search.

Innovative designers can use technology to identify and solve problems by creating new and useful solutions (ISTE, 2016). Such students would be able to be given a project and

complete it in multiple ways and from multiple entry points and using multiple technologies. For example, students who imagine a new process or original idea should be encouraged, and a classroom where innovation and creativity are celebrated should be the norm.

Computational thinkers can use technology to develop and test solutions to better understand and solve problems (ISTE, 2016). Computational thinkers have confidence dealing with complex issues and are willing to consistently work hard to try to solve difficult problems. For example, in the English classroom, computational thinkers would engage in argument from evidence or would (respectfully) critique the reasoning of other students. These skills are often hard to assess, but having students explain their decisions and processes can facilitate the ability to assess these skills (Brennan & Resnick, 2012).

Creative communicators can express themselves clearly and creatively using a variety of online tools to accomplish their goal (ISTE, 2016). Creative communicators can create original works or repurpose or remix digital resources for new innovations and publish that content for the intended audience. For example, in a Grade 7 classroom, students might be asked to work in groups to do a book report on one part of the text and then create a Google Slide Show that is then presented to the class.

Global collaborators use technology to collaborate with others around the world and broaden their own perspective. Global communicators can contribute to teaching projects effectively to reach a common goal and work with others including classmates and teachers to examine issues from multiple viewpoints (ISTE, 2016). For example, students working together with other nationalities gain valuable skills. This goal, in particular, is one that grounds my study because my students are tri-lingual and have family roots throughout Asia.

The ISTE's (2016) seven standards connect nicely with the six goals set out by Partnership for the 21st Century (2016) to be a 21st-century learner. Each of these indicators reveals close parallels with the Partnership for the 21st Century standards (see Figure 6). They demonstrate the types of skills students need for the future. In the next section, I discuss global competencies and the Partnership for the 21st Century standards.

Global Competencies

Concerning the vast amount of information one can find through technology, according to Fouts (2000), nearly every aspect of society has been influenced by technology in some manner. With so much technology available to students via computers and mobile devices and the rapid advances in technological hardware and software, educators have developed standards related to technology that attempt to keep up with the fast pace that is required. Several organizations try to bridge the gap between rote learning and the 21st-century skills needed by students. Such skills include the critical uses of technology for understanding global issues and how to maintain strong communicative strategies. The Framework for 21st Century Learning (Partnership, 2016), for example, integrates themes across the curriculum such as global awareness, financial and entrepreneurial literacy, civic literacy and health literacy.

The Partnership for the 21st Century (2016) offered four standards of twenty-first-century skills: communication, collaboration, critical thinking, and creativity (see Figure 6) often referred to as the *4Cs*. According to the National Education Association (2015), the *4C's* are foundational for students in classroom to help prepare them for the 21st century. These align with the roles of a democratic and equitable classroom, which I desired to bring to the Grade 7 classroom at the TCIS, in the following ways:

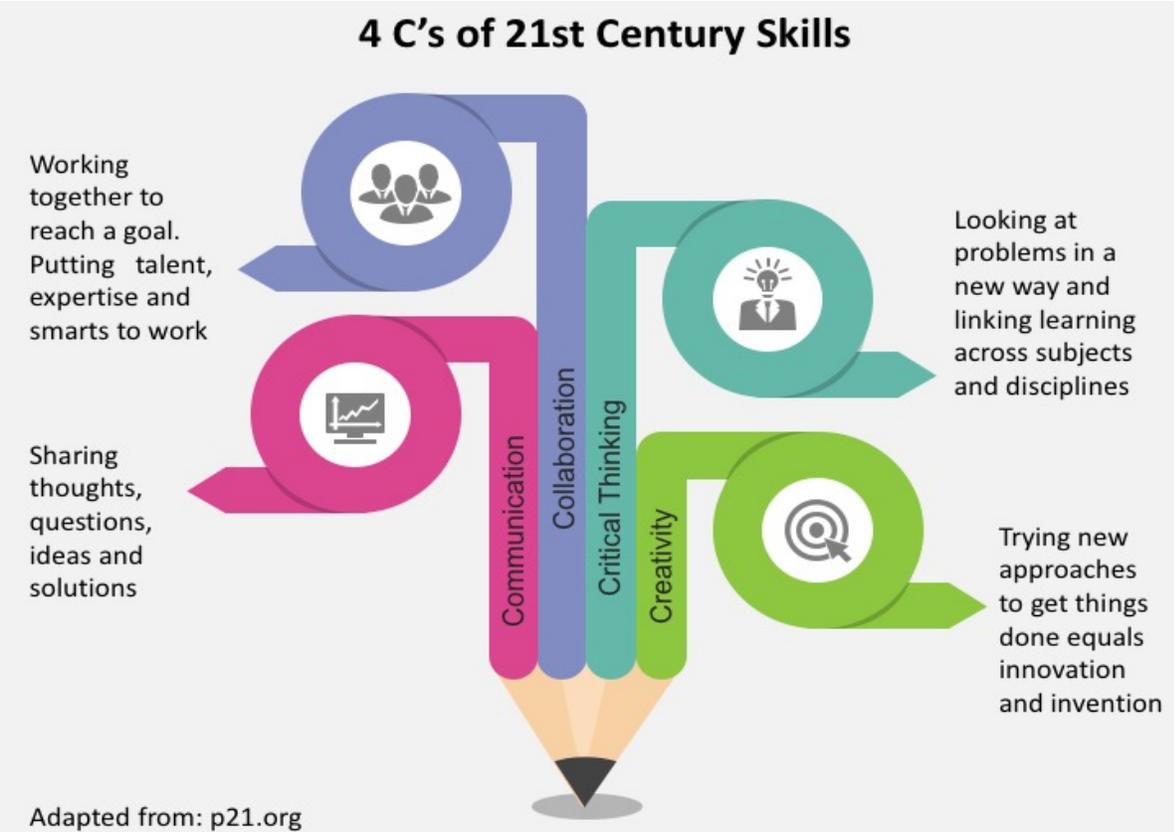


Figure 6. Partnership for 12st century skills: 4Cs.

1. high-level conversation skills need to be at the forefront of my classroom and to help students develop these skills needed for communication;
2. collaboration is an essential skill that needs to be encouraged;
3. skills needed to help students think critically will be crucial to most jobs in the future;
and
4. creativity is important to be able to solve problems in a rapidly and ever-changing world.

Communication

A student who has good communication skills is not just a student who can convey information clearly but also one who can also adapt to different situations, read the behavior of others, compromise, and resolve conflict. Good communication skills often require empathy, being a good listener, and being able to read the body language of others. Stratham and Torell (1996) stated that the need for students to communicate effectively is crucial for success in the 21st century: “As the world grows increasingly complex, success and prosperity will be linked to people’s ability to think, act, adapt and communicate creatively” (p. 24). For a Grade 7 ELA student at the TCIS, a good communicator would be one who could work in a small group and communicate both orally and in text about literature in rich way that co-creates meaning, using technology and multimedia. These students need to be able to share and listen to different perspectives and interpretations of texts and understand that multiple answers can be correct. As Robb (2017) stated, “not only do literary conversations strengthen student’s communication and collaboration skills, they also foster a sense of agency by inviting students to work together to compose questions that lead to discussing and uncovering layers of meaning in texts” (p. 20). My hope was that these discussions and debates would help students to be able to articulate their own

perspectives and scrutinize and challenge their peers' perspectives respectfully, creating an environment where dialogue flourishes.

Collaboration

A student who is in a technology rich environment is more likely to engage in cooperative learning effectively (Stratham & Torell, 1996). The integration of technology in the classroom creates a more authentic learning environment where students have a greater chance of communication and collaboration (Fouts, 2000). Cooperative teams outperform individuals across all ages (Quinn, 1995), and groups outperform individuals on tasks on which they later may be assessed individually (Barron, 2006). A student who has strong collaborative skills can ask questions, accept and give compliments, accept and give criticism, show and express empathy, and negotiate meaning with other students. Creating a culture in which collaboration is important requires that the community acknowledge the strengths of all students and that all students can learn from each other. Relative to my students at the TCIS, there is research that shows that cooperative groups improve self-concept and positive interaction and feelings about peers (Brody, Cohen, & Sapon-Shevin, 2004). As Chapter 1 indicated, often the Taiwanese students look down upon the Thai students as culturally inferior, which emerges in their tone of voice, words, and body language; therefore, one of the goals of this project was to create a respectful cooperative learning environment enabling students to think about their peers more equitably and to express themselves more courteously regardless of culture.

Critical Thinking

A student who has good critical thinking skills analyzes and evaluates evidence, arguments, and beliefs. The Partnership for the 21st Century (2016) offered four main approaches to foster critical thinking: inquiry, questioning, problem solving, and collaboration. While there

are many other ways to foster much needed critical thinking skills, these four skills help students to become life-long learners and self-advocates (Partnership, 2016). Stratham and Torell (1996) believed that as the world becomes more sophisticated and nuanced, the need for people to know high-level learning skills will be required—not simply desired—for success. Deep conversations on rich literature improve critical thinking skills, and, when students engage in conversations around specific text, growth in critical thinking occurs (Raphael, Florio-Ruane, & George, 2001). The development of rich discussions about literature suggests that it not only is effective for developing critical thinking skills but for improving students’ abilities to read for meaning and comprehension (Darling-Hammond, 2008). As one of my main concerns with Grade 7 students at the TCIS was reading comprehension, a need that I observed last year, I believed that developing these rich conversations would improve the students’ reading comprehension overall.

Students in middle school are at a good age to become collaborators and to learn to use their voices in their writing. As Markham (2013) noted, with collaborative learning, there is a shift from information to attitude and this shift puts a great deal of responsibility on the individual as they try to go through, interpret, apply, and share information. Markham suggested that this shift requires a mix of self-awareness, empathy, and skills for collaboration. He also indicated that eventually the measure of students’ success will be from their ability to demonstrate they can move proficiently through a connected world. For students to achieve such success, they must be equipped with these collaborative skills and be able to self-direct their individual and group learning experiences.

Creativity

A student who has good creativity skills can produce products in a multitude of ways. Students often think out of the box and come up with their own solutions. In a TED Talk entitled

“Do Schools Kill Creativity,” Robinson (2006) indicated that the current model for schools suppresses creativity, which is often left out of the teaching strategies in the classroom. Coles (1990) stated that students who analyze texts require the use of creativity and imagination as they are stepping into the lives of the characters they are reading about. As students begin to share ideas through discussions, they observe “creative thinking in action and see how the evidence they cite can support different viewpoints” (Robb, 2017, p. 20). As a Grade 7 English teacher at the TCIS, I wanted to see my students develop more creativity, and I created an environment where discussion of rich of literature could be plentiful.

The competencies for the 21st-century frameworks all have an inquiry focus. Communication, collaboration, critical thinking, and creativity require a skillset that involves being able to apply inquiry as a building block. Callison and Preddie (2006) wrote about the importance of inquiry and stated that there are five elements that contribute to inquiry: questioning, exploration, assimilation, inference, and reflection. To reach these higher levels of inquiry requires more than just gathering information or solving problems. Guided inquiry requires that classroom teachers work with information specialists and librarians to guide students to deeper understanding of issues and allowing students to ask “what did I learn” by using higher level questioning techniques and reflection (Kuhlthau, Maninotes, & Caspari, 2008). Robb (2017) said that teachers can develop the 4C’s with a student-centered approach where teachers facilitate discussion. Grade 7 students at the TCIS needed to become more proficient in the Partnership for the 21st Century standards (2016). With the standards as a guide to help them organize better projects and assignments as they progressed in school, I became more confident that I could prepare them for a rapidly and ever-changing world as well as for

future workplace settings in which their international identities and communication skills would factor heavily.

As shown in this section, 21st-century learners need certain skills to gain proficiency and understanding. In the next section, I discuss 21st-century learning capacities and new technologies.

21st Century Learners' Capacities

Teachers are bombarded with articles and advice on how best to prepare students for the challenges they may need in the future. Many articles are related to 21st-century learning needs and the 4Cs keep coming up: communications, collaboration, critical thinking, and creativity (see Figure 6). The abilities for students to communicate, collaborate, think critically, be creative all lead to global problem-solving skills, and they are standards many scholars of 21st-century capacities seek in education.

The Thai economy has shifted to a global economy, and it requires that students be prepared to meet its needs, which suggests a need to push for educators to teach 21st-century skills in schools. According to Childress (2016), "Student learning outcomes, beyond the traditional, need to be crafted for the twenty-first-century learner" (p. 19). One of the first steps in this process occurred when personal computers became readily available in the twentieth century, and it was easy for people to communicate from computer to computer and across national boundaries through the Internet (Childress, 2016). The 21st-century worker must be able to communicate with diverse customers and co-workers from around the globe and be able to do this in a collaborative manner. The 21st-century worker must have excellent problem-solving skills, be a lifelong learner, be able to collaborate with diverse cultures, and think and communicate effectively (Childress, 2016).

As technologies that improve communication and group collaboration increasingly become available, teachers are being required to address the needs of the twenty-first-century learner in a manner that supports the competencies that they need to succeed. Yet, at the same time, school rules confuse and delay those competencies. For example, in most international schools in Thailand, a Board of Directors has final say over budgets, curriculum changes, and pedagogy. For any change to take place, the Board typically must approve and sanction it. The time frame to get board approval may be not merely one year, but several years before the approval process is completed, leading to approvals of defunct or out-of-style technologies.

Haste (2009) addressed the competencies required in the 21st century, focusing on three: the use of technology through multiple uses and devices, more collaborative work for students, and new roles for teachers. Yet, instead of embracing these competencies, which, frankly international boards of directors may not have heard about, schools are slow to incorporate them. For example, the TCIS has a policy to keep mobile devices and tablets out of the classroom. Instead of embracing the possibilities these devices offer by using some of the educationally helpful software they make possible, they are banned from all classrooms. Rather, “these activities are deemed ‘leisure,’ and young people are, largely, told to leave their ‘toys’ at the classroom door. Even when new technologies are used within the classroom, they tend either to be minimal extensions of ‘library’ access via a classroom-based computer or teacher-controlled wikis and project” (Haste, 2009, p. 208). Students in industrialized societies regularly interact with hand-held devices and use them for Facebook, Twitter, webbing, blogging, wikis, and the like. Haste (2009) suggested that many students are using virtual games that are challenging, require group work, are highly collaborative, and require sophisticated organizational skills. As technology continues to improve and mobile devices are able to do many things that laptop

computers can do, policy changes must be considered at the TCIS. Such changes may happen when this action research project demonstrates their value to student success.

In this section, I discussed relevant literature regarding the current technology landscape including the pros and cons of technology use. In the next section, I consider literature related to technology use in schools.

Technology Use in Schools

Educational technologies have been around for decades whether they be blackboards, digital projectors, Scantron Machines, PCs or tablet devices; they undergo an ever-evolving progression with advocates and naysayers. In this section, I examine some of the specifics of technology in schools since the inception of American education and the current debates about the pros and cons of technology for use in education over time; I end by drawing some conclusions about how to use these questions to consider and make choices for this project.

In the 1960s, Papert (1967), a professor at Massachusetts Institute of Technology, recognized the potential that technology could play in education. He developed the Logo programming language that was a tool for helping children think and solve problems. Papert designed a robot turtle that students could then manipulate in their environment to solve problems. Through this device, students gained a deeper understanding of mathematical concepts and programming. The project demonstrated how student engagement in their learning could be enhanced by technology rather than the traditional “rote learning” activities.

From a constructionist perspective, learning is always highly connected with play (Resnick, 2014). Play is also associated with “taking risks, trying new things, and testing boundaries.” It is a “process of tinkering, experimenting and exploring.” And, “these aspects of

play are central to the creative learning process” (Resnick, 2014 p. 18). According to Resnick (2013a):

The tinkering approach is characterized by a playful, experimental, iterative style of engagement, in which makers are continually reassessing their goals, exploring new paths, and imagining new possibilities. Tinkering is undervalued (and even discouraged) in many educational settings today, but it is well aligned with the goals and spirit of the progressive-constructivist tradition—and, in our view, it is exactly what is needed to help young people prepare for life in today’s society” (p. 164).

This is important because like play, tinkering with ideas by developing questioning skills and discussing literature requires taking risks, exploring new possibilities, and allowing the mind to wander down paths that are only open with deep discussion. It is through such discussions that students will develop creativity and higher critical thinking skills they need.

Because Dewey (1938) was a proponent of progressive schools as opposed to traditional schools, I believe he would be a proponent of educational technology that supports inquiry- and project-based learning regarding classroom-based learning. Although unknown to Dewey and his followers at that time, the progressive school movement has continued, and teachers who propose using technology to advance the progressive movement’s belief in activity as opposed to passivity are making strides in education. For my study, I especially liked that Dewey found it important to communicate beyond the doors of a classroom. Technology now allows educators to use Dewey’s principles and take them multiple steps further.

My first exposure to technology in the classroom was with a program called the Oregon Trail in 1992, created by the Minnesota Educational Computing Consortium. Their advertising indicated that the program taught planning ahead, budgeting, management, and U.S. history; I would agree that students learned these things. However, what struck me was not the learning itself but the pure joy of being on the computer and playing games while learning and the spark in the eyes of my students. They begged to have a lunch pass to play this game, and it was then

that I realized the impact that games, fun, technology, and the mixing of all these things would have on the education spectrum.

The students in Grade 7 at the TCIS need to use technology in the way that Papert (1967) designed because it can encourage them to think and solve problems and to become better critical thinkers. They need to use it not only to get information but to develop inquiries based on the technology they use. They need to follow Resnick's (2013b) advice and take risks, try new things, test new boundaries. When they have the opportunity to choose their own technology and it might be used in the classroom, all these things become possible.

The Pros and Cons for Learning Technology in School

Just about every facet of people's lives have been touched with technology in some manner. When I taught 20 years ago, I used a green gradebook to keep, record, and then average grades. Now, this work is done instantly with online or computer grade-keeper programs. Many tasks that were often burdensome to teachers have been alleviated or made more efficient thanks to technology. The same thing can be said for students in that their writing can be drafted from a word processor rather than the cumbersome process of handwriting or typewriting. However, many teachers are reluctant to embrace technology for fear that it is only a distraction in the classroom. One teacher I met with at the TCIS said, "computers in my classroom can't teach students what I want them to learn" (personal memo, March 17, 2017). When I asked to see what he was teaching, he showed me worksheets about Geography that were made 20 years ago, and he believed memorization of certain facts could not be aided with computers.

In the asset column for technology are multiple examples of how technology can support how different learners acquire information and how to support the teacher as guide and students as active learners. For example, some current technology tries to bring the real world into the

classroom by putting students in an interactive environment on a ship or in a different place. Another technology that I use in my classroom is the Google Hyperdoc, which lays the foundation for an entire unit of study but allows students to work at their own pace and thus supports me to work with students who need extra assistance; the more accelerated students can work on activities that are more challenging in the same unit. These include visual learning; increased active learning; quick access to both information and presentation programs that support inquiry, project-based learning; and greater access to learning for students with learning and emotional disabilities. However, there are some downsides to technology for learning that include the reality that teacher capacity is not endless, the role of emotional anxiety in using technology, and the role of business in schools and how that has affected use and perhaps misuse (del Campo, 2012).

Del Campo (2012) presented a historical chart that showcases the pros and cons of technology as it has progressed over time (p. 1,088). For example, he addressed Smart Boards and said that they were dynamic and can show physical reality that easily allows switching between videos, slides, and photos. However, he also said that Smart Boards require preparation of the contents in order to be effective. What is interesting for me is that when I read the chart, I see the pros often outweigh the cons and often the cons are those that seem especially geared for traditional education settings and not the inquiry-based progressive settings that Dewey (1938) and others urged educators to take on. Technology can be used to create activity and excitement with students, and it allows for problem solving skills and critical thinking skills to be developed.

One of the general assets of the new technologies is that they are more visual; in general, the more visually interesting a technology tool is, the easier it may be to capture the students' attention. Gardner's (1983) work in multiple intelligences and the new brain science on the right

side of the brain demonstrated that a visual entry into learning is a way through the amygdala to the accessing the cognitive neural pathways.

Another positive aspect of technology in the classroom is that it can move a student from being a passive learner to a more active learner. A suitable definition of appropriate learning environments for the 21st century is an “active, constructive, cognitive, and social process by which the learner strategically manages available cognitive, physical, and social resources to create new knowledge by interacting with information in the environment and integrating it with information stored in memory” (Kozma, 1994, p. 1). Technology tools have freed up students’ needs to take notes and given them time for more questions and participation in class. For example, in my TCIS Grade 7 English Class, I used a flipped classroom model in which I created videos of important information I wanted students to know before we got to class. Students then watched these videos and came to class ready to start practicing what they had learned. This strategy cut down on me needing to be the teacher at the front of the classroom and gave all of us more time for valuable teacher-student interaction, discussion, and modeling.

Using the lecture format, classes often are not collaborative, but new technology has allowed for more collaborative learning and greater interaction between teacher and student, even in the places where students must learn new information to interact with it. One key finding of the revised version of Bransford and National Research Council’s (2004) seminal text on learning, *How People Learn*, was: “To develop competence in an area of inquiry, students must: (a) have a deep foundation of factual knowledge, (b) understand fact and ideas in the context of a conceptual framework, and (c) organize knowledge in ways that facilitate retrieval and application” (p. 16). Used thoughtfully and critically, technology can be a valuable tool to move students from novices to experts. For example, at the TCIS, I used Google Docs with my

students to write research papers and scheduled time with them to do this concurrently so that they could ask questions, get feedback, and immediately make progress. Thus, collaboration was not done only with other students but with me, too. The educational technology offered students and teachers opportunities to collaborate together synchronously in the classroom and online.

A technology-based curriculum can embed immediate feedback and additional prompts and would help reach and meet the needs of all students. For example, in Google Forms, there are options for teachers to give immediate feedback for quizzes or give extra prompts for better understanding. Students who get immediate feedback are more likely to make corrections and adjust their learning (McTighe & O’Conner, 2005). The feedback that is immediate helps students to see their results and understand where they need to improve (Nepo, 2017).

Another advantage to using educational technology is that project-based learning is likely to be what students will see in the workplace. One of the tasks of educators is to prepare students for the workplace and in today’s world, workers often work in teams to collaboratively solve problems. Teaching has changed to accommodate this fact:

Therefore, we have witnessed a transformation of teaching methods focused on the teacher (almost the only teacher to the student), a student-centered teaching, which gets it and is nourished by the teacher, peers, the web, other universities, radio, television, etc. Working in groups was used to train students in horizontal skills as important as teamwork. (del Campo, 2012, p. 1,090)

Collaboration and teamwork will only become more important as global digitalization continues to develop.

Technology has a plethora of benefits for students with disabilities, and they can have excellent benefits when utilized properly in the classroom. Technology can help in preparing these students for job specific skills and for virtual experiences to teach desired secondary skills. Kellems et al. (2015) stated: “Technology can assist students with disabilities in many self-

determination activities, such as choice making, decision-making, and self-management” (p. 336). Including students who have identified disabilities with general education students increases their dignity and self-respect. Portable devices can aid such students in developing and using appropriate communication skills. Furthermore, ongoing assessment makes learning more meaningful to students. Immediate feedback serves two functions. First, it motivates students and second it provides information they can then use to improve their learning (McClenaghan & Ward, 1987). If ongoing immediate feedback is given and students are told the correctness of their answers, it allows them to make modifications in the way they prepare and thus may lead to higher achievement (Zahorik, 1987). Wiggins (1998) asserted that students learn best when four criteria are met: Assessment must be timely, specific, understandable to the receiver, and formed to allow for self-adjustment on the student’s part.

Once feedback is given, “the learner needs opportunities to act on the feedback—to refine, revise, practice, and retry. Writers rarely compose a perfect manuscript on the first try, which is why the writing process stresses cycles of drafting, feedback, and revision as the route to excellence. Not surprisingly, the best feedback often surfaces in the performance-based subjects—such as art, music, and physical education—and in extracurricular activities, such as band and athletics. Indeed, “the essence of coaching involves ongoing assessment and feedback” (McTighe & O’Conner, 2005, p. 16).

Moore (2013) found that while Internet access has expanded dramatically, students spend most their time on passive media that includes film, music, and non-participatory sites and games. News and current events are relevant and connect directly with students’ lives and experiences, yet tragic news that often dominates the news media may inspire educators to shy away from current news and events. Students tend to use technology in every aspect of their

lives, including technology, regardless of their background, expertise, learning preferences, or subjects studied; various forms of technology simply are integral to their success in their studies. Most students find technologies to be excellent facilitator for learning. Today's learners not only use the Internet but also a wide variety of communication technologies. They actively use Line, Google Hangouts, Skype, Facetime, Facebook, Twitter, and a multitude of others to communicate and collaborate. These technologies are free and therefore available to all who want to use them, and students use them in a variety of ways. However, they fall into the category of passive, individual use technologies. Nonetheless, perhaps because of the social media component, there is "evidence from the data that there is a shift in emphasis from passive to more interactive, across all aspects of their learning, which is another characteristic of today's learners" (Conole, 2008, p. 136). Conole (2008) noted that students place a greater value on the technologies they "discovered" on their own as opposed ones they are directed to use by an educator.

Challenges of the New Technology: Teacher Capacity

Hamilton (2007) defined technology integration as the use of any technology or device to support, teach, or assess student learning during an instructional period. There are many ways that students and teachers can use technology, and all of them should be discretionary for learning to occur. By this, I mean that the technology students use to produce the required result should be left open to them. Ideally, teachers should allow students to "obtain information in a timely manner, analyze and synthesize information, and present it professionally" (Hamilton, 2007, p. 3). For technology to be successful, it must be fully integrated into the classroom, and when possible, students should be allowed to select either the technology or how they might use it for particular projects. However, all students need direction in how to make those choices

using a set of principles for advancing their work and the work of a cooperative democratic classroom. As Hewett (2015) stated in *Reading to Learn and Writing to Teach*, there is a major difference between using technology for social interactions and for learning, such reading content, discussing it, and writing essays. In this section, I consider the specific historical development of technology in schools, technological advances and the assets and issues related to technological use. I examine teacher integration in the classroom, which has been stymied to some degree by the business interests that have intruded on school and classroom use. Finally, I use the Partnership for 21st Century 4Cs framework from the previous section to analyze the usefulness of these advances to our overall purpose of dialogue and equity in the classroom.

A drawback to implementing new technologies in educational settings is that it does require more preparation by teachers although it allows for greater connectivity (del Campo, 2012). As technology changes at a rapid pace, it becomes harder for teachers to keep up with these changes and adapt to them rapidly. Many schools do not offer professional development to supplement technology in the classroom, and many schools do not have an administration that is supportive of changes in technology being rapidly implemented in schools. For example, at the TCIS, during the 2016-2017 school year, there was only one professional development session regarding technology required of teachers. It was a short session of fewer than 30 minutes. Many new teachers, as well as others who are slower to learn how to use and adapt various technological tools to their teaching, need professional development opportunities to learn about technology and become comfortable with its use in the classroom.

Additionally, unless teachers are familiar with how people learn, they cannot purposefully choose among strategies, including technology-enhanced learning, to develop units of study that are inquiry-based and support active dialogue (Bransford, Brown, & Cocking,

2000). Success is often hinged on openness to inquiry and willingness to deal with unforeseen events that altered plans. In an asynchronous written or oral discussion, for example, a teacher must be flexible and ready for the discussion to take a direction that was unplanned.

Technology and information skills are essential and much-needed skills in the 21st century. Overbaugh and Lu (2008) supported the fact that teachers must be able to use a wide range of technology to augment curriculum, if they are to be fully competent incorporating technology. To help themselves, teachers need to consider how the technology could be personally meaningful for them to critically integrate it in the classroom. Teachers must also have the technology skills to integrate the different forms of technology into their classroom and daily routine. Harris (2016) stated that for teachers to implement technology successfully, they must fully integrate it into their teaching, assessments, and communication. Teachers must be fully trained and versed in multiple technologies and be able to use them in every aspect of their teaching. For teachers to be successful in this challenging work, administrators must provide foundational support in the form of professional development in a variety of technologies and must constantly update these techniques as time progresses.

One challenge with the use of technology in schools is that sometimes teachers are unfamiliar with newer technologies and they must be willing to learn and adapt quickly. To connect the work with technology to students' experiences, teachers also need a "spirit of inquiry" (Moore, 2013, p. 326). Technology changes rapidly and it is difficult to keep up for most educators. In a classroom that has lively discussions on literature and current events, teachers must expect ambiguity and vagueness as current news is often variable and can be inciting. Students may tend to get into intense but lively classroom discussions related to current events, and many teachers have not been trained in how to deal with fervor. Teachers may

experience a sense of chaos as they are not always experts in all areas that are being discussed. It may make a teacher feel uncomfortable not to know an answer. But, when moving from the teacher as the giver of information to teacher as co-creator of knowledge, teachers are not going to have all the answers. Integration of the lively debate moves teachers from givers and toward a more reflective learning community that Dewey (1938) and others believed were essential for students.

In this section, I discussed technology use in schools and how schools are using technology to benefit students. In the next section, I address the importance of intentionality of academic discourse in the classroom and how two particular technologies aid in creating equitable dialogue and academic discourse. As one of my key research concerns, I wanted to understand how using technology can mediate classroom discourse, enabling this discourse to become more equitable and student-centered.

Talk, Dialogue, and Conversation

During the 2016-2017 year at the TCIS, I observed many students who were scoring higher marks in English class than they were in other classes. I did not understand this phenomenon, so I visited with ten students who were failing other classes and asked them what they were struggling with; interestingly, they all expressed similar experiences. They all said they did not understand the vocabulary of the other class content. I asked them why English class was different, and they said that when they had a question, they felt comfortable asking what something means, and, in other classes, they often were afraid of the teacher's response. For one student, who was new to speaking English and could barely communicate in September, I had seen tremendous improvement and her classroom talk and command of the English language were nearly on par with other students at the end of the year. When I met with her mother, she

said that she was failing social studies and science as she did not understand when the teachers gave instructions. I asked to see some of those instructions and was surprised to see that the teachers used vocabulary words in the questions that were not something that a non-native English speaker would understand.

The issues my students were having in other classes got me to thinking about the importance of academic vocabulary and the importance of a shared vocabulary. I also began to think about the importance that questioning skills play in student success. Specifically, as an English teacher, I wanted to improve my student's ability to have discussions and feel comfortable asking questions of each other and their teacher in a way that inspired confidence for them to ask questions when they do not understand something or to add to a shared discussion. To some degree, these concerns led to my interest in improving students' abilities with academic discourse.

Academic Discourse

Literary discussions have many benefits, and two of these benefits are strengthening students' communication and collaboration skills and fostering "a sense of agency by inviting students to work together to compose questions that lead to discussion and uncovering layers of meaning in texts (Robb, 2017, p. 20). When students are taught to generate their own questions for discussions after reading rich literature in a meaningful way, they develop a deeper understanding of the text (Rothstein & Santana, 2011). Students in Grade 7 at the TCIS tend to enjoy discussions about literature. When they lead discussions with questions they have composed and I encourage them to explore multiple interpretations, the discussions have been incredibly rich and insightful (Robb, 2016).

In my classroom, students read books in different ways. Sometimes we read books aloud, sometimes we partner-read books, and sometimes we have periods of sustained silent reading. According to Robb (2010), teachers can engage students in talk about literature regardless of how they are reading the text. Meaningful conversations are powerful tools that can help students make connections to their world, to better understand text, and to develop moral purpose and direction in life. When discussing literature, students learn how to talk to other students in a way that leads to deeper thinking (Robb, 2017). For example, conversations about the story map details that we use in Grade 7 include detailed information of plot, characters, setting, conflicts, and theme—all of which seem to initiate deep thinking for the middle school students in my courses (Rosenblatt, 1978). When my Grade 7 students at the TCIS read *The Giver* (Lowry, 1983) in the 2016-2017 academic year, I asked open-ended questions as opposed to closed-ended questions. The conversations that ensued were wonderfully thoughtful, and students said they enjoyed the book much more because of those deep discussions.

Socratic Seminars

Having observed classrooms at the TCIS on multiple occasions, I noticed that the vast majority of teachers utilized the lecture method. For many teachers, this method of teaching is the only approach they have ever practiced. However, this methodology places the teacher as the most important piece of the learning process. On the other hand, Socratic Seminar teachers know “that the student is the most important part of the learning process” (Moeller & Moeller, 1985, p. 3). My desire for this change of dynamics inspired me to learn more about Socratic Seminars. In this section, I discuss where Socratic Seminars started, what a Socratic Seminar is, and the value of Socratic Seminars in classrooms.

Socrates was not the first to note the importance of questions, but his writings and teachings about questioning and their role in effective discourse are as relevant today as they were during his life in ancient Greece. The Socratic Seminar is based on Socrates' belief in the importance for students to think for themselves and to engage in intense dialogue. It is during this dialogue that students implement a "variety of thought-demanding ways to explain, muster evidence, generalize, apply concepts, analogize, represent in a new way" (Perkins, 1993). Or, as Tredway (1985) stated, "they engage in active learning" (p. 27).

Freire (1970) postulated that teachers should not "fill" students with information but instead help them arrive at their own meaning. Socratic Seminars are an alternative to the traditional mode of teaching where the teacher fills the students' heads with information as if they merely were receptacles. In a Socratic Seminar, the teacher does not lecture and is not the sole giver of information for the class. Instead, the teacher presents the class with a text to discuss and acts as a facilitator of the content of discourse with little participation in the discussion. Adler (1984) stated that seminars can be described in a single word: "they are *conversations*, conducted in an orderly manner by the teacher who acts as leader or moderator of the discussion" (p. 17). He also stated that a teacher should be inquiring and asking questions to get at the truth. He stated that Socrates would say this method of teaching is "something like midwifery because he viewed it as assisting the labor of his companions in giving birth to ideas" (p. 15). According to Tredway (1995), the role of the teacher is to "guide students to (1) a deeper and clarified consideration of the ideas of the text, (2) a respect for varying points of view, and (3) adherence to and respect for the seminar process" (p. 28). Thus, as Freire (1970), Adler (1984), and Tredway (1995) suggested, teachers need to facilitate student conversations and allow the students to develop them to find deeper meanings in the text. Although Adler (1984)

would have teachers take a somewhat more active role in the conversations than Tredway (1995), in all of these cases, the conversation itself is held as most important to the learning.

Creating an environment where conversations and discussion flourish is the goal of Socratic Seminars. Brookfield and Preskill (2005) pointed out that discussion “is a particularly wonderful way to explore supposedly settled questions and to develop a fuller appreciation for the multiplicity of human experience and knowledge” (p. 3). They further stated that when discussions come alive, they are among “one of the most powerful experiences we can have as learners and teachers” (Brookfield & Preskill, 2005, p. 3). Indeed, as discussions progress, “a collective wisdom emerges that would have been impossible for any of the participants to achieve on their own” (Brookfield & Preskill, 2005, p. 4). Thus, Brookfield and Preskill suggested that the collective wisdom of the group is shared and enhances the individual wisdom of each participant. They listed 15 benefits of discussion (Brookfield & Preskill, 2005, pp. 22-23).

1. It helps students explore a diversity of perspectives.
2. It increases students’ awareness of and tolerance for ambiguity or complexity.
3. It helps students recognize and investigate their assumptions.
4. It encourages attentive, respectful listening.
5. It develops new appreciation for continuing differences.
6. It increases intellectual agility.
7. It helps students become connected to a topic.
8. It shows respect for students voices and experiences.
9. It helps students learn the processes and habits of democratic discourse.
10. It affirms students as cocreators of knowledge.

11. It develops the capacity for the clear communication of ideas and meaning.
12. It develops habits of collaborative learning.
13. It increases breadth and makes students more empathic.
14. It helps students develop skills of synthesis and integration.
15. It leads to transformation.

These 15 benefits encompass many, but not all, benefits of classroom discussion. They also include many of the skills needed in the 21st century. They encompass the 4C's of 21st-century learning (Partnership, 2016) discussed above, but they go further and add another C to this list: care. These 15 benefits of discussion certainly support the needs of modern learners.

These 15 benefits of discussion indicate why teachers use Socratic Seminars in classrooms and the importance such seminars play in helping students make connections to texts. Socratic Seminars help students speak the language of academic discourse and more deeply understand the texts they read. According to Brookfield and Preskill (2005), "Building connections, both personal and intellectual, is at the heart of discussion" (p. 28). They continued: "teachers who believe in inclusivity and who value students' voices and experiences can't avoid discussion" (Brookfield & Preskill, 2005, p. 29). These types of discussions, then, are not only relevant today but necessary to help students prepare for 21st-century intellectual endeavors.

Lambright (1995) defined Socratic Seminars as an "exploratory intellectual conversation centered on a text" (p. 30). The goal of Socratic Seminars is for students to be engaged, find ways to learn from each other, and feel more empowered in the classroom. Socratic seminars are student-oriented in that the teacher starts the discussion as facilitator, but the students must engage with the process, which is designed for their enlightenment. And, as Tredway (1995) stated:

Because the meat of seminars are the big questions of life . . . students are involved in making decisions about how to live their lives. They are encouraged to practice habits of mind and heart that further the individual and society. As a result, the school fulfills its primary purpose: preparing thoughtful citizens for active involvement in a democratic society. (p. 29)

The movement from recall to the “big questions” is why many educators employ Socratic Seminars in their classrooms; they can help students move from reciting facts to “true understanding” (Winebrenner & Brulles, 2008, p. 161).

In summary, Socratic Seminars have a long history. Scholars have used this method in various levels of academics for hundreds of years. There are many benefits to utilizing the methods of Socratic Seminars and many of those benefits are outlined above. However, Socratic Seminars are not the only way to encourage dialogue in classrooms. In the next section, I discuss another method, which is Lyman’s (1987) the ThinkTrix Matrix. Lyman created ThinkTrix to help students develop critical thinking and questioning skills; his method engages a matrix that uses questioning techniques to encourage academic discourse.

ThinkTrix

ThinkTrix is a questioning strategy to promote higher-level thinking and questioning skills in students. Lyman (1987) used a grid that stacks questions hierarchically to encourage students beyond simple recall to questions that require critical thinking skills. The seven types of questions are recall, similarity, difference, cause and effect, idea to example, example to idea, and evaluation. For example, regarding a novel, a simple recall question might be “where does this story take place?” while a critical thinking enhancing question would be “what motivates the main character to change his direction in life?,” which is an evaluation question. Using a question strategy or guide such as the ThinkTrix Matrix gives students much needed practice in all levels of thinking and creates a “thinking taxonomy” that is friendly to all types of learners

(Winebrenner & Brulles, 2008, p. 157). In an email conversation, Tredway stated that Lyman understands the value in academic discourse and “understands its deep value (instead of the trivial ways we sometimes use it in schools).” Tredway also said that the ThinkTrix Matrix

requires that students actually have a handle on forming questions and understanding how to frame questions that are what Lyman calls thinking actions—and his thinking matrix or ThinkTrix. These essential thinking actions are a part of seven critical thinking actions. They are more transparent than Bloom’s 6 [sic] levels in many ways because they are in language we actually use to think: compare and contrast, for example. (Tredway, email correspondence, July 22, 2017)

Lyman (1987) created visual cues to prompt students to create their own questions. According to McTighe (2015), this tool is “an elegant cognitive tool for developing students’ thinking skills” (Twitter, December 12, 2015). The thinking matrix that Lyman (1987) designed aids teachers and students in generating questions and responses. The ThinkTrix Matrix has “many uses in the classroom. Students can analyze classroom questioning or discourse; or they can create, analyze, and answer their own questions using a desk-size matrix as a game board” (McTighe & Lyman, 1988, p. 19). According to McTighe and Lyman (1988):

teachers can make up their own questions, teach question design to students, show students how to respond to information for different thinking types, and put out the possible visual representations, or cognitive mappings, of each thinking type. In essence, the thinking matrix allows for shared metacognition in which teacher and students have a common framework for generating and organizing thought as well as reflecting upon it. (p. 20)

The flexibility of ThinkTrix is one of its major strengths as a teaching and learning tool.

ThinkTrix also encourages students to analyze literature in which they “are learning a comprehension process to drive personal meaning from reading. Thereby, they are led to the heart of literature” (Lyman, 2005, p. 34). In an email correspondence with Lyman (2017), he said, that ThinkTrix “has the potential to radically improve the level of discourse in classrooms worldwide. Students who can create their own dialog will always know more about how to learn;

they are in a sense set free” (Lyman, email correspondence, September 23, 2017). Setting students free intellectually means giving them brain-memory control. As jazz pianist Herbie Hancock (2015) once said:

truly being in the moment—means exploring what you don’t know. It means going into the dark room where your brain, a sort of muscle memory, and allowing your gut to take precedence over your brain. This is something I still work on every day: learning to get out of my own way. It’s not easy, but the times when you can do that are truly magical. (Hancock & Dickey, 2015, p. 23)

Similarly, the ultimate goal of ThinkTrix is to help students explore what they do not know in a way that is easy for them to understand and to get out of the dark room by co-creating questions with classmates and teachers and working their brains through metacognitive analysis.

Flipgrid

Flipgrid is a relatively new technology that educators have started to embrace. Flipgrid is an asynchronous video response platform that allows teachers to host video-based discussions with students. It is asynchronous because students do not respond in real time, but they do respond to classmates when they have time to respond. As teacher, I create a topic grid with a question, and students respond to that question with an individually recorded video. Within their team of about four students, they each record and then share their comments. Then, teammates watch each student’s videos and make another video that responds to their classmate, using dialogue that shows the teacher they have listened to their classmate, understand what he or she said, and recorded an appropriate response that discusses the same topic and expands the dialogue. Finally, students respond to one or more of their peers in the team to complete the discussion loop.

Students can use a webcam, tablet, or mobile device, but since they all have laptops at the TCIS, everyone has the basic hardware available. The platform allows for asynchronous

discussions of literature that lets students interact within small groups in a dynamic way. I was not able to find research literature on Flipgrid, but the platform does enable a sophisticated academic discourse to happen. For example, I observed such discourse by my students when we had discussions about the importance of friendship in Tolkien's *The Hobbit* (1937). As students participate in deep conversations about rich literature, one of the goals is to develop their ability dialogue with each other, responding to each other and making connections with others' thoughts and ideas. As students participate in this type of thinking, their reading is the "heart of metacognition, which can improve visualization, recall, understanding, and critical analysis" (Robb, 2016, p. 4). I observed this kind of thinking with the classwork regarding *The Hobbit*, and for the purposes of this dissertation study, I believed that the practiced use of asynchronous technology could enhance this type of thinking.

Google Docs

When students write about books they read, their comprehension of the text jumps 24 percentile points (Graham & Harris, 2016). Reading comprehension is an issue for the Grade 7 students at the TCIS and I looked to Google Docs to aid in this problem. Google Docs is a synchronous writing technology in that students can work collaboratively on the same document at the same time. Unlike Flipgrid, in which students work together asynchronously, or at different times, Google Docs can be used to work together synchronously. Google Docs is a word processing software, but it has more advanced features that allow it to be a great tool for synchronous collaborative writing. One of the features of Google Docs is that through its commenting feature and writing history displays, it allows for peer and teacher feedback for writing classes (Brodahl, Hadjerrouit, & Hanson, 2011).

As Hewett (2014) indicated, technologies for writing will continue to develop and can change the way that teachers teach writing and the way students learn writing. Teachers can help their students when they pay attention to such technologies. For example, Hardison (2012) said that Google Docs was a beneficial tool for ELL teachers to help inspire students as it allows them to work collaboratively and to express their ideas in an environment they experience as comfortable and safe. Working on Google Docs with ELL students allows them to practice the English language in an inspiring environment (Zeiss & Isabelli, 2005), and it enables the teacher to guide students right in the writing itself when they get stuck or ask for help. The Grade 7 students at the TCIS used Google Docs in a synchronous manner in this study. It was, as later chapters in this dissertation show, a beneficial learning environment for them as ELL students but also for them as writers who needed to learn how to collaborate as a team.

In sum, I cite DeVoss, Eidan-Aadah, and Hicks (2010) in *Because Digital Writing Matters: Improving Student Writing in Online and Multimedia Environments*: “Digital writing matters because we live in a networked world and there’s no going back. Because, quite simply, digital is (p. ix). And the simple fact of digital technology is one reason that engaging it in this dissertation study was so important.

Conclusion

This chapter focused on literature related to re-imagining schools as active democratic places, the current technology landscape, technology use in schools and technology used to aid in discussions and collaborative writings, and academic discourse methods including Socratic Seminars and ThinkTrix. The most significant literature I read detailed how democratic environments can be co-created in the classroom and how authorizing student’s voice in the classroom aids it creating and sustaining a more equitable environment. What is missing in the

literature I reviewed was the ways technology can aid deep discussion of literature. While the literature on technology does not directly engage how software can democratize a classroom, I believe that interactive tools can mediate the experience for students and increase their ability to engage in dialogue. As a result, students can be more prepared for students for 21st-century skills of collaboration and technological capacity. Based on the review of literature, this study that engages both critical thinking strategies and technology is important to increasing students' abilities to have more equitable dialogue. My project at the TCIS contributes to this missing portion of academic research. Engaging students in both learning and metacognition of their learning contributes to research literature by documenting how an ELL classroom can be made more equitable; detailing ways technology can augment democratic spaces; and verifying how specific questioning techniques can foster 21st-century learning skills.

In the next chapter, I discuss the TCIS context, the place where this action research project took place, including my history with education and technology.

CHAPTER 3: CONTEXT

I visited Bangkok, Thailand for the first time in 2002. My experience was as a tourist, but since I had three months on tour, I could see the country in a way that most do not experience. Having a passion for education, I visited Thai schools. I was not surprised at how rustic they were or the supplies they seemed to be missing. What surprised me was the cheerfulness students exhibited through their smiles, demeanor, and conversations. In each school I visited, I could visually verify that the students in Thailand wanted to learn and wanted to be in school. This is just one of the many reasons that I fell in love with Thailand. Because I have worked with computer technology in business settings, I also noticed the lack of computers in the classrooms and how little educational technology had reached Thai classrooms.

A few years later, I rode in a charity bike ride from Chiang Mai to Phuket. It was 30 days of biking, and most days we would stop and visit a local school. Again, the students' love for learning was evident on their faces. I remember arriving at many schools in the early morning, and the loudspeakers played a song that paid tribute to the King of Thailand and the country more generally. In each school, much like in the US when I was a child, the teachers and students sang loud and vibrantly. The experience transported me back to my childhood education. Still, after the several years that had passed since my first visit to Thailand, students sat in rows, raised hands, and were taught in traditional manners.

Skip forward fifteen years after my first visit, and I am now teaching at a school on the outskirts of Bangkok. My school is a private, independent international school, comprised mostly of middle-class Thai students. However, like the other schools I had visited, the anthem is sung each morning, and all students stop and sing and pay honor to their King and their country. Their eyes express the same sense of love for their country and their King as those that I met in the

public schools years before. As my students sing each day, I see them for who they are; they are a group of students who love their homeland and want to make a difference in their world. But, unlike the other schools I have visited in Thailand, the TCIS supports technology in the classroom and throughout the entire school. However, like the Thai schools visited previously, the traditional classroom model is prevalent.

Educators know that technology has multiple benefits: it helps prepare students to communicate (Strathan & Torell, 1996), it keeps students engaged collaboratively (Robb, 2017), it encourages students' positive interaction with peers when working together (Brody, Cohen, & Sapon-Shevin, 2004), it often improves reading comprehension (Darling-Hammond, 2008), it gives students a more dynamic learning experience by allowing them to communicate across national boundaries (Childress, 2016), and it is flexible and easily adapted for differentiated learning (Kellems, Grigal, Unger, Simons, Bauder, & Williams, 2015). One benefit of educational technology is providing democratic access to students, so they can more fully participate in the classroom (Nepo, 2017). Besides being critical to 21st-century learning and a skill nearly everyone needs, using technology for learning has the potential to offer an additional benefit: democratizing the classroom dialogue space (Partnership, 2016). In my own teaching, this is the case. For example, during the 2016-2017 academic year, I used several technological platforms to increase student participation, and that success prompted me to want to understand how educational technologies can enable such changes more widely and systematically and how the use of technology can aid in creating a climate filled with lively discussions.

Even though the TCIS has a full technology staff and expresses a commitment to technology as a school focus, the use educational technology in the classrooms is limited. The TCIS has fast Internet, a 1-1 laptop program, and money budgeted for improving technology. It

has been the host school for Asia's Google Summit (2014-2017), and it will continue to host that meeting for the foreseeable future. Yet, my observations and interviews during the 2016-2017 academic year indicate that the majority of teachers in this school do not know how to implement the range of available educational technology effectively. In eight of nine classrooms in which I observed teachers in 2016, the common technology was the overhead projector. In three of those nine classrooms, Google Classroom was used in a limited way. Some teachers were designated to participate in the Google Summit (held on campus), but many of them did not complete the full three-day seminar and some only moderately participated. A ray of hope has been that the teachers who did participate exhibited more openness to increasing the uses of educational technology in their classrooms as I observed when they completed the Google Summit and started to implement some of the new strategies in their classroom.

For a school that advertises itself as one of the centers for technology in Asia, I see miniscule amounts of technology used in ways that are not conducive with the possibilities educational technology presents for student interaction and that give students a voice in their learning. I have observed no examples of classes where equitable dialogue was occurring. And, I observed extraordinarily little teacher or student creativity being enhanced through uses of technology. Partly because of my own tourist visits, I decided I wanted to enhance the TCIS mission to be a technological innovator. I wanted to more deeply advocate for and understand how to transform how teachers and students use educational technology in the school. In particular, I wanted to understand how thoughtful uses of such technology can open an avenue to more democratic classroom structures that support other key 21st-century learning requirements: how students communicate, collaborate, think critically, and create (Partnership, 2016).

In this chapter, I discuss the TCIS as the context for this action research project. In section one, I describe the general context of the project and discuss how it is and is not a place of equitable practice. In section two, I examine the history of schools and why my history in education is important to this project. In section three, I consider the current political environment at the TCIS and how this environment influences work at the school. In section four, I review the project's Co-Practitioner-Researchers (CPRs) and how I interact with them. Finally, in section five, I discuss my role in this project and how I worked with the CPRs.

Place

This study took place at the TCIS, a non-profit school on the outskirts of Bangkok. This context is important given that most schools in Bangkok are for-profit schools. In 2000, Bangkok had nineteen international schools. By 2013, that number grew to 123 international schools in the metropolitan area. In 2015, the number was 129, with 12 new schools being considered for acceptance and accreditation (memo, October 10, 2016). The TCIS is one of the oldest schools and is affiliated with the Thailand Taiwanese Council.

In the fall of 2016, when I took a job at the TCIS, I chose this school because I loved Thailand and believed that I would be able to make a difference in my students' lives. Founded in 1995 in Bangkok and one of only 19 international schools in Bangkok at that time, the TCIS's goal is to teach an American Curriculum that was taught in English but also teaching Thai and Chinese (mother tongue) to all students. The school started with 25 students and today has over 700 students in PK2—Grade 12. The school's mission is to provide a strong educational program based on American curriculum standards and three languages: Chinese, American English, and Thai. The TCIS is the only school in Bangkok where all students are taught in English, but also are required to study Thai and Chinese daily.

The student demographic at the school is 52% male and 48% female. The staff is comprised of 65% female and 35% male (memo, October 10, 2016). The staff makeup is consistent with other international schools in which I have worked and visited in its ratio of having more female than male staff. The school has a structure in place that supports success in its endowment that will allow it to function in the future. To understand why the school has problems with educational technology and equity, however, one must understand the history of the school. This section explains the leadership, governance concerns, and student achievement and opportunities.

Leadership Focus

Dr. Steven Ballowe was the Head of School who hired me and was the director during my first year at the TCIS. When he took over in 2013, the school was not aligned with current educational standards. First, students were not offered academic course acceleration in English, math, science or social studies. Second, Chinese and Thai were the only two options students had choices in selecting language courses. The TCIS is a distinctive place for students as it is the only school in Thailand that requires proficiency in three languages: Chinese, Thai, and English. Third, the three sections in the school—Lower School, Middle School, and High School—operated independently on separate bell schedules, which prohibited student crossover from one section to another section. They were established as three different schools. Fourth, the school had no program in place to for students who were bilingual but needed additional support in English. Finally, the school had no consistent academic promotion or retention standards. Students were socially promoted without needing to master academic standards.

Dr. Ballowe and his team made numerous changes after he became Head of School in 2013: students were individually scheduled in all academic areas; all three school sections started

to share the same bell system that allows for sharing of courses and teachers to meet individual needs of students and educators; a Language Academy was developed to support small group instruction to bilingual students who were not proficient in English; and, perhaps most important; to be promoted, all students needed to master academic standards. While these new actions did not of themselves make the TCIS the top school in Bangkok, they did enable the school to challenge students and hold teachers, administrators, and students accountable for authentic learning.

Governance Concerns

The Board of Directors, comprised only of Taiwanese nationals, is actively involved in all decision-making at the school. While the student demographics with regard to gender are close in number, the make-up of the Board is disproportionately male. The inequitable demographics of the Board often leads to programs that are traditionally considered male centric, including robotics, engineering, and sports, all of which receive higher funding than other programs. While Taiwanese students are no longer the majority at the school, the Board has maintained its makeup of all Taiwanese Board members. The Board's power is strong and nothing happens without Board approval. For examples, the Student Affairs Office sets the expectations for student achievement, and the Board of Directors approves, changes, or denies those expectations.

In regard to educational technology decisions, the Board has been slow to act, although that may be a result of the lengthy approval process for all purchases in technology in order to bring the school up to speed in terms of standards and operations. The current 1-1 laptop policy is one of the agenda items that the Board took a few years to approve. Most things related to technology are delayed and awaiting action from the Board; changes related to educational

technology often have required more time to discuss and then implement. In a discussion with the Technology Staff, they identified that they have numerous ideas to improve technology at the TCIS, but when suggestions are made, they require moving through several channels for approval; while this process is customary in most international schools, the length of time to secure approval and for invoices to be paid by the Board is substantially longer at the TCIS according to staff members who have worked at multiple international schools. The longer approval process is because the Board generally meets two times per year and not all agenda items are covered during those meetings.

In addition to the time-related issues of Board approval, there is an impression that the Board focuses more on the success of the Taiwanese students and less on the Thai students. Students express that they feel this way because the school supports multiple trips for students to Taiwan but not as many to other locations. This apparent inequity leads to key inequalities of concern to teachers and some students. For example, Taiwanese teachers are paid more than Western teachers, and Western teachers are paid significantly more than Thai teachers. The discrepancy in salary is an issue that many Western teachers state as a reason they do not stay at the TCIS for longer periods of time. It is also an issue with the Thai teachers as they express that they are taken advantage of by doing the same workload as other teachers while paid one-third less in salary and one-tenth less in benefits. Taiwanese teachers receive preference for smaller class sizes and in desirable schedules. The curriculum at the school has rigorous requirements for both English and Chinese Languages. However, the amount of time required to study Thai is less than fifty-percent. For another example, most Chinese holidays are celebrated, and school is closed on those days, but the same is not true for the Thai holidays despite the school's location in Thailand. Indeed, while the school does not provide the financial data regarding event

expenditures, the events related to Chinese holidays are grander in scale than other holidays. Finally, a sense of inequity can be observed in conversations with students, who sometimes state that being of Chinese descent gives them an advantage in the school and in the world. I met with my Taiwanese students in the spring of 2017, and they said they believe they have a better chance of success than the Thai students because they will be given greater access to the world and to college and university acceptance. On my first day of school in 2016, I asked a student if he was from Bangkok, but the student was visibly distressed and said, “I am not Thai. I am Taiwanese.” The look in the student’s eyes affirmed for me that there was a feeling of superiority from which he identified.

Student Achievement and Opportunities

Student achievement is a significant factor in the school, and both students and parents are invested in high GPA’s. Most students desire to go to college after graduation, and, therefore, good grades and a respectable high school transcript are vital. However, I have not observed an incredibly rigorous level of expectations at the school from teachers or administrators. For example, on more than one occasion, I walked into a colleague’s classroom to find students watching a movie that was not related to curriculum. On other occasions, I witnessed teachers only using handouts and lectures to teach classes. When I talked with students, they said that the school was easy for them and several of the students leave in Grade 9 to attend more prestigious schools.

While teaching students to be multilingual is a worthy 21st-century goal, the TCIS is not fully preparing students for the 21st century technologically. In addition to teachers’ lack of knowledge or skill, school policies often inhibit student technological growth. Along with teachers not receiving sufficient training in the uses of educational technologies that might help

students with their learning, these things create an environment where teachers tend to teach with the same tools they used years ago (Lee, 2006).

Nonetheless, the TCIS has made progress in trying to prepare students not only for college but to prepare them for 21st-century learning skills that they will use after they leave school. Part of this preparation does include use of technology in the school, even if it more minimal than what I see as useful. The TCIS is equipped with excellent Internet access, and students have access to multiple learning labs and computer centers. The school invested in a video production classroom with high-end Apple computers and software for digital learning. However, these labs are for advanced high school students only, and no such labs exist for the lower school or the middle school. All students in Grade 5 and above have a laptop in school. Many teachers in the high school utilize Google Classroom. However, most of the middle school teachers hired prior to Dr. McGrath use little educational technology. With new leadership as Dr. McGrath took over as Head of School, there is hope that technology will be used more under his direction. For example, in my conversations with Dr. McGrath, he has expressed that he wants to increase the school's Internet presence, take advantage of technology available to ELL students, and provide more assistance for teachers to be trained in educational technology.

In the next section, I provide details on the history of the TCIS and how this history has affected my action research project at the school.

Personal Education History

Technology has consistently continued to be an important element of the educational experience. From Horn-Books in the mid-sixteenth century and chalkboards in the late 1800s to overhead projects and the photocopier in the 1950s, technological advances paved the way for the modern 21st-century technology. Early in the twentieth century, Thomas Edison said, "Books

will soon be obsolete in the public schools. Scholars will be instructed through the eye. It is possible to teach every branch of human knowledge with the motion picture. Our school system will be completely changed inside of ten years” (Saettler, 1968, p. 98). What Edison predicted did not occur quickly, but it is easy to see how his prediction could have had a great impact had schools embraced technology. As technology has evolved rapidly in the last 20 years, however, teachers who have kept abreast of changes in educational technology often have found themselves challenged. They must work rapidly to keep up with these changes and to make appropriate pedagogical uses of educational technologies. Technology plays a pivotal role in the constructions of the current educational system and is crucial for 21st-century learning skills; it is essential to understand the history of technology as it relates to education and this research project. In this section, I focus on my history in schooling and what I see as the major goals of schools and education, my current school and its history, and how some of the changes in educational technology may affect my project.

My history of schooling has been important for this project because my education in a traditional classroom never exposed me to a classroom where students help direct the learning nor to a classroom where student’s voice was important and valued. My history can be seen through the eyes of readers of “The Legend of Sleepy Hollow” and Ichabod Crane (Irving, 1822). In 1846, Beecher gave a lecture “The Evils Suffered by American Women and American Children” (Goldstein, 2014). In this speech, she called male teachers incompetent and unfeeling. She then compared them to Crane, the protagonist of “The Legend of Sleepy Hollow.” This story resonated with me when I was in high school because I had many teachers who were male that were like Crane. In my experience, these teachers were tyrants and lorded their power over the classroom, and I always believed they were trying to hold their power over children as opposed

to teaching children. Another reason this story resonated with me is that when I started teaching, I made a pact with myself to never make a child feel demoralized or unworthy. Since my experience as a child was one where I hated going to school every day from Grade 7 until I graduated, I wanted my life to have a positive effect on children, and I do not feel that just because I am a man that I cannot be as good of a teacher as a female. Unlike what Beecher (Goldstein, 2014) observed about male teachers, I do not lord my power over my students. To the contrary, I try to make sure each of them has a positive experience in my classroom every day. Schools should be safe havens for students, and they should be welcoming and warm. But they also must be kept up to date. Therefore, new technology should be embedded in teaching and learning as appropriate to the educational goals so that students are prepared with the skills they need to succeed in the 21st century.

Other experiences in my schooling career support my beliefs about teaching and learning and point to my deep interest in technology as a vehicle for learning. The time-honored technology in 1972 when I entered school was the blackboard. By 1978, calculators and scantrons were used, and that fascinated me as a child who had trouble in school with the typical ways of schooling. In 1984, I was a senior in high-school and computers were just making their way into the classroom; the ability to code with the DOS programming language was exciting. By the time I started Goucher College in 1987, the personal computer (PC) was abundantly available for reasonable prices, and writing essays using word processing software was a treat for many of us who previously had only used pen and paper. In 1993, I started teaching middle-school; although there were Apple Labs in the school, teachers did not have access to them. I left the teaching profession for fifteen years to work in the technology sector, and when I returned to

teaching in 2014, I was amazed at the possibilities that technology had afforded teachers and students.

When I took my first teaching job in 1992, most of the classroom technology was still primitive, but we had an Apple Lab in the school, and my students could use these machines to play games. I remember the Oregon Trail game and how much my students used to beg for me to let them play during their free time; I also recall an electronic chess set in my classroom that played against students during their free time.

In 2015, when I took a job teaching in Saudi Arabia, I had not been working in education for nearly fifteen years. When I returned to teaching, I had no idea how much technology had advanced for classroom uses. I had a Smart Board, and every student had an iPad and computer. I had only a few months to learn how to use the software and how to set up my students for success in the classroom. Learning these platforms and applications increased my desire to make technology an integral part of my students' daily lives. However, when I re-entered the teaching profession, I observed that there are many ways to incorporate technology while there are too few teachers who take advantage of even the smallest amount of technology available.

My first year at the TCIS in 2016 was a true eye-opener for me in several respects. I discovered that the school was run from a top-down approach with few other than the administrators and the Board of Directors making any decisions. Even our Western Association of Schools and Colleges accreditation committee did not provide input and only were told what the administrators were doing to solve each issue the WASC had mentioned in previous visits. I was asked to take over the school yearbook, and while I had no experience in doing yearbook work, I agreed as a way of helping the school. I was surprised to find that this task meant I was supposed to design, edit, and make all decisions on the yearbook by myself, and that I needed to

meet administrative and Board approval. That process did not work well for me. Instead, I reached out to students and asked for a committee that would be willing to give up one or two lunches each week to help with the design of the yearbook. To my surprise, I had over 22 students volunteer and they had an active voice in what would be in their yearbook and how it would look. When the yearbook came out, multiple students told me it was the best yearbook ever and they appreciated that a teacher finally took advice from students. For example, the students determined the theme of the yearbook and designed the cover. This was possible because Dr. McGrath, the current Head of School, has a vision for making the school one of the best schools in Thailand and he has been willing to adapt to changes in many areas.

As I looked to the 2017-2018 school year and engaging in the dissertation project, I realized that I needed to find other ways to incorporate student voices in decision making at the TCIS. For my project, I embedded technology in every possible facet of my classroom and worked to help students learn to use critical thinking in equitable and respectful dialogue. However, given the school's resistance to change, I worried that I might run into problems or issues with Board members or administrators. As upcoming chapters reveal, Dr. McGrath's support and openness to new ideas helped to smooth potential rough spots. Additionally, because I taught a few Parents Association members' children in the year prior to the study and because they expressed that they had a positive experience, those members told me that I would have the ability to try and test new things in my classroom. I have found that these positive feelings translated to positive, active support for my pedagogical goals.

Evidence of Focus of Practice

At the beginning of the 2016-2017 school year, I observed students reading a chapter from a book. They read every word flawlessly, but they were unable to answer questions related

to what they read. I also saw that, when given a test on a book we were reading, their recall of basic information and vocabulary was high, but they were not able to explain, describe, restate, or summarize parts of the book. They could answer the simple questions of *who*, *what*, *when*, and *where*, but they were unable to explain the *why*” or compare or analyze the text in different ways.

Students at the TCIS are hardworking students and want to improve their English skills. As the TCIS is a tri-lingual school, all my students speak Thai, Chinese, and English. Students in Grade 7 can carry on great conversations about daily life in English and can converse with other students and teachers on a high level. However, I found that they were unwilling to discuss literature and take risks with dialogue when discussing anything other than basic queries. I introduced Flipgrid to them as a tool allowing them to discuss literature via video without taking the risk of speaking in class. I found that they enjoyed Flipgrid, and the more we used it as a tool to get students talking about literature, the more they voiced opinions in class about their reading.

For example, I had one female student who was quite shy at the beginning of the school year. She was so quiet in front of the class that no one could hear her voice. After I introduced Flipgrid as for use in the dialogue tasks for each reading, she started to speak with more clarity and her voice gradually got louder. My practice was to have each student give a brief talk once per month on an independent book they read at home. I videotaped these speeches and send them to parents. When I had the last parent-teacher conference, her father told me, in tears, that he was so happy that she was speaking comprehensible English in her speeches. For me, it was great to see a student come out of her shell and start to speak with clarity and confidence. When I asked her about this, she said that Flipgrid conversations helped her to debate with her classmates and the more they heard her opinions, the more they sought her for advice on the literature we were

reading at the time. This confidence spilled over to the classroom discussions and she became more active in the classroom.

Approximately 30% of my students are of Chinese (Taiwanese) descent, and the rest are of Thai descent. I observed that the Chinese students were often the students who were making higher grades and able to discuss literature on a more advanced level. The ratio of male to female students is almost 50%, but in class, males dominated the conversations at the beginning of the year. As more students used Flipgrid for discussions of themes and analysis of literature, more female students appeared to be willing to speak up and take the lead in the conversations.

Also during the 2016-2017 academic year, I observed that my students were below grade level in reading, and they struggled with reading comprehension. In an effort to improve this deficit, I started having extended discussions with students on each chapter we were reading. These active discussions improved their reading comprehension. Because of this success, I wanted to study to what extent the use of educational technology could increase student dialogue, whether that dialogue might transfer to classroom discussions, and whether those discussions could help to create a more equitable classroom environment.

Political Environment

The political environment, including the administrative disarray at the TCIS, had the potential to influence the proposed action research project. For that reason, I was careful to organize the project with few other adults involved and relied mostly on what I have been learning from the classroom environment. In past years, the teachers reported that they felt as if administrators believed they were easily replaceable. In 2016, we lost a long-term English teacher who transferred to another school. She stated that she left because the school did not take women seriously regarding administration opportunities. The school often has promoted

positions with extra pay like Head of Department based on which person the administrators thought needed more money and not based on qualifications. Many teachers have expressed that this system ignores women in administrative roles. However, under Dr. McGrath's leadership, this cycle appears to be breaking as a more equal number of females serve as Head of Department under his leadership.

This year, several candidates who were offered jobs did not accept because the packages at other schools were better. Dr. McGrath and two Board members participated in recruitment interviews in the US, but they learned that getting good teachers is difficult when the school salary and benefits packages are not competitive. According to the administration, the experience of seeing so many teachers gravitate toward other schools will make them reconsider better pay scales and better housing allowances for teachers.

While the current administration is supporting my efforts in this action research project, the school tends not to keep administrators more than a year or two. The principal that was my direct supervisor for the middle school was the fourth principal in five years, and many of my colleagues expressed to me that he would be looking for a new job at the end of the year. The previous Head of School was forced out even though he wanted to stay at the school in any position available. The previous Thai Director was asked to resign in April after ten years at the school. In other words, the administration has often been in disarray. However, Dr. McGrath has been at the school for many years and moved up from High School Principal to Head of School. He has been able to retain the current High School Principal and Middle School Principal for more than two years and there is hope that that administrative turn around has begun to change.

The political and administrative situations affect student enrollment. In the last few years, the TCIS student population has decreased from over 850 students to fewer than 650 students for

the 2017-2018 academic year. The middle school has seen the most dramatic decrease in students, which may be attributed to the revolving principal chair. Since 2012, the middle school enrollment has been reduced by 80 students or about 40 students per grade level. Teachers have reported that they are completing many evaluation forms for students transferring to other schools. When I talked to two parents whose children are leaving, both said they were not happy with the turnover of faculty at the school and they did not want newly certified teachers in charge of their children's classroom.

It is obvious to most teachers at the TCIS that there are a multitude of problems, but the hope is that with Dr. McGrath as the new Head of School, some of the problems will be resolved and great things will start happening at the school. It is with this hope that I decided I wanted to do an action research project that aimed to create an equitable environment using current educational technology. At the TCIS, the voices of both teachers and students need to be heard although they often have been silenced. Once students are given the tools to be more assertive in their communications with each other, my hope is that they may begin to stand up for more equity within the school community.

Action Research Group

Action research is a type of research that is initiated to solve an immediate problem or a reflective process of open-minded problem solving. It is a way to improve issues and solve problems in an environment that usually incorporates a team of people interested in the same outcomes. Action research opens up a space for a group to delve deeply into an issue or problem that is important to them (Hunter, Emerald, & Martin, 2013). According to Greenwood and Levin (2013), action research is both a research strategy and a reform practice and it centers more on doing “with” rather than “for” (p. 15). In my teacher role of Grade 7 students at the

TCIS, I was a part of this action research project *and* the leader of my group of students. My goal was to bring about changes in how students talk with each other and to use educational technology as an aid to improving this dialogue. As the students were my co-researchers or CRPs, I conducted this action research project with them and working together with them to address the stated goals of the project.

Other than the student CRPs, I have had a group of four colleagues—two administrators and two English teachers—to serve as member checks as the project progressed. The member check strategy of sharing the initial findings with the host school has proven helpful and conducting additional building administration interviews also has helped to determine saturation and data accuracy (Rudestam & Newton, 2001).

Students at the TCIS have long days. The school day is longer than any other school in the area because of the additional one-hour requirement of Chinese added to every student schedule for three-year-olds and higher. Even with those long days, I have seen students arrive at school one hour early every day, and many have not left school until one or two hours after school has been dismissed. This context is important to understand as many students leave their home at 5:30 AM and do not return home until 7:00 PM. My student CRPs often have long school days and little time at home to enjoy being a child. However, I have observed that assignments that I have given via Flipgrid sometimes were done after school in the outside areas as students waited for parents or drivers to pick them up, which means that work did not always encroach on their evenings.

Grade 7 students at the TCIS are technology savvy and know how to use Google Classroom and the wide variety of Google Suite applications. They are familiar with MLA format and digital citizenship. They enjoy working on computers, and all students are required to

have a MacBook Pro in Grade 7. However, these students had done little school work outside of the Google Suite of applications. It was my intent to expand their technology skills beyond what they have experienced in the past and help them be better prepared for the digital world in which they live.

Wisdom of People

I discussed my project with several key personnel, including five administrators, the curriculum coordinator, and other colleagues at the TCIS to gain information about this project's Focus of Practice. The discussions led me to understand that improving dialogue in the classroom and learning how certain educational technologies might aid in this improvement is a factor for this research project. The following list shows those key personnel that I discussed the project with before I began my study.

- Dr. Steven Ballowe: Previous Head of School
- Dr. John McGrath: Current Head of School
- Mr. Thomas English: High School Principal
- Ms. Hannah Hartman: Previous Lower School Principal
- Mr. Conrad Pholar: Previous Middle School Principal
- Ms. Penporn (Rung) Kaewmark: Thai Head of School
- Mr. Justin Brink: Previous Curriculum Coordinator
- Dr. Betsy Fitch: Current Elementary School Principal

Although most of these administrators helped me with focusing in on my study's goal, the three who gave the most helpful advice were Dr. McGrath, Mr. English, and Mr. Brink.

Dr. McGrath recently earned his doctorate. He was supportive of this Focus of Practice by stating he would help in any way needed, revamping the 2017-2018 class schedule to give me

the classes that would be beneficial to my study, and by numerous meetings and suggestions regarding the Focus of Practice. He provided guidance by suggesting I develop a study that uses technology fostering better reading comprehension as I began to structure my project.

Mr. English, a retired superintendent of schools from Michigan, was the new High School Principal, and I spent a great deal of time with him discussing the project as we were in the same car pool; he willingly answered each question I asked of him. He has been an advocate for any changes I made in my classes and in the English Department from my new position as Department Head. He expressed that he wanted to work hand in hand with me to help push dialogue, conversation, collaboration, creativity, and technology at the TCIS, and he was interested specifically in my role as Head of the English to enlist his high school English teachers to work in more productive ways to improve the way students speak and talk to each other about how technology could aid in this endeavor.

Mr. Brink was the Curriculum Coordinator, and he also is technology savvy. He said he would be happy to work with me on the Focus of Practice and perhaps even continue the research when I am finished. His primary advice was to try to find a way to use Google for Education more in the classroom and even walked me through his use of Google Hyperdocs and how he implemented these in his classroom.

As one can see from Figure 7, I have a large circle of support among colleagues that have enabled this study to be successful. The support for this project primarily has come from the Head of the School and continued through the Department Chairs and colleagues. Since the school is a Google for Education school, there has been opportunity to receive training from professionals in educational technology through the Google Summit. As the Head of the English Department, I have been encouraged to go to the Google Summit and participate in professional

Circle of Resources and Supports: Assets

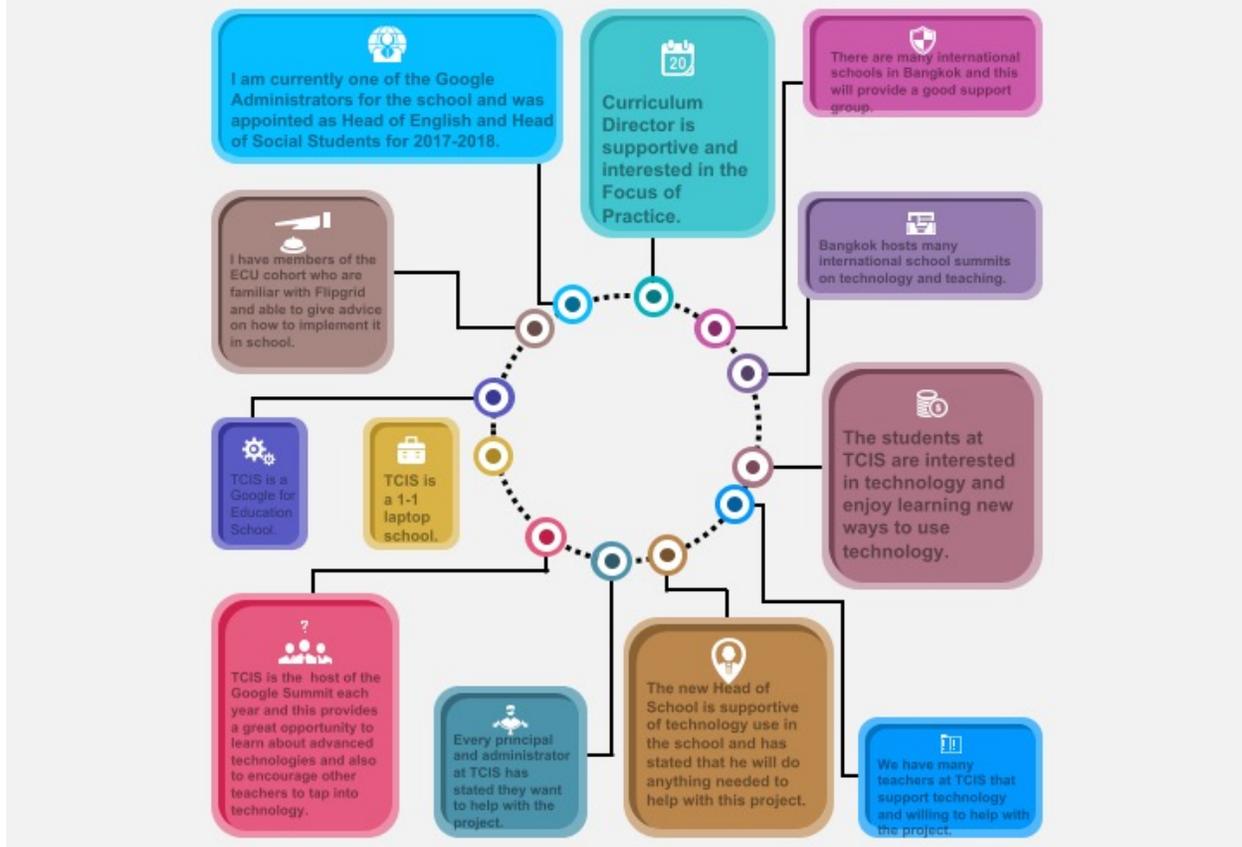


Figure 7. Circle of resources and support: Assets.

development. These professional development opportunities have helped me improve my own school technology expertise.

My Role

My role was as co-practitioner with students. I worked to assist students in taking on a more democratic role in their education and to co-construct their own learning environment using technology to support advancement through the use of dialogue and communication.

When I read Lois Lowry's *The Giver* with my Grade 7 students during the past academic year, we had excellent discussions on what a utopia means and how society often desires to create this kind of environment. This book was constantly in my mind as I read Tyack and Cuban's (1995) *Tinkering Toward Utopia*. The title of the book is one of the first metaphors that the authors use. Tinkering is a way to accomplish something slowly. Tinkering is a play on words for the authors, who wanted to demonstrate that the education system has changed all too little in the past 100 years. Educators still maintain many of the same systems and structures that they used 100 years ago and, even with advancement in technology and knowledge, the American education system as well as international schools seem to fight any change. There are many reasons for this, but in the end, tinkering with education accomplishes microscopic change. If educators want to be change agents in their schools, they must not just tinker with the system; they must embrace change and bring others along for the ride.

In my role as a guide and the adult in this study (Dewey, 1938), I attempted to help my students understand the experience and guide them to embrace change and new technologies. My role has been to help them find their voices while using educational technology, enabling us to go beyond tinkering. Achieving this goal has not been especially easy at the TCIS given the

current political situation and the lack of funding that has been available, but it has been an enlightening project.

One of my biggest challenges has been that while students at the TCIS have used Google Docs in the past, they have rarely used them to work collaboratively and when they do, it is not done in a way that is respectful and kind to their classmates. I realized that I would have to teach and model appropriate dialogue and ways of communication with both Flipgrid and with Google Docs. However, I address these challenges whenever possible.

This chapter has discussed the place of my study, my history of education, my study group (students), and an introduction to action research. In the next chapter, I address the plans for this action research project, its intended cycles, and the goals for each stage of this project.

CHAPTER 4: ROOTED IN PAR

The self is not something ready-made, but something in continuous formation through choice of action. - John Dewey

Giving students a voice in their education and fostering democratic classroom structures are principal goals for progressive educators. It is important to give students choices in a variety of ways. As an English teacher, I have observed that students who select their own novels tend to enjoy reading them more and exhibit increased desire to continue reading. As students have more input in decisions about their learning, they become more involved in their own education and become more excited to learn. Understanding literature is an important skill at an international school where none of the students are native speakers of English. During my first year at the TCIS, I noticed three things lacking that are important for students' success with their reading skills. First, I noticed that students in Grade 7 were not reading on grade level. Second, I observed that they were not having active discussions about the literature they were reading. And, third, I noticed that there was little use of technology that could be used to improve learning. When we read our first book, students struggled with comprehension and with discussing literature critically. For example, they could answer questions about *who* or *what* but rarely could they answer questions about *why* or connect the literature to their lives. When I talked to the other English teachers, the Head of English, and the Head of School, all acknowledged that reading comprehension and the ability to carry on deep conversations about literature is a systemic problem at the TCIS. Stringer (2013) asserted that "a fundamental premise of participatory action research is that it commences with an interest in the problems of a group, a community or an organization" (p. 14). As I discussed the issues of student dialogue, reading comprehension, and the integration of technology with my colleagues, it became

apparent that this action research project appropriately begins with a specific and problem in the school.

Students at the TCIS appear to enjoy using technology, but I have observed that they only use their computers minimally in a classroom setting and then only with the Google Suite of products provided by the school. Consequently, I started expanding their repertoire, and I asked them to use technology in more meaningful ways. For example, as a class exercise, they created an online timeline of J.R.R. Tolkien's life. This timeline was done using technology that CNN and other news agencies currently use, and it allowed students to expand their toolbox of ways to create a project. I then invited them to respond to questions about J.R.R. Tolkien orally while discussing themes of the novel. To improve their comprehension, we read slowly with deep discussions about theme, plot, and character development. My approach was reinforced as their grades on comprehension quizzes improved.

School and society often reflect each other. Often, what society values is what is taught in schools. However, this reflection can be complicated because schools are "terrains of struggle" (Giroux, 1988). Educational theorists like Dewey (1938), Freire (1970), Giroux (1978), Green (1988), and others argue that "society has certain moral, political, and intellectual ideas that should take precedence over others in schools" (Morrison, 2008). Like these theorists, I believe that fostering democratic classrooms structures is one of the more important goals of education. As Shor maintained in *When Students Have Power* (1996): "power-sharing creates the desire and imagination of change while also creating the experience and skills for it. The critical-democratic class, then, is a context for change that develops the desire and imagination to make change" (p. 176). I also believe that new technologies can be a great asset to students and teachers in the process of making change, and those beneficial technologies will enable Grade 7 students at the

TCIS to learn and demonstrate equitable dialogue and collaborative writing, thereby inspiring the entire school community. If the goal becomes to create an equitable learning environment that empowers students to take more direction in their learning, then two questions come to mind: To what extent can educators use technology to foster that dialogue? To what extent does that dialogue through technologies transfer to classroom discussions?

I think that if I can facilitate democratic classroom pedagogical methods and technology tools that foster dialogue among students, then students may assume collaborative ownership for academic tasks, demonstrate their ability to engage in cross-cultural groups to complete projects and tasks, and assume responsibility for maintaining equitable classroom dialogue. If I can analyze and share the pedagogical and technological practices that I study with fellow teachers and if they buy into these practices, English teachers at the TCIS may adjust their teaching practices to include additional forms of student-centered learning and dialogue and use technology effectively in their own teaching. To these ends, the purposes of this action research project are

1. to create a classroom environment that is full of lively discussions, respectful conversations, and based in rich literature;
2. to cultivate democratic and equitable classroom structures that encourage an atmosphere where students' voices are used, heard, acknowledged, and respected; and
3. to employ technologies toward the goal of increasing student communication, collaboration, critical thinking, and creativity.

Put simply, the purpose of this study is to create a classroom environment that promotes active and equitable dialogue by cultivating students understanding of literature through the use of communication, collaboration, critical thinking, creativity, and technology. Thus, the

overarching research question for this action research project is: How can middle school literature teachers of ELL students foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century learners?

Sub-Questions:

- Relationships: To what extent do democratic classroom practices foster relationships?
- Academic Interaction: To what extent do dialogical strategies, specifically ThinkTrix and Socratic Seminar, improve ELL student dialogue?
- Deeper Understanding: To what extent do dialogical strategies lead to deeper understandings of literature for ELL students?
- Self: To what extent has the researcher transformed his own practice and become a leader to help others engage students with dialogical strategies?

This chapter outlines my action research project at the TCIS and details how this project has attempted to answer the research questions. The remainder of this chapter outlines the theory of action; the design and methodology of this action research project; and a description of the cycles of research, data tools, and analysis methods. I conclude this chapter with a discussion of my role of praxis or reflection as well as the limitations of the study and a chapter summary.

Theory of Action

The goal of action research is to address a specific problem in a practice-based setting such as a classroom (Herr & Anderson, 2005). With this action research project, I have attempted to improve discussions of literature by teaching enriching questioning techniques and by using relevant, meaningful educational technology that exposes children to some of the 21st-century skills they need. Interventions included:

1. Using technology to expose students to 21st-century skills of communication, collaboration, critical thinking, and creativity interconnected to the literature we are reading.
2. Moving students from the basic use of technology to become proficient with the use of more effective and meaningful learning technology.
3. Moving students from merely answering teacher-directed questions to generating their own higher-level questions for themselves.
4. Asking that they answer these questions within their own groups.
5. Promoting a democratic classroom environment that is equitable for all students by encouraging them to be more self-directed in their learning.

Action Research Design

Qualitative research is good for in-depth analysis of complex processes (Miles & Huberman, 1994; Stake, 2010). Creswell (2003) indicated that qualitative methodology follows in the “traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture; analyzes works; reports a detailed view of informants; and conducts the study in a natural setting” (Creswell, 2003, p. 15). As a result, the research design employed is an action research project with an in-depth qualitative case study of one classroom embedded (Creswell, 2003; Thomas, 2003; Yin, 2009). This project at the TCIS uses an embedded study design. This design allows for the researcher to understand the actions of the students involved. The selected analytical approach allows the researcher to discover the meaning and theory of dialogue and technology through the in-depth investigation, diverse collection of data, and continuous analysis of the data.

Table 1 represents a logic model that shows the research goals for this project. It is being used to help the researcher to create a plan of action with the activities that must be completed to meet each goal. It also helps by documenting the timeline of activities and outcomes.

Cycles of Action Research

Cycle One: Fall 2017

I introduced technology to expose students to the 21st-century skills of communication, collaboration, critical thinking, and creativity (Partnership, 2016) to develop student-directed assignments around literature. The action research goal was that introducing these skills would allow students to communicate better, inquire more deeply about the literature, and reflect about the literature in different ways, thus improving reading comprehension through the use of discussions and questioning techniques. First, I tried to build a classroom where students would have the ability to choose and to use their voices. For example, students helped write the syllabus for the year and decided the classroom novels to read as a class. I asked the students to co-create grading contracts for each term. In order to help them collaborate, I worked to build a team spirit in the classroom. For example, I used an “All About Me” activity to help students understand they had things in common with their classmates. I used an “I Am” poem to help students see that their classmates come from different experiences and cultural backgrounds, but that they all still had commonalities.

I also tried to move students from the use of rudimentary technology software like the Google Suite of applications to the use of more cutting-edge technology by incorporating video, audio, and digital portfolios. For example, I asked students to create memes related to the importance of belonging; we created these memes with photo editing software and published them via digital portfolios. I taught them to use Flipgrid to invigorate classroom discussions of

Table 1

Logic Model

Goals	Input/Activities	Findings / Hopes	Broader Systematic Impacts
<p>To work closely with my department and school administration on the importance of my Focus of Practice—the activities and the findings in order to achieve the broader impacts that all educators and parents want for the students at the TCIS.</p>	<p>I established a CPR group (one class of Grade 7 students). I had regular meetings with department and administration. I structured an information process for parents about the study.</p>	<p>I met with many colleagues last year but the staff turnover at the TCIS is high and new administration team members are newly employed; I wanted to ensure they knew about my project and that I could get input from them.</p>	<p>The biggest impact has been on the teaching practices—hopefully these practices can become the new normative practices. As such, how administrators evaluate and hire in the future based on this can have a major impact on teaching, and, thus, learning at the TCIS.</p>
	<p>I dialogued with students about the study, what voice and democratic classrooms look like, and why we wanted to create this type of environment.</p>	<p>During the 2016-2017 school year, I met with members of the staff, administrators, and parents. The conversations led me to determine this study was relevant and needed.</p>	

Table 1 (continued)

Goals	Input/Activities	Findings / Hopes	Broader Systematic Impacts
<p>To facilitate a democratic classroom with pedagogical methods and technology tools that foster dialogue among students in order for students to have collaborative ownership of academic tasks, demonstrate their ability to engage in cross-cultural groups to complete projects and tasks, and assume responsibility for maintaining equitable classroom dialogue.</p>	<p>Students co-created syllabus with facilitator.</p> <p>Students co-selected books to be used for class novels.</p> <p>Students selected independent novels to read.</p> <p>Students had project requirements for each novel, but they had input and choice in how to get to outcomes using a variety of technologies.</p>	<p>My hope was that if students were more involved in the learning process, they would start choosing the things they wished to learn and the ways in which they learn best.</p>	<p>Students who take initiative are the future leaders of tomorrow, and the current workplace requires that students communicate, collaborate, think critically, and be creative.</p>

Table 1 (continued)

Goals	Input/Activities	Findings / Hopes	Broader Systematic Impacts
<p>To create a classroom environment that is full of lively discussions, respectful conversations, and based in rich literature, my students would need to improve in communication, collaboration, critical thinking, and creativity. To help my colleagues explore their own professional development using some of the methods I implemented in class.</p>	<p>I studied and implemented the ThinkTrix Template, the Socratic Method, and Google Docs.</p>	<p>My hope was that students would have more dialogue about the literature we were reading and that they would understand the literature on a different level and use the dialogue techniques in other classes.</p>	<p>Preparing students for the 21st century is important to provide my students with the necessary skills to live in an increasingly advanced world and for future workplaces where these skills are required. Also, creating a school where these techniques are utilized and where I would mentor other teachers to implement them in their classes.</p>
<p>To create an equitable learning environment that empowers students to take more direction in their learning using technology to foster this dialogue.</p>	<p>Have students work collaboratively on Google Docs.</p> <p>Support the use of Flipgrid for discussion.</p> <p>Involve students designing and using a digital portfolio.</p> <p>Facilitate students to create “Belong Meme.”</p> <p>Implement Google Hyperdoc for students’ use to study books.</p>	<p>My hope was that teaching my students skills with discussion and critical thinking technologies would inspire them to be more creative and to use other technologies to their educational benefits.</p>	<p>Technology skills are required for most jobs, and more technology skills will be needed to be successful in the workplace.</p>

dialogue related to literature. I also exposed students to higher-level questioning techniques and encouraged them to reach beyond the who, what, when, and where questions about literature to answering questions on different levels. For example, we used ThinkTrix and Socratic Seminar techniques when discussing literature, and we conducted learning walks when discussing literature.

Cycle Two: Spring 2018

I continued with the interventions in Cycle Two, but I also encouraged students to move from reliance on teacher-directed questions to generating their own questions for themselves and answering them in their own groups. In Cycle Two, I also continued to improve my own questioning skills in order to mentor students and to model for them in questioning each other and their group.

Cycle Three: Fall 2018

I continued with the interventions I introduced in Cycles One and Two, but I also provided opportunities for students to use their skills in new ways. Together, we expanded our knowledge of new technology to help co-construct curricula for their group.

Figure 8 shows the different stages of the action research project. Each cycle constitutes a circular process of planning, acting, observing, and reflecting. To this end, I developed a plan of action to improve my classroom, acted to implement that plan, observed the effects of that action, and reflected for further planning and additional action (Kemmis & McTaggart, 1982, p. 7). A good action research project contains three main elements: “a good story, rigorous reflection on that story, and an extrapolation of usable knowledge or theory from the reflection on the story” (Coghlan & Brannick, 2005). In other words, action research answers what transpired, how one can make sense of what transpired, and the “so what?” question.

Action Research Cycles



Figure 8. Action research cycles.

Participants

The participants in this study were a group of Grade 7 students at the TCIS in Bangkok, Thailand. They were volunteers from my Grade 7 class who agreed to participate in the study. I asked these students to partner with me as I worked to improve my own practices. The students are Asian; approximately 35% are of Chinese descent and the rest are of Thai descent. During the 2016-2017 school year, my class size ranged from 12-24 students. During the 2017-2018 school year, my class size was 19-27 as the school was downsizing the number of teachers. As I had two periods of Grade 7 students, I selected the class that turned in the most parental consent forms for the study as the one for this research project.

Data Collection

The embedded study design enables a myriad of data collection strategies. The collection strategy could best be categorized as *emerging* because of the on-going analysis element of this design (Creswell, 2003). In such a study, the goal of the data collection is to generate an on-going conversation and collection of artifacts to uncover facts, opinions, and insights (Yin, 2009). Schmoker (1999) stated that regular collection of data is one of the most important foundations for action research study results. The primary methods of data collection include in-depth, semi-structured interviews (Merriam, 1988; Patton, 1989), observations, and strategic collection of artifacts. This array of data is supported by Yin's (2009) recommendation of six types of information that can be collected: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts.

Memos

Memos were a large part of this project. Memos consisted of documenting my thoughts in a journal. I memored on a regular basis while observing student groups to provide a detailed

account of my time at the study site. I kept a detailed record of my observations, experiences, thoughts, and perceptions throughout the project and during the data analysis stage. Students also memoed in journals. Memos were written in first person point of view. Writing memos is a critical aspect of effectively analyzing qualitative data (Kruger, 2000), and it can help greatly in writing the results because they both prod the memory and support or disprove other data collected. Action researchers often use memoing heavily “due to the action orientation and the fast-paced nature of action research” (Herr & Anderson, 2005). This process has provided the basis of the analyses that I am including in my final reporting through this dissertation, creating an extra layer of insight for the final analysis. Finally, I used memos to track my own learning during this project.

Artifacts of Work

Work artifacts were collected throughout the study. These were either physical artifacts or cultural artifacts. These artifacts either were collected or observed, and they often are used in action research (Yin, 2009). Work artifacts may include visual ethnography in the form of photographs, videotapes, websites, emails, and audio tapes (Pink, 2001). They also may include photos of projects students complete as part of the classroom experience and other items that a teacher collects through the normal course of teaching. In my study, I collected artifacts from our the ThinkTrix Template and Socratic Seminar discussions as well as photographs of students working and sharing their work. For example, I asked students to write responses to our Socratic Seminar discussions in a reader’s response journal. I then asked them to choose their best journal responses and post these on their online digital portfolio. In order to get a multi-faceted view for the study, artifacts of work were collected and archived often.

Interviews

Interview notes were used as each participant was meeting on a regular basis with me; notes of the interview were taken and analyzed for patterns. Interviews were a way to dialogue and recognize the person's story. Telling stories is a meaning-making process (Seidman, 2006); therefore, it is important to get every detail of the interview as every word that people use when telling their stories may be described as a microcosm of their consciousness (Vygotsky, 1987). As a method of meaning-making, interviewing is "most consistent with people's ability to make meaning through language. It affirms the importance of the individual without denigrating the possibility of community and collaboration" (Seidman, 2006). Seidman (2006) concluded that interviewing is satisfying to the researcher interested in the stories of others. As I am deeply interested in knowing the story of my students, I believed that interviews would help me get the full picture I need of their educational stories. Action research is unpredictable and is often a series of unfolding events where the researcher needs to be able to adapt to those contingencies and the unfolding of the story (Coghlan & Brannick, 2005). To account for the need to be adaptable, I interviewed students before and after each cycle.

Observations

It is important not to have just one method for collecting data, and some researchers believe that having multiple sources of data is a fundamental characteristic of qualitative research (Patton, 1989). Qualitative observations occur when a researcher takes field notes on the behavior and activities at the research site (Creswell, 2003). In my study, students were observed by both the teacher and an outside mentor to determine whether and how they used questioning techniques and to consider how to improve discussions. I also took field notes to

record observations of student participants. Finally, I videotaped the classroom once per research cycle in order to analyze my own teaching.

Data Analysis

Data collection and data analysis occurred simultaneously as recommended in qualitative research (Merriam, 1988). During the analytical process, I indexed and coded data into as many categories as possible while seeking to recognize and label patterns and themes from the viewpoint of the participants. Then I endeavored to recognize and explain these patterns and themes (Agar, 1980). A list of major themes or frames were chronicled (Merriam, 1988). Audio-taped interviews were transcribed verbatim. Observation notes were regularly and systematically reviewed. I also asked members of my school, two administrators and two teachers, to serve as member checkers. The member-check strategy of sharing the initial findings with the host school proved helpful. For Rudestam and Newton (2001), conducting additional building administration interviews determined both the saturation and accuracy of their collected data. I triangulated all data collection sources. The purpose of triangulation is to use a variety of methods so that one is not limited to only one kind of data source (Herr & Anderson, 2005). Table 2 details data sources that I used in partial response to each research sub-question.

In Table 2, artifacts of work included Journey Lines, photographs, Google Sites, emails, audiotapes, ThinkTrix Template Collaboration Documents, Socratic Seminar Maps, journal responses, summative tests, formative tests, Flipgrid video transcripts, and Hyperdocs. As each cycle of research was dependent upon the previous cycle, the importance of being flexible with data collection was crucial.

Table 2

Linking Research Questions to Data Collection

Research Sub-Question	Data Source
To what extent do democratic classroom practices foster relationships?	Artifacts of Work Interviews Memos Observation
To what extent do dialogical strategies improve student dialogue? Specifically, the implementation of ThinkTrix and Socratic Seminars?	Artifacts of Work Interviews Memos Observation
To what extent do dialogical strategies lead to deeper understandings of literature?	Memos Observation
To what extent has the researcher transformed his own practice and become a leader to help others engage students with dialogical strategies?	Memos Artifacts of Work Interviews

Role of Reflection/Praxis

I have reflected on my observations and learning on a regular basis. Reflection serves to start the cycle over (Militello, Rallis, & Goldring, 2009), which is helpful because this constant process of thinking and reflection enabled me know how the plan needed to be modified as I proceeded (Stringer, 2013), an action discussed in each cycle chapter (see Chapter 5-7). For example, I expected to learn that the more comfortable students become at asking questions about literature, the more they would understand and comprehend those texts. I expected that the use of technology embedded in the class would create excitement with students and help them to self-direct their learning. I expected that my use of memos would help me see themes that I did not expect and that the memos would help me to refine my practice. However, when and where I did not see any of those expectations being met, I used my reflection skills to find the potential problem and adjust my course of action. Therefore, I expected that my reflection with the research would help me to transform and correct as needed to become a better researcher, teacher, leader, and department chair.

Confidentiality and Ethical Considerations

I carefully and strictly maintained the security of the collected data and the participants' confidentiality. Pseudonyms for all of the participants in the study were used in all write-ups and will continue to be done in like manner in any future published form. In addition, the hard copies of interviews and physical tapes as well as their transcriptions, field notes, and collected documents have been kept in a secure, locked location. Electronic data such as digital forms of the interviews also have been securely kept.

Since the number of participants was small, the findings have been interpreted with caution. The sample group also was a group of students in one private international school in

Bangkok, comprised primarily of Thai and Chinese students. As a result of the position of power as teacher and department chair, I have been cognizant of their age and of my duties to teach and assess them with grades. I have worked to balance these duties with those of an embedded researcher, remaining aware at all times that the research study must not harm the students in any way, that my work as teacher must not unduly influence the study, and that my work as researcher must not in any way neglect or interfere with their learning of any required curriculum.

Summary

The purpose of this chapter was to provide a summary of the measures for implementation and outcomes for assessing my research design that have addressed the research questions. I have been committed to analyzing how the uses of dialogues, discussions, and technologies might assist students and teachers in creating student-centered classrooms. This study was intended to enable students to learn and demonstrate equitable dialogue and collaborative writing; as such, all activities and actions were engaged with the primary goal of benefiting Grade 7 students at the TCIS and the entire school community. I believed that if I could engage dialogue, certain technologies, and self-directed learning strategies to create an equitable learning environment that empowers students to take more direction in their learning, then it might be possible to transfer them to other classroom setting discussions. With each cycle of this action research project, I have tried to understand how dialogue can create an equitable environment, how technology can aid the creation of this dialogue, and how I could grow as a facilitator of such skills. In Chapter 5, I describe the process and findings of Cycle One.

CHAPTER 5: PARTICIPATORY ACTION RESEARCH

CYCLE ONE: BUILDING THE FOUNDATION

You can't build a great building on a weak foundation. You must have a solid foundation if you're going to have a strong superstructure. - Gordon B. Hinckley

Cycle One of the Participatory Action Research project was largely about laying the building blocks for the entire project with students. I knew that if I did not give them a well-grounded and resilient foundation, the project would not succeed. Therefore, I assessed each step to ensure that every student had a strong foundation in the preparatory skills necessary for a classroom that is successful to increase academic discourse. Chapter 5 has four sections. The first section briefly describes Cycle One actions, including building relationships with students, building relationships with adults, and building academic discourse skills. The second section in this chapter provides the emerging findings that I discovered in Cycle One. The third section deals with the implications related to my research questions and reflections on my own learning. Section four summarizes what occurred in Cycle One and previews Cycle Two.

Cycle One Actions

Two types of leadership actions were the focus of this cycle: building relationships with students and adults and building skill sets of students in academic discourse skills. Both actions used technological applications as a key resource.

Building Relationships with Students

Three key activities led to building relationships with students: student-teacher conferences, a Student Learning Profile and a Journey Line of Reading. I chose to implement two activities using Google Docs, a relatively simple software, to complete the assignments as a way to introduce technology and to assess students' comfort levels with technology. In addition

to Google Docs, during the semester, I also introduced Flipgrid, Padlet, Playposit, Timeglider, Google Drawing, Google Word Art, and Google Presentations.

To have successful conversations with students, I needed to know each student in a meaningful way. In the first month of the school year, in order to learn about each student, including their strengths, weaknesses, dreams, and hopes, I had regular conversations with each student about literature in formal student-teacher conferences, online conversations, and informal walk-arounds in the classroom. I began to learn what they thought about reading and technology, as well as how they conversed with other students and staff. The *I'm Becoming an Expert Learner at the TCIS HyperDoc* (see Appendix D) helped me to learn about their strengths, challenges, preference, needs and goals for the year. A Google HyperDoc packages Google Docs and hyperlinks to create a multimedia experience for students. Google HyperDocs allow students to “access a lesson that contains instructions, links, tasks, and many clever ways to get kids thinking. Focusing on creating opportunities for choice, exploration, and ways for kids to apply their knowledge is key to creating a truly innovative HyperDoc” (Highfill, 2014, par. 2). Each step listed on the *I'm Becoming an Expert Learner at the TCIS HyperDoc* contained a link to a Google Form asking students comprehensive questions; these questions helped me to understand how to best support them during this school year. At each step of the process, I conducted individual conferences with students, meeting each student a total of five different times for one-on-one dialogue.

In this activity, students assessed their strengths, challenges, preferences, needs, interests, talents, aspirations, and passions so I could adjust my teaching style and pace to their learning styles and preferences. Tomlinson (2017) indicated: “There are many ways to accommodate students’ preferred ways of learning. Looking for a good learning fit for students means, at least

in part, trying to understand how individuals learn and responding appropriately” (Tomlinson, 2017, p. 66). Learning profiles help teachers to see student’s strengths, weaknesses, and preferences. The students’ Learning Profiles helped me to see each of them as they saw themselves. It also gave me multiple chances to conference with each student and to learn more about them. For example, TCIS-F-002 stated, “What is hard for me is that I can’t express myself easily through words, but I can write stories and poetry because it is a place where I can let my imagination run wild” (memo, August 15, 2017). Meeting with students individually helped me to understand more about them as an individual and give me some knowledge I need to direct the class to be more successful together.

In another example of how I got to know individual CPRs, I had them create one word that best defined each student’s goals, dreams, and ambitions, as well as what kind of a student they wanted to become during the 2017-2018 school year, I set up a Google Doc exercise called *One Word Hyperdoc* (see Appendix E). This HyperDoc pushed students to creatively choose many words and then narrow the list to the one word that best described what they wanted their year to be like; choosing one word to describe something is part of the higher-level questioning techniques that I would be introducing later in Cycle One when students started using ThinkTrix. I also chose a HyperDoc because using HyperDocs is a way to design authentic, participatory, and relevant learning experiences for students (Martin, 2015).

The One Word HyperDoc activity consisted of five parts. First, to engage students, they made a list of words that defined their goals and ambitions for the year. Second, in order to explore, they reflected on past years and what they accomplished and achieved. Then they listened to audio, watched videos, and scanned motivational images to get some inspiration to move to the next step. Third, they narrowed their lists to the one word and explained why they

chose that word. Fourth, to elaborate, they used Google Drawing and Google Word Art to create a one-word graphic. Fifth, to extend and evaluate this activity, they shared their image on Padlet (see Appendix F), and they dialogued via Flipgrid about why they chose that word. Figure 9 provides one example of a student's selected word and shared image using Padlet. In this one activity, they conducted online research, reflected on previous experiences, brainstormed their thoughts for goals for the year, listened to a YouTube Playlist of Inspirational Songs that I had created, viewed motivational posters, watched motivational videos, used Google Drawing and Google Word Art to create their one word representation, engaged Padlet to share their drawing, and applied Flipgrid to talk about their choice of word. In this one lesson, I was able to assess students' levels of technology skills and comfort levels of working in small groups. I learned that students knew how to use basic technology but when asked to come up with original work, they relied on Google searches as opposed to taking time to create something original.

The third activity used to know students better was a Journey Line of Reading (see Appendix G for these samples) because I wanted to know what they viewed as important events in their lives related to relevant reading experiences. According to the Institute for Educational Leadership (n.d.): "A journey line uses experiences as a moving force for change (Dewey, 1938) in the sense that the individual and collective experiences as remember by participants constitute a story. In turn, the journey line themes provide generative knowledge about a subject" (Tredway, n.d.) The Journey Lines of Reading assignment required that each student create one line for age and another line for importance. No other requirements were provided, and when students asked questions, I always responded, "Well, what do you think?" to enable them to make their own decisions. The Journey Lines of Reading were informative, and the data from



Figure 9. One-word HyperDoc from Padlet.

student work centered around the three themes of early reading experiences, connections to reading, and reading in school (see Table 3).

The third activity used to know students better was a Journey Line of Reading (see Appendix G for these samples) because I wanted to know what they viewed as important events in their lives related to relevant reading experiences. According to the Institute for Educational Leadership (n.d.): “A journey line uses experiences as a moving force for change (Dewey, 1938) in the sense that the individual and collective experiences as remember by participants constitute a story. In turn, the journey line themes provide generative knowledge about a subject” (Tredway, n.d.) The Journey Lines of Reading assignment required that each student create one line for age and another line for importance. No other requirements were provided, and when students asked questions, I always responded, “Well, what do you think?” to enable them to make their own decisions. The Journey Lines of Reading were informative, and the data from student work centered around the three themes of early reading experiences, connections to reading, and reading in school (see Table 3).

As an aside, I shared these Journey Lines of Reading themes with my critical friend, Dr. Betsy Fitch, the TCIS’s new Elementary School Principal. She expressed that she was fascinated with the visuals and recommended that we use the data for seminars with the TCIS Early Childhood Education Department and the parents of that division to teach them about the value of reading at earlier ages. She also suggested that we use the data and the Journey Lines of Reading for discussion points in all grades down to PK2 (memo, October 18, 2017). From using the Journey Lines of Reading, it was evident that for many students to enjoy reading, they needed to make more connections with what they read. It also was clear that many students did

Table 3

Journey Lines of Reading Themes

Themes	Example Student Statements Describing Themes
Early Reading Experiences	<ol style="list-style-type: none"><li data-bbox="610 422 1341 485">1. Some did not start reading until ages 5 or 6 but others started at age 7.<li data-bbox="610 491 1182 520">2. At a young age, parents read books to us.<li data-bbox="610 527 1341 558">3. A lot of the boys started reading with graphic novels.
Connections to Reading	<ol style="list-style-type: none"><li data-bbox="610 604 1328 667">4. Some classmates do not have good connections with reading.<li data-bbox="610 674 1094 703">5. Some students do not like reading.<li data-bbox="610 709 1295 779">6. Some were interested in books when older as they understood more.
Reading in School	<ol style="list-style-type: none"><li data-bbox="610 825 1393 888">7. There was one gap year with a teacher who did not assign books at all.<li data-bbox="610 894 1300 961">8. “At 12 or 13, we started to read a lot of novels and textbooks with Mr. Michael.”

not like reading as they did not believe they could relate to what they were reading. Therefore, one of the goals I developed as their teacher was to help students find meaningful ways to connect to literature.

Toward the end of Cycle One, I conducted a learning exchange with students. I followed several of the Community Learning Exchange (CLE) protocols advocated by Guajardo, Guajardo, Janson and Militello (2016). Students took a learning walk to discuss technology, created a Journey Line of Technology (see samples Appendix H), and shared those timelines in an inner/outer circle to develop themes that they noticed were in classmate's timelines. Students noticed there were several common themes that arose out of this exchange including playing games on computers, using iPads, engaging in technology at an early age, and purchasing a MacBook computer and other devices that aligned with the MacBook. From conversations in class about these student-discovered themes, it was apparent that most students had been introduced to technology at an early age, they enjoyed the use of technology, and they expressed this enjoyment by requesting more assignments that were technology based (memo, November 14, 2017).

Building Relationships with Adults

Building successful relationships with adults is important for school leaders because without team support, leaders have more difficulty becoming agents of change inside their school. At the beginning of Cycle One, I took the job as the Head of English and Social Studies at the TCIS, and I became part of the Leadership Team. I spent time learning about leadership through my classwork at ECU and with hands-on experiences at the TCIS. Building successful relationships with the adults in my department and on the Leadership Team is of on-going importance in my ability to effect change at the TCIS. In Cycle One, I spent time listening and

learning from the current leadership team members. During Cycle One, my leadership skills improved as I learned more from my co-workers, ECU professors, and student-CPR group.

As part of my ECU course work, I conducted two observations with TCIS co-workers using different observational methods. This process helped me to see the struggles that teachers face in the classroom but also gave me confidence in my own teaching and helped me to improve activities and approaches in my own classroom. As my job does not require me to observe teachers for assessment purposes, these observations helped me to learn that are a variety of tools that leaders need to do classroom observations in a way that benefits both the teacher and students.

As part of the ECU requirements, I completed one project on the instructional triangle for my ECU professors. This project helped me to see how many different things go into being an effective change agent in an international school. I spent one weekend at the Google Summit in Bangkok learning how to use technology to enhance my curriculum. The knowledge gained from the weekend summit along with other instructional techniques I learned throughout Cycle One were placed on my Instructional Triangle. My biggest take-away from this work has been that the Instructional Triangle is a never-ending project that will change over time. The more I develop as a leader, the more I will need to add to the triangle and the more I will move things around on my current triangle.

My students also have helped me to become a better teacher and leader in the school. I learn from them each year. Brooks and Brooks (1999) specified the importance of questions and in constructing information. They said that constructivism lives when, are “permitted the freedom to think, to question, to reflect, and to interact with ideas, objects, and others—in other words, to construct meaning” (Brooks & Brooks, 1999, p. 20), which suggests that when my

students ask questions that are relevant to literature, themselves, their community, and the world, we are in a constructivist environment. I encourage questions and discussion. One class of students from the 2016-2017 academic year had an “ah ha” moment when we were discussing S.E. Hinton’s (1967) *The Outsiders* and the importance of loss. Students were able to bring this issue of loss full circle and relate our discussion of Freud back to Lois Lowry’s (1993) *The Giver*. Students were building on their past knowledge and, for this connection to take place, they needed to have that fundamental knowledge of making connections in literature; thus, it appears that their entire outlook on feelings and dreams were changed based on a book they had read in the past. Or, said in another way, their knowledge of Freud was constructed based on an active discussion and their own experience of unpacking *The Giver* from the previous year. The students involved in this study had one view of these ideas in the past school year, but their interpretation was subject to change with the new knowledge layered upon the old. It seems that there is no absolute knowledge because what one knows can change—be socially constructed—based on experiences and personal views; with that change, students construct a new interpretation. Several students told me they wanted to go back and reread *The Giver* based on that conversation and see what else they could learn from the book in a second reading. I hope my CPRs will have similar “ah ha” moments as I work with them and as we discuss literature at more advanced levels.

The conversation outlined in the previous paragraph led to a great discussion in an English Department meeting and also inspired teachers to suggest that we teach the same novels, enabling students to find themes and teachers to recognize those themes to everyone’s common good. Because of the above conversation, the English Department has begun to teach specific common novels annually as opposed to freely choosing each novel. Members of the English

Department were unanimous in their decision to develop a list of specific novels that encompass the richness of world literature for each grade level from Grades 5 through 12. As the Head of English, it was my job during the following Cycle to facilitate that discussion.

As the Head of English at the TCIS, I always look for what the students are actually doing in class when I observe a teacher. In other words, I do not focus on teachers unless they are the ones directing all the learning. And, in my school that is often the case. I have given suggestions and ideas on how students can take more control of their learning, but sometimes, it has seemed to fall on deaf ears. When an administration team supports old-school teaching methods and bases observations on these ideas, it can be hard to make a shift. Therefore, I have focused on the new teachers that have come to the TCIS since I became Head of English. I have been able to be more of a mentor to them and have tried to guide them in how to prepare their classroom to be more student centered. Of the two newer teachers in the middle school, one of them has been following this advice and the other one has not, which suggests that I may need to do more relationship building.

The thing that attracts me to qualitative research is the feeling of actually being involved in the lives of the participants both students and coworkers. Doing research *and* doing it with my students, actually seeing the changes they make over the school year, brought me into teaching in the first place. I believe most teachers—like me—go into the field to effect positive change in their students' lives. If both my students and I are growing, it is a win-win. Perhaps that is too optimistic of an outlook, but I do believe the more I know, the more I will learn, and the more I learn, the better teacher I will become. As I improve as a teacher, I will improve as an administrator and leader. Likewise, as I improve as a researcher and the more I understand of

classroom-based qualitative research, the more I can effect change in myself and thus in students, coworkers, the school, and our community.

Building Academic Discourse Skills

The three academic discourse skill-building strategies that helped to build students' capacity for understanding text were systematic annotation (Sacks, 2013), ThinkTrix, and Socratic Seminars. All three methods address ways of thinking. In addition, I introduced Accelerated Reader to boost general reading comprehension and used Socratic Seminar methods to foster stronger co-constructed discussions.

To become better readers, students need to read text in multiple ways. Using Sacks' (2013) method of annotating their literature texts based in literal statements (L), inferential statements (I), and critical statements (C), the "Three Ways of Thinking" are:

- Literal: Your thought was stated directly in the text, like a fact from the text.
- Inferential: Your thought was not stated directly, but there is evidence for it in the text; it is hinted at, suggested, or implied.
- Critical: Your original thought opinion, connection, or critical question related to the text. (p. 72)

In class, I referred to this process as *LIC* and spent time in the opening weeks of the semester teaching students how to organize their thoughts based on these three types of thinking statements. After students developed statements for one book using sticky notes, they moved from making statements about the text to asking questions based on LIC. This assignment was intended to help them dissect their readings; I hoped that spending time with the texts would help them gain a better understand of texts and develop strategies that would aid in comprehension and critical thinking.

According to students, the LIC statements and questions helped them to understand the book they were reading on a higher level than they otherwise would have (memo, November 8, 2017). Overall, 15 (n = 16) students stated that the annotation of their books using LIC statements and questions helped them to have a better understanding of the material they were reading independently. Supplementing these student statements, 17 (n = 19) students met their Accelerated Reader comprehension test goals for the quarter (memo, December 11, 2017).

As the first cycle progressed, I introduced the ThinkTrix to students. ThinkTrix is a process that helps students to construct their own questions using what Lyman (1987) described as the seven thinking actions: recall, similarity, difference, cause and effect, idea to example, example to idea, and evaluation. ThinkTrix adapts Bloom's (1956) taxonomy to an actionable and usable tool for teachers and students and they "are more transparent than Bloom's six levels in many ways because they [the ThinkTrix names] are in language we actually use to think" (email correspondence, Tredway, July 22, 2017).

I adapted Lyman's (1987) ThinkTrix Matrix to a Google Docs format, enabling students to access it both synchronously and asynchronously online. To freshen the look and appeal better to 21st-century learners, I also refashioned the figures to represent the seven thinking actions. I call this representation the *ThinkTrix Template* (see Appendix H). We used the ThinkTrix Template with the in-class novel, Lowry's (1993) *The Giver*, while maintaining the LIC with the independent books. At first, students completed the ThinkTrix Template together as a class, then students moved into to small groups for this work, and finally students were individually encouraged to create their own question-and-answer the ThinkTrix Template. In addition, I also had email conversations with Dr. Lyman about the process, which were helpful in unpacking what I observed in the classroom.

To learn more about their comprehension of what they read, I introduced the Accelerated Reader program to the class. Accelerated Reader is an online tool that assesses comprehension using computer-based quizzes. The Accelerated Reader quizzes test general knowledge in a multiple-choice format that allows teachers to see how well students understand what they are reading. The Accelerated Reader system enabled students to choose from thousands of books to find, read, and be assessed on books they might enjoy at their own levels.

Toward the end of the cycle, I introduced Socratic Seminars to students. Socratic seminars are an alternative to the traditional mode of teaching, in which the professor or teacher lectures and is often the sole giver of information for the class, who take notes and may from time to time ask questions. With the Socratic seminar, the teacher presents the class with a text to discuss among themselves, with the teacher acting more as a moderator or facilitator of the content of discourse. The goal is for students to have academic discourse, develop broader and deeper analytical thinking, and co-construct ideas based on textual evidence. Tredway, my ECU mentor, modeled a Socratic Seminar process. She conducted a Socratic Seminar on *Why Mosquitos Buzz in People's Ears* by Verna Aardema (1975). Tredway conducted this seminar to demonstrate what a Socratic Seminar looks like both to teach me and to introduce students them; Socratic Seminars have played a crucial role in all three cycles of research. Students were engaged during the seminar; I noticed that Tredway spoke rarely after the seminar started, and her questions were formed by listening intently to students and building upon their statements. Tredway asked students to work on three things: not to raise their hands, respect others and let them finish comments before they speak, and to listen to students and be able to paraphrase what the person before them said. As I watched the Socratic Seminar and made notes, I was impressed that for the most part students abided by their three goals.

Conclusion

In this section about Cycle One, three main themes emerged. First, building relationships with students at the beginning of the cycle was critical for me to understand their needs and their goals for the term. Student teacher conferences were held consistently, and the Student Learning Profile helped me to build successful relationships with students. Second, building relationships with adults also is important to affect change in a school. I was able to begin building better relationships with English Department faculty when I became the new Head of English. The course work at ECU and the skills that I developed through observation and facilitation helped me to become a better leader and to build consensus within the department. My ECU mentor helped me to develop stronger relationships through advice, emails, and conversations. When a problem occurred, I made note of the issue and my ECU professors offered options and advice that helped me. Third, students were able to build their academic discourse skills through the use of LIC annotation of texts, my ThinkTrix Template, Accelerated Reader, and Socratic Seminars. Each of these methods helped students understand more about reading, but they also helped them to effectively discuss literature in the classroom and using Flipgrid. These methods enabled students to connect more to the literature they were reading and thus helped to alleviate students' apparent sense of disconnection to the readings, an issue that was prohibiting their enjoyment of reading based on our Journey Lines of Reading (see Table 2). The next section narrates and analyzes the evidence I collected in Cycle One and the emerging findings from some of the more prevalent themes.

Building Communities Aimed at 21st Century Learning

Students need various literacy skills to compete in an environment that is heavily saturated with technology. However, in order to help students develop these skills, students need

a classroom in which a community of learners is present. In this section, I discuss the importance of community building to a classroom that encourages students to take academic risks. Next, I consider three important areas that the student research group worked on to help build life-long learning skills: regular sustained reading times, the introduction of critical thinking skills, and the use of technology to assist with reading comprehension. Finally, I explain the importance of building critical thinking skills needed in the 21st century. These skills encourage student dialogue and voice by using Flipgrid, ThinkTrix, and Socratic Seminars all while using other technologies. As indicated in the first section of this chapter, one of the goals for Cycle One was to build a sense of community with students. I observed community building developing with students exhibiting increased trust to take academic risks, working together in more cooperative ways, and choosing how they worked. Consequently, I saw a decrease in behavior issues.

Choice Leads to Increased Trust to Take Academic Risks

According to Lipman (1991), Dewey (1938) saw choice as the basis of education: “An educational system that does not encourage children to reflect—to think thoroughly and systematically about matters of importance to them—fails to prepare them to satisfy one criterion that must be satisfied if one is to be not merely a citizen of society, but a good citizen of democracy” (p. 113). In my class during Cycle One, students picked their seats and moved to different groups whenever they wanted. They chose the books they read and voted on which books we read in the classroom. As much as possible in assignments and projects, students chose how to showcase their understanding of a topic.

With the Accelerated Reader program, students were given the ability to choose all independent books. I observed students reading books that were above their grade level, passing quizzes on those books and having discussions that demonstrated they had read and understood

the books. Seventeen (n = 19) students met their Accelerated Reading Goal for Cycle One (memo, December 11, 2017). For example, during Cycle One, student TCIS-F-0010 reached her goal and surpassed it by reading 354% of what was required. She read many books that were high-school or adult-level books including *Glass Sword* (Aveyard, 2016) and *Quests for Glory* (Chainani, 2017). In an email conversation with Lyman about our small group discussions, he said:

It thrills me to hear that you have discovered the quality of the conversations that ensue from returning the students' minds to them. The metacognitive awareness of the accessible seven mind actions is not the end in itself as you have seen; the proof of the heightened awareness is in the conversations themselves. (September 22, 2017)

My belief that trusting students to direct their own learning journey seems to have encouraged them to take risks and expand their academic endeavors.

Choice Encourages Students to Work Together More Cooperatively

Giving students choice encourages them to engage more actively with their classmates and thus a more positive social experience is created. I observed engagement on a regular basis when groups worked together in Cycle One. It was fascinating to see “students were in a flurry of activity but as I walked around the room, the discussions were all on the assignment. We were reading *The Giver* and each group had active debates about the role that Jonas had been given. Even TCIS-F-009 was actively engaged in the conversation and giving the pros of Jonas being chosen as The Receiver of Memory” (memo, September 26, 2017). Dewey (1938) expressed that students need to have choice, meaning, purpose, and motivation throughout their learning process. I wanted to create a dynamic that gave students choice from the moment they walked into my classroom. To facilitate a comfort level with choice making, I created a living-room type of environment with a couch and tables. The Middle School Principal walked into the classroom during one of our small group discussions and said he was impressed and that “these students are

very articulate” and “on task” (memo, September 20, 2017). Additionally, my ECU professor said:

Your understanding of the active learning required to truly engage students is on target. Learning can be, and usually is, messy. Active learning sometimes conjures images of uncontrolled and unstructured classrooms but, it’s quite the opposite. Students need time to process what they are thinking. In the active classroom, less time and focus are allocated to the traditional teacher presentation as the provider of all information. There is a greater emphasis and time spent on having student develop, read, solve, create, analyze, and summarize—and most of that happening with the students with the teacher as facilitator. In a traditional classroom the amount of time that students are getting to talk about their learning is so minimal it really calls into question the usefulness of the traditional instructional framework—I believe. We cannot wrap each student’s demonstration of learning into a neat package that would look the same for all. (email correspondence, McFarland, September 21, 2017)

One parent said at our TCIS Open House before this dissertation study officially began but after I began learning from ECU: “No wonder my son loves your class. It reminds him of a home instead of a classroom” (memo, August 18, 2017). These words all were encouraging as I moved desks around in cooperative groups, staggering the order so that different size groups could form. I added bean bags and carpets for those who preferred to lie on the floor or sit in smaller groups. This intentionally created environment gave students choice from the moment they entered the room. The first day or two, students did not believe they could sit anywhere or with anyone as most teachers at my school (and many others) assign seats in rows. But, after a few days, students started moving around the room. Because I do ask them to work in groups on some activities, they seemed to gravitate to sitting with that group during group activities and then moving to the couch, bean bags, or carpets during reading and independent work times. One student said, “Last year, classes were very boring, and the teacher kept letting us do work and work, but this year we get to be on the carpet, share our thoughts and more” (memo, October 31, 2017). Another student said: “I like that we can sit with our friends and have the ability to move to another group if we get angry with our friend. I don’t like sitting in rows” (memo, October 31,

2017). Yet another student said: “I have been on a learning journey this year. I can tell you that I’ve been afraid to speak up last year because we mostly work on grammar stuff, but I’ve been able to talk more, read more fluently, and I even get to learn about new stuff like Socratic Seminars this year” (memo, October 31, 2017). These three comments are from students about having choice this year, which has been a difference in their learning environment. My experience is that Dewey (1938) was right when he suggested that giving students choice, they socialize and talk differently.

Choice Leads to Decreased Behavior Issues

I observed over the course of Cycle One that there less conflict inside the groups, and when students worked on group projects there appeared to be more equal collaboration; in previous years when I assigned groups, I had seen less cooperative and equal contribution (observation notes, September 27, 2017). I also observed that students generally tended to sit in groups with friends of equal ability (observation notes, September 27, 2017); however, the one student who struggled the most sat in the group with students who excelled easily. Additionally, I observed students teaching each other when they did not understand instructions (observation notes, October 3, 2017). For example, in the first Flipgrid exercise, I noticed one student in Group A caught on quickly; this student not only helped her group, but she also helped a few students in other groups, who in turn made sure their groups fully understood how to record the video, pause it, continue, and upload a photo (observation notes, September 21, 2017).

As important as giving choice is to students, it is also important to build essential skills they need in order to be productive citizens. One of these important skills is reading and understanding what they read. In the next section, I explain how students started to use their more democratic classroom environment to improve their reading skills.

Building Lifelong Readers

One of the complaints that I often hear from teachers at the TCIS English Department meetings is that students do not read for pleasure. Since English is always their second or third language, books in English are not their “go-to” language for reading a book on their own. Reading English texts is often difficult for students, and they do not gravitate toward reading books unless required. However, by giving students choices in reading material and making them accountable for the amount of reading they do, students seem to become more active readers. Over the course of Cycle One, three different pedagogies were used on a regular basis to embolden them as readers: regular sustained reading times; the introduction of choice of material read within the Accelerated Reader program; and the introduction of literal, inferential and critical reading skills.

Regular Sustained Reading Times

Sustained Silent Reading (SSR) helps students become independent readers and fosters an environment where students read more for enjoyment. The National Center for Education Statistics found that “reading ability is positively correlated with the extent to which students read recreationally” (Smith, 1997). To accomplish these two objectives, I asked my students to read self-selected non-fiction and fiction on a regular basis. To encourage them to read more at home and for fun, I tried to make my classroom a place that modeled these goals regularly.

For non-fiction, using the website Newsela.com, which tracks students’ progress using Lexile Levels, students self-selected articles. For example, during our novel reading for J. R. R. Tolkien’s (1937) *The Hobbit*, I selected 40 suggested articles for students based on themes from the book and asked that students choose any 20 of those articles to read. Each article has a four-question quiz that relates to specific Common Core standards: what the text says; central idea;

people, places, and events; word meaning and choice; text structure, point of view/purpose; multimedia; and arguments and claims. Each article can be read in multiple Lexile Levels, so each article has a drop-down menu with different Lexile Levels, which allows students to choose a level that is appropriate for them while also offering them choices of interesting articles. In regular meetings with students, we assessed whether they need to read articles on a different Lexile Level or make other adjustments.

For works of fiction, we had a 45-minute period once a week. Because it is “crucial that teachers participate in the process as role models” (Hopkins, 2007), I read at the same time. During our SSR time, students were actively engaged with their novels the entire time. Students were reading, interacting with the books, and appeared to be consistently engaged. At the beginning of the school year, students reported that only 16% of the class read books for pleasure (see Figure 10), which increased to 89% by November 2017. In August 2017, 79% of students had read no books for pleasure during the previous month; by November, 100% of students had read multiple books for pleasure in the previous months. Figure 10 is a photograph of one of my students with a self-selected book about Greek heroes; at the top of the book shown in this figure, one can see multiple paper stickies of his LIC annotations.

My theory of action was that regular SSR times in the classroom would promote students to become more independent in their reading, increase their enjoyment of reading and improve their comprehension skills. Fourteen ($n = 19$) students reported an increase in pleasure from reading books this year (see Appendix I). Seventeen ($n = 19$) read enough independent books to score over 80% of their Accelerated Reading Goal for the quarter while 14 students met 100% of their independent goal (see Appendix J). In memos taken when students discussed reading (see Appendix I) one student stated: “I get to read anything I want, and I like reading vampire novels

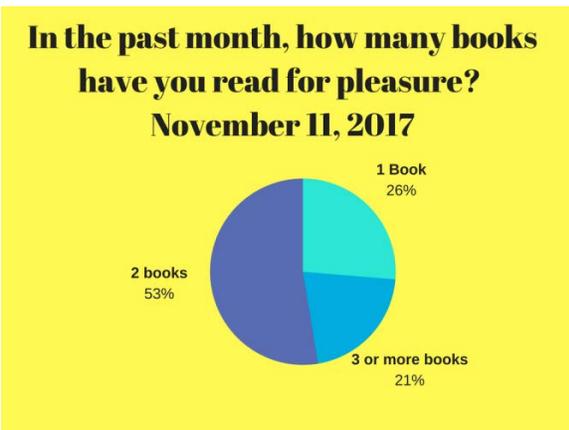
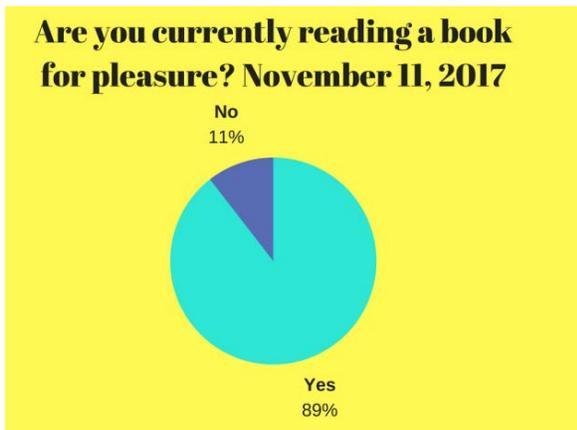
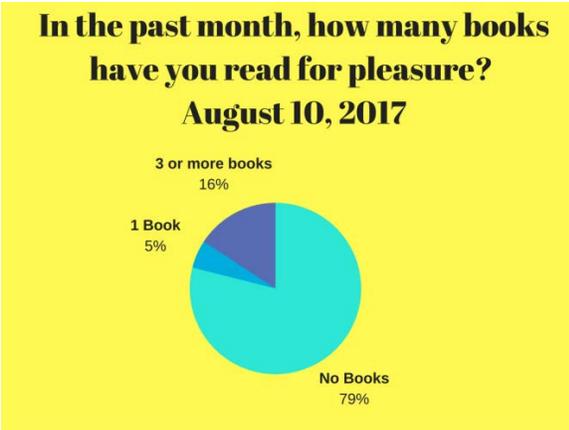
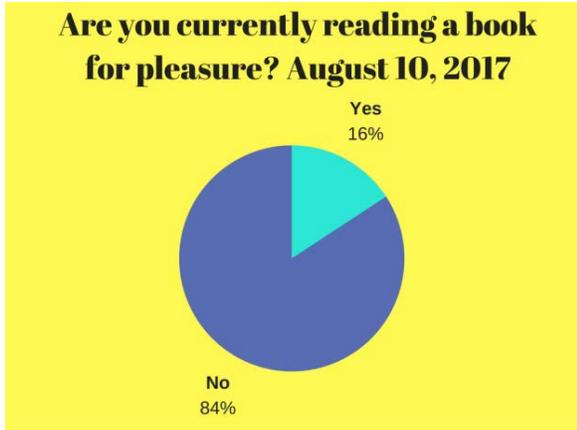


Figure 10. Student reading for pleasure increases.

and teachers in the past did not let me read those kinds of books as they said I was too young. I enjoy reading whenever I have free time.” Another student said: “You make us think more about what we are reading this year and I understand it better. I didn’t understand as much in the past so I’m glad I can now understand most of what I read in English.” Lastly, another student said: “This is the first year I have read novels. My other school we only read textbooks and online stories. Reading books is different and more fun than before and I understand them more. I like choosing what I read because books teachers choose are boring.” From these three statements and others (see Appendix I) students seemed to enjoy selecting their own novels and were starting to read more for enjoyment. From the data shown in Figure 10, students were reading more for enjoyment after three months of Grade 7, and the evidence suggests that enjoyment supports independence in choice and deeper comprehension. Evidence also suggests that when students self-select their books, they read more and enjoy reading more.

Introducing Literal, Inferential, and Critical Thinking Skills

When students learn to analyze books, their learning and comprehension of the text benefit. I introduced my students to using sticky notes in books and breaking those notes down into three different areas as recommended by Sacks (2013). After I introduced these annotation skills into the classroom, students started to talk about literature in a different way, which suggests they were developing a deeper understanding of the books they were reading. Students used one color sticky note for literal statements, a second color for inferential statements, and a third color for critical statements (see Figure 11). To ensure they understood this process, it was scaffolded until they were able to convert statements to questions. Students spent one week reading folktales and fairy tales, and they were asked to make statements about the text the class was discussing. After they made as many statements as the group desired, we categorized them



Figure 11. Example of LIC annotations.

into literal, inferential, and critical statements (LIC). After successfully completing this step, I asked students to read stories in groups using the same method. Once students were comfortable that the group understood the concept, I asked them to implement this process into their daily reading of books. We checked progress every few days to ensure they were doing the task properly, and I met with every student individually at least five times during their first month, making suggestions and adjustments accordingly.

After the students successfully developed their LIC statements on sticky notes in their first book, they were asked to begin asking questions instead of writing statements, which continued the scaffolding progress outlined above. Again, I observed and met with each student individually over the course of that month to ensure they were asking the right questions. Then, I asked students to respond to a Flipgrid question about LIC and whether they believed that analyzing books this way was helpful to them. Out of the 15 students who completed the Flipgrid assignment, all but one said that writing LIC questions in their books helped them to understand the book better. The one student who said it did not help already is a high achieving student who normally reads about three to four books above her grade level per month. Student TCIS-M-008 said using the LIC helped him to “make better decisions and think about the things more deeply” in his own life outside of reading alone (see Appendix K). Student TCIS-F-0011 said that she uses the LIC skills in her Thai class to “annotate the things in the poem and it really helps” (see Appendix K). See Appendix K for a complete transcription of Flipgrid statements.

Therefore, after several slow scaffolding activities to get students to create LIC questions, students began to look at literature in a different way and pay more attention to details in the text as observed in memos, notes and student Flipgrid responses.

Accelerated Reader

Third, in order to build lifelong readers, students require choice in the books they read, building on Dewey's (1938) idea of the importance of choice in the classroom. The Accelerated Reader program provides choice and checks for understanding in an independent comprehension test on the computer for that book. Each student received points for satisfactory completion. When students were given choice in what material they read, they started to read more for pleasure, and they seemed to comprehend the books they read. Giving students a choice of books also allowed students to self-differentiate the books they were capable of reading and to read books on a level they were comfortable reading. The data in Appendix I illustrate that my students believed they were developing reading habits that helped them in school.

Another theme emerging from that data was that students liked self-selecting books to read. Overall, 12 (n = 19) reported that they enjoyed reading more this year than in past years. For the first quarter of Cycle One, I set a goal of 17 Accelerated Reader points for each student in the research study group. As Appendix J shows, from this class, 17 (n = 19) students met that goal at 80% or above and 16 (n = 19) met goal with 90% or above. Of those 16, 15 exceeded 100% of the goal. Only two students did not make the goal the first quarter, and both were male. When in conferences with these students, both said they did not like to read and had trouble choosing books they could read. In the second quarter, I helped them to choose books that both were on their level and about subjects they expressed they liked.

With the Accelerated Reader program, I observed that the majority of students were keen not only on meeting the goal for the quarter but also on exceeding that goal. One student received 60.4 points for the quarter, and she was the one student who stated that the LIC questions did not help her. From this result, I realized that I needed to help make this student's

reading experience more meaningful. Because she is a voracious reader who will devour any book, I suggested to her, in the 2nd Quarter, I gave her a few books that would challenge her; she read and understood each of them.

The Accelerated Reader program, implemented to encourage students to become lifelong learners, seemed to work well for 16 (n = 19) students with one student being at the high end and bored with taking notes and two students being at the bottom end who said they do not like to read. I have had to work hard to challenge these students in different ways. However, overall for Cycle One, my pedagogical choices seem to have made some headway into helping students enjoy reading or at least read more often for enjoyment. While reading during Cycle One was a major theme, another significant theme was building critical thinking skills.

Building Critical Thinking Skills

To improve critical thinking and dialogue in the classroom, I introduced the use of Flipgrid, ThinkTrix, and Socratic Seminars. The overarching findings from these three discourse activities were that students' abilities to think about literature analytically improved, their abilities to reason effectively improved, and they were able to evaluate and analyze evidence. In addition, I developed critical thinking skills through the use of other technology platforms. The evidence suggests that technology builds critical thinking by giving students a platform to reflect on their learning experience.

Encouraging Student Dialogue and Voice: Flipgrid

Flipgrid encourages student dialogue by giving students a safe space to express ideas and helps build student confidence in speaking and sharing perspectives on literature. In using Flipgrid to talk about how they thought LIC questions helped or hindered their reading (see Appendix K), students seemed to be comfortable with Flipgrid for speaking and communicating

in the classroom. From their transcribed responses, female student responses were much longer than those of the male students. For example, every female student spoke over one minute on their LIC response, but no male spoke over one minute. The longest Flipgrid response from a male was 47 seconds and the longest Flipgrid response from a female was three minutes.

Additionally, the male students expressed they were using the LIC notes to help themselves with their reading comprehension, while the female students appeared to find the LIC notes to be fun or enjoyable (observation notes, September 28, 2017 and October 18, 2017). As Militello stated in a conversation about these observations, the female students seemed to find the LIC notes to be “another cool, functional, fun way to capture their understanding” (Militello email, September 23, 2017).

Encouraging Student Dialogue and Voice: The ThinkTrix Template

ThinkTrix encourages student dialogue by developing student thinking about literature and helps students think more critically and creatively about what they read; such thinking seems to lead to better group conversations about literature. In April 2017, as I was preparing my literature review for this dissertation, Tredway strongly suggested “a protocol by Dr. Frank Lyman, of TPS fame, as a possible protocol for understanding how students’ progress in developing questions” (Tredway email, April 30, 2017). She also suggested that if I wanted to implement the ThinkTrix protocol, she could connect me with Lyman. During Cycle One, I had multiple email exchanges with Lyman regarding implementing ThinkTrix in my classroom and how to best use his questioning techniques. In one email, he said:

It thrills me to hear that you have discovered the quality of the conversations that ensue from returning the students’ minds to them. The metacognitive awareness of the accessible seven mind actions is not the end in itself as you have seen; the proof of the heightened awareness is in the conversations themselves. . . . The ThinkTrix Matrix is just as important and has the potential to radically improve the level of discourse in

classrooms worldwide. Students who can create their own dialog will always know more about how to learn; they are in a sense set free. (Lyman, email, September 22, 2017).

After seeing the first template I created, he also wrote, “Yours is the most encouraging effort. Keep it up and write me regularly along with Lynda” (Lyman, email, September 22, 2017).

To prepare students for ThinkTrix, I used an overhead projector to introduce them to the questions. We spent an hour discussing each type of question and reviewing how these questions could be asked and answered. I then read a short story to the class, and we worked together on questions and answers that fit inside the template at the proper place. Since we had just started reading *The Giver*, students worked in small groups to design Chapter 1 questions and answers using the ThinkTrix question starters. For the next step, which I implemented once I observed they were comfortable writing ThinkTrix question and answers, I adapted Lyman’s (1985) matrix to add four different focus areas as well as an area for question starters (see Appendix H). I set the task for students to use this template in Google Docs asynchronously while they were reading each chapter of *The Giver*. After the students had read the entire book, I developed a test using the student-created template to assess their understanding.

I shared this template (see Appendix H) with Militello, Tredway, and Lyman. Lyman remarked: “Groundbreaking work with the new technology. This work may be just what is necessary to promote ThinkTrix worldwide. More than impressive. It may also be helpful in the marketing of the book. Your dissertation can possibly be worked into a companion book” (Lyman, email, December 7, 2017).

From my student’s time developing their ThinkTrix Template, the data show that they realized that thinking about literature is important (see Appendix L). After reading *The Giver* (Lowry, 1993), they also seem to have understood that organization is important to studying

literature on a deeper level. They stated that they thought sharing ideas in a group was beneficial to all and that developing a ThinkTrix Template helped with test preparation.

The ThinkTrix Template worked especially well in my classroom because it kept students motivated. They appeared to enjoy responding to the questions asked using Lyman's question starters (see Appendix L), and they developed their own questions about literature as opposed to the more common experience of the teacher asking them questions. During our reading of *The Giver* (Lowry, 1993), 19 of 20 students found the ThinkTrix Template helped them with understanding on a more advanced level (memo, September 13, 2017). I found that implementing the ThinkTrix Template opens up students' minds and allows them to question literature without the teacher imposing his/her opinion about ideas and themes.

Encouraging Student Dialogue and Voice: Socratic Seminar

Socratic Seminars encourage students to voice their opinion about literature and create a more respectful classroom atmosphere. Tredway visited the TCIS and conducted a Socratic Seminar for students. Using an African tale, *Why Mosquitoes Buzz in People's Ear* (Aardema, 1975) for the demonstration Socratic seminar text, she asked an opening question that is at Bloom's (1956) synthesis/evaluation level. Students said they learned more about having better discussions based on the guidelines of the seminar. Table 4 indicates the responses of the students to the seminar process.

From this discussion with students, I understood that they recognized the importance of respect for others and the importance of respect during a Socratic Seminar. I realized the students were surprised that their opinions changed during the course of the seminar after a deep discussion and listening to various points of view. I saw that specific skills needed to be taught for the Socratic Seminar to be successful. And, I comprehended that students believed that

Table 4

Socratic Seminar Student Response Memos

Name	Student Response
TCIS-F-001	The important things that I learn about Socratic Seminars is that we can't enter the conversation, until the first person have done talking.
TCIS-F-002	Since this is the first time I had talked about literature, I learned to stand for my own ideas better. I learned that people's idea could be changed easily if they did not choose their ideas confidently.
TCIS-F-003	The one important thing I've learned about Socratic Seminars yesterday was to listen to what others said because it can affect our way of thinking and may even lead us to the right choice.
TCIS-F-005	One important thing I learned about Socratic Seminars was the ability to face my fears because speaking and sharing opinions in front of class is terrifying. Everyone looked at me and I had to beware that what I said was inappropriate or not.
TCIS-F-006	Socratic Seminars are when you discuss literature and there is no hand raising.
TCIS-F-007	How important it is to speak loudly.
TCIS-F-008	One important thing I learned about Socratic Seminars is that we need to listen to other people's viewpoints even if it is different than ours.
TCIS-F-009	To state what other has said but at the same time giving them your own opinion.
TCIS-F-0010	I've learned that they are actually about literature (I never knew that before).
TCIS-F-0011	One important thing I learned about Socratic Seminars is we have to listen carefully to what others are saying.
TCIS-M-001	I learned that we can't raise our hands and we need to have a loud and clear voice.
TCIS-M-002	I learned that people start with one opinion and they often change their mind based on the discussion.

Table 4 (continued)

Name	Student Response
TCIS-M-003	The one important thing I learned about Socratic Seminars is that we do not raise our hand.
TCIS-M-004	Speaking and listening skills are important and being open to other ideas is important.
TCIS-M-005	I learned that people have very different opinions and we shouldn't judge right away.
TCIS-M-006	Paraphrase the words that others said before.
TCIS-M-007	The one important thing I learned about is we don't need to raise your hands.
TCIS-M-008	I think one important thing is being able to think and able to share it out in the way that other people can understand.

creating joint understanding is possible and opinions about literature will change with deep discussions. Table 5 provides student responses regarding how their opinions changed about a text after their Socratic Seminar experience.

From this discussion with students, I understood that they recognized the importance of respect for others and the importance of respect during a Socratic Seminar. I realized the students were surprised that their opinions changed during the course of the seminar after a deep discussion and listening to various points of view. I saw that specific skills needed to be taught for the Socratic Seminar to be successful. And, I comprehended that students believed that creating joint understanding is possible and opinions about literature will change with deep discussions. Table 5 provides student responses regarding how their opinions changed about a text after their Socratic Seminar experience.

I learned that through conversation and discussion the majority of students were open to hearing what others thought and changed their opinions based on group discussion. However, five students did not change their opinion after the discussion and believed that their original choice was the correct choice.

Technology Supports Critical Thinking

Technology affords students the opportunity to enhance critical thinking skills by organizing it in a way that they are familiar with and that helps them to focus on relevant details. As discussed earlier, students were introduced to various forms of technology (see Appendix C) and Google HyperDocs was introduced early in the cycle, and its use was a continuous evolution. Students have spent time on most assignments with a Google Hyperdoc that I created for them. For example, when we started reading *The Hobbit*, I gave them multiple HyperDocs that enabled them to use their skills to examine various topics and to express their ideas. Most

Table 5

Socratic Seminar Student's Changed Opinions After the Discussion

Name	Discussion Answer
TCIS-F-001	After the conversation, my opinion does change. Because during the conversation I heard a lot of people saying the standard of the different animal's responsibility.
TCIS-F-002	My opinion stayed the same, because I choose the animal at the first place wisely with confident, so it will be hard to change.
TCIS-F-003	When we started the seminar yesterday, I've decided on animal who was most responsible for the problem. After the conversation, I did change my opinion because I heard what my classmates said, and I just happen to agree with them.
TCIS-F-005	No, because when I heard other people opinions, I thought it was very evidential and I could look through different sides of the story.
TCIS-F-006	My opinion stayed the same because there was a piece of text in the story that really made my opinion stay the same throughout the conversations we had.
TCIS-F-007	When the seminar started yesterday, I decided that the mosquito was responsible for the problem. My opinion changed after I heard my friends' opinions.
TCIS-F-008	After the conversation, my opinion changed because as I listened to other viewpoints, I started to think of how other animals might be the most responsible for the problem.
TCIS-F-009	Yes, it changed because I had heard many people say other things that is also true.
TCIS-F-0010	I started out believing that the fault was on the mother owl and I still believe the same thing, however, I have started to see how TCIS-M-002 claim about it being python's fault makes sense.
TCIS-F-0011	After the conversation my opinions changed. At first, I think the monkey is the most responsible because it is the one that fell down and hit the owlet. But after the conversation I think the python was the most responsible because it should know that a rabbit is scared of the python.
TCIS-M-001	My opinion did not change because I think I have a strong point and everyone else did not have enough information to persuade me.

Table 5 (continued)

Name	Discussion Answer
TCIS-M-002	My opinion changed because after our discussion I was able to see different points of view and that maybe there was more than one way to look at this.
TCIS-M-003	My opinion changed because, all of the animals have their responsibility.
TCIS-M-004	Changed because my friends have reasons that is true.
TCIS-M-005	My opinion changed a little because after hearing my classmates speaking with their evidence, I thought the same as they are.
TCIS-M-006	After the conversation my opinion changed because from listening to all the class with different opinion, I thought all the animals had the same responsibility
TCIS-M-007	The one animal I decided in the beginning is the mosquito. After the conversation my opinion did not change because the mosquito started the chaos.
TCIS-M-008	I think it changed from the monkey to the python. I changed my opinion because I agreed with TCIS-M-002 idea that the python overreacted, and it was scared of the iguana, I don't think big animals like pythons should be afraid of small animals like iguanas.

chapters for *The Hobbit* had activities to learn about plot, setting, and other novel-focused elements, but I also embedded technology elements into the assignments.

For example, in the Pre-Reading HyperDoc for *The Hobbit*, students were introduced to the Timeglider technology. Timeglider helps students organize various pieces of information in chronological order. For *The Hobbit*, I asked students to develop a timeline of Tolkien's life. I asked students to work in cooperative groups to find with ten different important events from Tolkien's life and then write one paragraph on each event. They then used that summary with photos they collected to create the timeline. In my previous academic year, students completed the same activity and turned in one group project. From that experience, I learned that only one student in each group really knew how to use Timeglider well, so in Cycle One, I asked that each student create their own timeline using the group documents. For this activity, I wanted them to learn to set up a timeline using Timeglider because it appears to be widely used on the internet and therefore of potential value. In future activities, they had more choices available to them, but Timeglider was the first technology for creating a timeline that I wanted them to experience.

Another technology that was new to students was Playposit. Playposit allows teachers to build interactive videos using various online URLs by adding questions to the video. It is just like building a Google Hyperdoc except with videos that have embedded questions linked to specific moments in the video. Teachers can use various types of questions and then grade student responses quickly. After implementing this technology for *The Hobbit* Hyperdocs, students indicated that Playposit really helped them to concentrate on the videos and to learn what I wanted them to learn from the viewing experience (memo, December 1, 2017). Other employed technology was Quizlet to study for vocabulary words and Google Forms for all testing on *The Hobbit*.

Summary

During Cycle One, I thought it was important to take gradual steps to build student's critical thinking skills and to free their minds to think for themselves as opposed to merely thinking the way a teacher wants them to think. I started the cycle by introducing them to Flipgrid and various forms of technology, which were embedded into the program. I also believed it was critical to encourage students to learn to dialogue with each other respectfully using their own voices rather than an echo of my voice. Introducing my ThinkTrix Template, Flipgrid, and the Socratic Seminar appears to have helped students find their voices and understand the importance of developing questions and forming their own opinions. These activities also seemed to help them express their opinions about literature in a way that appears to be different from previous experiences they have had with literature. These conversations about literature led to students uncovering layers of meaning in texts that they might not have uncovered on their own. Using these various methods to talk about the literature seems to have helped students to think critically about the texts by looking at a specific text, coming up with reasonable judgements about that text and then discussing those thoughts either orally or in writing. Using these various methods improved their comprehension as evidenced by their Accelerated Reader scores. Additionally, using ThinkTrix helped change the focus from the teacher's knowledge to the students' thinking, which encouraged them to develop their own questions about literature as opposed to echoing mine

Employing Interactive Technologies to Increase Student Dialogue

Stratham and Torell (1996) hypothesized that a student in a technology-rich classroom engages in cooperative learning more effectively. In this study, I introduced a technology-rich classroom that seems to have improved student's ability to communicate, collaborate, think

critically, and be more creative. Instead of offering deep detail on how to use new technologies, I gave a brief introduction to the capabilities and let the students play with the software to learn what it could and could not do. “Faithfulness to the moment and to the present circumstance entails continuous surrender,” said Nachmanovitch (1990, p. 21). By figuring out the new technology on their own, students learned by doing and playing; I found this process more effective than a teacher-led demonstration. McFarland, one of the ECU professors, stated:

Too often students look to teachers for the “answer” when all they need is guidance and further reflection. Learning is not about an answer that is right or wrong and the accompanying grade—it is about the struggle, the figuring out, what I know and don’t know, what information do I have and what do I need, where to go find it, etc. Critical inquiry, being able to support your response in an articulate and scholarly manner—that is learning. (assignment feedback, November 9, 2017)

This approach was successful as my TCIS students were fairly technology savvy in their own personal lives, which transcended to the use of technology in the classroom. Students sat in small groups throughout Cycle One, and they collaborated with each other when new technology was introduced. I observed some struggles in the initial few minutes of introducing something new but also observed how fast students figured out any solutions needed to address the required task. I found that using these technologies led to great group discussions for students as “every conversation is a form of jazz. The activity of instantaneous creation is as ordinary to us as breathing” (Nachmanovitch, 1990, p. 17). Nachmanovich (1990) thought that children learn by exploring every nook and cranny and always being open to discovering new things. Watching the students work in groups and learn new things on their own and from each other was not only fulfilling but taught me that I can learn much from my students.

Vygotsky (1978) and Freire (1970) both believed that dialogue as social interaction has an important role in the development of student success, and my observations with students working in groups confirmed their belief. My *aha* moment with technology during Cycle One

occurred when Apple came out with a new update to its operating system, and it disabled the school Internet for Google Chrome. The school is a Google school, so students normally only use that web browser. However, when they had a Flipgrid due, some students found a work around by downloading other operating systems that were not updated and others found that they could get Flipgrid to work by recording a video using QuickTime and uploading that video as part of their requirement. Overall, I found the students use of technology impressive and observations suggest that its use enhanced communication, collaboration, critical thinking, and creativity. These 4Cs are important to become global citizens (Partnership, 2016).

Employing Technology that Transfers to Classroom Discussions

For this study, during Cycle One, I designed a technology-rich classroom that was filled with dynamic discussion, respectful conversations, and based in rich literature. Stratham and Torell (1996) believed that the need for people to have high-level learning skills is becoming compulsory for success. Deep conversations on rich literature improves critical thinking skills, and, when students engage in conversations around specific text, growth in critical thinking occurs (Raphael, Florio-Ruane, & George, 2001). My TCIS students read both *The Giver* and *The Hobbit*. During the process of reading each novel, students engaged their classmates in dialogue and conversations through whole class discussion, small groups, and individually using Flipgrid. Other than having read the two class novels, using the Accelerated Reader program gave students the opportunity to read any choice of book they choose; they each read multiple books. For Cycle One, the minimum number of books each student read was five and the maximum number of books any one student read was ten (memo, December 13, 2017). Most students' book reading accomplishment fell in the medium range for these numbers. Other than the books students read independently, students also read non-fiction Newsela.com articles. In

all, students read anywhere from 30 articles to 62 articles during Cycle One (memo, December 13, 2017). In sum, the students read more than I have experienced in previous classes despite my focused attention to reading.

Flipgrid, ThinkTrix, and Socratic Seminars helped to create a classroom that was alive with active discussions about literature and current events. Each different tool—whether technological, grid-based, or talk-based—brought something new and unique to the classroom; combined, however, they appeared to create an atmosphere where conversation is respected, and discussion is open.

I believe that giving students choice in seating on the first day of school and continuing to give students choice in assignments, groups, and projects set the stage for an environment where students experienced themselves as part of the classroom decision-making processes. This particular development is relevant as it helped to create an atmosphere where students felt comfortable to have deeper discussions with peers, which then transferred to more interesting discussions when using technology. Thus, the transfer was not just from technology to discussion but also from good group discussions to discussions relying on technology like Flipgrid. I was, perhaps most surprised that students continue to ask if they can sit anywhere they want. Even after five months of saying “yes” to this question and emphasizing that students can sit where they want and make themselves comfortable, some still ask the question daily. Although I do not know the reason for this apparent lack of belief in the permanence of the classroom structure, it makes me curious about what habits have been engrained in them during their entire school experience.

Engaging Adults to Improve my Own Educational Leadership Skills

One of my research questions related to how I could improve my pedagogical repertoire to support classroom dialogue and equitable student voice. In this area I excelled. I spent vast quantities of time in Cycle One learning techniques to support dialogue and equitable student voice. Reviewing notes and memos that I had collected over this cycle, McFarland stated, “Thank you for your work ethic and determination to do what is right for students—improving your craft so as to offer students vibrant and varied learning experiences that look nothing like a traditional classroom!” (McFarland, memo response, November 9, 2017). Earlier in the cycle he indicated:

Your understanding of the active learning required to truly engage students is on target. Learning can be, and usually is, messy. Active learning sometimes conjures images of uncontrolled and unstructured classrooms but, it’s quite the opposite. Students need time to process what they are thinking. In the active classroom, less time and focus are allocated to the traditional teacher presentation as the provider of all information. There is a greater emphasis and time spent on having student develop, read, solve, create, analyze, and summarize—and most of that happening with the students with the teacher as facilitator. In a traditional classroom, the amount of time that students are getting to talk about their learning is so minimal it really calls into question the usefulness of the traditional instructional framework—I believe. We cannot wrap each student’s demonstration of learning into a neat package that would look the same for all. (McFarland, memo response, September 19, 2017)

One of my goals early in the semester was to make my class look more democratic and the opposite of a traditional classroom. Notes on memos I kept stated that my professors at ECU believed that I was accomplishing that task.

The leaders at the TCIS also observed that I was working hard to improve my leadership skills. McGrath, the Head of School, invited me to be on the TCIS Leadership Committee after Cycle One. This committee is made up of administrators only. However, he stated that I was one of the leaders at the TCIS and he wanted me to have a seat at the Leadership Committee meetings each Monday. Also, after my facilitation of a meeting about a school speech contest,

McGrath wrote, “I am excited by what I have just read” and said that he believed I was doing an excellent job leading the English Department (email correspondence, October 18, 2017).

I am growing and learning as a leader. However, my deficiency in growth is that I have not been in any full-time administrative position at any school. I love teaching and enjoy being in a classroom. I have been offered opportunities in administration in the past and have turned them down because I think I can be a leader inside a school by being a teacher. I believe that if I can make progress in improving the TCIS as a teacher, that work will affect more than just my own classroom. For example, as described in a previous chapter, last year I took charge of the school yearbook. I was told that this work had been done in the past by the teacher, but I wanted to give the students a voice; I asked for help at a school-wide assembly and got over 20 students to participate in a weekly Yearbook Club. These students made all the major decisions about the yearbook, and I led them by giving them support and ideas. The produced yearbook was so popular that the TCIS School Board handed out copies to every dignitary that came to the school including the new Ambassador to Thailand from Taiwan.

Another example of my leadership growth is with the facilitation meeting mentioned above. As in my classroom, I removed myself as much as possible from the decision making of the speech contest at the TCIS. I let those that who came to the meeting lead the direction of the event. Many teachers commented that they have never had a meeting at the TCIS where they felt their voices were heard. I believe that these subtle changes in my leadership over school events have been noticed, appreciated, and replicated.

Conclusion

In Cycle One, I learned a tremendous amount about my students in terms of their strengths and challenges. I spent time introducing them to different ways to communicate and

think critically, as well as to ways to understand reading better and to comprehend what they read. I tried to help them develop a love for reading and to provide them a space where they felt free to ask questions about any subject. Cycle One was merely an introduction, however. I continued the steps from the first cycle and improved upon them in Cycle Two. For example, based on the introduction to Socratic Seminars, I conducted several of them during the next cycle. The students were successful in organizing their ThinkTrix Template; for the next cycle, I introduced them to using ThinkTrix question starters on a video platform. Most of my students were successful in reading a variety of books for the Accelerated Reader program, and, for the next cycle, I helped those students who were struggling to reach their potential with book reading.

For Cycle Two, I continued to develop the democratic classroom processes and thoughtful reading and discussions both with and without technology. Chapter 6 details the work of Cycle Two.

CHAPTER 6: PAR CYCLE TWO: MÉLANGE OF EMERGENT INTELLECTUAL CURIOSITY

The function of education is to teach one to think intensively and to think critically.

Martin Luther King, Jr.

PAR Cycle Two was fundamentally about building on the results of Cycle One and continuing to deepen students' cognitive skills. Having observed and studied the student CPRs in Cycle One, I analyzed how they were developing their thinking skills as I observed them using the ThinkTrix Template and Socratic Seminars. What became clear was that I had used a mélange of processes and skills that transformed the classroom discourse space into a place where students demonstrated increased intellectual curiosity. That intellectual curiosity, in part, was based on the affective domain of all strong teaching: building and deepening trusting relationships (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). In this chapter regarding Cycle Two, the first section provides a brief description of the class's work during that cycle, including continuing to use the ThinkTrix Template, ongoing use of Socratic Seminars, and engaging technology to enhance dialogue and creativity. The second section presents the emergent findings. The third section analyzes the implications related to the research questions, an analysis of organizational theory as it applies to the project, and reflections on my own learning as a leader of this effort. The fourth section summarizes what occurred in Cycle Two and discusses the research in Cycle Three.

Cycle Two Actions: Relationships for Deeper Learning

As indicated above, the key actions applied in Cycle Two were continuing the use of ThinkTrix, ongoing use of Socratic Seminars, and engaging technology to enhance dialogue and creativity. These activities were part of encouraging deeper learning among the students; however, such learning was grounded on the premise that deeper relationships are a prerequisite

for deeper learning. During Cycle Two, I continued to build academic discourse by using ThinkTrix, Socratic Seminars, online reading programs, and various forms of technology in order to improve dialogue and discussions of literature and prepare students for 21st-century skills. I also engaged strategies to build relationships with students and adults, undergirding the entire process.

Strengthening Academic Discourse Through ThinkTrix, Socratic Seminars and Online Reading

ThinkTrix

ThinkTrix helps students to think independently by asking their own questions and, in the process, to become self-directed learners who make connections and find deeper meaning in texts. During Cycle Two, I used ThinkTrix in a variety of ways including asking students to mark up texts independently and using peer groups to complete the template and other work. While both options had benefits, it was obvious to me at the end that my ThinkTrix Template worked best in groups where students can have open dialogue about the text.

Socratic Seminars

Lambright (1995) defined Socratic Seminars as an “exploratory intellectual conversation centered on a text” (p. 30). Socratic Seminars help students make connections, speak the language of academic discourse, and more deeply understand texts. During Cycle Two, the CPRs participated in three Socratic Seminars. These seminars were important as they helped students learn how to speak politely, rearticulate questions, listen to peers, build upon others’ interpretations, and increase self-confidence in discourse.

Online Reading Programs

Online reading programs support students' reading comprehension and understanding, and they give teachers valuable data needed to help students advance in their reading skills. Specifically, the Accelerated Reader program and Newsela.com are programs that taught me how to help students improve their reading skills through a wide variety of choices in both fiction and non-fiction.

Technology

Every class during Cycle One had technology embedded in the structure. We made strides to become a paperless classroom with all tests, homework, and essays using technology; most projects used various forms of technology. In Cycle Two, students created a newscast of *The Hobbit*. They were given a brief set of directions and then allowed to use any technology they wanted to create their newscast. I facilitated the groups and provided support as needed. The result showcased their creativity and imagination. The Head of School showed a sample video to the entire faculty meeting in March and said, "Here is a sample of what students can accomplish when they are allowed to be creative and [are] supported by a teacher who encourages them to step outside the norm" (memo, March 9, 2018).

Mélange of Skills Converging

During Cycle Two, I spent time solidifying academic discourse skills through the use of the ThinkTrix Template, Socratic Seminars, online reading programs, and technology. By continuing to develop these skills in students, I observed how the use of these skills could potentially lead to enhanced discussions and deeper understanding of literature. In the next section, I discuss the important role that relationships play in a school setting.

Strengthening Relationships with Students

As discussed in Chapter 5, relationships are the cornerstone for any PAR project, and two types of leadership actions were the focus of this cycle: (1) strengthening the relationships with students and faculty and (2) expanding students' skill sets in academic discourse. Both actions used technological applications as a key resource.

As PAR Cycle One indicates, students were tentative about trusting the open processes by which I organized the class, but by the end of Cycle One they all made choices to support their learning. Besides continuing student choice, three key activities led to strengthening relationships with students: daily greetings, school activities outside the English class, and student-teacher conferences. Relationships of trust with students are crucial to creating an environment where they can experiment and engage in dialogue and discussions that expand their curiosity, and, in fact, are a correlational factor in school improvement (Bryk et al., 2010).

Daily Greetings

In Cycle One, I observed that students typically sat in small groups with little conversation among them and often without even greeting each other. Even though Cycle One occurred at the beginning of the academic year, most students knew each other from previous school years. In Cycle Two, I purposely greeted by name and smiled at every student daily. I observed that they responded to me every time with a greeting in return, and most of the time smiled back at me, possibly indicating that I had recognized and acknowledged them. The simple warm greeting and smile seemed to start the day right and offered a model for student interactions with each other.

I also observed that when they sat in their groups, students said hello to their classmates in a similar manner that appeared to model from my own greetings. This behavior was new. I

had hoped that students would process my own greetings and smiles, transferring these actions to their own interactions with their peer groups. From observations on five different occasions, I counted the number of students that greeted their group members, shown in Table 6.

Although I do not have numerical data regarding student greetings during Cycle One, I had observed very few greetings during that time. During Cycle Two, as Table 6 indicates, students clearly were actively engaged in greeting one another, which suggests that student engagement increased in Cycle Two. This upsurge is relevant because one of my goals was to increase dialogue among students, and the simple action of a daily greeting seems to have impacted them.

External English Class Activities

In Cycle Two, I intentionally attended events that were school-related but outside of school hours to build positive relationships with students. Several of my students were on the school's basketball and softball teams, and I attended three of those games and cheered students by name. Three students were part of the Thai Traditional Dance class, and I attended their rehearsal and watched them perform at a local mall in celebration of Chinese New Year. Two other students were selected to be a part of the school's English Language Speech Competition, and I met with them at lunch and on break to help them practice and be more confident speaking in front of a crowd of over 300 people that included the public and members of the school's Board of Directors. The students noticed these attempts to build positive relationships. One said, "I was happy you came to watch our game even though I don't think you like sports" (memo, March 19, 2018). Another student stated that Thai Dance was "very important to my family and I hope you enjoyed the routine" (memo, April 5, 2018). McGrath, the Head of School, stated: "Your students did a great job at the speech contest. I can see that they and you put a lot of work

Table 6

Daily Student Greeting

Number of Students Who Greeted Peers	Total Number of Attending Students	Observation Date
16	n=19	January 16, 2018
19	n=19	February 8, 2018
16	n=18	March 13, 2018
18	n=19	April 2, 2018
14	n=14	April 5, 2018

into the speech. I want you to find a way to recognize them and the other Middle School students for being so brave and speaking in such an impressive manner” (memo, March 30, 2018).

My intention during Cycle Two was in part to help students to realize that I value and care about them. I believe that the time spent building these positive relationships resulted in students being more engaged in class and in dialogue with each other as is discussed in the ThinkTrix Template analysis for Cycle Two. I did observe that after I visited students in their after-school activities, they responded to me with more cheerful greetings for a few days. I am not sure whether my attention to their activities had a long-term effect, but I believe they remembered that I visited them at outside activities.

Student-Teacher Conferences

During Cycle Two, I had regular meetings with students centered around reading, writing, and listening to what they would share about learning. The two main areas in which I learned the most occurred in discussions with students about ThinkTrix and about their writing. As well, I reviewed their goals with them and revised goals for Spring 2018. From these student conferences, patterns about my teaching became obvious; I had greater clarity about ThinkTrix, more understanding about how to teach writing, and a stronger sense of how to help students achieve their self-selected goals.

Clarifying Use and Understanding of ThinkTrix

With ThinkTrix, students shared that they had difficulty with Idea-to-Example and Example-to-Idea (memo, March 9, 2019), which constitute the challenging constructs of induction and deduction. As several students told me they struggled with these, I emailed Lyman regarding their struggles. He suggested using clarifying examples like a whale as a mammal:

One of my favorite clarifying examples is: “Is a whale a mammal?” Which mind action/thinking type is required? Answer: Go in the direction of the known to the unknown. In this case we know we have a whale {the example} what we want to know is its classification {the idea}. Hence, this is an example to idea question. So, when the unknown is example{s}, it is idea to example; when the unknown is a category, classification, hypothesis, etc. it is ex to idea.

Lyman further explained how challenging these concepts are for students and offered some ways of clarifying them:

To straighten this distinction out for students, character traits/feelings is a good area to explicate. Kids get confused because they think when they are deriving character traits they are finding examples. When in fact they are thinking first of what the character does {lower abstraction examples} and then classifying the actions into traits, or ideas. The known is the actions, the unknown is their classification {Examples to idea}. Hypothesizing and supporting with data is the classic scientific process. {example to idea to example} I think science examples help students to internalize the difference between these two ThinkTrix mind actions. For students who continue to have trouble distinguishing between the two directions of thought, concept attainment strategy helps. This activity goes from ex to idea to example. (Lyman, email, March 21, 2018).

Conferencing with students brought this problem of using inductive and deductive questions to the forefront, allowing me to ask an expert about how to better teach the distinctions between Idea-to-Example and Example-to-Idea. This clarification, in turn, helped students to document better examples in their own ThinkTrix Template documents. After this mini-lesson, I observed that students were better prepared to give relevant examples of these two thinking skills in discussions (observation memo, March 29, 2018). These types of questions and answers were more intuitive and made more connections than they did prior to the mini-lesson and my communication with Lyman. However, of all the seven ThinkTrix skills, students continued to question these two skill types. In Cycle Three, I reintroduced these skills to model them again (observation notes, April 7, 2018).

Goal-Setting

At the beginning of Cycle Two, I asked students to write their goals for 2018. After they put these goals into a Google Note, I had individual conferences with them to discuss how I could help them attain the goals. The goals of improving grades was a theme with most students while building personal relationships was a theme with only female students (memo, January 8, 2018). Conferencing with students about their goals, setting objectives to meet those goals, and meeting throughout the cycle about student goals helped build better relationships.

While many of their goals related to sports, academics, and things of interest outside of school, which helped me to plan my outside activities for Cycle Two, one student's goals stood out. TCIS-M-004 stated that he wanted to learn how to deal with his depression. This statement caused me great concern, so we discussed it in my conference with him. He was exceptionally open about his feelings and about where he learned the word *depression* and what it meant. We spent approximately 30 minutes talking, and I assured him that I would be there for him (memo, January 8, 2018). However, as I am not a professional counselor, I also referred him to student services to talk with our school counselor (memo, January 9, 2018). I never observed signs of depression from TCIS-M-004 as he is always smiling and cheerful. Nonetheless, conferencing with him and listening with intent to understand (Tredway, memo, October 30, 2018) helped me to see an issue I did not know existed. Closely and actively listening allowed me to try to meet this student's critical need. The bond that we developed over Cycle Two was important for him. He said he was a "tech guy" (memo, January 12, 2017), which encouraged me to consider ways I could connect with him. He had mentioned that he wanted to know what was in a computer in Cycle One (memo, December 14, 2018). I had a 17" MacBook Pro that had crashed, and he and I spent two weeks at lunch breaking every piece of the computer apart to see what was inside.

Each day, I listened to him and created a safe environment to discuss any issues. This bonding time was important as it built relational trust between us; and building these types of relationships are crucial to getting to know individual students.

Building Relationships with Adults

Building relationships with adults is important to effect change in schools. During Cycle Two, there were two important outcomes based on positive relationships I developed with colleagues. The first was that the English Department decided to collaboratively choose novels that would be taught at each grade level. The second was the successful implementation of a school speech contest. Both outcomes were based on my listening and facilitation skills developed from this dissertation research project.

English Department Novel Selections

The TCIS English Department has had insufficient curricula in place for teachers. New teachers are told to teach the Common Core Standards, but they receive little direction detailing how to accomplish this task. As the Head of English, I wanted to ensure that new teachers have at least a starting point when they come to the TCIS. To that end, at the August 28, 2017 meeting with the English Department, I posed the question of how best to ensure that all students were given equal opportunities and a similar curriculum year after year. Teachers offered various comments, but the consensus was that having a fiction/novel teaching guide for Grades 5-12 would be beneficial. This curricular development had been tried in the past, but few teachers followed the guide. It was suggested that we revamp this guide to include major studies of novels that are relevant to American and World Literature and to ensure that the novels would be classics that can be taught by any new or incoming teacher.

At the January 29, 2018 meeting, we talked again about the books and met with the school librarian to get his input. All teachers present agreed that having four required books per grade at all grade levels would be a good start. A Google Doc was shared with all teachers, and they started giving input and listing the books they believed best at each grade level. This document changed over time, but at the March 26, 2018 meeting, it was discussed again, and we came to a consensus indicating with which all department members expressed they were happy. This was a first, good step in revamping the English Department. I believe there was significant buy-in from teachers because multiple opportunities for input and agreement were offered in our meetings. The draft document shared equally, and everyone's voice was heard, valued, and incorporated into the final document.

The TCIS Speech Contest

In Cycle One, I facilitated a meeting about a school speech contest (see Chapter 5). This facilitated meeting was used as the basis for a speech contest held on March 29, 2018. While planning for this event, the original group plus all English Department members worked to prepare contest rules, grading rubrics, and contest timeframes. The original speech contest rubric that the committee revised was developed from the high school English teachers' collaborative input (email correspondence, February 6, 2018) where they were asked to make changes to or comment on the rubric. The speech contest was a great success as indicated by the Head of School: he was "so impressed that he wanted to be sure that we have this every year" (memo, March 29, 2018). The high school Principal said that the students "were impressive," that the contest "flowed very smoothly," and that it was one of the most "successful events" he had seen at the TCIS (memo, March 30, 2018).

Importance of Relationships

In this section about actions taken in Cycle Two, three themes emerged as part of the cycle. One, it was important to build positive relationships with students to create an environment in which all students can succeed. Two, a good leader who accomplishes goals needs to build relationships with colleagues and work together to build consensus. Three, combination of ThinkTrix, Socratic Seminars, online reading programs, and technology helped students to accumulate critical thinking skills needed for the 21st century and become more adept at observant listening and articulate speaking. In the next section, I present the emergent findings revealed in Cycle Two.

Key Emergent Findings: Tectonic Shifts for Listening and Questioning

Building academic discourse skills helps students listen thoughtfully and ask questions, potentially triggering tectonic shifts in intellectual curiosity. These skills should be modeled to be most effective. After Tredway's Cycle One Socratic Seminar with my CPRs, she said that the most important aspects of conducting a successful Socratic Seminar are the opening question and intently listening to responses (memo, October 30, 2018). Her statement about intently listening struck a chord with me, and I have used this strategy not only in dialogues with students but with colleagues. I now understand the significance of speaking less and listening more. In this section, I dig deeper into the areas of strengthening academic discourse skills that I have introduced and for which I have provided evidence in the previous section. In this section, I specifically concentrate on the rapid growth of their ability to engage in intellectual discourse and I call this development tectonic because while the brain "plates" or abilities are already present in students, it is the responsibility of the teacher to shift the plates so that the maximum intellectual curiosity and direction can become solidly part of the student repertoire (Dewey, 1938). Structuring the

academic tasks in ways that continue to build their academic chops is critical, and the role of the teacher is to provide students with a secure emotional environment in which to pursue ideas, developed through relationship (Vella, 2007). Thus, I discuss the responses of Flipgrid to compare two uses of ThinkTrix, and I analyze the discourse in one Socratic Seminar.

Strengthening Academic Discourse Skills

As discussed earlier in this chapter, one of the goals for PAR Cycle Two was to continue to build student skills that improved their discussions about literature. While the ability to engage in a conversation and use evidence to support their ideas is important, in Cycle Two, I observed tectonic shifts in students regarding their abilities to listen to the ideas of others and question each other. These observations are documented with memos, observation notes, transcripts, student reflection sheets, surveys, and class discussions. Students formed connections and thought independently; they advanced enhanced dialogue; and they transferred skills learned through ThinkTrix and Socratic Seminars to understanding literature and developing richer writing.

ThinkTrix and Flipgrid: Supporting Students' Thinking

Students' cognitive skills were possibly improved by forming their own questions and developing a deeper understanding of literature. ThinkTrix offers students a method for asking their own questions and, in the process, they can become self-directed learners who make connections and find deeper meaning in texts. According to Lyman (2015), two essential skills for students to attain the highest-level thinking are (1) active engagement and (2) understanding the task (p. 20). In Cycle Two, students used Google Docs to support my reinvented ThinkTrix Matrix and achieve active engagement. We also used Flipgrid to support ThinkTrix questions to ensure students understood the task and how to reflect metacognitively. In Cycle One, we used

Flipgrid to elicit responses to Literal, Inferential, and Critical (LIC) text markups as discussed in Chapter 5. However, in Cycle Two, we moved from the LIC Flipgrid to a ThinkTrix Flipgrid.

Using my ThinkTrix Template as we read *The Hobbit* helped to elicit deeper meanings. I observed certain themes developing in dialogue using ThinkTrix, Socratic Seminars, and in regular discussions about literature. These themes were more pronounced as the cycle continued, and I coded them as follows:

- Attempts at Deeper Meaning (DM)
- Attempts at Main Theme (MT)
- Careful Reading of Text (CRT)
- Connections to Life (CL)
- Connections to Other Literature (COL)
- Connections to Other Subjects (COS)
- Gracious Voice (GV)
- Paraphrasing (P)
- Restating Response (RR)
- Student Agreement (SA)
- Student Disagreement (SD)
- Use of Textual Evidence (TE)

Two Flipgrid discussions based on ThinkTrix were transcribed and coded for themes. In both Tables 7 and 8, students asked a question and classmates responded via Flipgrid. Table 7 provides student discussion examples from January 2018 and Table 8 provides them from April 2018. Student responses are provided in the order in which their responses occurred. Transcriptions of sample student questions and answers are provided in Appendix M.

Table 7

ThinkTrix Flipgrid Video Questions January 2018

Student	Time in seconds	Number of Words	DM	MT	CRT	GV
TCIS-M-006	35	71		*		*
TCIS-M-003	17	86			**	*
TCIS-F-003	23	48	*		*	*

Table 8

ThinkTrix Flipgrid Video Questions April 2018

Student	Time	Number of Words	DM	MT	CRT	L	V	P	D	E
TCIS-F-002	68	176	**	*****	*		*			*
TCIS-F-005	128	236	*****	*	*****	*	*	**	*	*
TCIS-F-009	86	164	****		***	*	*	*		
TCIS-F-006	38	107	*		*****					

Table 7 demonstrates student responses by time and word count. The average response time was 25 seconds and the average word count was 68. Coding for such themes as seeking deeper meaning revealed sparse results; only one student attempted to reach deeper meaning (e.g., TCIS-F-003). All three students in this table referred to the questioner by name, a courtesy that may have been carried over from our morning greeting routine established above. Such courtesies were coded as a “gracious voice” (GV). Also, all three students provided a detailed answer and tried to support it. For example, as shown in Table 7, all three students used the word “because” and explained their answers.

To my surprise, student responses changed dramatically by time and word count just three months later in Cycle Two. Table 8 provides average responses from the same type of assignment using ThinkTrix.

Table 8 shows the average student response time was 74.6 seconds and the average word count was 168 words. These numbers represent an average increase of 49 seconds (196%) and 100 words (147%). As opposed to the one attempt at deeper meaning shown in Table 7, there were 14 attempts as shown in Table 8. Another positive change was the number of attempts to make connections to their lives ($n = 8$) in the April Flipgrid as opposed to zero in January’s data. The differences in these two sample Flipgrid responses, which appear to represent the data generally, may be due to students integrating ThinkTrix cognitive skills. It seems that the more they used ThinkTrix in class, the more those skills transferred to Flipgrid video responses, which was apparent in both the transcriptions above and in conversations with students (observation notes, February 23, 2018, March 6, 2018, and March 27, 2018).

An April 3, 2018 test showed that ThinkTrix cognitive skills may have transferred from the template and discussions. The test was comprised of open-ended questions and a five-

paragraph essay. I observed that students' answers were more thoughtful and detailed than in previous classes. After 45 minutes, I spontaneously removed the essay part of the test because they were still writing short answers and I knew they could not finish the test. English is not my students' first language and expressing themselves in writing is challenging. However, over Cycle Two, I have observed multiple instances of them both writing more text and more meaningful text overall. To illustrate how students expressed themselves in writing, Table 9 provides sample answers. As another striking example, for the second test question, I used one of Lyman's (1987) recall questions about characters, plot, details, and sequences. TCIS-M-003, a student who presents challenges in testing, motivation, and focus, responded by describing three characters in detail where only one had been required:

- Kenny: he has a cross eye, he is short, and he like to play with his dinosaur toys, he doesn't feel very welcome in the class he always got bullied by his older brother.
- Byron: he is tall and strong he is the big bully in the school, although Kenny is his brother, he still bullies him a lot.
- Jenny: Kenny and Byron's little sister, she is very kind and heartwarming, she always protects Byron from any situation although he is a bully, she is religious.

TCIS-M-003's growth during this cycle has been intriguing as his grades have improved, his motivation has increased, and his focus has been on target during the ThinkTrix Template discussions.

Students' answers on this test were atypical for TCIS students, who commonly answer in one sentence. According to Lyman (2015), a good way to demonstrate that students understand the prompts and mind actions is by looking at test answers that have been written with metacognitive understanding as students "will answer more accurately and fully" (p. 21). Having

Table 9

One Word that Best Describes Independent Reading Novel

Name	Student Response
TCIS-F-001	The word that best describes this book [<i>The Witch of Blackbird Pond</i>] is religious. Because most of the people blame each other for different religions, and because of that, Hannah Tupper is treated very badly because of her religion and her different lifestyles. The things that the characters believe, make their actions and thinking different, including the way they treat other and other people. This is a negative way of thinking in this book that makes Katherine (the protagonist) alone and treated very badly. Religion also takes place in our daily lives. For example, some terrorist attacks happen because they want others to believe in their religion. But, for me, I am an atheist, so I do not really believe in that.
TCIS-F-0012	The word that best describes this book [<i>The Witch of Blackbird Pond</i>] is heartwarming. Heartwarming because it taught us how to be yourself and ignoring others' thought of you. It also taught me to appreciate things as they are right now. Hannah house's atmosphere, the environment and other things All of these showed how heartwarming person influenced someone.
TCIS-F-005	Unpredictable: because many events happened without thinking it would happen. Most of the story [<i>Bridge to Terabithia</i>] is unpredictable, if there are no events that are unpredictable, then I would know all the events that would be happening, and the book would be useless to read. Some parts in the story gets really excited when unpredictable events happen, for example, when Leslie drowned while she was trying to reach Terabithia.
TCIS-F-009	Love because Kit have gone through a lot of problems like her grandparents died, and she just need someone to love her. Love is a very common word but it means a lot to me, love to me means friendship and caring at the same time [<i>The Witch of Blackbird Pond</i>].
TCIS-F-0011	I think the word that describes my book [<i>Bridge to Terabithia</i>] is, "sad." This book is really sad because of the ending that was really unexpected. One of the main characters died, and I feel sad because the two characters spent a lot of time together. This relates to the theme of loss which is about when we lose someone we love.

Table 9 (continued)

Name	Student Response
TCIS-M-008	The one word that best describes this book [<i>The Watsons Go to Birmingham</i>] is Family. I think that the word family best describes this book because this book is about the Watsons family that goes to Birmingham. It is also about the kids that like to bully each other, but at last, they did help each other and got along with each other well. That is what family is all about and why I can relate.

viewed the tests, I believe that students were moving toward more metacognitive awareness. I surmise that their answers were longer and more detailed because the ThinkTrix Template work and the Socratic Seminars raised their metacognitive awareness. Such awareness seems to have transferred to their tests, where they wrote with the same detail they had been using during conversations. This metacognitive awareness might have been amplified by student understanding and practice in formulating their own questions. Data suggest a transference relationship between oral dialogue and other formats such as test writing. For example, when students are taught to be metacognitively aware and then learn to develop their own questions sets, they may transfer their oral questioning techniques to create fuller written responses to essay questions, quizzes, and tests. Additionally, it seems possible that when ThinkTrix is implemented in a classroom effectively, students' minds may be more open to building meaningful connections.

During Cycle Two, the ThinkTrix Template was used for question starters and discussion openers when marking texts; creating Google Docs; producing Flipgrids; and in discussions in pairs, small groups, and whole groups. The ThinkTrix Template appeared to help students create deeper meaning in literature through Google Doc work, and this analytical work carried over to Flipgrid and testing environments. On a March 26, 2018 Google Survey Form, 13 (n = 19) students said they felt more comfortable discussing literature in smaller group this year while 6 indicated they felt the same comfort level as in past years; even though it was an option, no student indicated feeling less comfortable. Also of importance was that 16 (n = 19) students said they felt more comfortable speaking in front of the class. This result may be attributed to class discussions and group presentations as all students stated they were required to dialogue more than in previous years. Thus, data from Flipgrid transcriptions, Google Surveys, class tests, and

observations and memos of discussions confirmed that students were more actively engaged, forming connections differently than prior to using the ThinkTrix Template, understanding literature on a deeper level, and making tectonic shifts in listening and speaking skills.

Data collected, which included Flipgrid responses and test answers, and analyzed during Cycle Two also suggest that when the multilingual students in my TCIS literature course learned to construct their own questions with metacognitive awareness, they responded and talked more deeply about the literature using more sophisticated language. The data also indicate that trilingual students, who have learned English from early schooling but who likely speak their country's language at home, may learn to use English in more academically complex and advanced ways when they are asked to dialogue with their peers frequently using such techniques as ThinkTrix and Socratic Seminar. These propositions should be tested with other student populations (Lyman, email correspondence, April 21, 2018). If they tend to occur in other multilingual settings, these findings might be used to change how teachers prepare multilingual students for English-based discussions of complex material. During Cycle Two, it emerged that the key ingredient to enlightenment did not seem to be the format used (i.e., the ThinkTrix Template and Socratic Seminar) but the students' own self-constructed questions. Cycle Three research considered whether adding more Socratic Seminars to ThinkTrix exercises would help students to develop stronger dialogue, deeper peer conversations, and complex test responses.

ThinkTrix and Flipgrid were not the only options to improve dialogue that were utilized in Cycle Two. Students also explored literature through Socratic Seminars. In the next section, a discussion about how Socratic Seminars were incorporated during Cycle Two is reported.

Socratic Seminar One: Deeper Connections and Enhanced Academic Discourse

Socratic Seminars give students a method for responding to literature in group discussions and, in the process, becoming self-directed learners who make connections and find deeper meaning in texts. In Cycle Two, we continued the use of Socratic Seminars to help students make deeper connections to literature and to improve development of academic discourse. As with the ThinkTrix Template, we also used technology as part of our Socratic Seminar routine. Per Dewey's (1938) belief in self-directed learning, before each seminar, students would participate in a Google Survey to set both an individual goal and a group goal. After each seminar, students would participate in a Google Survey to record their experiences and consider whether they had met their individual goals for the seminar and whether the group had met their student selected group objective. Data collected for seminars included the results of Google Surveys, observations, peer assessment forms, Socratic Seminar Maps, and self-evaluations. We conducted three Socratic Seminars during Cycle Two, and I report on observations from two (January and April). The first was on Chapter 6 in *The Hobbit*, and the second was on Dr. Seuss's (1971) *The Lorax*. I observed certain themes developing in student dialogue about literature. Themes such as attempts at deeper meaning, attempts at the main theme, careful reading of the text, connections to life, connections to other literature, connections to other subjects, gracious voice, paraphrasing, restating responses, student agreement, student disagreement, and use of textual evidence were often used. These themes are displayed in Figure 12. These themes became even more pronounced in Socratic Seminars as the cycle continued.

Themes and Codes

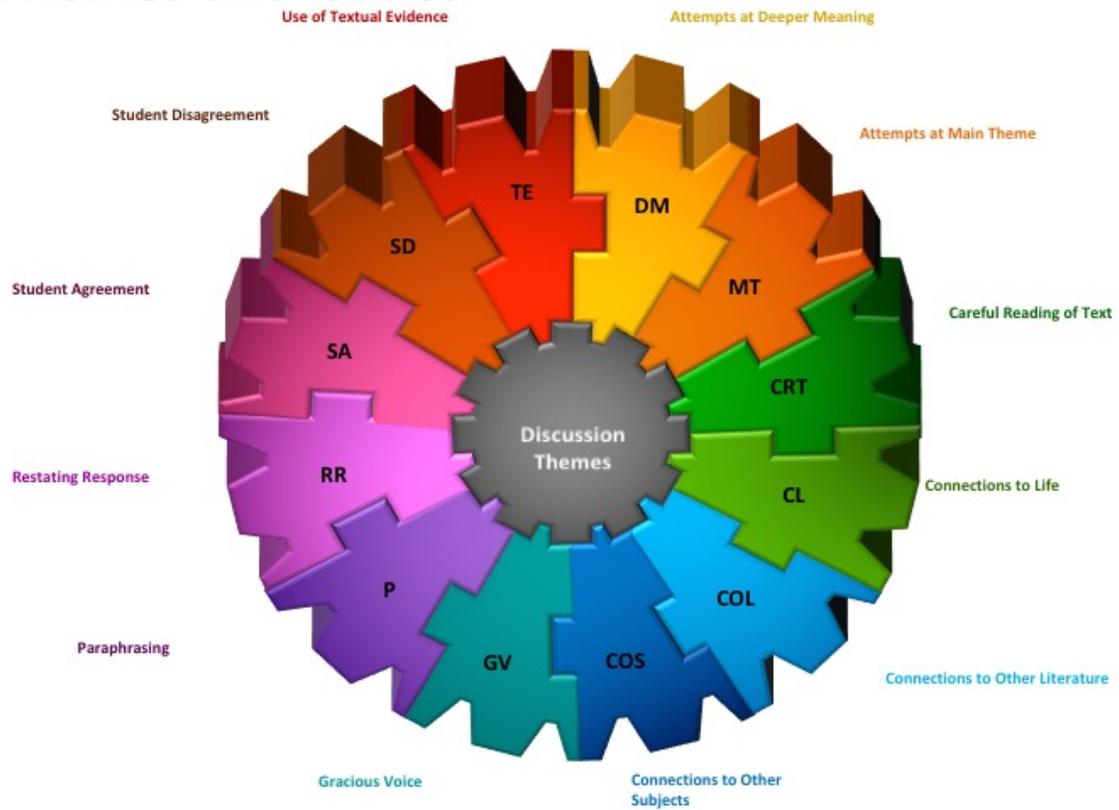


Figure 12. Themes and codes.

Seminar One (January): Evidence of Active Engagement.

The first Cycle Two Socratic Seminar was held on January 23, 2018. Students chose one or two goals for each seminar about their participation. They recorded their goals on Google Forms, in which $n = 19$ and the number of votes is shown in parentheses:

- Look at members of the group when speaking (14)
- Consider multiple points of view (11)
- Refer to text when speaking (8)
- Make connections between ideas (7)
- Disagree politely or in a neutral tone (7)
- Yield to another in order to share talk time (3)
- Speak out of uncertainty (2)

It is interesting that the goal with the most votes involved a more direct form of communication skills in terms of looking at one another; this skill is one that I consciously modeled during the Cycle. Additionally, I had demonstrated that I value considering multiple points of view by developing the importance of this in individual and small group discussions; students, therefore, may have been following my lead although it is possible that they simply wanted to please me. On the other hand, it is not surprising that students least wanted to speak out of uncertainty given their ages; age thirteen is a challenging time for any student to risk being wrong in a public way. However, the two students, both of whom were females, who voted for this goal did work to speak out of uncertainty, at times even dominating the conversation when it otherwise might have lagged.

As Figure 13 shows, students sat in a horseshoe configuration and used laptops to indicate their personal and group goals. As this photograph demonstrates, there is a student



Figure 13. Socratic seminar in action.

sitting outside the horseshoe; she was one of four observers for the Socratic Seminar. According to Tredway, these observers become “mini-researchers in the process” (email, January 14, 2018), and they do not speak in the discussion; their role is to complete the after-seminar

After students finished the survey, they put their computers away and pulled out their novels for reference. The group goal for this seminar about *The Hobbit* was to look at classmates when speaking. They had read chapter six, and their main question was “At this point in the book, which character has contributed most to the success of the adventure?”

At the beginning of the discussion in which all 19 students participated, students orally responded to the seminar question and the responses were recorded on butcher paper, as seen in Figure 14; 12 students voted for Bilbo as the main character contributing the most to the adventure. Even though Gandalf was significant in moving Bilbo out of his comfort zone and onto a journey, only four students saw him as significant.

At the end of the seminar, by a show of hands, six students (n = 19, including the four observers) had changed their minds on their original selections, voting more for Gandalf and Thorin as primary characters contributing to the success of the journey. This fact is significant because it suggests that they were listening to classmates and open to different opinions. I observed that all students were listening to the conversation. Additionally, the four observers noted that all students (1) looked at others when they spoke, (2) remained focused and paid attention, and (3) leaned into the conversation when others were talking (peer assessment forms, January 23, 2018).

These actions confirmed my observations on that date and aligned with the Individual Student Assessment Forms I had compiled for each student. As explained earlier, it is possible that students were modeling my actions from small group meetings earlier that week as I had met

Gandalf - 11111
Bilbo - 1111 1111 11
Lord of Eagles - 1
Gollum - 1
Thorin - 1

Figure 14. Socratic seminar character chart

with each group and intentionally modeled active listening. This was the first Seminar I conducted on my own, and I endeavored to keep track of the conversation using a Socratic Seminar Map, which enables one to track conversation from one person to another. It begins with a circle and every participant's name; one draws lines from person to person as the conversation changes from one interlocutor to another. I used the Socratic Seminar Map, as shown in Figure 15, to keep track of student dialogue. My blue pen ran out of ink, and I completed the mapping using an orange pen that was within my reach. Simultaneously, I tried to code the conversations, as shown in the bottom left corner.

While I was mapping the conversation, I noticed several issues that made mapping challenging. First, the conversation was moving rapidly, and I found it difficult to code on the spot while listening to conversations. Second, there were three students ($n = 15$) who did not speak at all, and I needed to find ways to get them involved in the conversation while continuing the mapping process. Third, I needed better questioning techniques for the middle and ending part of the seminar because I knew I wanted to get all students involved. The second two issues were in part resolved in the following two Socratic Seminars by using an interactive strategy called Think-Pair-Share as demonstrated in the October Tredway seminar.

Upon reviewing the flow of conversation in Figure 15, I noticed that seven of the fifteen students in the seminar contributed to most of the dialogue with one student surpassing all others in the number of times she spoke. For the next seminar, I made a point to ensure that all students spoke at least one time. Finally, it is useful to note that I had technical issues with recording devices that made later transcription impossible. Figure 15 demonstrates that active engagement certainly was happening. Students engaged in a “variety of thought-demanding ways to explain, muster evidence, generalize, apply concepts, analogize, represent in a new way” (Perkins, 1993,

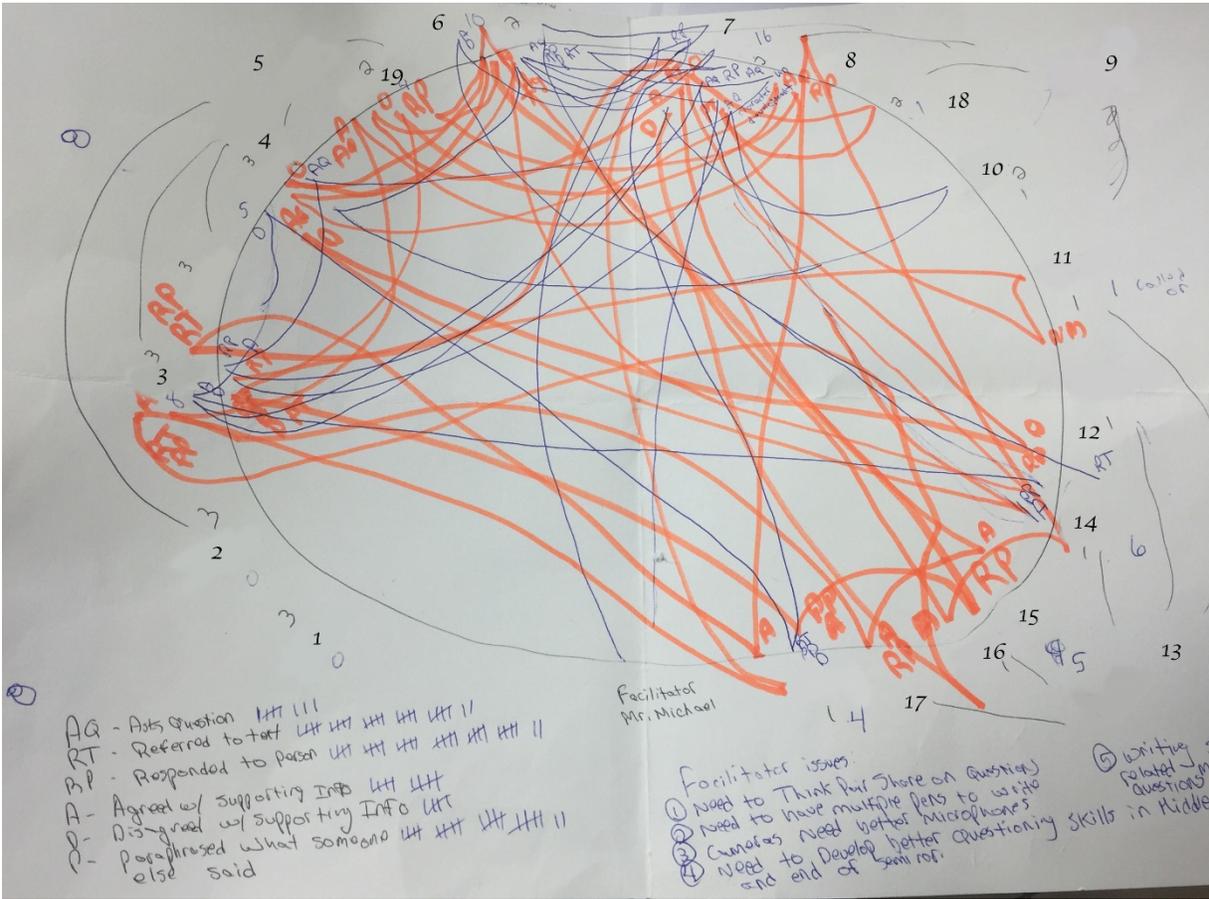


Figure 15. Socratic seminar map of *The Hobbit* seminar discussion.

pp. 28-29) things they had read in *The Hobbit*. In other words, they were undertaking what Lyman (2015) referred to as “active engagement.”

Of note, Figure 15 shows that I identified 22 different occasions of references to the text, confirming that students were using the text in the seminar and were familiar with it. In the post-survey Google Form feedback results, on a Likert Scale of 1-5, where $n = 19$, nine (47%) students responded with “4,” while six (26%) responded with “3,” two (10%) responded with “2,” and one (5%) responded with “1.” These results indicated less than half the class believed they used textual evidence during the discussion. These numbers are relevant as using the text as support was the new concept I asked students to work on during the seminar, and they had prepared for doing so by marking up their novel and making notes in their novel. Figure 14 does not record which students referred to the text during the seminar; doing so was something I incorporated into the following seminars’ Socratic Seminar Maps to acquire more data on each individual participant.

Additionally, in the post-survey Google Form feedback results, 13 (68%) students ($n = 19$) responded by marking “5,” indicating they did a good job of not raising their hand (something Tredway listed as one of the seminar rules in October 5, 2017), while 5 (26%) responded with “4,” and 1 (5%) responded with “3.” These results were confirmed by my observations as no student raised a hand to speak (observation notes, January 3, 2018). These responses are relevant because one of our Socratic Seminar Standards posted in the classroom and discussed before a seminar is that hand-raising is not appropriate.

In this subsection, I discussed the ways in which students were actively engaged in a Socratic Seminar discussion. I also related CPRs attempts at textual analysis. In the next section, I will share observations and evidence based on our last Socratic Seminar in Cycle Two.

Socratic Seminar Two: Evidence that Deeper Discussions Augment Participation

The final PAR Cycle Two Socratic Seminar (there were three, and I report only on the first and the third herein) regarded *The Lorax*; results showed apparent improvements in many areas. I asked students to read *The Lorax* twice, once individually and then again with their group. Using a grid as the writing space, I also asked them to answer six questions related to *The Lorax* and to give textual support for each answer. Before the seminar started, we watched a video of the short story on YouTube, and students continued to take notes on things they found relevant.

As with each Socratic Seminar, I asked students ($n = 19$) to complete individual and group goals for the seminar and a Google Form Survey afterward. Strikingly, the Socratic Seminar Map for this third seminar (see Figure 15) revealed that students responded with the exact same numerical data for use of textual evidence as they had for the first Socratic Seminar about *The Hobbit*. Nonetheless, I noticed that their cited evidence represented enhanced connections to the text in terms of detail and specific lines and pages (observation notes, March 27, 2018). This result may be attributed to the fact that students' responses were lengthier than in the first seminar; it also could be attributed to using Think-Pair-Share before responding at two different discussion points. Of note, in the feedback results, students also responded identically to the numerical data from the first Socratic Seminar.

Figure 16 shows that nine students ($n = 15$, where four additional students served as observers only) attempted more often to find deeper meaning in the text as opposed to zero students doing so in January's first Socratic Seminar. It also shows more attempts at using textual evidence (29 versus the earlier 27) and more attempts at student disagreement (7 versus the earlier 5). These increases, however modest, may be attributed to students being more

comfortable discussing literature over the cycle or that I may have been keener in noticing themes developing. It is also relevant to note that all 15 students participated in the seminar versus only 12 from the first seminar. This increase may be attributed to efforts to ensure that every student spoke at least once even if I had to call names. This increase also may be connected to Tredway's having modeled Think-Pair-Share during the October seminar (observation notes, October 28, 2017), which I also employed in this third Socratic Seminar. While I noted only three instances of *gracious voice*, most students repeated the name of the person that spoke before them and, even if they disagreed, they did so in a kind tone with polite words (observation notes, March 27, 2018). In fact, when students were asked what went well in the seminar, one student stated, "I like how people are disagreeing with me, but they are still using their regular voice and I didn't feel like they were mad at me or that I am stupid" (observation notes, March 28, 2018). Another student, representing those who spoke and participated less successfully, stated, "I don't think anything worked well for me because I didn't peak a lot and the only time I spoke was when the teacher called my name" (observation notes, March 27, 2018).

One thing that surprised me was that male students commented fewer times than female students. As shown In Figure 15, one male student commented two times, but the rest commented only one time. The female students commented on overage 4.2 times during the seminar with one female student making eight comments, one making seven comments and another making five comments. I also observed the female responses were longer and more detailed than male student responses except for TCIS-M-001 who spoke two times in great detail. However, given the disparity between male and female students' speaking times in Cycle

Three, I am curious about the cause—beyond the possible nature of 13-year old teens—and I am engaging in ongoing attempts to enable more equal discussion among all students.

In this section, I discussed ways in which I saw student engagement of literature deepen on multiple levels. I also noted ways in which I believe this may be attributed to students' ThinkTrix questioning techniques. Next, I summarize what I have observed and noted concerning academic discourse in Cycle Two.

Summary of Strengthened Academic Discourse Skills in Cycle Two

During the three months of Cycle Two, I observed tectonic shifts in speaking and listening in ThinkTrix discussions. These shifts were aided through the ThinkTrix Template documents, small group conversations, Fligrd discussions, and one-on-one dialogue. As noted above, these shifts in both listening and speaking skills were significant. I watched as students were at first shy and unwilling to participate in a Socratic Seminar and eventually became willing to share insightful information about the texts (observation notes, January 14, 2018, February 7, 2018, March 27, 2018). It is important to note that the skills that students were learning in the ThinkTrix Template and Socratic Seminars likely transferred among these discussions regardless of, or perhaps inspired by, the format. I observed clear expansions of dialogue from the first Socratic Seminar until the last one held in Cycle Two. As Socratic Seminars were not as frequent as the ThinkTrix Template, I speculate that conversations in Socratic Seminars were improved based on the shifts I observed with the ThinkTrix Template discussions. In the next section, I discuss how evidence from this cycle corresponds with existing literature.

Analysis of the Evidence: A Journey into the Mind

As noted in Chapter 2, Socrates, over 2,000 years ago, was not the first to note the importance of questions, but his writings and teachings about questioning and the importance they play in efficacious dialogue are as germane today as they were during his life in ancient Greece. In a small private school on the outskirts of Bangkok, Thailand, a group of 19 students undertook a journey into Socrates' mind. These students simultaneously were students and CPRs, and the emergent findings detailed tectonic shifts in dialogue based on questions students co-created and group dialogue around important works of literature. In the first subsection, I discuss the importance of humanizing conversations.

Humanizing Conversations

The traditional approach to teaching often employs the teacher as the sole giver of information that is shared with students through lectures and with limited discussion (Tyack & Cuban, 1995). I never saw myself as a traditional teacher and often viewed myself as a facilitator of information. However, the more time I have spent with ThinkTrix and Socratic Seminars, the more I have realized that I was still teaching old school methods with tidbits of progressive ideology. Now, I see the need and the necessity to allow students to be involved in their own learning and directing their own education (Dewey, 1938). Specifically, I see the need to create an environment that gives students an active voice in the classroom and encourages them to co-construct knowledge and be active peer participants in their studies (Vygotsky, 1978).

Freire (1970) indicated that “dialogue is an existential necessity” and that learning is a social act where teachers and students converse and create dialogue together (p. 77). It was evident in PAR Cycle Two that both ThinkTrix and Socratic Seminars created an atmosphere in which dialogue was at the center of the classroom dynamic and that students had a voice in their

own learning. Using ThinkTrix and Socratic Seminars is an example of what Freire would call a mutually humanizing conversation in which all parties are actively engaged. Freire discussed the banking system of education where students were receptacles to be filled, and he expressed that this approach to education was the wrong approach. However, when Lyman's (2015) ThinkTrix and Socratic Seminars are used in a classroom, these strategies promote students' discovering their own questions and answers as opposed to the teacher being the sole giver of information filling students up. This important shift from the giver of information to a facilitator is one that Dewey (1938) would argue benefits students and one that progressive schools should embrace. In this subsection, I have discussed the importance humanizing conversations play in academic dialogue and the importance of teachers stepping back from the role of the sole giver of information. In the next subsection, I discuss the importance that choice plays in academic dialogue.

The Importance of Choice in Academic Dialogue

One of my PAR project goals was to promote choice and encourage dialogue. ThinkTrix and Socratic Seminars catalyze both areas. According to Brookfield and Preskill (2005), "Discussion and democracy are inseparable because both have the same root purpose—to nurture and promote human growth" (p. 3). While Brookfield and Preskill promoted interweaving discussion and democracy, Dewey (1938) believed that democracy alone would help build students' capacity for learning. Because I chose to employ two strategies that embraced discussion (i.e., the ThinkTrix Template and Socratic Seminars), the classroom seemed to embody discussion and democratic principles. However, what I learned during this cycle is that approaches to creating a democratic classroom likely facilitated the discussion and not the other way around.

Dewey (1938) and Vygotsky (1978) are often considered the fathers of constructivism. Dewey (1938) alleged that learning is a social and shared practice requiring students to construct their own understanding based on personal experience. He stated that “A being connected with other beings cannot perform his own activities without take the activities of others into account (Dewey, 1938, Chap. 2, Para. 5). He further stated that choice and meaning needed to be mixed with motivation for student learning. Dewey (1916) speculated that students come to construct their understanding based on their personal experiences: “No thought, no idea, can possibly be conveyed as an idea from one person to another” and “only be wrestling with the conditions of the problem first hand, seeking and finding his own way out does he think” and “the job which children themselves experience is the job in intellectual constructiveness” (p. 166). Dewey (1916) stated that “what the best and wisest parent wants for his own child, that must the community want for all its children” (p. 7). Ravitch (1985) itemized what the wisest parents could want for their children:

To read and write fluently; to speak articulately, to listen carefully; to learn to participate and give-and-take of group discussion; to learn self-discipline and to develop the capacity for deferred gratification; to read and appreciate good literature; to have a strong knowledge of history, both of our own nation and of others; to appreciate the value of a free, democratic society; to understand science, mathematics, technology, and the natural world; to become engaged in the arts, both as a participant and as one capable of appreciating aesthetic excellent. (p. 277)

Educators should strive for what Ravitch (1985) suggested that parents desire for their own children. Dewey (1938) believed that all communication is educative. As evidenced in the emergent findings, students in Cycle Two were actively engaged with one another socially in various forms of communication. The self-selected choice of questions and answers developed and discussed socially and communicated in self-selected pairs and small groups as well as

whole class discussions allowed students to construct their own understanding. Choice in seating, pairs, groups, and questions promoted choice in many areas of the classroom environment.

Brookfield and Preskill (2005) stated that “discussion remains an indispensable part of democratic education. It teaches dispositions and practices, provides us with the opportunity to serve and connect with others, and tests our ability to confront the most difficult of problems and think them through collaboratively” (p. 20). They indicated that perhaps most important of all, “it challenges us to consider the different-the other-and to ponder the fragility of our own identities and our ideals” (Brookfield & Preskill, 2005, p. 20). Having observed students listening to other students, considering other ideas and opinions, and often changing their opinions based on engaged dialogue, I believe they connected with others and considered problems collaboratively (observations notes, January 8, 2018 and March 27, 2018). In this subsection, the importance of choice in academic discourse was described. In the next subsection, the importance of social interaction is reviewed.

Importance of Social Interaction in Academic Discourse

At the end of the CPRs’ Socratic Seminar discussion on *The Hobbit*, one student noted that our discussion was an adventure but much different than Bilbo’s adventure in Middle Earth “because there were no real dragons” (observation notes, January 8, 2018). This statement aptly sums up my theory on active discussions; *they are adventures into the mind*. Oakeshott (1962) said that group conversations were “unrehearsed intellectual adventure” (p. 198). It is my contention that evidence collected in the ThinkTrix Template and Socratic Seminar discussions demonstrated that students were on an adventure. If not, the results of the test example discussed earlier would not have been possible.

Vygotsky (1978) argued that social interaction plays an important role in the development of student success. Freire (1970) argued that dialogue also plays an important role in the development of high-level thinkers. Cambourne (1995) posited that students need to be engaged in order for learning to be achieved. During Cycle Two, ThinkTrix and Socratic Seminars were used to enjoin social interaction and dialogue. Therefore, I asked students to work in groups to create ThinkTrix Template documents and Socratic Seminar study guides and textual evidence charts. As students worked together, they enjoyed the interaction, but they also received valuable input from classmates and were engaged. In this section, the importance of social interaction was detailed. In the next subsection, the importance of technology in academic discourse is examined.

Importance of Technology in Academic Discourse

Strathan and Torell (1996) indicate that students communicating effectively is crucial for success in the 21st century. The Partnership for the 21st Century (2016) offered communication, collaboration, critical thinking, and creativity as four standards of 21st-century skills, also called the 4Cs in this document. Using the ThinkTrix Template and Socratic Seminars addressed these standards. Additionally, using Google Docs in a synchronous manner, Flipgrid in an asynchronous manner, and Google Forms for surveys grounded technology in the classroom. Therefore, I encouraged students to explore technology in multiple ways. Overall, during Cycle Two, students used multiple platforms to communicate, collaborate, creatively think, and create.

It is important to note that technology may have enhanced learning significantly. Jerome Bruner (1960) said that learning “should serve us in the future” (p. 17), and he advocated curriculum organized by concepts and learning by discovery. Childress (2016) stated that learning outcomes should prepare students for the 21st century (p. 19). According to Fouts

(2000), a more authentic learning environment is created when technology is integrated in the classroom. During Cycle Two, we integrated technology into every class, which advanced the ThinkTrix Template from a pen/paper tool to a computer-enhanced tool. Specifically, Google Docs successfully blended technology and dialogue. I shared this strategy with Lyman via email; he responded that the way I used his questions blended with technology “may be the springboard to bringing the ThinkTrix Matrix into the 21st century” (Lyman, email correspondence, October 26, 2017). When he saw the Flipgrids that were based on his questioning techniques, he stated, “Your work gives me hope.” He further said that my work was “enabling classroom inquiry and student structures of knowledge,” potentially amplifying Lyman’s own theories and strategies such that they would “survive and revive a neglected corner of education” (Lyman, email correspondence, January 8, 2018).

During Cycle Two, we used technology beyond its potential to enable dialogue. For example, projects were assigned regarding the literature students read. One project was to create a newscast for *The Hobbit*. I gave few requirements and responded minimally to their requests for assurance, instead prodding them to make choices and develop their ideas without much guidance. The newscast project engaged the 4Cs skills and gave students freedom in choice; indeed, from this project, I suspect that Dewey (1938) would be a proponent of technology that assists in such inquiry and project-based learning.

In this section, the role that technology plays in successful academic discourse in a modern-day classroom. In the next section, I consider the role that great literature plays.

Importance of Suitable Literature in Academic Discourse

Raphael, Florio-Ruane, and George (2001) said that deep conversations on rich literature improves critical thinking skills. During Cycle Two, the CPRs had many deep conversations

about literature. They read *The Hobbit*, *The Witch of Blackbird Pond*, *Island of the Blue Dolphins*, and *The Watsons Go to Birmingham*. For each novel, they created a ThinkTrix Template-based group Google Doc and they conversed orally and online about the books. These conversations were active and engaging (observations, March 13, 2018, April 3, 2018, April 26, 2018). According to Robb (2017), when students discuss literature with other students, they learn in a way that leads to deeper thinking. Brookfield and Preskill (2005) stated that academic conversation “helps students explore diversity and complexity, it sharpens intellectual agility, and it endorses collaborative ways of working and the collective generation of knowledge” (p. XII). Arnold, Hart, and Campbell (1988) submitted that when Socratic Seminars were introduced in the classroom, students “gain deeper understanding of literature and heightened interest in reading and writing. They are learning to think critically and to respect the opinions of their peers” (Arnold et al., 1988, p. 48). The emergent findings confirm that my students did find deeper meaning in texts and heightened interest in reading through the use of the ThinkTrix Template and Socratic Seminars as aided by technology.

During Cycle Two, students appeared to be achieving more and thinking more deeply about the literature and their oral and written responses to questions. According to Lyman (2015), “students will achieve better and persist in learning more” (p. 20) when they are aware of the basic workings of the mind. Lyman also indicated that students would improve because their metacognitive thinking is enhanced by understanding the workings of the mind. These ideas were relevant as exemplified by TCIS-M-003, whose test responses improved many fold over the previous cycle, potentially because his experience of detailed writing using the ThinkTrix Template for discussions transferred to a testing environment.

Importance of Combining Deep Dialogue, Student Choice, Various Technologies and Rich Literature

In summary, many academic studies confirm the importance of dialogue, choice, voice, and the use of technology. However, I have found no studies regarding technology that incorporates the ThinkTrix and Socratic seminars as my CPRs have used them. This section has discussed the current literature applicable to my PAR project. The next section provides an analysis of evidence vis-à-vis organizational theory and uses what I have learned from democratic classrooms to understand the lack of democracy in the organizational structure.

I Have Something to Say: Exploring Voice with Teachers at the TCIS

Dr. Martin Luther King, Jr. (1965) once said: “Our lives begin to end the day we become silent about things that matter”. While King’s words ring true, teachers in international schools may have their voices silenced by administrators, and open dialogue may be more of a dream than a reality. At the TCIS, some teachers have told me that they do not feel they can express their opinions in conversations with their administrative team as there is little open dialogue between administration and staff. Indeed, teacher input is rarely requested from those in charge. For example, as part of my ECU classwork in the Fall of 2017, I facilitated a meeting for all interested staff regarding the TCIS Speech Competition. I invited all teachers and administrators, set the goal for the meeting, and then encouraged conversations about what the speech contest would look like. The meeting goal was to get input for the competition but also to give all interested parties a voice. After the meeting, one teacher stated that the meeting was refreshing as she had “not felt she was listened to” in past meetings and that she loved the way that everyone “helped to plan the event” (memo, October 18, 2017). Another participant stated, “Thank you for listening to everyone” (memo, October 18, 2017). These comments kindled my

motivation to explore how teachers at the TCIS feel when their voices are silenced. The leadership at the TCIS utilizes a top down approach. In the next subsection, I discuss how this approach is communicated at the TCIS and give specific examples from this year that establishes their management style.

Top Down Approach to Leadership at the TCIS

According to Knight (2016), “The fundamental problem with traditional top-down models of communication is they always involve people imposing their messages onto others” (p. 71). The administrative team is broken into three divisions: Elementary School, Middle School, and High School. Since at least two of the three TCIS divisions typically work top-down, the openness in these meetings regarding the speech competition appears to be an anomaly at this school. As Freire (1970) argued, this top-down approach “dehumanizes” teachers, failing to recognize them as fully having their own agency; Freire further indicated that “dialogue is an existential necessity” (p. 77) and that “to speak a true word is to transform the world” (p. 75). I believe that teachers want and need a chance to have their voices heard.

Below, I use three different examples of how teachers’ voices are silenced at the TCIS to consider the need for organizational change from the bottom up. The three examples regard the new school logo, the curriculum pillars for academic year 2018-2019, and the institutional change from MacBook to Chromebooks.

At a meeting with the Marketing Committee in October 2017, the decision was made to create a new logo for the school. As a member of the Marketing Committee, I suggested that we get teachers and students involved in designing the logo. The committee leader replied that the decision must be made in a small group because the “more people that are involved, the more difficult it is to come to a consensus” (memo, October 12, 2017). This position denied both

teachers and students a voice in the school logo, which is a symbol that purports to represent everyone. Another instance of teachers' voices being silenced occurred when the school developed the four curriculum pillars for the 2018-2019 school year. The current Curriculum Coordinator told me that "the pillars are decided by me and the Elementary School Principal as it is better to have leadership make important decisions" (memo, January 17, 2018). This instance of a top-down approach meant that teachers would have no say in critical curriculum development, a curriculum they would be responsible for delivering to students. This position denied teachers a voice in the school curriculum when they are the ones that teach that curriculum. The third instance of teachers' voices not being heard regards the school policy on purchasing new laptops. The TCIS is a 1-to-1 laptop school, where every student is required to have a laptop of their own beginning in Grade 7. For years, the school required students to purchase an Apple laptop with the reasoning that this brand provided project versatility. However, in February of 2018, a message went out to all parents that the incoming group of Grade 7 students would not be using Macbooks but instead Chromebooks. This decision was made jointly by the Head of IT and the Head of School. Teachers, parents, and students were not asked for their thoughts and concerns before this change was made a mandate shared with stakeholders. Teachers only learned of the new policy change when the email was sent out to parents of incoming Grade 7 students. This position denied teachers, students, and parents a voice in a major change that needs active participation of all groups, and it put teachers in the challenging position of not only learning a second type of hardware but also of assisting students with both types.

In all three of the instances outlined above, the TCIS school leadership made decisions without the voices of teachers and students, in effect silencing them in key decisions that should

have engaged them. All three were instances where teachers wanted to share their opinions, which presumably were backed by their educational experiences at the TCIS. One colleague asked, “Why did they change from MacBooks as I just grew comfortable with Apple computers? And now they are asking us to change again. This is very frustrating because I have a hard time keeping up with all these changes in technology” (memo, March 22, 2018). Teachers’ opinions should matter, and teachers should have a voice in what takes place in the school.

Organizations are part of the fabric of modern society, and there are numerous theories to explain and understand organizations. According to Scott and Davis (2017), there are some requirements that all organizations must fulfill. All organizations

must define (and redefine) their objectives; all must induce participants to contribute services; all induce participants to contribute services; all must control and coordinate these contributions; resources must be garnered from the environment and products or services dispensed; participants must be selected, trained, and replaced; and some sort of working accommodation with the neighbors must be achieved. (p. 11)

Like any other organization, the TCIS defines its objectives, includes participants (teachers and administrators), coordinates the participants, distributes resources; and selects and trains staff.

Therefore, the TCIS meets Scott and Davis’s (2017) requirements for an organization.

In this subsection, I listed three examples of a top down leadership approach being used at the TCIS. In the next section, the importance of teacher voice is detailed and Bolman and Deal’s Theory that gives leverage to silenced voice will be described.

Bolman and Deal’s Four Frames

Bolman and Deal (2013) provided a framework for exploring organizational leadership through four different perspectives: structural, human resource, political, and symbolic perspectives. According to Pourrajab and Ghani (2016), Bolman and Deal’s (2013) structural frame emphasized efficiency and effectiveness. Structural leaders attempt to obtain

organizational goals via control and proportion. The second frame (i.e., human resources) emphasized the individual and leaders try to attain organizational aims via meaningful and satisfying work. The third frame (i.e., political) emphasized competition. The political leaders try to obtain organizational goals via negotiation, consultation, and compromise. Finally, the last frame (i.e., symbolic) emphasized meaning. The symbolic leaders attempt to obtain organizational aims by interpretative rituals and ceremonies.

Bolman and Deal's (2013) model postulates that the interconnectedness of all of these frames in a multi-frame perspective is important for schools to grow and be successful. Therefore, their four frames of leadership provide a useful way to consider the TCIS organization and its leadership.

Contemplating the Four Frames in Relation to the TCIS

Bolman and Deal's (2013) structural frame views schools metaphorically as machinery. With each part of the machine, there is a rule or procedure in place that defines how it operates and how to fix things when the machine is broken. In international schools, the Head of School often is the one with his or her hands on the gears and ready to apply needed fixes. At the TCIS, the Head of School hires the principals, who then apply those fixes. Structural leaders often fail because "they miscalculate the difficulty of putting their design into place. They often underestimate their resistance that it will generate, and they take few steps to build a base of support for their innovations. In short, they are often undone by human resource, political, and symbolic considerations" (Palestini, 2011, p. 11). In the TCIS's case, the structural frame is where the administration places the most value, but it often neglects the human resources frame, thereby creating tension inside the school.

The human resources frame postulates that schools are not just made of concrete and other materials used for the building; rather, they are communities of people who need and value each other. In this frame, principals believe staff are important and try to build trust and care. They also try to build strong relationships and taking care of the needs of the staff is crucial as the community is often seen as a family. The human resources frame “sees an organization as much like an extended family, inhabited by individuals who have needs, feelings, prejudices, skills, and limitations . . . the key challenge is to tailor organizations to people—to find a way for individuals to get the job done while feeling good about what they are doing” (Bolman & Deal, 2013, p. 16). Human resource leaders believe in people and “communicate that belief. They are passionate about productively though people” (Palestini, 2011, p. 43). Human resource leaders are “visible” and “accessible” and “a facilitator and participative manager who supports and empowers others” (Palestinik, 2011, p. 11). They often refer to their employees as partners and try to make clear that they have a voice in decisions in the organization. In the case of the TCIS, teachers express that they do not feel empowered and do not feel like they are a partner inside the organization.

In the symbolic frame, the Head of School is always communicating what matters most to the organization. In this frame, staff may view leaders as an inspiration. The symbolic frame “treats organizations as temples, tribes, theaters, or carnivals . . . propelled more by rituals, ceremonies, stories, heroes, and myths than by rules, policies, and managerial authority” (Bolman & Deal, 2013, p. 16). Shakespeare (1622) said, “all the world’s a stage, and all the men and women merely players”; symbolic leaders see their organization as a stage, and their goal is to get the actors to play certain roles that “communicates the right impressions to the right audiences” (Palestini, 2011, p. 12). In conversations with the TCIS Head of School, I perceived

that he views himself as a transformational leader (memo, March 15, 2018), which suggests an underlying belief in the symbolic frame as a leadership style. He seems to expect the group's performance to exceed expectations. According to Palestini (2011), "A transformational leader changes an organization by recognizing an opportunity and developing a vision to organizational members, building trust in the vision, and achieving the vision by motivating organizational members" (p. 14). Indeed, one of the requirements for a transformational leader is having a vision; the Head of School's vision of having 100% of teachers Google Certified and using the latest technological advances are examples of how the symbolic frame plays out in the school. The TCIS Head of School has a vision for the school, but when he operates mostly in the structural frame, his vision is often not achievable because teachers do not buy into a vision in which they have no voice.

In the political frame, to get things done, the leader must work with various factions inside the organization and keep in touch with important members of the school community. The political frame "sees organizations as arenas, contests, or jungles. Parochial interests compete for power or scarce resources. Conflict is rampant because of enduring differences in needs perspectives, and lifestyles among contending individuals and groups" (Bolman & Deal, 2013, p. 16). Political leaders often try to build their power base by creating "allies, networks, and coalitions" (Palestini, 2011, p. 12). They are often realists and "never let what they want cloud their judgement about what is possible" (Palestini, 2011, p. 12). At the TCIS, there are multiple political group competing for power and resources.

Structural and Human Resources Frames at Odds at the TCIS

Looking at the TCIS through the lens of Bolman and Deal's (2013) structural and human resource frames is a thought-provoking way to analyze the complex environment of the TCIS

because the school's organization seems to make decisions within the structural frame while teachers seem to view their needs within the human resources frame.

Freire (1970) wrote that through authentic and meaningful dialogue, people can experience mutually humanizing conversations. Freire (1970) referred to the approach of "filling" students with what is being taught and thus turning them into "containers" of information as "banking education" (p. 72). While it is easy to see that this banking approach does not value students, it may be less obvious that it also reveals a low valuation of teachers. In this view, the more containers they fill, the more successful they are as teachers. However, this educational approach is dehumanizing, Freire said, as it turns students into objects to be filled as opposed to the humans engaged in learning. Similarly, this approach dehumanizes teachers. Freire argued that everyone needs to feel safe to share ideas, and the educational organization dehumanize them by not ensuring they can say what they feel and think.

At the TCIS, teachers do not appear to have an open safe space to speak comfortably with some administrators. For example, in a recent faculty meeting in the middle school (memo, March 12, 2018), the Middle School Principal lied about a Ministry of Education requirement to keep doors unlocked—possibly because he felt personally affronted in being locked out of rooms in his building when students are on break. Even though teachers knew they were being lied to, they also knew that if they spoke up and disagreed, there would be repercussions. This kind of dehumanization likely causes teachers to have less meaningful dialogue with administrators and makes it difficult, if not impossible, to have positive conversations that move the school forward. According to Bernstein (1983), "A dialogue or conversations among individuals . . . must be based on mutual respect, equality, a willingness to listen and to risk one's prejudices and opinions" (pp. 219-220). In the case of this middle school principal, there seemed to be no

mutual respect or equality because he positioned himself above the teachers as the giver of all information—even when it was incorrect—and the teachers seemed to be deflated by the situation. Freire (1970) stated: “Dialogue cannot be carried on in a climate of hopelessness. If the dialoguers expect nothing to come from their efforts, their encounters will be empty, sterile, bureaucratic and tedious” (p. 80).

Through open and honest dialogue, I think the TCIS can improve as an organization. However, when teachers feel they are lied to and spoken down to, they disconnect from the conversation and, too often, from the school itself. Wheatley (2002) indicated: “Human conversation is the most ancient and easiest way to cultivate the conditions for change—personal change, community and organizational change, planetary change. If we can sit together and talk about what’s important to us, we begin to come alive” (Wheatley, 2002, p. 3). For the TCIS to move forward and become the best school in Thailand that Dr. McGrath wants, the administrative team must be willing to listen to other voices and not just dictate policy. The current administrative team appeared to move in this direction during the 2018-2019 school year.

Knight (2016) would call Freire’s (1970) postulated banking system a top-down communication approach situated more in the structural frame of Bolman and Deal’s (2013) theory. Knight (2016) said that when people are viewed as objects “to be influenced, persuaded, or worse, manipulated—not full partners in a conversation” (p. 5), they feel demoralized. He argued that there are times when a top-down conversation is needed. For example, in a school emergency, specific tasks need to happen rapidly, making conversations inappropriate. However, Knight believed that the top-down communication approach is often overused, and the value of conversations is often overlooked. He expressed that “the alternative to a top-down communication is a conversation where I position the person I’m speaking with as a full-partner

rather than an audience,” thus creating a better conversation (Knight, 2016, p. 5). The partnership approach is more in the human resources frame of Bolman and Deal’s (2013) theory. Knight (2016) suggested that “partnership is about a simple idea—to treat others the way we want to be treated—and partnership stands at the heart for a better conversation” (p. 9). Knight (2016) thought that there are two reasons why people treat others in a way they do not wish to be treated themselves: people are either unaware of their behavior or they “consciously or unconsciously work from a set of beliefs that lead them to act in such dehumanizing ways” (p. 22). Knight (2016) indicated that people often resist the top-down approach less because of the ideas being presented than from the perception that “they are not getting the status they deserve” (p. 25). At the TCIS, I spoke with five teachers who indicated that the Middle School Principal during the 2016-2018 school years worked from a set of beliefs that lead him to act in dehumanizing ways and silence teachers’ opinions (memo, March 22, 2018). However, that principal left the TCIS and more humanizing conversations started to take place.

In Why We Do What We Do: Understanding Self-Motivation, Deci (1995) stated that control is not an easy answer. It . . . sounds tough, so it feels reassuring to people who believe things have gone awry . . . however, it has become increasingly clear that the approach simply does not work . . . the widespread reliance on rewards and punishments to motivate responsibility has failed to yield the desired results. Indeed, mounting evidence suggests that these so-called solutions, based on the principle of rigid authority, are exacerbating rather than ameliorating the problems. (pp. 1-2)

Deci’s alternative to the top down approach was to recognize that teachers need autonomy to be motivated. This approach lends itself to Bolman and Deal’s (2013) human resource frame. They indicated that autonomous people are willing to do everything fully and embrace the activity. Freire (1970) stated that without freedom, people “cannot exist authentically” (p. 31). Knight (2016) believed that when educators come together to set and achieve goals, “a real bond can develop, a deep affection can grow, and important life-long friendships can take root” (p. 37).

However, when administrators are not willing to allow these open conversations and feel the need to control and micromanage each situation as part of a structural framework for operating, teachers lose their freedom. When the TCIS Head of School and the principals design a structure that works, they “have a set of options for dividing up the work and coordinating multiple efforts. Structure needs to be designed with an eye toward desired ends, the nature of the environment, the talents of the workforce, and the available resources (such as time, budget, and other contingencies)” (Bolman & Deal, 2013, p. 56).

Importance of Voice in Organizations

One thing that I hope my dissertation study demonstrates is that when students are given the opportunity to express their opinions and when their voices are heard, acknowledged, and acted upon, they begin to take more pride in their school and their community. I also hope that this type of openness and pride can transfer over to other areas of the school community since when more people have input on matters related to their community, better options and different decisions are available. Teachers need the same opportunities to be vocal and be heard that my research project seeks to provide to students. Senge (2006) wrote when people embrace dialogue, “collectively, we can be more insightful, more intelligent than we can possibly be individually. The IQ of the team can potentially be greater than the IQ of the individuals” (p. 239). To this end, in this section I have analyzed how the TCIS administration operates in Bolman and Deal’s (2013) structural frame while the teachers’ desire to be heard and recognized operates in the human resources frame. The TCIS organization would do well to develop some positioning in all of four frames, but while the leadership operates heavily in the structural frame and the teachers operate primarily in the human resources frame, there is a clearly inequitable situation that needs

to be addressed. If the school's culture can change to accommodate teachers' voices, the school will become a more equitable place in which to work, potentially opening the space for growth.

This section examined the organizational structure at the TCIS and how different theories can be applied to the current environment. The next section details how I transformed as a leader during Cycle Two.

Transformations in Leadership: Adults and Students

While I saw the student CPRs experience tectonic changes in listening and speaking skills—particularly in the cognitive skills of asking and responding to questions—I experienced similar changes to my own listening and speaking skills. Because I began to listen more carefully to teachers in the English Department and to ask better or different kinds of questions based on what I heard, I had more respectful and fruitful interactions. First, I understood that being able to ask the right questions would require me to become an expert listener (Tredway, memo, October 30, 2018). I spent Cycle Two trying to improve my listening skills and my ability to question based on intently listening. As these intentional listening and response skills were new to me, I dove into literature that examined improving these skills. I read Adler's (1997) *How to Speak, How to Listen*, as well as more than 20 books concerning listening with intent and developing good questioning skills. As the cycle progressed, I used this newfound knowledge both in discussions with students and colleagues. In this section, I reflect on how my leadership transformed with adults and with students and how lessons learned during the first two cycles of this PAR project have changed my perceptions.

Transformations in Leadership with Adults

Adler (1997) stated: "Listening, like reading, is primarily an activity of the mind, not of the ear or the eye. When the mind is not actively involved in the process, it should be called

hearing, not listening; seeing, not reading” (p. 85). For my leadership skills during Cycle Two, I wanted to ensure I genuinely listened to—and did not merely hear—colleagues, administrators, parents, and students. I discovered that listening with intent is something that did not come natural to me and I needed to work at it.

For example, I started working as a classroom teacher at the TCIS in July 2016. In July 2017, I was promoted to English Department Chair. In July 2018, I was promoted again to full-time Curriculum Coordinator and in December 2018, I was appointed to a new position, that of Assistant Middle School Principal. This upward movement from teacher to Department Chair to Curriculum Coordinator to Principal for the entire school in less than three years is a marked accomplishment that both has enhanced my leadership abilities and demanded that I deepen them. Listening more closely was the key ability I needed to address.

At the beginning of Cycle Two, I was asked to apply for the job of Curriculum Coordinator. I knew that the three divisional principals would make the final recommendation to the Head of School based on candidate presentations. On my own, I met with each leader and learned what they wanted a new Curriculum Coordinator to accomplish. Using my improved listening skills, I incorporated the divisional principals’ stated objectives into the presentation. Two weeks later, I was offered the job and told by the Head of School that “all three principals recommended me overwhelmingly” (observation notes, January 15, 2018). Given past experiences, I think that my attention to listening was a key factor in my promotion.

A second example of how learning to listen better has changed me as a leader regards asking open-ended questions at English Department meetings. Elder and Paul (1998) stated that “Questions define tasks, express problems and delineate issues. Answers, on the other hand, often signal a full stop in thought. Only when an answer generates a further question does

thought continue its life as such” (p. 297). Using this advice, I encouraged discussion among department faculty; previously, faculty had expressed a sense of being shut down in meetings, and open-ended questions helped to resolve their silenced voices.

Another example of how my leadership skills improved in Cycle Two relates to developing a more democratic process in English Department meetings. According to Copeland (2005): “To become active discussion participants, students must first learn to listen to another’s ideas. Without being able to listen carefully and attentively, they will never gain social skills necessary to become effective members of a democratic discussion” (Copeland, 2005, Chap. 1, Para. 53). I decided that what is important for students per Copeland was just as important for me. To become effective members of a group in an English Department setting meant that all members needed to become part of the discussion and the discussion needed to be structured in a democratic manner. Therefore, I practiced listening carefully and with intent and tried to ensure active discussions. For example, we completed the list of required novels through multiple discussions using Google Docs to make suggestions and compile the final list.

This section has discussed the importance a democratic environment and how listening played a key role in my leadership transformation with adults at the TCIS. The next section addresses the role that these elements played in my transformation in leadership with students.

Transformation in Leadership with Students

I developed leadership skills with adults as discussed in the previous section. However, my leadership skills also improved with students, and I became a better teacher based on listening more and asking better questions. The skill of listening to my colleagues with intent transferred to dialogue with students during which I asked more open-ended questions requiring them to speak more and me to listen more. My teaching skills improved dramatically as I

developed more patience in listening to and understanding their responses to questions. As Tredway noted in Cycle Two, intently listening is a skill that must be utilized for successful dialogue (observation notes, October 28, 2017).

Barber (1984) stated that when positions of power and privilege are present, engaged discussion is not possible. Barber (1984) said until “no voice is privileged, no position advantaged, no authority other than the process itself acknowledged” (p. 183) can a rich and meaningful discussion be enacted. Even though I am committed to a democratic classroom, I know it is impossible to alleviate this hierarchy completely. But I engaged willingness and commitment to try to remove the position of power where and when I could do so. This attempt was perhaps best demonstrated during our Socratic Seminars given that other than during the initial opening question and some follow-up questions, I stayed out of the conversation and did not express my opinion while students dialogued. I also tried to avoid sharing my opinions during the ThinkTrix Template discussion and other discussions about literature. I believe that removing myself from the center of attention and focusing more on what students thought made me a better teacher and leader because I enabled students to think for themselves. This section re-counted how I developed as a leader with adults and students. The next section recaps the chapter and preview the PAR Cycle Three.

Mélange of Emergent Intellectual Curiosity

In Cycle Two, I learned more than I imagined I could about colleagues and students and how they learn and interact. The mechanism responsible for my knowledge was a big shift from being the giver of information to a leader who listens with intent and who asks relevant questions based on discussions. I also saw tectonic changes in students regarding their listening and

speaking skills. Specifically, I saw the shift they made in the type of questions they asked and the ways in which they answered those questions.

My own curiosity regarding how to ask the right questions and listen with intent was enhanced by reading a books and scholarly articles. It was also enhanced through conversations with Tredway and Lyman. Tredway encouraged me to listen with intent and taught me the importance it plays in Socratic Seminars. I took her statements to heart and expanded the idea related to Socratic Seminars to all other areas of my teaching and leadership activities. As a result, I saw relationships with colleagues and students improve. Lyman, on the other hand, instilled in me the desire to ensure that questions were self-selected and that students understood the typology behind those questions. Finally, while this chapter has not focused on the role of self-selected technology in the cycle, I observed a possible trend. It seemed that when students self-selected the technology for various projects, they may have been more interested and engaged in the work; this apparent trend appears to mirror their engagement I observed when they self-selected their own reading books.

For Cycle Three, I continued this study by implementing democratic structures in the classroom, using ThinkTrix and Socratic Seminars, and trying to ascertain to what extent transference occurs in different thinking typologies and to what extent questioning skills can develop through various forms of student dialogue. As I also moved into the role of Curriculum Coordinator, I introduced both ThinkTrix and Socratic Seminars to the TCIS faculty. My goal therein was to educate teachers in how to use these metacognitive thinking strategies successfully across all disciplines and divisions.

CHAPTER 7: TRANSFERENCE

The role of the teacher is to uncover the question that the answer hides. - James Baldwin

Participatory Action Research (PAR) Cycle Three was primarily about building on the conclusions of PAR Cycles One and Two. Having observed and studied the student co-practitioner researchers (CPRs) in PAR Cycles One and Two, I scrutinized their advances and development of ThinkTrix (Lyman, 1987) and Socratic Seminars. The intellectual curiosity developed in Cycle Two continued to flourish, and I observed a transfer of actions inside the classroom. Building and deepening trusting relationships (Bryk et al., 2010) continued to be an important part of Cycle Three as we moved to daily open circle discussions to start each class. In Cycle Three, three different themes emerged as part of this PAR project: blossoming relationships, growing leaders, and planting seeds for change. In this chapter on PAR Cycle Three, Section I provides a brief description of the importance of continuing to build relationships with both student CPRs and with colleagues; additionally, it addresses how gracious space circles and the co-creation of the syllabus improved teacher-student relationships. Section II presents the findings of how dialogue with students and staff continued to be relevant, especially with ThinkTrix and Socratic Seminars and how these methodologies transferred to additional spaces in the school. Section III relates how the CPRs grew in regard to reading comprehension and how some of the CPR approaches to reading transferred to the English Department and other departments. Section IV returns to the original research questions and provides a summary of the researcher's deeper understanding of those questions.

Equitable and Democratic Spaces Provide Sustenance for Strong Relationships

During Cycle Three, building relationships with students and colleagues continued to be an important part of this PAR project. Ladson-Billings (1994) said that “good teaching starts

with building good relationships” (p. 44). Cline (1995) found that students want two things from teachers: “first, students want teachers to care for them. Second, students want teachers who think of them as individuals” (pp. 82-83). In other words, students need to know that teachers care and that their teachers recognize them as an individual. Tomlinson (2018) sums up the importance of recognizing students as individuals: “In the end, and in the beginning, emotional and academic well-being stem from a community in which students learn to recognize one another’s similarities, appreciate one another’s differences, and treat one another with dignity. SEL [social-emotional learning] is not a program or curriculum, but a way to be together” (p. 86). Thus, to build relationships in the classroom, there must be a way to learn from each other and to appreciate differences in others and grow together based on this shared knowledge.

A recent study found that teacher-student relationships are crucial in the early years and that those relationships are can be linked to reading achievement in elementary school (McCormick & O’Conor, 2015). Noteworthy, teacher-student relationships are just as important to adolescents (Gregory & Ripski, 2008). Likewise, the time spent building strong relationships in this PAR project, and with these CPRs in middle school, can possibly be linked to reading achievement discussed in Section IV of this chapter. During Cycle Three, there were two specific ways that relationships were fostered. In the next subsection, I discuss the importance of group circles and the co-creation of a syllabus, which exemplify the theme of gracious voice from the previous chapter.

Circles Strengthen Gracious Voices

In Chapter 6, I described *gracious voices* as a kind, respectful nature of students’ conversations with each other. During Cycle Three, we added a daily opening circle to our routine, which had the effect of giving students more opportunities to practice gracious voice.

Opening and closing circles were a part of the PAR project in each of the two previous cycles, but they were not done on a daily basis. As I developed in my own knowledge of building relationships, I began to realize the importance of opening circles and the need to conduct them daily. Thompson (1998) articulated that the best way to foster an engaging learning climate is to build a positive relationship with students. Kohn (1996) stated that students “are more likely to care about others if they know they are cared about” (p. 111). Rimm-Kaufman and Sandilos (2011) stated that it is important to “Plan activities that create a sense of community so that your students have an opportunity to see the connections between what they already know and the new things they are learning, as well as have the time to enjoy being with you and the other students” (Section 5, paragraph 4). The addition of daily, as opposed to sporadic, opening circles allowed students to learn more about each other and about their facilitator. Gates (2017) stated: “Discovering and developing commonality between student and teacher leads to maintaining dignity in the classroom. If we truly consider the dignity of our students to be an absolute priority, everything else falls into place In the end and from the beginning, it all comes down to human dignity” (Gates, 2017, Paragraphs 25, 27). This is relevant because I do believe that without developing commonality, the work done to put dignity as a priority is immobilized. Zehm and Kottler (1993) suggested that students will not open themselves up to hear what teachers say unless they feel that they are valued and respected. Accordingly, a positive relationship that allows students to know that their teacher respects them is an important aspect to building a trusting relationship. Student TCIS-M-003 stated, “Opening circles each day helps you to get to know your classmates and it shows more of their personality.” Student TCIS-F-002 stated: “I get a glimpse of their personality. For example, one said that she loves reading fantasy books while talking about the creative literature. I immediately knew that she has an open-

mindful personality.” However, not all students agreed that opening circles were helpful in building relationships and Student TCIS-F-008 stated, “I don’t think that opening circles helps me to know my classmates because I often don’t pay attention to the person speaking, and my mind keeps wandering thinking about many different things.” Opening circles appeared to be effective in building relationships (observation notes, August 9, 2018, September 13, 2018, October 3, 2018, and October 9, 2018), and a student member check supported this observation in that 15 (n=18) students believed the circle talk helped to build positive relationships (student member check, October 11, 2018). According to Rimm-Kaufman and Sandilos (2011), positive teacher-student relationships encourage students to be more motivated to be more engaged in learning. Indeed, conducting these group circles for three cycles during this PAR project, I observed that these circles aided in building positive relationships between students but also between the teachers and students (observation notes, August 9, 2018, September 13, 2018, October 3, 2018, and October 9, 2018).

I perceived that students transferred the leadership and respectful speaking skills learned in the group circles and their deepening practices of gracious voice in several ways. Two particular instances in Cycle Three were notable and led to student CPRs growth as leaders. In the first instance, after the first two weeks, I asked for student volunteers to lead the group circles, and their opening questions were often more insightful than my own. On one occasion, the student in charge of our group circle, TCIS-F-0010, asked: “Yesterday, when we worked in groups concerning our short story. Did that help you or not. And, why?” (memo, September 20, 2018). Eighteen (n = 19) students stated that working in groups helped them to understand their readings better. One student said she preferred to work alone so she could finish faster. Four students directly said it aided in their understanding of the text. Two students stated that

conversations about the story helped them. One student said that the harder ThinkTrix questions were easier because the group worked on a sentence starter. Two students stated that they were glad that I randomly choose groups so that they would work with groups faster as opposed to working with their friends with whom they would talk more. Of interest, the one student who said the group work did not help is independent and reads at the highest Lexile level. However, another student who ranked slightly higher on the Lexile level said she could work faster alone but preferred groups as the conversation helped her to understand both the story and different points of view (memo, September 20, 2018).

The second instance of student transfer with group circles, leadership, and gracious voice occurred when I was late to class one day. Students had moved the chairs around, positioned themselves into a circle, and were starting a conversation (memo, August 18, 2018). I was astonished and fascinated by the TCIS 8th Grade students who normally never enter a classroom without a teacher yet started their own class without me—and I was only four minutes late. It was a wonderful example of the CPRs using the circles I had modeled and making these circles their own. The emotional space we had created of a comfortable classroom and the resulting educational atmosphere encouraged them to take risks. One student said, “we just felt comfortable in our room” (memo, August 18, 2018). What primarily stood out for me in that comment was the word “our,” which means that I had successfully recreated the learning environment from “my room” to “our room.” And, students confirm this fact daily as I enter at lunchtime and find them hanging out during their break, chatting, and relaxing (memo, August 23, 2018, September 11, 2018, October 3, 2018, and October 10, 2018). The classroom space seems to have become a haven for the CPRs. The following example illustrates this sense of care that students have established for each other. When students were taking a MAP Test early in the

cycle, they noticed that I arrived early, and they asked why. I told them that I get to the classroom early to turn on the air conditioner for them to make them more comfortable. That same day, an entire group of students surprised me by going to the classroom (a room unused until our class met each afternoon) early and turning on the air conditioner for the class. When I asked them why they had done so, they said, “we want our classmates to be comfortable” (memo, August 23, 2018). These are just a few examples of the CPRs transferring gracious voice and genuine caring from modeling to daily activities.

Not only did the use of opening circles take place as part of the CPR classroom, they started to become a norm in the entire TCIS community. As part of our school’s new teacher orientation, group circles were conducted each day for two weeks. I observed that the new teacher group appeared to bond and grow closer together during these opening circles (memo, July 17, 2018, July 19, 2018, July 23, 2018, and July 25, 2018). In a group conversation with the new teachers, they also stated they felt “comfortable,” “part of a team,” “safe and secure,” and “part of a family” (memo, July 25, 2018). When I began to transfer Tredway and Militello’s ECU practices to my CPR group and then witnessed this in the new teacher orientation, I observed that both the CPRs and the new teachers began to transfer these gracious voice practices to their own settings. I discovered the importance of not only conducting group circles but also of implementing them daily to create genuine change in the educational atmosphere. In an email conversation with Militello, he stated, “Love it when the work moves into one’s practice” (email correspondence, July 17, 2018).

As group circles were successfully implemented in the new teacher training, in my new role as Curriculum Coordinator, I also started our first professional development (PD) day off with a group circle. In response to an evaluation of the PD day developed as triangulation of

data, one administrator stated, “This PD was the best and most meaningful I have attended at the TCIS. It seemed to be focused on building relationships, getting to know one another and sharing while also aligning to the PD pillars” (survey, September 7, 2018). Another member of the staff said, “I enjoyed connecting with peers and feeling positive about making things better for students” (survey, September 7, 2018). These survey responses validated my observation that the group circle allowed staff members to interact with colleagues in a positive way with gracious voice and to start building better relationships with one another (memo, September 7, 2018). In a conversation with the Head of School, he stated that day was organized to “build bridges and build relationships between staff members at a crucial time of the school year” (memo, September 11, 2018). In an email with the high school principal, he said:

Your leadership and vision to increase student voice is taking a hold. Your passion for this seems to be transferring to teachers in such a genuine and real way that it appears some fundamental shifts in the teaching are underway at the TCIS. Case in point, I met with one of our Chinese Teachers for a post classroom observation reflection conversation and to launch the annual goal setting process. To my surprise, the teacher’s number one goal for the year is to “talk less and have the students talk more.” I questioned what the first steps might be to accomplish this and was told a “Circle” like you facilitated at the September 7 PD session. (email correspondence, September 14, 2018)

For the first time in three years at the TCIS, I observed group circles being conducted by classroom teachers (memo, August 16, 2018, September 17, 2018, and September 25, 2018). As part of our new advisory period, elementary teachers were using circle time and our upper school teachers also said they would be using this to enhance communication (memo, September 10, 2018). In a conversation with the high school principal, he stated that a teacher under his supervision “wanted to incorporate circles into her classroom and wants advice on how to talk less and encourage students to do more of the talking” (memo, September 12, 2018). Pranicoff, Cherry-Paul, and Johnsen (2017) affirmed, “Building relationships requires individuals to share

parts of themselves, to reveal themselves, to find connections. Your students want to know about you as much as you want to know about them” (Ferlazzo, 2018, paragraph 51). In a conversation with the elementary school principal, she stated that there was a classroom issue with behavior, and she used a group circle to allow everyone to express their thoughts and determine some solutions to the problem (memo, September 20, 2018). While the benefits of group circles have not been fully realized at the TCIS, the transfer from the CPR group to additional spaces is rewarding to see. Group circles are now being used in a variety of ways at the TCIS, and they seem to be a valuable tool in learning gracious voice practices, which help to build relationships. In the next subsection, I discuss the importance of a student-created syllabus giving students a voice and assisting them in building relationships.

Co-Creation of Documents Augments Democratic Space and Student Equity

Teachers who include students in the decision-making process are encouraging students to become more motivated (Daniels & Perry, 2003). To give students more voice in their learning, the CPR group co-created the syllabus for the entire school year. Students were given a design-thinking activity and the CPRs spent time working together to create a syllabus that they believe would help them prepare for high school. The final syllabus contained the group’s requirements. By sharing the responsibility to co-create the syllabus, students expressed that they felt empowered in the classroom and said they believed a teacher was actually listening to what they wanted and the way they wanted to learn (memo, August 7, 2018). Student TCIS-M-002 said, “I do believe my voice was heard in the creation of this year’s syllabus because I always wanted to improve my grammar, writing, and vocabulary this year, and those three things ended up being part of the syllabus. And it was motivating that Mr. Michael asked us what we wanted as opposed to him telling us what he wanted” (memo, August 9, 2018). During the whole group

discussion on the syllabus, I observed 48 instances of Gracious Voice, 14 instances of Connection to Self, 10 Connections to the World Around Them; new to these coded statements were 20 Connections to College Dreams, which previously were not in student dialogue at all. In an end of cycle check, 19 (n=19) students said they believed their voice was heard when they co-created the syllabus (student member check, October 11, 2018). Reis (2014) postulated that relationships are important to encourage students to feel connected to the learning community. According to the CPRs, the co-created syllabus did make them feel empowered, connected, and equally responsible for their success (memo, August 9, 2018).

An analogous design-thinking activity was used with the new teacher cohort, and they developed an activity that enabled them to construct their introduction to the TCIS. These new teachers said that the activity made them feel like they had a voice in the way they were introduced to the staff (memo, July 23, 2018). The design-thinking framework of the co-created syllabus was shared with all the TCIS teachers and administrators both via email and the Staff Curriculum website. There were three teachers who expressed an interest in co-creating documents with their students. The high school principal used a similar design-thinking framework to co-create the divisional meeting agendas for the remainder of the school year (memo, August 6, 2018). This principal observed both the new teacher design-thinking activity and the co-created class syllabus. He then took what he learned from those observation sessions and used that knowledge in a staff activity. Giving voice to those who want to share is important, and some teachers were thrilled at the opportunity to help create an agenda for divisional meetings (memo, August 6, 2018). The more I learn about democratic space and the importance of hearing students' voices above the teacher's voice, the more I lean toward methods that required me to listen more and talk less. In her educational blog, Sacks (2018) said:

Just because we are talking, doesn't mean they are learning! The big picture shift I'm suggesting is to dramatically cut down on our teacher talk, and increase time for students to be doing meaningful work that engages their minds through the disciplinary lens of our subject area. In some ways, this will mean imagining ourselves "teaching less." But by that, I just mean moving away—literally and figuratively—from the traditionally defined role of the teacher. (Para. V)

As discussed above, seeds were planted with the implementation of opening circles and the co-creation of documents, shifting the traditional role of the teacher at the TCIS. In the next section, I discuss the role that dialogue apparently played in this shift and specifically the role that the ThinkTrix Template and Socratic Seminars seems to have played in amplifying student voice.

A Garden of Gracious Dialogue Begins to Grow

During Cycle Three, dialogue sprouted at the TCIS partially due to my CPRs' work and the teachers' openness to trying new methods. The theme of voices heard, valued, and elevated flowed throughout Cycle Three. During the first teacher preservice day of the school year, I asked the new teachers to lead an experiential learning activity to encourage dialogue between new teachers and returning staff with the goal of building relationships. Small groups of new teachers built a 9 foot by 9 foot grid on the floor that veteran teachers needed to navigate. To be successful, all teachers needed to work as a team and communicate well. Returning staff stated: "this was a great way to get returning staff to know new teachers," "this was fun and a good way to start the new year," and "we need more things like this as opposed to speeches" (memo, July 31, 2018). The high school principal stated, "What a great way to grow new leaders on the very first day" (memo, July 31, 2018). We appear to have started the new school year by cultivating leaders, nurturing a space for active dialogue, and fostering the buds of new relationships—qualities that all schools need—and this activity helped with those three tasks at the TCIS (conversation with head of school, July 31, 2018).

Socrates believed that teaching should promote thinking rather than forcing the teacher's opinion on students. Hundreds of years later Vygotsky (1978), Dewey (1938), Piaget (1994), and Bruner (1960) prioritized experiences in which students construct their own knowledge, and thus the idea of constructivism bloomed. A constructivist classroom is one in which the student is the center of learning and students' question, wonder, and debate. Fisher and Frey (2014) stated: "The amount of talk that students do is correlated with their achievement" and that "talking through something facilitates understanding" (p. 19). ThinkTrix and Socratic Seminars were the two main constructivist components used during cycle three to facilitate understanding, encourage talk and to support student's formulation of their own questions concerning literature.

During Cycle Three, the ThinkTrix Template was again used to help students think about literature. As Lyman (2015) clarified, the main rationale for using ThinkTrix in a classroom is that "with an awareness of the basic workings of the mind, students will achieve better and persist in learning more" (p. 20). He stated that student work that improves metacognitive control of thinking is "one cause of the improvement. The sense of empowerment the students gain from making cognitive decisions in a conscious and mindful way enhances their view of themselves as learners. This cognitive enfranchisement helps create an independence that can make lifelong persistence in learning more likely" (Lyman, 2015, p. 20). In other words, the space that ThinkTrix builds for students helps them to become more mindful, more independent, and more likely to become lifelong learners or, in the case of these CPRs, lifelong readers as well. As someone who has observed first-hand the power of ThinkTrix and my recreated ThinkTrix Template, I was eager to share this thinking rubric which engages students with colleagues. However, Treadway reminded me that the results of my CPRs work did not start with ThinkTrix or Socratic Seminars, but with annotation of texts (Treadway, email correspondence, August 21,

2018). She said, “However, was not your first step the annotation? I think it is important that adults do just what you want them to do with young people—with an adult level text that is accessible and then with a student text they might use or already use” (Tredway, email correspondence, August 21, 2018). Based on this conversation with my ECU mentor, I decided that I would introduce thinking skills to teachers at the TCIS in the same order I did with my own students, and we therefore started with annotation of texts (see Chapter 5). As my students continued to annotate texts for all three cycles, this task was not a new concept for them. However, I did want other teachers at the TCIS to see the benefits of annotating text as a first step to moving into using the ThinkTrix Template.

Pranikoff, Cherry-Paul, and Johansen (2017) stated:

Student-driven conversations require attentive reading; the details readers deem most important become the basis of their discussion. Student-driven conversations create a natural purpose for critical reading; it’s the best preparation for talk grounded in the ideas of the text. When students drive conversation, engagement in high-quality literary and informational texts comes naturally. (p. 25).

In light of my goals in introducing the ThinkTrix Template to other teachers, this cycle needed attention to annotation and the goal of introducing the ThinkTrix Template was postponed for a future date.

In Adler’s (1956) *A Guide for Leaders of Great Books Discussion Group*, he asked, “(1) What does the author say? (2) What does he mean? (3) Is it true; does it have relevance to you here today? Fact, Interpretation, Evaluation—these are the three levels of question” (p. 8). Adler’s three levels of questioning are among the skills I have asked of my TCIS CPRs. The combined desire to encourage the TCIS students to be attentive readers and engage in deep conversations about literature is one goal of the PAR project. When the goal is to have whole-class discussions, it is necessary to prepare students for those discussions and “that work begins

with students pushing their own independent thinking before they come together in whole-class discussions” (p. 94). As the Head of English at the TCIS, I shared with new teachers Sacks’ (2013) “Three Ways of Thinking” method for annotating texts, a strategy my students used the previous school year; it had been my first step to push their thinking about texts we were reading to higher levels. These three ways of thinking are to annotate based on literal statements (L), inferential statements (I), and critical statements (C), or as we referred to them, LIC. At the end of Cycle Two, according to a memo from the CPRs, the theme of annotating text was an overarching reason for their new-found enjoyment of reading in Cycle One and Cycle Two (see Appendix I). One new teacher asked me to spend time with him sharing this strategy with his students. I visited his classroom (memo, August 8, 2018)) and sang a song for the students based on the story of Little Red Riding Hood. As a class, students then made statements about the story. We wrote each statement on the board and then when all statements were recorded, I shared with students the three thinking skills of Literal, Inferential and Critical. The teacher indicated that he appreciated this way to help students begin learning LIC and that he was also excited to learn this strategy (memo, August 8, 2018).

Ruskin (1903) once said, “No book is worth anything which is not worth much; nor is it serviceable until it has been read and reread, and loved, and loved again, and marked so that you can refer to the passages you want in it” (p. 32). To my delight, I witnessed what can be understood as such love of reading when, in the MAP Testing room after students had finished their tests, they were asked to read—an entire group of 7th Grade students took out their books and started reading and annotating them with LIC references (memo, August 24, 2018). Other English teachers stated they were also using LIC in their class to prepare students for deeper conversations on literature (memo, August 27, 2018). As the concept of annotating texts was

growing roots in the English Department, I wanted to plant seeds for this annotation strategy with the entire staff at our next Professional Development Day. As I also want to new teacher-leaders to sprout, I asked the new 7th Grade teacher who worked with his students on LIC to co-facilitate the seminar. I was encouraged that more than just the English Department came to the seminar, and over 20 faculty members were present. Three teachers from other language departments said they wanted to use LIC in their foreign language classroom, and other teachers said they could easily see this strategy being used in Social Studies class and elementary school classes (memo, September 7, 2018).

One unanticipated undertaking occurred during this cycle. I created a set of posters based on the ThinkTrix Template for my classroom, and I shared them with the entire school as part of the curriculum website. A few weeks later, I was walking around the school and noticed that other teachers had taken these posters, printed them, and posted them in their classrooms (memo, August 7, 2018). One teacher said, “These posters are amazing because they span the full gambit of thinking abilities of my students”; he continued, “They also have question starters on them which is extremely helpful for our ELL students” (memo, August 7, 2018). In an email conversation with my ECU mentor Militello, he said, “more transfer, by osmosis!” (Militello, email correspondence, August 27, 2018). During a routine classroom visit, I observed students working in cooperative groups and a student walked over to the ThinkTrix Template poster set, looked at it, returned to the group, and used one of the evaluation questions to continue the conversation (memo, September 18, 2018). Since one of this year’s curriculum goals is to encourage sentence starters for ELL students, which comprise the vast majority of our student population, to hear that Lyman’s question starters were being used not only to advance thinking skills but also as a way to differentiate reading comprehension sentence starters for various levels

of readers was an encouraging moment, and it increased my desire to bring ThinkTrix to the school.

My CPR group used ThinkTrix questions this term in a variety of ways: to annotate texts, create conversation starters on Flipgrid, prepare for Socratic Seminars, and take tests. The ThinkTrix Template became the basis for everything we were doing in the classroom, and it was so embedded into the classroom that students often did not seem to recognize that their actions were the result of their developed thinking skills.

Table 10 shows that the average student response time for a student generated ThinkTrix evaluation question was 154.25 seconds and the average word count for the response time was 311.5 words. These numbers represent an average increase of 79.65 seconds (106.8%) and 143.5 words (85.4%) compared to those illustrated in Table 8. As opposed to the 14 attempts at deeper meaning shown in Table 8, there were 24 attempts as shown in Table 10. Another positive change was that there were 10 attempts to connect to the main theme in the September Flipgrid as opposed to 6 in May 2018's data.

The difference between the three coded Flipgrids (one for each cycle) appear to represent the data generally. The increased time and word count, the connections students made to life, and deeper meanings they found in the texts may be the result of students seeing their classmates' responses and trying to replicate them (observation notes, September 14, 2018). Possibly, however, they were more concerned with deeper understanding of texts as they expressed in a class group circle (memo, September 18, 2018). Having viewed their Flipgrid responses, I believe that students' response time and word count were longer and more detailed because ThinkTrix work had raised their metacognitive awareness. Such awareness seems to

Table 10

ThinkTrix Flipgrid Video Questions September 2018

Student	Time	Number of Words	DM	MT	CRT	L	GV	P
TCIS-F-002	118	312	*****	*****	***	*	*	*
TCIS-F-005	312	524	*****	*	*****	***	*	**
TCIS-F-009	98	201	*****	*	***	*	*	*
TCIS-F-006	89	209	**	*	*****	*	*	

have transferred to their video responses, where they recorded with the same detail they had been using during conversations (observation notes, September 20, 2018).

Over Cycle Two, I had observed multiple instances of them both writing more text and more meaningful text overall. I gave students a one-word question in the same format as Cycle Two Table 9, which was one of Lyman's (2015) ThinkTrix question starters to describe a short story using one word. Using the same students as represented in that table, their one-word responses were as follows.

Table 11 shows an average increase of 200.8 words in the One Word assignment. This is a considerable transformation from Cycle Two. However, this change may be attributed to students being familiarized to answering this type of question or desiring the praise they receive when they answer questions comprehensively. Nevertheless, in conversations with students, two of them stated that the increase was because they understood how the text related to them more and three of them stated that they felt more comfortable with the question format than in the past. One stated that the ThinkTrix Template annotation made this easier as the question is one of the ThinkTrix question starters (memo, October 10, 2018). While ThinkTrix appeared to continue to play a pivotal role in the CPR academic growth, Socratic Seminars also changed the dynamic of the classroom.

Socratic Seminars are a great tool for encouraging dialogue in the classroom. Israel (2002) defined a Socratic Seminar as

a formal discussion, based on a text, in which the leader asks open-ended questions. Within the context of the discussion, students listen closely to the comments of others, thinking critically for themselves, and articulate their own thoughts and their responses to the thoughts of others. They learn to work cooperatively and to question intelligently and civilly. (p. 89)

Table 11

One Word Comparison

Student	Word Count Cycle Two	Word Count Cycle Three	Word Count Difference
TCIS-F-001	122	171	+49
TCiS-F-0012	53	354	+301
TCIS-F-005	67	327	+260
TCIS-F-009	46	196	+150
TCIS-F-0011	59	215	+156
TCIS-M-008	71	360	+289

As seen in Cycle Two, the symbiotic relationship between Socratic Seminars and ThinkTrix discussions were observable. Nevertheless, the one thing that continued to vex me during Cycle Three was that not everyone participated in the Socratic Seminars proportionately. As a teacher, I had held a sufficient number of seminars and I had advice from ECU mentor Tredway that allowed me to get all students to talk during a seminar, but this was often the result of Think-Pair-Share or calling on a student directly. It appeared that no matter how hard I tried to encourage students to speak at least three times during a seminar, some students consistently dominated the conversations, and some remained silent unless I drew them into the conversation (memo, August 16, 2018, August 30, 2018, and September 6, 2018).

In my attempt to try to engage all students, I tried one of the Touchstones® Discussion Project curriculum. Touchstones was founded in 1984 to offer educators a platform that uses whole group discussion and places critical thinking and reading skills, discussion skills, active listening, and collaboration as the intended outcomes (Zeiderman, 2012, pp. 4-7). According to Stefanie Takacs, Executive Director of Touchstones®, their method moves beyond other discussion-based learning environments, including Socratic Seminars, because they encourage “each person to own his or her responsibility in the collaborative and inclusive group. Part of that is to understand what is being read and being said, so close reading and active listening are incredibly and intimately linked; they are reciprocal processes relying on the same cognitive mechanisms” (Takacs, interview, July 16, 2018). Takacs also stated that Socratic Seminars are often text based, but that Touchstones® discussions are people-centered so that

each participant’s voice and unique perspective can be heard by the group. It creates an environment where the teacher is no longer the leader and the mediating authority. The teacher is no longer the source of correct answers. Instead, the students are starting to think about what (they) know about these topics, not necessarily the text, but what’s my thinking on these topics. (Takacs, interview, July 16, 2018)

Essentially, the difference between a Touchstones® discussions and a Socratic Seminar is that a Socratic Seminar is text-centered and a Touchstones® discussion is person-centered. In effect, the Touchstones® method attempts to cultivate critical thinking skills, as what Socratic Seminars attempt to do, and adds the component of individual participants taking responsibility for their own learning while building leadership skills into the discussion. There are elements in Touchstones® discussions that mirror Socratic Seminar but Touchstones® really comes out of the St. John's College environment, which is not at all Socratic in nature (Takacs, email correspondence, October 30, 2018). Takacs further said that in regular Socratic Seminars, studies have shown “that about 25% of participants are highly participatory; they've done the work; about 25% of the participants are disengaged or terrified; there's some barrier to their full engagement; and the remaining participants are sort of in and out of the group (Takacs, interview, July 16, 2018). Takacs' participation percentages are consistent with what I had seen in my own seminars (memo, August 16, 2018, August 30, 2018, and September 6, 2018). Thus, the goal with implementing Touchstones was to lead those who had been disengaged and those that had been “in and out” of the conversations to become more participatory.

After conducting four Touchstones® discussions in Cycle Three, I saw that all students participated actively during the seminar (memo, September 13, 2018, September 20, 2018, October 4, 2018, and October 11, 2018). I also observed that during the whole group discussion students appeared to be on more equal footing in the conversation based on their assigned roles of Chairperson and Secretary. However, the whole group discussions were not as long in minutes as a regular Socratic Seminar, and thus I see the need to conduct both Socratic Seminars and Touchstones® discussions. I also found that with Touchstones®, more students spoke voluntarily during the group discussions as opposed to being prompted by the facilitator, the discussions

were more inclusive, and collaboration seemed to be embedded in the seminars (memo, September 13, 2018, September 20, 2018, October 4, 2018, and October 11, 2018). After experiencing the four Touchstones® discussions, 19 (n=19) students said they liked the flow of the discussion and that they thought all students participated more (memo, October 11, 2018). In my observations of these same four seminars, I noticed that all students participated in pair work and small group work, and I also saw that the majority of students participated in the whole group discussion (memo, September 13, 2018, September 20, 2018, October 4, 2018, and October 11, 2018).

As teachers at the TCIS began to hear about Socratic Seminars from students, they asked me how to implement them in their classroom, which was a gratifying instance of transfer. I wrote articles for the monthly *Curriculum Currents* (Issue 2, September 1, 2018 & Issue 3, October 1, 2018) regarding Socratic Seminars and conducted both individual and small group discussions about Socratic Seminars. A Grade 7 teacher tried a Socratic Seminar on “*The Gift of the Magi*” and said: “It was great. Students really responded more than I expected”; he indicated that perhaps the easy transition to a Socratic Seminar could be “because Michael taught them last year and they knew the rules and procedures better than I do.” However, he continued that the seminar “was an amazing conversation” (memo, September 14, 2018). A member of the TCIS High School English Department also said he was using Socratic Seminars as part of his English class (memo, September 21, 2018). An elementary teacher approached me wanting to add Socratic Seminar discussions to her Grade 4 class (memo, August 27, 2018). Multiple teachers across divisions expressed an interest in implementing a Socratic Seminar to celebrate Mary Shelly’s *Frankenstein* (memo, October 15, 2018). The TCIS sponsored two teachers (myself and another English Language Arts Teacher) to travel aboard to attend a Socratic Seminar

Professional Development Seminar (memo, October 3, 2018). The request from faculty and the willingness from the school leadership team to budget money for expanding Socratic Seminars at the TCIS allowed seeds to begin sprouting.

An additional instance of transfer and developing student leaders occurred when my students started conducting their own Socratic Seminar discussions; we had both a planning session and a debrief after their seminar session (memo, August 23, 2018). One CPR student stated, “the boys were more talkative this time because it was more of a manly story and they liked the hunting aspect” and that “it is hard to get everyone to talk about the reason behind their answer. I know I got everyone to speak at least twice by asking specific questions, but some did not expand on their answers” (memo, August 23, 2018). This student CPR asked for strategies to “get all students more involved” (memo, August 23, 2018). Another student was listening in on the debrief as she wanted to facilitate a Socratic Seminar herself. She stated that she was quiet last year in Socratic Seminars, but the more she got to know the group, the more comfortable she became. They both stated that they wanted to encourage students to understand the text better, and they believe that annotating their short story helped them with their understanding. They shared that their annotations were completed using my reinvented ThinkTrix Template (see Appendix H) questions and answers as it was a great way to organize and prepare for a Socratic Seminar (memo, August 23, 2018). In an email conversation with my ECU Mentor regarding this student led seminar, Tredway wrote:

The level of modeling you have done and her own grasp of watching you actually does produce a student-led seminar that is possible and a positive experience. I am interested in how she began to see things through a teacher lens with the same worries that we have about equitable and thoughtful participation. Especially in this looped class that has built so much rapport and trust. This is not only possible but just the thing to do. I am not against student-facilitated seminars; I have just seen seminars turned over too quickly, with little debriefing. You have built the capacity for this over time. It seems to me this level of transfer is a good example of what can happen. And of course, she needs another

level of capacity building as she has so much to say and think. (Tredway, email correspondence, August 24, 2018)

Based on what I have seen during Cycle Three, transfer continues to take place. Students continued to develop the steps leading to a successful facilitation of a Socratic Seminar was because they had learned to annotate texts carefully and they had mastered ThinkTrix Thinking Skills. Had these students not had these skills, I am not sure the results would be the same. Thus, as Tredway suggested, it is important to remember where the group started last year and have teachers (or students) follow each step (Tredway, email correspondence, August 21, 2018).

Reading Comprehension Crucial for Cultivating Lifelong Learners

Over the three cycles, I observed students read more and say that they enjoyed reading more. However, “becoming a skilled reader is a journey that involves many steps. Strengthening any one element yields small gains. For large gains, many elements need to be in place” (Anderson, 1985, p. 15). There is a positive relation between reading amount and reading competence (Cipielewski & Stanovich, 1992). The growing capacity to be lifelong learners could be heard in the hallway sounds at the TCIS as the CPRs were making large gains in reading comprehension and engaging vigorous dialogue. Takacs stated that “it is interesting to consider how we see when people learn to listen more carefully and actively, their speaking becomes similarly more precise. And as students engage meaningfully with complex texts that they both read and have read to them, (without specifically being trained, told, or instructed to read the texts “closely”) and are asked to bring their own thinking into juxtaposition with the texts, their reading skills (comprehension) improve” (Takacs, email correspondence, October 30, 2018). Thus, it is feasible that the improved dialogue and joy for reading supported improved reading comprehension skills.

In the beginning of Cycle 1, many students had not read any novels the previous year and some had read between one and four (memo, May 4, 2018). However, by the end of Cycle Two, students averaged 19 novels read during the first two cycles while the most read by any one student was 31 books and the lowest was 14 books (memo, May 2, 2018). This high increase over the past year possibly can be correlated to their reading comprehension achievements during the three cycles of research. Students were asked to self-document their book journey with a photo. Figure 17 is one example of one students' documented book journey. While these numbers are self-documented, they were consistent with tests passed on the Accelerated Reader online program during the first two cycles (memo, May 2, 2018). Students stated that they were happy with their reading improvements over the course of the first two cycles (memo, May 2, 2018). Also, it is significant to note that CRPs set goals for the 2018-19 school year for the number of books they would read, and this number represents an increase for every student over the number of books they indicated they wanted to read this school year. Figure 18 shows a pictorial representation of their book goals for the new school year.

Students were given class time to read non-fiction Newsela.com articles on a regular basis. At the beginning of Cycle One, students had an average reading level of 5.8. By the end of Cycle Three, they had an average of 9.0. Thus, the class averaged an increase of 3.2 years in just 13 months. Students averaged 9.45 hours on Newsela.com articles and took over 1527 combined quizzes based on those articles; the grade level increase most likely is due to the amount of time spent on this online platform (see Appendix O).

Students also improved on their standardized MAP Testing Results. When they were tested at the beginning of Cycle One, 10 (n=19) students were below grade level standards in reading, but by the start of Cycle Three, only 2 were below grade level (memo, October 1,



Figure 18. Book goals for new year.

2018). Also significant is that only 4 (n=19) students were in the High Percentile at the beginning of Cycle One while there were 8 in the Hi Percentile in Cycle Three (memo, October 1, 2018). These improvements likely are linked to the amount of reading students did in Cycles One and Two. As students read massive amounts of both fiction and non-fiction, their vocabulary increased, and their understanding of the texts also increased (memo, October 1, 2018).

The CPRs realized a correlation between the amount of reading and their improved comprehension (memo, October 11, 2018). In a member check, 17 (n=18) students said they believed they had grown as a reader since Cycle One started.

Figure 19 shows that students anonymously placed dots on a chart to indicate whether they believed they had developed as readers during Cycles One, Two, and Three; all but one student indicated that they believed they had grown during this project. In the same member checks 15 (n=19) students said that choosing their own books encouraged them to read more. Fourteen said that the ThinkTrix Template helped them to comprehend literature better. Seventeen said that small group discussions and large group discussions helped them to understand a story better. All nineteen students stated that choice of seats, choice of books, and the co-creation of the syllabus gave them a safe space to challenge themselves more (student member check, October 11, 2018).

Having seen the CPR reading growth and results on MAP testing as well as having witnessed students' ability to conduct more advanced conversations in other classes, additional teachers at the TCIS started using Newsela.com and Accelerated Reader, and they placed more importance on literature. The English Department incorporated a plan implementing for Accelerated Reader and whole novels into the departmental requirements for Grades 5-12 (see

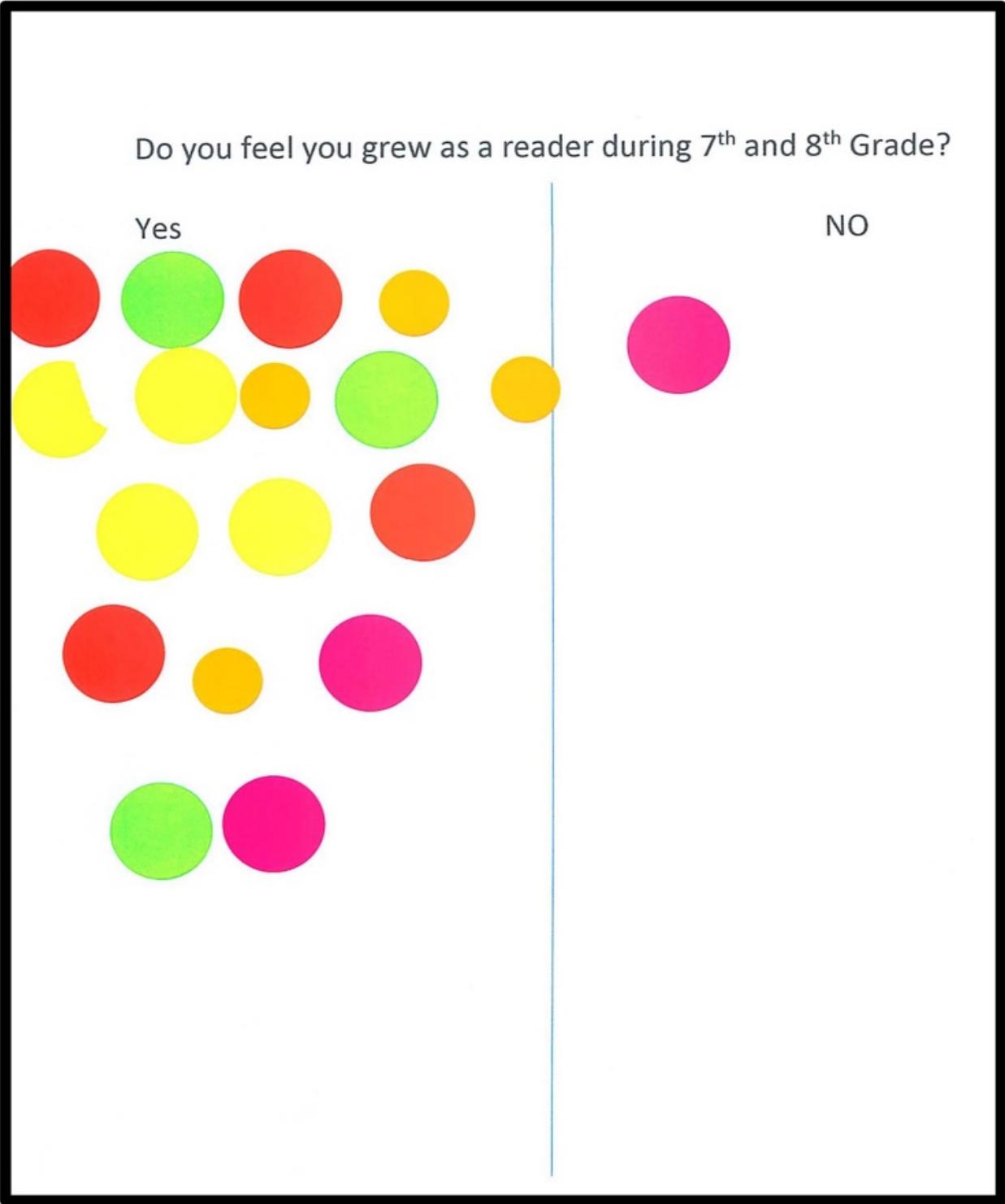


Figure 19. Member check for growth as a reader

Appendix P). Research has suggested that Accelerated Reader has been shown by researchers as “an effective tool for strengthening reading comprehension and motivating students” (Solley, 2011, p. 49). The English Department also budgeted money for Accelerated Reader into the 2018-2019 school budget for Grades 5-9 with the hope of increasing this allocation in the 2019-2020 school year (memo, August 27, 2018). As Curriculum Coordinator, I have conducted two professional development days regarding Accelerated Reader to help teachers understand how to implement into the classroom. Also, for Newsela.com, I generated a generic Google Slide graphic organizer for Newsela.com, which provides sentence starters and helps students organize main ideas and concepts for any Newsela.com article. I shared the graphic organizer with the entire staff and have observed it being used in classrooms (memo, September 5, 2018). I also used this organizer in my classroom and 19 (n=19) students stated that it aided in their understanding of the article, but one student said that it was “just busy work” (memo, September 10, 2018). The growth in reading for that the CPRs had experienced started interesting administrative and teacher-teacher conversations regarding how to improve TCIS reading comprehension for all learners. Based on the CPR project, many new seeds have been planted and hopefully, some will take root and become part of the garden that makes the TCIS so beautiful and colorful. In the next section, a brief outline of topics for the final chapter of this dissertation are provided.

Conclusion: Relationships Blossom, Leaders Grow, and Seeds for Change Planted

In Cycle Three, the plan was to educate teachers at the TCIS on the importance of using metacognitive thinking strategies across all divisions and disciplines. As the cycle progressed, my role as Curriculum Coordinator helped me to share these strategies. Visible transference occurred in several ways. First, my CPRs started to embed both ThinkTrix and Socratic Seminars

into their other work in other classes. They also started to model things they learned over the past year by leading students in annotation of text, leading daily circles, and conducting their own Socratic Seminars. Second, transfer occurred among colleagues at the TCIS as noted above with teachers using LIC annotation, using the ThinkTrix Template posters, trying Socratic Seminars, participating in a whole school Socratic Seminar Day, incorporating Accelerated Reader into the school curriculum, advancing Newsela.com across disciplines, embracing rich literature novels into the English Department requirements, and using Design Thinking and team building activities to foster deep relationships.

Chapter 8 discusses the theory of action started in Chapter 1, how it was supported by extant literature in Chapter 2, and analyzes what happened, what worked, what was important, and what is possible to contribute to the existing literature, practice, and theory from this research study.

CHAPTER 8: AMASSED DIALOGUE

Walking with a friend in the dark is better than walking alone in the light. - Helen Keller

I began my career at the TCIS in August 2016 as a Grade 7 English Language Arts teacher. My students were inquisitive and intelligent. All of my students were ELL students for whom English was a second or third language. They were eager to learn, and their spoken command of the English language was excellent. However, when we read our first novel, I stopped after Chapter 1 and asked questions to check for understanding. In oral reading, students were able to pronounce every word, but they did not understand what they were reading. This experience taught me that many students' reading skills were undeveloped and basic as opposed to a skillset that allowed for a deeper understanding of the text. It was this recognition that led me on a three-year journey to help them to not merely pronounce words correctly, but to understand the story on a deeper level. I spent my first year at the TCIS trying different strategies to improve reading comprehension and seeking to incorporate students' love for technology into my classroom. I was inspired and committed to my PAR project addressing reading skills, oral dialogue, equity, and technology. The specific goals for this participatory action research (PAR) project were:

1. to create a classroom environment that was full of lively discussions, respectful conversations, and based in rich literature;
2. to cultivate democratic and equitable classroom structures that encourage an atmosphere where students' voices are used, heard, acknowledged, and respected;
and
3. to employ technologies toward the goal of increasing student communication, collaboration, critical thinking, and creativity.

In August 2016, as a new teacher at the TCIS, I was not sure how I was going to create this type of environment, which would be unfamiliar to this school. During three cycles of PAR, I co-created with students an equitable environment in which they developed 21st-century skills and became stronger readers, writers, and thinkers.

For this PAR, one primary research question and four sub-questions guided the process, considering in turn relationships, academic interaction, deeper understanding, and my own learning. These questions were:

Overarching Question: How can middle school literature teachers foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century ELL students?

Sub-Questions:

- Relationships: To what extent do democratic classroom practices foster relationships for students?
- Academic Interaction: To what extent do dialogical strategies, specifically the ThinkTrix Matrix and Socratic Seminar, improve ELL student dialogue?
- Deeper Understanding: To what extent do dialogical strategies lead to deeper understandings of literature for ELL students?
- My Own Learning: To what extent has the researcher transformed his own practice and become a leader to help others engage students with dialogical strategies?

My CPRs were a Grade 7 ELL English literature class at the TCIS. During three cycles, they moved from Grade 7 to Grade 8. To complete the PAR project, I was given permission to teach the same group both years; I also was promoted from teacher to full-time administrator

during that period. From this group of 19 students, I collected data in various forms including: memos, artifacts of work, interviews, surveys, observations, and member checks (see Table 4.2).

Each of these data types was used in one form or another throughout the project and have been addressed in this dissertation. However, the most frequently used data types were memos, journey lines, ThinkTrix Template Collaboration Documents, Socratic Seminar maps, Flipgrid Video Transcripts, and observations. I then triangulated data from this list to make claims. The use of triangulation is important in PAR so that data is not limited to only one kind of data source (Herr & Anderson, 2005).

Over three PAR Cycles, I studied how to create democratic spaces and to support ELL students to become better readers and thinkers. In doing so, I added numerous teaching strategies to my toolkit, including ThinkTrix and Socratic Seminars, and I learned the importance that building relationships and nurturing dialogue play in a middle school ELA classroom. The list below summarizes six key findings for the PAR project. These findings address my Focus of Practice (FOP) that I implemented to initiate positive change at the TCIS, and they are detailed by their implications for educational policy, practice, and research in section two of this chapter.

1. Building democratic classroom space leads to agency and ownership as students collaborate and become initiators of their own learning.
2. Supporting ELL students with a practical typology of thinking that is easily understandable creates a shared knowledge base and sharpens critical thinking for literature.
3. Lyman's (1985) ThinkTrix empowers students to become more metacognitively aware of their thinking and enables them to think and discuss more profoundly

about literature; the addition of digital technology as a learning support for using my ThinkTrix template enhances its value for 21st-century learners.

4. Building collaborative relationships with students around an academic subject such as English literature elevates school experiences and creates more respectful and interactive dialogue, possibly improving reading and writing fluency.
5. For ELL students, such practices as individualized dialogues, small group learning, annotation of texts, and Socratic seminars improve reading comprehension and interaction with literature as a way into using English more fluently
6. Scaffolding repetitive uses of interaction and dialogue-building strategies augments mastery and advances students toward deeper understanding.

The first section of this chapter is about digging into the findings, understanding them, and reanalyzing them. In section one, I discuss the importance of democratic space, typology of thinking, ThinkTrix, relationship building, reading comprehension, and dialogue. In section two, I consider the emerging claims that form assertions from this PAR project. In section three, I outline two re-informed theoretical models for developing democratic classroom space and encouraging metacognitive skills in middle school ELL students. In section four, I examine the implications these findings have on practice, policy, and future research. In section five, I reflect on my leadership development during the ECU EdD program. In section six, I return to the project's original research questions to offer initial responses. Finally, in section seven, I discuss the limitations of this study.

Digging into the Findings: Understanding and Reanalysis of Findings

Using the lens of empirical and theoretical literature, I examine in greater detail my assertions, and review theories related to dialogue, democratic classrooms and metacognition.

During the three PAR cycles, I learned a great deal about myself and about my Co-Practitioner Research (CPR) group. One belief that was quickly dispelled was that I was a teacher who spoke rarely and let my students lead the conversation. One of the first things I did was to videotape myself teaching in order to tally the minutes I spoke (36:12) and the amount of time students spoke (15:43) during a 90-minute class (memo, October 18, 2017). The results were bewildering to me, and they taught me that my goal of becoming more of a facilitator and less of a traditional teacher required effort. Turning discussions over to students and letting them direct their own learning was a lot of work, often challenging, but exceedingly rewarding. I not only observed my students' transformation but also my own. During these three research cycles, six primary findings emerged. Their themes concerned democratic space, typology of thinking, ThinkTrix, relationship building, reading comprehension, and dialogue. In the first sub-section, I discuss the importance of building democratic space in classrooms.

Creating Democratic Space

Building democratic classroom space leads to agency and ownership as students collaborate and become initiators of their own learning. In the beginning of this project, I thought that creating a democratic space was about giving students choice in where to sit and what groups to be in when working collaboratively. While those may be a part of a democratic classroom, more is needed to enable students to direct their learning. I gave students choice in seats, assignments, discussions, questions and answers, and even the ability to co-create their own syllabus. The more choice I gave them, the more they started to take charge of their own learning and push themselves harder to think more deeply. For example, at the beginning of Cycle Three, students challenged themselves to read more books than in previous cycles (see Figure 17 in Chapter 7).

The students and I co-created the syllabus for the school year. This undertaking surprised and delighted me as they made clear that they wanted to challenge themselves in reading, writing, and talking about both activities; I saw them become thinkers. Tharp and Gallimore (1988) suggested that the “sage on stage” or the teacher as the “sole giver of information” are concepts that are wasted in the classroom and a more successful approach would be the teacher as the facilitator of information (see also Freire, 1970). As I de-powered being the sage, I started to redefine and democratize my role, and I noticed that my students powered up and challenged themselves to take more responsibility for their own learning as evidenced by their co-created syllabus. The more I reimagined sage, the more they stepped forward, and the more we all seemed to learn. To the point, I did not stop teaching. Vygotsky (1978) argued that interaction between teacher and student spurs cognitive growth. Teachers are still needed in a democratic classroom, but the role that teachers take looks different. During these PAR cycles, I saw myself evolving and becoming more comfortable and confident in facilitating students to lead their own journey just as Dewey (1938) suggested.

Student success in reading created an atmosphere where not only the love for literature flourished (see Figure 10 and Appendix J), but students also expressed they were more confident and prouder of themselves as readers and thinkers. Kerman, Kimball, and Martin (1980) suggested that pride is a powerful force in building positive relationships in the classroom. I observed this pride during three PAR cycles and I spoke to parents about how proud they were of their children’s success. I observed the TCIS teachers praising the CPR. Finally, I observed a shift in student confidence, especially in those who had started Cycle One as lower achieving. In feedback to my own graduate assignment, ECU education professor McFarland said, “What is right for students—improving your craft so as to offer students vibrant and varied learning

experiences that look nothing like a traditional classroom!” (assignment feedback, November 9, 2017). By the end of Cycle Three, these students were more confident, more prepared, and more willing to converse with each other and me than in Cycle One. As this shift occurred, I observed students thinking more critically about literature and the move from a traditional classroom took root. In the next sub-section, I analyze the importance of creating a typology of thinking.

Honoring Different Types of Thinking

A practical typology of thinking that is easily understandable creates a shared knowledge base and sharpens critical thinking for literature. ELL students particularly need such a typology because it allows them to see a step-by-step manner to think more deeply about literature and it creates shared metacognition. As all of my students are second (and some third) language learners, one task was to find a way to get them to read literature and think about passages critically. McFarland wrote to me: “When students are asked to think critically and be interactive often, they are learning” (assignment feedback, November 9, 2018). In Cycle One, we started with learning how to annotate texts using Sacks’ (2014) *Literal, Inferential and Critical* note taking skills, or *LIC*, as my students referred to it. LIC helped students to begin to think about literature in a more sophisticated way because of the structure it added to reading. We moved in Cycle Two to using ThinkTrix, and that tool embedded a shared way to think, read, and discuss literature. At the end of Cycle Two and throughout Cycle Three, we continued to use ThinkTrix to analyze literature, propel conversations, and get students to think about literature, but we also added Socratic Seminars. Over the three cycles, I observed that students were using a shared knowledge base for discussions not only when using ThinkTrix and Socratic Seminars but in conversations with each other. These conversations lead to a constructionist literature classroom:

readers make meaning, but they make it together through discussions, conversations, and thinking. In other words, they co-construct meaning.

In this PAR project, I observed some students move from tacit learning, which reflects an unawareness of their metacognitive knowledge, to the other learning awareness levels. As Perkins (1995) described, he and Robert Swartz defined four levels of metacognition:

- Tacit Learners: Unaware of their metacognitive knowledge.
- Aware Learners: Know about some of the kinds of thinking they do—generating ideas, finding evidence—but are not strategic in their thinking
- Strategic Learners: Organize their thinking by using problem solving, decision making, evidence seeking, and other kinds of strategies.
- Reflective Learners: Not only strategic about their thinking but reflect on their thinking-in-progress, ponder their strategies, and revise them. (p. 101)

Over time, students seemed to become more aware learners by finding textual evidence and generating ideas regarding literature, enabling them to learn more strategically, leading to deeper connections and advanced dialogue. When I started this study, I did not observe any students who were reflective learners, for example, in that they were not strategic and thinking about their own thinking. However, at the end of Cycle Three, I observed that at least 9 of the 19 students consistently demonstrated markers of reflective learning. I especially noticed this trend in regard to small-group ThinkTrix and large-group Socratic Seminar discussions. In the next sub-section, I assess the role that ThinkTrix played in helping the CPRs become more metacognitively aware.

The Power of ThinkTrix

ThinkTrix empowered my CPRs to become more metacognitively aware of their thinking and enabled them to think and discuss more profoundly about literature; the addition of digital technology as a learning support, which enabled me to create an online ThinkTrix Template, enhanced its value for 21st-century learners. When my ECU professor Tredway suggested I look at ThinkTrix, I believed it might benefit my students. However, the text and visuals were somewhat dated for a technologically driven student population. To reinvigorate the matrix, I converted it into a Google Doc that allowed my students to work together both synchronously and asynchronously. When I shared this template with Lyman, he stated that my template was “the most encouraging effort” he had seen regarding updating ThinkTrix (Lyman, email conversation, September 22, 2017). I knew I was onto something major if Lyman believed that the way I transformed this matrix “may be the springboard for bringing ThinkTrix into the 21st century” (Lyman, email conversation, October 26, 2017). He said that my work with ThinkTrix gave him hope and that my reimagined template would help revive metacognition as a much needed but often neglected part of education (Lyman, email conversation, January 8, 2018). Tredway submitted that “people learn from patterns, but also from co-constructing those patterns” and my ThinkTrix Template gave students the ability to co-construct those patterns (memo, February 14, 2017).

McTighe and Lyman (1988) suggested that when a variety of organizational structures are in place, students are more likely to capture and process the information. Lyman’s ThinkTrix Matrix modified into my ThinkTrix Template offers a variety of structures to help students capture and process information. I observed the more they used ThinkTrix, the more they grew as readers and thinkers. I realized that as the CPRs spent more time with ThinkTrix, my role of

teacher started to change to that of a facilitator. The boundaries that were once solid became fluid, and as students started generating and co-constructing their own questions and answers with their facilitator and in small groups, the classroom became a place where knowledge was celebrated. Only in a democratic space can the teacher step back and not be the sage, a difficult concept for traditionally educated teachers to accept. I learned to rephrase students' questions rather than answering them. Not once were they unable to come up with an answer. Perhaps, theirs was not the answer I was looking for, but in literature analysis, an answer that is well supported by the reader's textual interpretation can be acceptable. In Grades 7 and 8 at the TCIS, this type of learning met and exceeded reading comprehension anticipations.

In a typical classroom at the TCIS, a teacher stands in front of the classroom and asks a series of questions about the text. Students raise their hands and answer the question, and if the answer is the one the teacher wants, they are praised or rewarded. However, the questions often are only recall and comprehension questions that do not require students to think critically. Recall and comprehension are just the beginning of the ThinkTrix Matrix, however, and students must think critically regarding recall, similarity, difference, cause/effect, idea to example, example to idea, and evaluation. The brilliance of ThinkTrix is that it teaches students to ask the questions as well as answer them. Adger (1995) said that

the Think Trix approach to instruction contributes to many educational foci. Skills in higher order thinking, social interaction, and academic language are directly, explicitly taught as teachers teach their students how to do cooperative learning and how to use the ThinkTrix typology. As you use the Think Trix approach systematically along with other instructional strategies, students hone those skills. (p. 106)

It was my experience over three cycles of research using ThinkTrix that students were able to hone those skills to a greater extent as they became more accustomed to ThinkTrix and as I taught and retaught the thinking skills in order to reinforce the typology.

The ThinkTrix approach is “for teachers who want all of their students to learn to talk smart; to be active, engaged learners who co-construct lessons with them and their classmates; and to have confidence in their abilities to figure things out” (Adger, 1995, p. 8). Adger alleged that the ThinkTrix approach is “complex It combines the ThinkTrix typology, graphic organizers and cooperative learning” (p. 7). As Lyman (1985) suggested and Adger (1995) reiterated, the ThinkTrix approach is for teachers who are comfortable with students co-constructing meaning, with classrooms that are active, and with high level discussions where teachers do not always have “the answer.” Or, as Lyman (1992) indicated, it is for the teacher who wants students to become knowledge makers. Adger (1995) suggested that ThinkTrix is a great tool to use in classrooms to encourage academic talk and to help students get to higher level thinking skills. By incorporating ThinkTrix into a classroom, Adger proposed that it creates advanced opportunities for students to communicate, collaborate, and think critically. These goals align with three of the four Partnership for the 21st-Century skills: communication, collaboration, critical thinking, and creativity. Thus, even though it was created in the 1980s, the ThinkTrix approach is crucial for modern classrooms, and it is made more accessible by my development of a Google Docs-based ThinkTrix Template. ThinkTrix certainly is valuable for building thinking skills. Yet, students also need to develop cooperative relationships, and ThinkTrix helps with this work as well. In the next sub-section, I reveal the important role that building relationships played with the CPR group.

Relationships Should Come First

As the PAR project continued, I observed relationship bonds grow stronger and oral discussions become less competitive and more respectful. Building collaborative relationships with students around an academic subject such as English literature elevates school experiences

and creates more respectful and interactive dialogue, possibly improving reading and writing fluency. I knew the importance of building relationships with students and encouraging them to build relationships with each other. As with my first finding, I thought I had been doing this my entire career. However, I found that I had not built such relationships. Therefore, in Cycle One I planned systematic activities to know each student as an individual. In Cycle Two, I started to build deeper connections through a concerted effort of daily greeting and talking about their hopes and dreams. In Cycle Three, I discovered daily opening circles, a powerful way to build relationships in a school setting. I also observed student bonded during and after opening circles, and I watched as they connected delightfully with one another. The findings in this study indicated that reading and writing fluency improve as evidenced by essay writing and tests, and at the end of Cycle Three, they were writing better than most of the TCIS Grade 12 students, reading better than students in higher grades, and having discussions that were more advanced than in higher grades.

I think that fostering positive, respectful relationships with students is not only desirable but a requisite for building collaborative relationships. Thomas (1998) said, “The most powerful weapon available to secondary teachers who want to foster a favorable learning climate is a positive relationship with our students” (p. 6). Kohn (1996) suggested that students are more likely to be respectful if they know their teacher respects them. I do not believe that relationships are merely part of the educational puzzle because relationships must be developed before the puzzle pieces can come together. Without this groundwork, the teacher has failed to embolden students to become 21st-century learners. It is not important how fast the Internet is, how much access to technology students have, or how well equipped the school is with resources. The primary need for every classroom is that teachers must build positive relationships with students

from the first day of the school year. Building these positive relationships has many potential benefits, an interesting one of which is aiding student reading comprehension skills. In the next sub-section, I reflect on the role that reading comprehension plays in an ELL classroom.

Conversations Improve Reading Comprehension

For my ELL students, such practices as individualized dialogues, small group learning, annotation of texts, and Socratic seminars improved reading comprehension and interaction with literature as a way into using English more fluently. When I started the PAR project, my primary objective was to improve students' reading comprehension. I thought that using technology would most benefit this endeavor; However, I discovered that a more useful approach to improving reading comprehension in ELL classrooms is to build active, engaging, and relevant dialogue. My students developed as readers as discussed in Chapter 7 and evidenced in their MAP scores. I credit their depth of dramatically improved understanding to deep and powerful conversations about literature. They interacted and conversed more as they got to know each other, felt comfortable with each other, and learned to view dialogue as part of the everyday classroom environment as opposed to an item in a checkbox to meet a standard. Vygotsky (1962) accentuated dialogue as an important instrument in co-creating new concepts. Our democratic classroom was filled with lively discussions on a regular basis, and students were the ones leading those discussions and co-creating new concepts. Thus, the paradigm shifted from teacher as the sole giver of information to the Freirean goal of students co-creating understanding. This shift created beautiful conversations, dialogue, and debates that were a fixed part of our English Language Arts classroom.

Harvey and Goudvis (2000) stated: "When readers interact with the texts they read, reading becomes important. Reading shapes and even changes thinking. Getting readers to think

when they read, to develop an awareness of their thinking, and to use strategies that help them comprehend are the primary goals” (Harvey & Goudvis, 2000, p. 5). This PAR project taught me that students who practice dialogue and cooperative group work improve reading comprehension dramatically. The more students read and talked about their reading, the more detailed and vivid their conversations became, showing genuine understanding of what they had read. Through dialogue, these CPRs found a way to read and talk about the reading using English more fluently.

Of comprehension, Fielding and Pearson (1994) indicated:

Once thought of as the natural result of decoding plus oral language, comprehension is now viewed as a much more complex process involving knowledge, experience, thinking, and teaching. It depends heavily on knowledge—both about the world at large and the worlds of language and print. Comprehension inherently involves inferential and evaluative thinking, not just literal reproduction of the author’s words. (p. 62)

Over three cycles of PAR, I observed that students were not just regurgitating information; they started to process information, infer, evaluate and think deeply. Students began to unite in a constructivist view of understanding, “being able to explain information, connect it to previous knowledge, and use information” (Beck, 1997, p. 10). This PAR group co-constructed meaning by using the ThinkTrix Template and Socratic Seminars as a means to build knowledge and promote understanding. The discussions using these two techniques led to wonderfully dialogic conversations, which should be the cornerstone of every classroom. In the next sub-section, I deliberate the role that dialogue plays in improved thinking.

Dialogue is Imperative in ELL Classrooms

The small steps my CPRs made toward enlightened conversation did not happen without changes in our approaches to reading and discussion; they happened because we engaged in repetitive uses of LIC, ThinkTrix, and Socratic Seminars. Scaffolding repetitive uses of interaction and dialogue-building strategies augments mastery and enables deeper understanding.

I postulate that our Socratic Seminars would not have been as rich as they were had we not used ThinkTrix as a basis for those discussions. I also speculate that our ThinkTrix discussions and templates would not have been as strongly developed without first teaching students how to annotate text and start thinking about it in a different way than they had in the past. Each cycle, I needed to remind them how to create their own questions for LIC and ThinkTrix. The more we did this activity, the easier it became. However, these ELL students had never built these skills in English or another language; as such, they needed constant scaffolding of techniques and repetition from previous lessons. Interestingly, during our final Socratic Seminar of Cycle Three, they needed no reminders from me. Students took over the seminar and used the techniques they learned over the past one and a half years to have a conversation about which an observing teacher said:

The Socratic Seminar was fascinating. Students were able to speak so eloquently and decipher meaning from a photo and talk about that photo for nearly one hour. The talk was not just simply understanding, but a deeper, more developed thoughtful discussion of ideas, themes and relationships. I have not seen students in our high school speak so articulately. (memo, October 11, 2018)

Regarding the same Socratic Seminar, a TCIS Senior said, “I never imagined that 8th Grade students could have such a powerful discussion. I wish all our English teachers used Socratic Seminars as these seminars add dimensions to discussions that I have not experienced in my twelve years at TCIS” (memo, October 11, 2018). When this student from a different grade level noticed how powerful these literature discussions could be and expressed a desire for such an experience, it seemed as if he has missed something of great value in his educational journey. Socratic Seminars appear to be significantly effective in terms of literature study and, more importantly, enabling students to express their thinking through their own voices.

Students who can think about a topic are more likely to talk about it, and if they can talk about it, they can write more fluently about it. If students are encouraged daily to think deeply, converse freely, and write showing understanding, then they can move to a different level of comprehension. The repetitive uses of LIC, ThinkTrix, and Socratic Seminars taught students to read, reread, think, rethink, write, rewrite and then do it all again. Much like a PAR cycle, this recursion keeps students constantly reading, thinking, planning, and writing. It is through this process that deeper understanding develops. Reading, talking, and writing about literature places students in the realm of being metacognitively aware about what they have read, and this goal is within the grasp for all students, not just native English speakers. Jago (2004) stated that “simply assigning books is not enough; teachers need to have an instructional plan that makes difficult texts accessible to students” (p. xii). Scaffolding LIC, ThinkTrix, and Socratic Seminars are an excellent way to make text accessible to students and help them to better understand texts and think about them more deeply. Vygotsky (1962) argued that students need to be in the Zone of Proximal Development and that teachers should be more of a facilitator aiding student understanding: “The only kind of good instruction is that which marches ahead of development and leads it” (p. 104). Having closely observed the CPRs over three cycles, I know that LIC, ThinkTrix and Socratic Seminar techniques, when implemented with foresight and thought, encourages students to deeply root their learning and blossom developmentally.

I also believe that the use of ThinkTrix and Socratic Seminars can create remarkable dialogue that engages students and helps them to understand literature better. Jago (2004) said, “Powerful literary experiences expose young people to the complexity of the world around them” (p. 13). During this PAR project, I listened to students talk about literature and relate it to their lives and to their communities. The rich dialogue opened my eyes to the possibilities of

creating a love of literature in my students' lives. It also demonstrated that my CPR were able to understand the world around them based on their reading of literature and their expanded thinking mindsets. Tharp and Gallimore (1995) supported this notion by writing that “concepts are the goal; meaningful discourse is the medium in which society creates minds, and by which minds create society. For literacy, meaningful discourse is both destination and vehicle” (Tharp & Gallimore, 1995, p. 93). As this PAR project advanced, I watched students have meaningful discourse and talk about concepts that I have never seen middle school students discuss. Or, as Tharp and Gallimore would say, their conversations were both the destination and the vehicle to greater understanding.

The Socratic Seminar teacher “involves the learners in a continuous thoughtful practice as they collaborate and content to sort out the issue” (Perkins, 1995, p. 57). According to Perkins (1995), “helping learners to work through concepts for themselves that they might not truly grasp in any other way, as well as giving them a chance to engage in and learn about inquiry” enables students to expand their “repertoire of knowledge” (p. 57). Tharp and Gallimore (1995) stated that questioning is a valuable means of assistance performance because “questions call up the use of language and in this way assist thinking” (p. 59). The liveliest discussions occurred when the CPRs worked to sort out issues with texts, and this sorting work occurred through LIC and ThinkTrix questions that assisted thinking skills. I observed students thinking aloud about what was being discussed and constantly reflecting and changing their opinion as the seminars progressed. The CPRs have engaged deep and meaningful conversations in both Socratic Seminars and ThinkTrix group discussions to develop socially and metacognitively, and Vygotsky (1962) would be proud that his social experiment is alive and thriving in the halls of the TCIS.

Summary

In this section, I examined the findings through the lenses of empirical and theoretical literature. Like Dewey (1938) and Friere (1970), I discovered that giving students voice and choice created a more democratic space, thus allowing for the CPRs to take more ownership of their learning and become initiators of their own learning. Like Sacks (2014) and Lyman (1987), I realized the importance of creating a shared knowledge base in order to sharpen the CPRs critical thinking skills, thus allowing conversations to be the focus for co-constructing meaning in the classroom. As McTighe and Lyman (1988) suggested when organization structures are in place, students capture and process this information better. For this PAR, ThinkTrix and Socratic Seminars were the structures used to process information, thus creating engaged learners who grew in ability and confidence speaking, reading, and writing. The growth observed was made possible by building strong relationships with students. Relationships should be the cornerstone of every classroom and strategies for successful reading comprehension should be the cornerstone of every literature-based ELL classroom. The findings also indicate that learning to ask questions and dialogue with fellow students is needed to allow for this environment to be created. In the next section, three primary claims, or assertions, that emerged from the study are discussed.

Assertions from the PAR Project

Three primary assertions emerged from this PAR project. They reveal important principles for ELL classroom teachers—particularly in international school settings but certainly reasonable for almost any classroom. These assertions consider relationships, organizing tools, and classroom dialogue.

First and foremost, every classroom teacher should build strong, respectful relationships with students, and this attitude of respect should emanate from the administration on down. When school leaders provide a foundation for respectful relationships, teachers and students benefit from the delightfully transformative environment. Relationship ought to be the foundation of every school. When good relations are transmitted by administrators to teachers and students alike, teachers are apt to begin their days positively and students will feel the effects; they are apt to work harder, think more, and place more meaning in their studies if they have solid relationships with their peers and their teachers. These relationships are easier to create in democratic spaces and when teachers develop gracious spaces such as those described in Chapter 7. Gracious voice starts not with teachers, however, but with administrators and how they interact with both their faculty and students alike. In fact, listening to others and having conversations with them should begin at the outset of an administrator's position in the school. These actions allow leaders to start their work with stronger relationships to the faculty and students. Then, the leader's modeling of respectful relationships and coaching with faculty about how to develop these relationships have a trickle-down effect. Undoubtedly, teachers benefit from seeing and experiencing the changes such gracious spaces engender and the empowered environment in which they now function. Then, as teachers begin to purposely incorporate gracious voice and astute listening skills in their classrooms, magic begins to happen. Gracious voice starts, for example, when school administrators smile and greet students as they enter the building and as teachers likewise welcome students to their classrooms. It can be deepened for students with regular opening and closing circles. It is easily developed when students are given voice and choice and are the leaders of their own learning, but teachers, too, must have voice, choice, and leadership opportunities in the school. Such empowerment creates an environment of

presence wherein teachers and students both can feel recognized, known, and liked for themselves.

Second, every teacher should have a tool to encourage critical thinking. I have been in the education arena since the early 1990s, and I have seen many pedagogies come and go. However, ThinkTrix has been around longer than I have, and it has become, for me, a conduit for teaching students to think metacognitively. Lyman's (1985) ThinkTrix was groundbreaking work. However, somehow over the years, educators did not pick it up as a key strategy for teaching thinking. Having reviewed the research and having seen ThinkTrix in action for the past one and a half years, I believe without reservations that the ThinkTrix approach works for students in middle school and it works especially well for ELL students. ThinkTrix makes metacognition easy to understand and helps move students beyond teacher-generated questions to student-generated and co-created questions. However, to adapt ThinkTrix to 21st-century learners, I needed to adjust it for an online platform, enabling students to work together online both synchronously and asynchronously. The addition of my template to the ThinkTrix program embeds technology into the approach and helps students experience the typology differently. I have shared this adaptation openly through a Creative Commons license because, particularly at international schools, every educator benefits from such sharing to increase and improve their own toolkit of resources. Teachers in various countries would benefit from trying ThinkTrix via its original form and through my adapted template as the skills it teaches are as applicable today as they were in the 1980s, and they are invaluable for every 21st-century learner. All this said, ThinkTrix is an example of a powerful critical thinking tool, and whether teachers select this one is less important than that teachers must select something to help their students become critical thinkers. Here, again, is where the school's leadership enters the picture. With critical thinking

designated as an outcome for nearly every curriculum, the administration must put into place professional development that educates teachers about new and older ways of teaching critical thinking. Once again, the desired effect--this time of critical thinking--comes from the top down in terms of faculty opportunities for learning what and how they might teach.

Third, teachers also need students to be well spoken and thoughtful about literature. Socratic Seminars have been available to teachers even longer than ThinkTrix. After learning about Socratic Seminars and learning the subtle nuances of conducting successful seminars, I understand why many teachers do not use this method more often: it is hard work. To conduct a true Socratic Seminar is not merely about asking a question and letting students talk. Time and thought have to be placed in the opening question as this is the most important part of the seminar. Learning to allow the discussion to ebb and flow is difficult for teachers used to constant teacher and student talk as the indicator of a good discussion. My first few seminars were good, but they were not great. The more often I conducted them, however, the better they became. Additionally, the improvements I observed in students included increased attentiveness, active dialogue, and engaged interest. Socratic Seminars opened up a different world of discussion to these students; by the end of our PAR project, both upper-class students and teachers who observed my classes were astonished at how well spoken, insightful, and knowledgeable these Grade 8 students were throughout a seminar. Exploiting Socratic Seminars in an English Language Arts Classroom should be mandatory given its benefits to students and teacher. Such a mandatory rule would be foolish, however, without a scaffolded, experiential training opportunity for teachers. Interaction strategies cannot be taught without allowing participants--in this case, teachers--to experience them. Therefore, it is important that administrators support these types of strategies financially and with the best selection of

educational coaches available. When teachers receive mentoring from excellent educators, they become excellent themselves.

In this section, I discussed important aspects of creating a culture where teachers and students alike enjoy coming to school and where developing critical thinking and dialogue skills are paramount. This culture can only be created when respectful relationships are valued and cultivated first by administrators and then by teachers who have experienced the results of such a culture and who know how to create it in turn. Because they are nestled within the larger culture of a foreign (to many teachers) country, international schools are more like close-knit families than American schools. As with a family, change may be hard to achieve, while status quo is comfortable if not always enjoyable or the best for the community as a whole. For an international school to develop a support system that works for leadership and faculty, which makes school work better for students, leaders should practice what they preach: they must listen to teachers, engage in dialogue, have conversations, and co-construct that community with other leaders, teachers, and students. If the leadership will not or cannot do this essential work of shared responsibility for the school-family culture, then it has failed. Whereas often administrators lead by dictates in a top-down manner, the point of both ThinkTrix and Socratic Seminars are—in part—to teach, practice, and encourage discussion and to equalize or level the playing field for all parties. Yet, if the leadership does not take responsibility--from the top on down to the students--it cannot build the right type of relationships. Rather than giving directives, it should share and provide options for improvement plans. The kind of learning that Dewey (1938) imagined and the types of interpersonal conversations that Vygotsky (1978) wanted educators to construct and experience can create an environment where equity flourishes. Building educational communities based in equity is hard work, but it is work that school leaders

should embrace and advance. In the next section, I discuss the transformational changes observed at the TCIS over three PAR cycles.

Theories of Transformational Changes at the TCIS

During three PAR Cycles, I observed students build better relationships and grow as readers, writers, and thinkers. I watched them work on my ThinkTrix Template, partake in discussions in Socratic Seminars, and write on advanced levels, leading to observable cognitive development that I had not expected. I do not think they expected such learning either. When I first started this project, my goal was to help students become better readers and, perhaps, better writers as well. Those were the two areas at the TCIS that students most needed improvement in ELA classrooms. I was surprised at how much they matured in their oral dialogue and thinking skills. Almost symbiotically with my students, I also changed as a teacher and a leader while, somewhat unexpectedly, some factors of the TCIS educational infrastructure also changed. These transformations suggest that as I became more reflective and sought feedback from administrators and colleagues, those conversational sparks may have ignited change outside my classroom as dialogue, conversation and stories impacted the TCIS in ways that I had not projected.

Therefore, in this section, I identify three areas of transformational changes at the TCIS that were either classroom based or school wide. Two of these changes at the classroom level involve re-informed frameworks for teaching ELL students at an international middle school. By frameworks, I mean layers and structures that needed to be added into the curriculum to create democratic space and to assist with metacognitive development. As such, these frameworks provide a backbone to the classroom procedures that enable students to participate with their own voices and self-reflect on their learning. These frameworks, while implemented in my classroom

alone, clearly have had resonance with other teachers and school administrators, and they may in the future be integrated by others. The third change is a set of transformations in the school's educational infrastructure, some of which occurred because of my work in this PAR project and others of which occurred more organically. In the first two sub-sections, I identify, define, and describe the two frameworks and illustrate them. In the third sub-section, I synthesize the TCIS educational infrastructural changes as a synthesis of school leaders and my own leadership changes. Overall, I theorize that these transformations, while they might have happened individually and in a disconnected manner, actually occurred as a synthetic process where the transformative changes added to the TCIS educational culture to create a new, more democratic space for everyone.

Re-Informed Framework 1

Building a democratic classroom space has been the goal of progressive educators for decades. As student populations become more technologically savvy, the need for this type of environment is even greater. Educators must prepare students to enter the modern workforce and its realities. Students need teachers to guide and facilitate their learning (Dewey, 1938) and not to fill their heads with information alone (Freire, 1972). Kohn (2008) referred to progressive education as a “working with, rather than a doing to model” (para. 7). Students no longer need to be passive absorbers of information but, instead, can become active, engaged, critical thinking, co-constructors who are part of the process. Indeed, students should be encouraged to play a vital role in helping to design the curriculum, formulate the questions, seek out (and create) answers, think through possibilities, and evaluate how successful they—and their teachers—have been (Kohn, 2008). I restructured my classroom environment to help develop such a democratic space.



During this PAR project, I discovered that a democratic classroom can easily be constructed in a middle school ELL literature classroom in Thailand. The re-informed framework I used to build democratic classroom space for ELL students, shown in Figure 20,

Figure 20. Re-informed framework for 21st century democratic classroom space.

included the following foundational schema developed in an additive and recursive process (presented in no particular order): Building Respectful Relationships + Voices Heard and Respected + Choice in Learning + High Expectations + Integrated Technology = Contemporary 21st-century Democratic Classroom Space. This overarching framework is one from which students in any class at the TCIS might benefit, making it something the entire school should consider engaging.

To build respectful relationships, I invested time modeling respectful dialogue and building relationships through daily opening circles as well as one-on-one time with each student. Adding in hearing and respecting voices required that I not only become an active listener but one who incorporates what he heard into our classroom. Incorporating the students' thinking when they spoke became a habitual way to show respect. Once I realized that a democratic classroom can only happen when students have choice in their learning, I actively worked to bring choice to the classroom by allowing choice in seating arrangements, assignments, and especially in the literature students read. Such a classroom need not be one without standards, however. At all times, students needed to understand that I had high expectations for them and that they needed to have high expectations for themselves. Therefore, I challenged them and documented their goals for themselves; interestingly, the syllabus we co-created incorporated higher expectations than I previously had held for my students at that grade level. Finally, appropriate educational technology skills needed to be introduced to the classroom because these are crucial to students' current tasks and their future work lives. To do so, I embedded particular technologies that required students to use critical thinking, communication, collaboration, and creativity.

This framework represents an additive process: each item is necessary, item order can change (recombination), the process is recursive and repetitive, and each item provides building blocks in that each activity creates new capacity for follow-on experiences and activities. Although this model represents the major themes of this PAR project, it is by no means inclusive of all the activities and work necessary. Most of these activities are described in greater detail in Chapters 5-7 regarding PAR Cycles One through Three. And, while creating a democratic classroom space was a first step and primary goal for this PAR project, the end result of the methods used developed a more metacognitively aware CPR group, as I describe regarding the re-informed framework 2.

Re-Informed Framework 2

Wang, Haretel, and Walber's (1993) meta-analysis of research on learning determined that metacognition was the number one shared characteristic of high academic achievers. Having observed numerous students improve their metacognition, I began to rethink my teaching and how I could encourage others to become more metacognitively aware. Similar to Pellegrino and Hilton's (2012) thinking about strategies to solve problems, my PAR students became stronger learners when they learned to monitor their own thinking, but they did so through teacher-provided strategies. In other words, the democratic classroom does not mean that the teacher has no place; my job was to enact strategies to assist their metacognitive thinking. Students developed metacognition in this PAR project specifically through schema of text annotation, supportive dialogue, and ThinkTrix. Therefore, research on the importance of metacognitive thinking is clear. Students can be taught how to think metacognitively, helping them become high achievers.

For my PAR project, the ThinkTrix approach was the most significant means that I used to assist the ELL students in thinking metacognitively, and the modification of the ThinkTrix Matrix to my ThinkTrix online template helped them immeasurably. However, because they were ELL students, before they were able to understand and use ThinkTrix well, they needed to learn to read and understand literature better, which is where Sacks (2014) LIC came into play. Thus, for ELL students at the TCIS, the re-informed framework for developing metacognitive awareness, shown in Figure 21, involved the following foundational schema in an additive process in this specific order: Text Annotation + Supportive Dialogue + ThinkTrix = Developed Metacognition.

To teach students text annotation, we used Sacks (2014) method of annotation based on LIC. Students used sticky notes to form questions and answers based on the three ways of thinking Sacks suggested. Supportive dialogue was modeled throughout the PAR project and students were encouraged to take risks in conversations with literature. For example, we used Think-Pair-Share and small group discussions for assisting with text annotation and ThinkTrix, and these conversations became central for these ELL students to support their classmates and for me as facilitator to guide students during these strategies. Finally, once students were comfortable annotating texts and becoming more comfortable with small group discussions, ThinkTrix was added as a strategy to develop better understanding regarding reading. At first, this work was done solely in small groups with the ThinkTrix Template I created. I scaffolded teaching each thinking action over a two-week period until I was confident each student understood the terminology of the typology and understood how to begin asking and answering questions related to each thinking skill. Then, during the remaining PAR project time, ThinkTrix was used both synchronously and asynchronously in small and large groups. Metacognitive

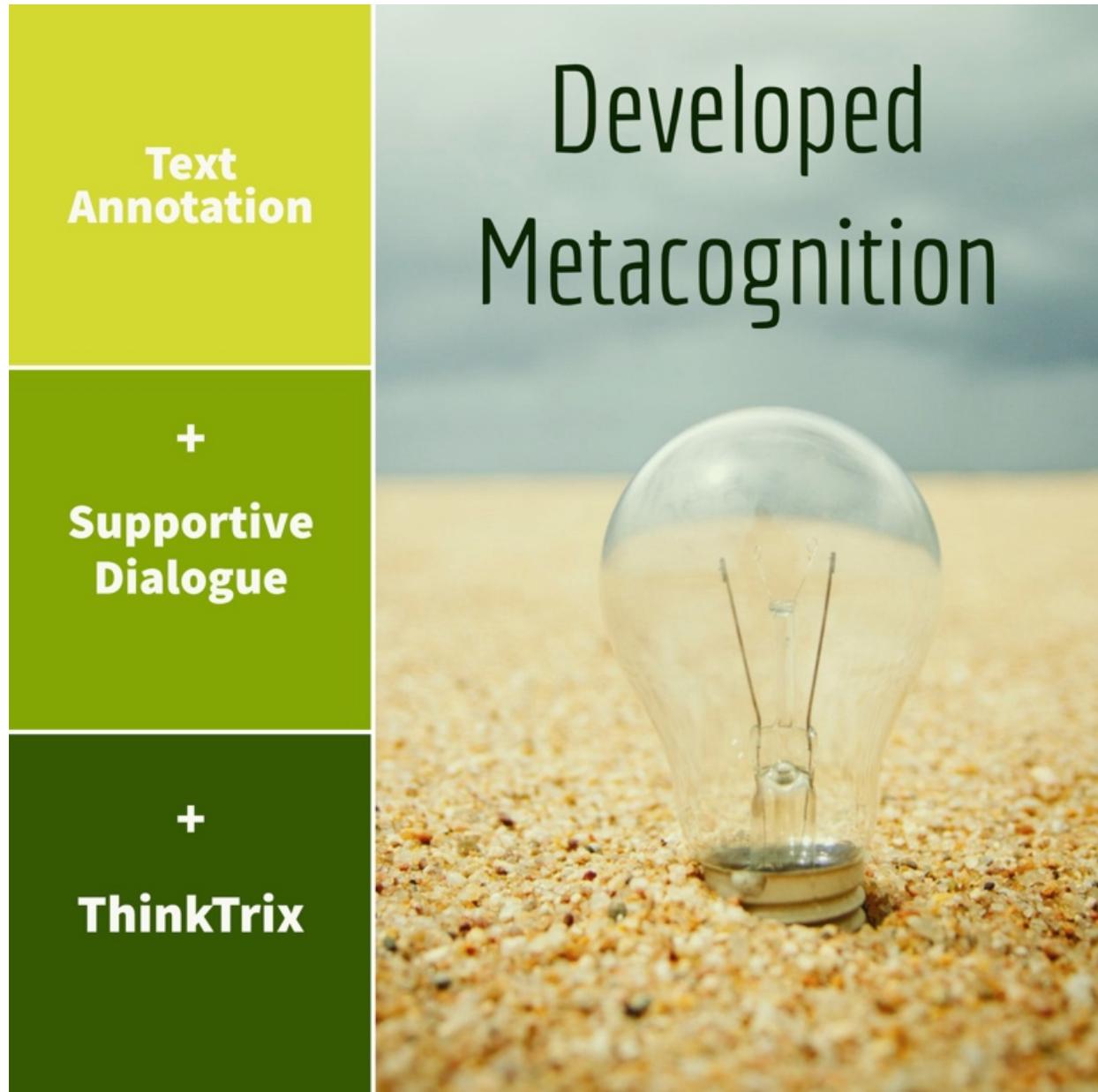


Figure 21. Re-informed framework for metacognition.

awareness as demonstrated by their abilities of self-reflection regarding the literature was the gamechanger to help them read, speak, write, and think on levels as high as, and often above, their peers in other classes. In this next section, I show that as I transformed into a more progressive educator, I became part of an educational infrastructural change at the TCIS.

The Progression of Transformation from the Original Research Questions

Through three PAR cycles, I established that it is possible for middle school literature teachers to foster relationships, improve academic interaction, and support deep understanding of literary content for 21st century ELL students. As my overarching research question involved these elements, I paid special attention to the methods through which such changes could occur in a democratic classroom. This chapter has detailed the project outcomes, and Chapters 5-7 have itemized the specific steps needed to support the outcomes. I learned that becoming a progressive educator is hard work, requiring effort from both teachers and students. Specifically, the teacher has to be open to moving from a traditional classroom environment to one that gives students more ownership of their learning. The changes represented by the re-informed frameworks 1 and 2 can be considered local to my classroom. Overarching educational infrastructural change requires long term planning, implementation of consistent professional development, and tools for accountability. The fishbone diagram presented in Chapter 1 (see Figure 1) was an early attempt to represent a contributing systems analysis at the TCIS. It identified certain macro, meso, and micro assets and challenges inherent to the TCIS. As I worked through my research questions, I realized that the diagram itself could become a meter for identifying change. In effect, teachers at the TCIS started to become open to change, professional development for teachers became more of a focal point, policy was put into place for teachers to become proficient as Google Educators, students' reading and writing proficiency improved, and

teachers' retention improved. These changes came about, in part, because a new Head of School was appointed at the TCIS, curriculum development started to focus on the needs of students as opposed to independent desires of teachers, and policies were put into place by the collaborative efforts of our English Department based on specific local needs of our ELL student population. During the three PAR cycles, I was promoted from solely being a teacher to head of the department (while also teaching) and then promoted again to a full-time curriculum coordinator (teaching only my CPRs). These added leadership responsibilities allowed me to inspire the school in becoming a more progressive teaching and learning environment. The assets and strengths diagrammed in the Figure 1's fishbone diagram were used as the basis for my learning and growth as a leader. Conversations and dialogue with all stakeholders were crucial for positive relationships that developed. Although many changes were organic and naturally occurring, changes based on strengthened relationships and added dimensions of teacher voice were definite factors for change at the TCIS.

Summary

In this section, I identified three areas of transformational change that took place at the TCIS over three cycles of PAR. Two changes occurred at the classroom level involving re-informed frameworks for teaching. I identified, defined, and described the two frameworks and illustrated them. The third change led to a transformation in the school's educational infrastructure. The combination of these three transformational changes created a more democratic space for the entire TCIS community. In the next section, I detail the implications my project has for policy, practice, and research.

Implications

During this PAR project, I learned the importance of building space where students can initiate their own learning, supporting ELL students with a typology of thinking to sharpen critical thinking skills, empowering students to become metacognitively aware, building collaborative relationships with respectful dialogue, supporting ELL students through dialogue in both small and large groups, and scaffolding strategies to augment mastery toward deeper understanding. I also learned about myself, the role I should play as a teacher, the importance of dialogue, and how ELL students can develop better relationships and become better readers, writers, and thinkers. The purpose of this section is to translate the PAR project's findings into the significance for practice, policy, and research.

Practice

The primary implication of this PAR project for classroom teachers is meaningful for ELL students who can be taught to become high-level readers through a systemic approach to reading that embeds dialogue into their classes. In my experience, most international schools concentrate on grammar and writing. But listening and speaking are the first and second steps in the process to language acquisition, and they should be a priority in international school classrooms. When students start having conversations about literature or any subject, they activate a part of the brain that allows them to store more information than they would by just reading alone. Conversations should be the cornerstone of ELL classroom teaching and learning.

For the most part, teachers in international schools work with ELL students. Still, it is my experience that most teachers are not trained to work in an ELL environment and need strategies to work with these students. ThinkTrix and Socratic Seminars are excellent strategies for encouraging students to talk and collaborate more in an ELL classroom. It is important for

teachers in international schools to put strategies in place to help students talk more, read with understanding, and write with clarity. In other words, it is important to teach international teachers how to engage students to get positive outcomes in the classroom. To this end, a thoughtful leader will focus on professional development in scaffolding instruction for teacher development. To effect a change at the TCIS, administrators must engage teachers and give them voice in their own learning. Once teachers have been educated as ELL teachers and are experienced in an ELL classroom, then they can be given more choice in curriculum development. Additionally, turnover is often an issue in international schools. Thus, teachers need to be provided constant professional development opportunities. A form of shared or collaborative governance over professional development will provide teachers a sense of pride and develop buy-in for the changes that need to occur. Interestingly, this process is similar to Framework 1 (outlined in this chapter), which illustrated how to create a democratic space by introducing features such as building relationships, respectful dialogue, choice, and high expectations.

Once the school's leadership has a solid plan to assist ELL teachers with strategies to scaffold instruction for talking more, reading with understanding, and developing critical thinking and metacognitive skills, then the teachers can assist their students better. Building strong, respectful relationships with students should be the first step teachers make. To build these relationships, teachers need to be curious about and attentive to students' interests and concerns. To learn about students, teachers can build learning profiles at the beginning of the school year and utilize interest surveys, but most of all, they should have meaningful conversations with students. Conducting learning exchanges also are a powerful strategy for engaging students and setting an appropriate, individualized pace and direction for that particular

set of students. Such individualization for students and the entire ELL class allows teachers to understand the history of the group and visualize their personal learning and educational backgrounds; from such information, powerful interventions can be developed and students can experience education as supportive. To this end, active listening and open dialogue are crucial. Building respectful relationships is hard work, but when leaders encourage teachers to engage in this work—and when teachers actually put these strategies into place—the dividends multiply.

All teachers, but particularly ELL teachers, need to have a toolkit of activities to encourage critical thinking skills, and the school's leadership needs to coach faculty and provide them with ample professional development opportunities to develop such a toolkit. Educational scholarship reveals that many powerful strategies already exist, so teachers' jobs do not need to be made harder by asking them to recreate the wheel, so to speak. ThinkTrix and Socratic Seminars are two of those powerful strategies that are easily implemented in classroom, especially in ELL classrooms. However, supporting teachers and educating students are two different steps. For example, to get to the point where teachers can use the two particular tools effectively in literature classes, students also need scaffolded opportunities to learn how to build connections to what they read, and LIC is an easy way to start teaching students to comprehend literature; then, discussion strategies, such as ThinkTrix and Socratic Seminars, can help students develop meaningful dialogue about the reading. At the TCIS, now that I am the middle school principal, I have observed teachers I previously coached engage LIC in their classrooms. Their students, by my observation and teachers' statements, have gained observable skills in understanding and talking fluidly about the literature they are reading. If a school's leadership places critical thinking skills as important pillars of professional development, then scaffolding LIC, ThinkTrix and Socratic Seminars are easy for teachers to implement, and the rewards will

follow students to their next grades and further in life. In the next subsection, I discuss implications of this study for educational policy.

Policy

Although the results of this PAR project are specific to the TCIS, they may be applicable to other international schools, and I recommend two policies based on them. First, students who are not native English speakers can improve reading comprehension by a series of systematic changes in the way they are taught. There should be greater emphasis on dialogue and discussion before more emphasis is placed on reading and writing. Often, educators skip discussion completely and jump into reading and writing. But, as children learn language, they learn to first listen and then to speak (Vygotsky, 1978; Wolf, 2008). When teachers skip the speaking part, they put students at a disadvantage. To this end, a sound policy would be to place greater emphasis on oral dialogue in ELL classrooms even where reading and writing are expected. Regular and scaffolded speaking opportunities should be embedded daily in every classroom activity.

Second, the results of this PAR project strongly indicate that middle school ELL students can be taught metacognitive skills. Certainly, metacognition is necessary for ELL speakers who will enter an ever-evolving workplace where collaboration, communication, critical thinking, and creativity in various languages are required. From a policy perspective, I recommend that international school administrators and teachers should spend time learning Lyman's (1985) ThinkTrix typology and then using my ThinkTrix Template across disciplines to enhance metacognitive awareness in support not only of reading and writing literacies but also of English language competence and fluency. In the next sub-section, I review possible future research opportunities based on the finding of this PAR project.

Future Research

There are implications in this study for future research, which might take several different directions. First, this research study was developed for middle school students in a Thai/Chinese ELL school. Students were often third-language learners and not just bilingual. An appropriate research study using a similar action research approach that would test the results of this PAR project would engage middle school students in a different Thai school. Another action research or even a case study might take the processes developed and used in this PAR project and apply them in the elementary school and/or the high school classroom. Second, the issue of how many languages students speak is an important one, of course. Therefore, future studies should try to discern whether speaking two or three or more languages somehow affects ELL students in their English learning and speaking when dialogue and metacognition are placed into the educational forefront; such a study might involve mixed methods, such as action research combined with a survey or standardized test to determine student language development. A third type of research study, using action research approaches, would address ELL students of a non-Asian background. Cultural differences in parent and student expectations may influence how students respond to the types of classroom changes and learning requirements developed for this study. To this end, such a study might apply similar teaching and learning strategies that place dialogue and metacognition in the forefront while considering culturally appropriate or differentiated educational approaches.

A fourth type of action research or case study would be one in which the teaching and learning strategies for dialogue and metacognition are implemented in a classroom with native English speakers. Possibly, students who are native English speakers could have an advantage because they already would know how to dialogue in their native language; however, that they

likely would have been taught in more traditional classroom settings might mean they would have other challenges in becoming comfortable with the kinds of dialogue and metacognitive work developed for this PAR project. Finally, a fifth type of study would comparatively examine different international school, or schools in any country, that do not have majority of ELL students; such a comparative study would like have both qualitative and quantitative approaches given its breadth.

In this section, I have discussed the implications for this work to policy, limitations, practice, and research. In the next section, I outline how I transformed as a leader practitioner during this PAR project.

ECU EdD Framework

In the Spring of 2016, I met on Skype with Dr. Matt Militello, Wells Fargo Distinguished Professor in Educational Leadership at ECU. I was considering several Ed.D. programs, and Dr. Militello required that we have an online interview. The program's basis in equity and that the journey would be new to educational leadership led me to choose ECU. Over the past three years, this graduate work has taken me on a journey to become an equity warrior, an educational leader who listens to others, and a non-traditional teacher.

In the Fall of 2016, my ECU professors asked me to pick an equity artifact that represented my journey to date. I chose Dr. Seuss's (1990) *Oh, the Places You'll Go*, a cherished and inspirational book for educators. I believe it can be even more stirring for international educators. When I left teaching about 15 years ago, my colleagues gave me a copy of this book signed by every staff member. They seemed to know, more than I did, that my life was going to be transient, moving around and visiting other countries; as of 2018, I have visited over 80 different countries. I chose this book as an equity artifact because, as an international educator, I

believe that I can make an equity impact at the schools in which I work around the world. As Dr. Seuss (1990) said: “Kid, you’ll move mountains! . . . Today is your day! Your mountain is waiting. So, get on your way!” (pp. 41-43). I cannot begin to imagine the places my CPRs will go and the mountains they will move as the future is totally open for them.

Making an impact at an international school requires a good “equity frame” and a commitment to this vision. To become an equity warrior, I needed to “understand self, school community and the intersection in-between” (Rigby & Tredway, 2015, p. 331). The ECU EdD program is only the beginning of my journey, yet it has given me a foundation of knowledge into equity issues that I had not considered before. The program also has helped me to start absorbing more self-knowledge and how I can embolden equity in schools. I am still on the journey to becoming a stronger equity warrior, but as Dr. Seuss (1990) said: “*You* have brains in your head. . . . *You* can steer yourself any direction *you* choose” (p. 3). Tredway established that, “I think from this and many other email and FB [Facebook] posts and writings this semester, you are moving into a space to be that kind of guy...Committing yourself to using technology to actually create and support more democratic schooling is no small thing. We can find deep meaning in the simple and powerful like Dr. Seuss” (email correspondence, December 20, 2016). I wanted to be that guy of guy that Seuss and Tredway referred to and the direction I chose was one based on equity for my students, my school, and my community.

My leadership skills developed as I became a better teacher by building trusting relationships with students and colleagues and learning to listen to others attentively. Covey (2017) said: “Trust is the glue of life. It’s the most essential ingredient in effective communication. It’s the foundational principle that holds all relationships” (Covey, 2017, p. 213). McFarland said of relationships: “Having the ability to cultivate relationships with

stakeholders is the most important way a leader can develop and sustain forward movement in an organization” (assignment feedback, September 23, 2018). Relationship building, particularly in terms of my leadership development, was one of my primary goals for the three PAR cycles. Leadership capacity does not flourish where there is no co-planning, collaborative projects, community building projects, and working with student leaders (Lambert, Zimmerman, & Gardner, 2016). As I worked with CPRs and started to build a more democratic environment, my ECU mentor Tredway affirmed, “I know you are doing the terrific work of supporting students to be thinkers and actors in their own education” (personal email, February 14, 2017).

Developing listening skills to hear students and creating an environment where they experienced their voices as being heard and acknowledged are two focal areas for this PAR project. When viewing Flipgrid responses from my CPRs, Militello was impressed at how “thoughtful responses were” (email correspondence, September 21, 2016). The transformation students made over three cycles of PAR helped them become more considerate and develop stronger relationships. Creating daily opening circles has been one of the most useful things I have done in my entire teaching career. Every student talked during these times, and the process has helped them to develop stronger leadership skills; they now lead the opening question. Through my modeling of good opening circles, they matured to asking relevant questions that related to building trust and relationships with each other. My ECU Internship instructor, Dr. Edward McFarland said:

We all learn by doing but we learn more by reflecting on what we have done. You have been intentional about the process of building relationships—demonstrating for students, engaging in self-reflection and then asking the students to do the same. This is why the opening circles is working so well. (assignment feedback, September 23, 2018).

My leadership journey has also shifted me from being a traditional teacher to more of a non-traditional teacher and one who believes in Constructionist theory. It was important that my

CPRs have voice and choice in my classroom. This approach often created a bit of a mess as I never knew what direction the class would take once our class started. However, in response to my own written graduate assignments, McFarland commented:

Your understanding of the active learning required to truly engage students is on target. Learning can be, and usually is, messy... Students need time to process what they are thinking. In the active classroom, less time and focus are allocated to the traditional teacher presentation as the provider of all information. There is a greater emphasis and time spent on having students develop, read, solve, create, analyze, and summarize—and most of that happening with the teacher as facilitator...The skills 21st century employers are seeking are skills like creative problem solving, strategic thinking, collaborative leadership, and communication skills. (assignment feedback, September 19, 2017)

As the PAR project progressed, my students were actively engaged, and they started to co-construct their own journeys. I believe that sharing the responsibility with students for their own learning is important and enables them to learn and to lead. Lambert et al. (2016) wrote, “Reciprocity means we share mutual responsibility for one another’s learning, as well as the learning of the community” (p. 15). They further said: “Capacity building enables a group of people to engage in and solve their own problems—rather than wait to be rescued” (Lambert et al., 2016, p. 21). As the CPRs started to engage in designing their own syllabus and solving their own problems, I saw such capacity building as they matured into learners and leaders.

Perhaps one of the biggest gains in my own leadership journey has been to become a better listener. I became not only a better listener for my students but also with my colleagues. The attention I now pay to listening is helping me to become a better leader in several ways. First, it allows me to not only hear but to understand better the needs of those with whom I work and to implement solutions to their needs in the school. Second, it gives everyone a voice, and if they know that I am open to listening to them, they approach me (and problems) differently. Third, when I do talk, people consider it is more relevant than in the past. McFarland suggested

that this could be one of the most important things I learned during the ECU program. In feedback to another written assignment, he said:

So many people sit quietly, just biding time, so they can speak. Looking into someone's eyes and hearing fully what they have to say is the most powerful form of leadership and relationship building. It says, "I care about you and I honor the perspective you bring." "I can put my voice aside (for now) so that I can clearly hear yours and process what you have to say." (assignment feedback, October 4, 2018)

Another gain I have made in leadership is that I have learned that I need to model best practices. I now begin every class I with an opening circle; doing so seems to have improved relationships in my classroom. When I started this school year interacting with new teachers, we began meetings with circle time. When I conducted the first PD Day for this year, we also opened with a circle. As teachers have seen this practice with students, they have started to ask questions on how to use circles, and some have begun to use circles as well. In fact, the elementary school principal told me about solving a classroom issue with a circle. Again, when responding to my graduate work McFarland stated:

Leadership positions and named titles are granted, but how you act is what earns you the respect. Most outstanding leaders know that if they want to gain buy-in and reach performance gains with their team(s), they must model the behavior they would like to see in others. Those exceptional leaders have to be clear about their personal "why." How you behave clarifies what you value. You clearly have your own voice, and you clearly give voice to others and what is important to them by how you listen and by how you respond. Great leaders stand up for their beliefs but sometimes are not sure what their beliefs may be and how to give life to those beliefs through their actions. You seem to know your beliefs and how to model them for others. (assignment feedback, October 4, 2018)

The entire Elementary School now uses circle time as part of their advisory activities. Such activities were non-existent at the TCIS in previous years. Modeling, not force, seems to have enabled teachers and administrators to welcome such circles. When teachers see the benefit of activities, they are encouraged to adopt them in their own work.

Being in the ECU Ed.D. program helped me to see things in a different way and to try things that I had not used previously in the classroom. Learning Socratic Seminar techniques from Tredway, learning about ThinkTrix thinking skills from Lyman, and learning design thinking from Militello have all been valuable for teaching; I also have incorporated them into my leadership role at the TCIS. In addition to group circles, I am trying to share gracious spaces with them. These innovations are not new for many of Tredway and Militello's students, but they are new for me and my TCIS colleagues. Now, I am extremely comfortable not only being a part of such activities but in leading other teachers to practice them. In Chapter 7, I discussed how transfer was occurring at the TCIS. This transfer happened because I was open to learning about new innovations and then passing that knowledge to others, which has led to massive improvements to my teaching and leadership skills. As teachers started to adopt elements I learned from the ECU EdD program, Tredway stated that I have shown myself "to be a strong teacher and a good citizen at the school" (memo, February 14, 2018). For me, being a good citizen is not just being a good teacher but also helping others grow as educators, and continuously placing equity at the forefront of activity. But, more important, I have seen the systems in place at the TCIS start to change for the better and disenfranchised voices are now being heard more than previously.

Part of the ECU doctoral work was to create a journey line and history of one's leadership. But, until this program started, a journey line was a foreign concept for me. My belief in what a leader should be has changed dramatically. Based on the program, my department meetings are now run differently, my professional development program for teachers is based on the models that Militello and Tredway modeled for us, and my thoughts about what a leader is and what makes a good leader have changed. Part of this is the magic of the ECU program, but

part is the people I have met who have encouraged me to open up my ideas and beliefs and seek a new understanding of what a leader is and what comprises a good leader in a school setting. The end result is a self-aware being rather than self-centered one. I have found that being a leader, at least a good leader, is much harder and much more involved than I expected. Thus, the self-centered Michael Purser who undertook this program merely to get a better school job has matured to be a much more selfless and self-aware individual who encourages the leadership skills in students and colleagues. It is not easy work. It is not self-centered work. It is hard work that involves deep dialogue, acute listening skills, and an expansive vision. As Tredway commented on one of the CPRs Flipgrid videos that “gives access to equitable conversation” (email correspondence, September 22, 2017). In the end, one the Parent Association representatives summed up my experience beautifully: “Mr. Michael” she said, “we know you will not always give us what we want. But you are . . . one that actually listens to us and cares about our children” (memo, October 12, 2018). As it turns out, listening is such an easy task but something that so few administrators are willing to do with love and compassion. Leaders must project love for the art of teaching, for the students they work with, for the school, and for themselves. As Dr. Seuss (1990) said in *The Lorax*: “Unless someone like you cares a whole awful lot, nothing is going to get better. It’s not” (Dr. Seuss, 1990, p. 64). During my ECU leadership journey, Tredway stated: “I am particularly charmed (I guess that is the word -- maybe touched) as a teacher deep in my core, the ways you are transferring what you are doing to your work in classrooms and noticing what the equity issues are there” (email correspondence, October 15, 2016). To do any less, to care any less, to inspire any less would have been a total waste of my leadership journey. Next, I discuss my original research question and how they guided my PAR project.

PAR Research Questions, Redux

My overarching research question for this PAR project asked how middle school literature teachers of ELL students can foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century learners. This question guided my approach to the entire project. Four sub-questions considered relationship building among ELL students, academic interactions and dialogical strategies, building deeper understanding of literature, and self-awareness for the researchers in terms of transformed teaching. Here, I address each of these sub-questions and finish with the overarching question.

Democratic classroom practices foster relationships with ELL students in a variety of ways. When this PAR project began, the Thai and Taiwanese students tended not to talk with each other and there were tones of disrespect at times in the classroom, which was a distinct cultural problem. The language-based problems included that the Thai students spoke Thai and the Taiwanese students spoke Chinese, which meant that their only common language was English. Yet, they initially were reluctant to speak English in the classroom, and when they did speak, their responses were brief, perfunctory, and lacking depth of detail and—apparently—self-confidence. Over the course of three PAR cycles, relationships were able to flourish because students were given voice and choice throughout the project, enabling them to use English to achieve common goals. Additionally, they were given individual choices in projects, books, and where to sit. The democratic practices of using their individual voices and making choices individually and in groups also gave students the ability to guide their own learning. They became active participants and problem solvers in the classroom who were guided by a facilitator as opposed to directed by a teacher, which not incidentally both enabled them to use English more often but also required that they do so. Decision making was shared between facilitator and

students, and frequent oral conversations became the cornerstone of the classroom. With these practices, students' relationships grew and started to flourish, not just with their teacher but with fellow students both Thai and Taiwanese. The initial distance between the different cultures started to disappear and students started to treat each other as equal participants using English as their common language.

Academic interaction, specifically ThinkTrix and Socratic Seminar, improve ELL student dialogue when discussing literature. It was important to start students where they could best be prepared to have dialogue about text. Students were not ready for ThinkTrix or Socratic Seminars until they had a better understanding of the literature they were reading. Thus, initially, students spent time annotating text to understand the readings better. As they began to understand the literature better, ThinkTrix was incorporated into the classroom, and students not only worked online with my ThinkTrix Template but also had small group discussions. They continued these discussions in an online platform, Flipgrid, which helped them to become more comfortable and gain confidence talking. The addition of daily opening circles greatly enhanced their comfort level regarding dialogue, creating a safe haven for speaking in English. Finally, Socratic Seminars with the entire class enhanced their dialogue abilities because they had the background knowledge of understanding literature and the oral skills developed through ThinkTrix. While these strategies certainly would have value to any middle school students, they were especially valuable with these ELL students because they needed such scaffolded activities both to comprehend their reading and to learn to talk confidently about their reading.

Dialogical strategies lead to deeper understandings of literature for ELL students, giving them tools to access the text, process the text, and assess the text on multiple levels. ELL students who are reading texts in English have a difficult time with comprehension and making

meaning of the texts. This is a challenging task for any ELL student. However, when ELL students talk about texts, they begin to understand better. When these conversations move beyond simple recall questions and answers, their metacognitive skills with textual analysis begin. With increased dialogue, specifically geared toward questions that get at the deeper meaning in texts, students' understanding of text improves and they start to relate texts and conversations to other texts, themselves, and the world around them. Thus, they take what was a literary text and bring meaning to it based on their enhanced understanding on multiple levels. The ELL students at the TCIC thus matured as readers of text through strategically selected dialogical strategies.

I transformed my own practices and became a leader that helps others engage students with dialogical strategies through modeling best practices and facilitating conversations to change the way teachers at the TCIS teach literature. ECU reimaged what an Ed.D. looked like and reclaimed it for active practitioners in the first East Asian Cohort in 2016. One critical component for me was that a facilitator visited my school in Thailand each year to advise, assist, and strategize. As a PAR project is recursively reflective where planning, acting, observing, and repeating the process is critical, the ECU facilitative model was instrumental in changing my own teaching into learning facilitation. One requirement of the Ed.D. was the FoP aim to improve the educational situation at the TCIS. The co-generation of knowledge with students and the move to be a facilitator as opposed to a traditional teacher as well as the desire to help my CPRs and school community to become stronger were part of the ECU doctoral tenets and also part of my PAR project. Three years into the ECU Ed.D. program, I have matured into an improved teacher and leader, and I am moving into full-time administration, which will enable me to make a more significant difference in my school and community. In the next section I

review how the ECU framework, the TCIS context, and the limitations of the study had on this PAR project.

ECU Framework, TCIS Context, and Limitations

The goals of action research are to generate new knowledge, achieve action orientated results, educate both the researcher and the participants, maintain relevancy in the local setting, and use a sound research methodology (Herr & Anderson, 2015, p. 67). This PAR project met the defined goals. Perhaps most significant is that both the researcher and the participants were educated. I grew as a facilitator and leader while the CPRs grew as students and started to develop leadership skills inside the classroom. It is important to note that the TCIS administration believed this study to be very relevant to the school at the beginning of the project and were consistently supportive of implementing policies based on the PAR findings.

In the first sub-section, I examine the important role the ECU Ed.D. framework played in the PAR project. In the second sub-section, I discuss the role that context played in the PAR project. Finally, in sub-section three, I consider the limitations of the study.

ECU EdD Framework

When I started the ECU program, I knew this was not a typical Ed.D. program. I knew this program was different based in the ECU Framework put in place and the attention to Community Learning Exchange Axioms and Improvement Science. There were two especially significant Axioms that developed though the PAR project: (1) learning and leadership as dynamic social processes and (2) conversations as critical and central pedagogical processes. Learning and leadership were dynamic as the PAR project required consistent change and modification based on cycles of reflection and on frequent conversations with CPRs, ECU mentors, and the TCIS leadership team. Also, conversations were critical in the PAR project on

two levels. First, my ECU mentors were consistently available for advice and dialogue. Additionally, conversations with Lyman via email were crucial for the success of the project as he also was always there for encouragement, advice, help, and suggestions. Second, conversations were critical to my project because the project was deeply based in the potential that active conversations and dialogue had for the ELL students and our classroom work.

There were four major areas where the ECU Framework showed up most in this PAR project. First, this PAR project had my full interest and passion from the very beginning. I had a deep desire to find a way to improve my students' reading comprehension skills, but I was not sure how I was going to accomplish this goal. Initially, I thought I would use more technology than I did, and while I did use a number of technological software and strategies, I found myself focusing less on it and more on the basic communication needs of speaking and listening. In essence, the more I engaged each research cycle, the more I realized that technology was important but secondary to relationships and discussions. Second, the design of the PAR project was something that was doable and feasible to take through three research stages. As each cycle progressed, I found myself altering and adjusting the process based on the previous cycles of PAR, reflection of results, and dialogue with my ECU professors and my TCIS support system. Third, this PAR project honored the place and wisdom of people at the TCIS. Conversations with the administrative team, especially McGrath, were critical as this group was best positioned to address local issues that developed. Fourth, learning and leadership are dynamic and social processes, and these qualities were evident as both the CPRs and I learned and grew as leaders through each cycle. The conversations with the CPRs were critical not just to building relationships but to making pedagogical changes in the classroom. Community Learning Exchange Axioms were new to my CPRs and how they were incorporated into my PAR project

(e.g., journey lines, opening circles, gracious space, and learning walks) helped me to mature as a teacher, and they also helped the CPRs to develop new learning skills. In the next sub-section, I gauge the role that context had on my PAR project.

TCIS Context

This PAR project took place at the TCIS on the outskirts of Bangkok, Thailand. The student population is two thirds Thai nationals and one third Taiwanese. Nearly 100% of students attend college after graduation. Students at the TCIS are hard workers and appear to have a desire to learn. Possibility because of the Asian cultural preference for learning achievement, parents often pressure their children to make good grades and to be at the top of their class. However, at the TCIS, teachers often come to the school from abroad without specific knowledge of how to teach ELL students. Nearly all students at the TCIS are ELL students and teachers need to have strategies to teach these students effectively. Also, many teachers do not have the educational toolkit to differentiate their instructional strategies for either low achieving or higher achieving students, which places them at a disadvantage. This project was made possible because I had a strong support system in place with the Head of School, Dr. John McGrath, who not only supported the research but was willing to meet with me multiple times for advice and suggestions. Also, my two divisional leaders, Mr. Thomas English and Dr. Betsy Fitch, offered advice and support along the way. In essence, these three were my critical friends who were my sounding board for each cycle. In the last sub-section, I examine the limitations of this PAR project.

Limitations

This study is limited by location, grade level, and student CPRs. Because I worked at the TCIS in Thailand, the student population was limited to mostly Thai and Chinese nationals. They

had the unique challenges of learning English as a third rather than a first or second language. Therefore, results may not be directly applicable to students in another country, even another Asian country, or with students who speak English as a first or second language. Additionally, at the time of the study, I taught Grade 7 students and was allowed to continue with these same students into the next school year. Not only do middle school students have different social and learning needs than elementary or high school students but the responses of these particular students cannot be fully generalized to a broader population without additional study. Case studies such as a PAR project always carry with them limitations of population. Further, it is unusual for teachers to have the opportunity to work with the same students for two academic years in a row. That alone could have created a research bias in students who had come to know me and wanted me to succeed, thereby offering me and this project a powerful advantage.

Summary

The goal of education should be intellectual and social growth (Dewey, 1916). For this PAR project, such growth was attained by the researcher and the CPR students. The level of growth I witnessed in the CPRs often caused me to ponder why ThinkTrix and Socratic Seminars are not used more widely. Having seen the power of conversations when students feel safe and respected and have strategies to understand literature on a more advanced level, I know that my future students—and the teachers who work with me—will benefit based on this PAR project. In this sub-section, I shared the power of the ECU EdD Framework, importance of context, and the limitations of this study.

Conclusion

The epigraph from Helen Keller at the beginning of this chapter resonated with me because, for so much of this study, I felt like I was walking in the dark. But I knew I had a

support group that was walking with me for the entire journey. My ECU professors, especially Militello and Tredway, became my mentors and advisors, and they spent massive amounts of time coaching and encouraging me. My ECU cohort members became friends to bounce ideas off, and our conversations often continued for hours during a normal week. My TCIS colleagues, especially the Head of School, constantly encouraged me and supported me in this project. And, most important, I believe that my CPRs, a group of Grade 7 and Grade 8 students were on this journey with me. There were times when I tried something new and it failed, and they would encourage me to try again the next day. These CPRs anchored me, inspired me, and motivated me daily. My life has been forever changed because of all the people who walked in the dark with me on this learning journey.

This PAR project demonstrates that middle school literature teachers of ELL students can foster relationships, improve academic interaction, and support deep understanding of literary content for 21st-century learners. These goals can be accomplished by devoting time to building bonds with the ELL students and encouraging them to build bonds with each other. Perhaps opening circles are the most dynamic way I found to build those relationships. Academic interaction around literature can also be improved through the use of dialogue in both small and large group settings. Specifically, talk that uses ThinkTrix questions in small groups and Socratic Seminars in large groups improve dialogue and academic interaction. Finally, using technology like my ThinkTrix Template, Flipgrid, and Google Docs, to name a few, helps students to read literature deeply and critically and to develop empower their own higher-level critical thinking and evaluation skills.

In sum, when this PAR project started, I knew my CPRs had a problem with reading comprehension and that the majority of them were reading below grade level. I did not know

how to solve this problem. I started Cycle One with little understanding of the importance dialogue plays in reading comprehension, but I knew I needed to take risks and make changes as an educator to help these students. As each cycle progressed, I learned more, I grew more, and I developed a greater understanding of the importance of relationships, dialogue, and metacognition in the context of educational development. In the end, the constant planning, implementing, and reflecting helped me to not only help these students surpass their deficits in reading comprehension, but these actions helped them to build better relationships with one another. And, most significantly, such supportive actions encouraged them to talk, engage, and think more powerfully. During three cycles of PAR research, relationships flourished, student dialogue exceeded expectations, student understanding of literature was augmented, and I matured as a teacher and leader who models, coaches, and teaches these new skills to colleagues. In the end, these middle school students pumped up the volume in dialogue, grew into more successful and creative 21st-century learners, and created a more equitable environment. As a result of this increase in volume, I have amplified and pumped up my own skills as a teacher and leader. As a result, I have become an agent of change.

REFERENCES

- Aardema, V. (1975). *Why mosquitoes buzz in people's ears: A West African tale*. New York, NY: Dial Press.
- Adger, C. T. (1995). *Engaging students: Thinking, talking, cooperating*. Thousand Oaks, CA: Corwin Press.
- Adler, M. J. (1956). *A guide for leaders of great books discussion groups*. Chicago, IL: Great Books Foundation.
- Adler, M. J. (1941, July 6). How to mark a book. *The Saturday Review of Literature*.
- Adler, M. J. (1997). *How to speak how to listen*. New York, NY: Touchstone.
- Adler, M. J. (1984). *The Paideia program: An educational syllabus: Essays*. New York, NY: MacMillan.
- Adler, M. J., & Lincoln, V. D. (2014). *How to read a book: The classic guide to intelligent reading*. New York, NY: Touchstone.
- Agar, M. H. (1980). *The professional stranger: An informal introduction to ethnography*. New York, NY: Academic Press.
- Anderson, R. C. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Pittsburgh, PA: National Academy of Education.
- Arnold, G. H., Hart, A., & Campbell, K. (1988). Introducing the Wednesday Revolution. *Educational Leadership*, 45(7), 48.
- Barron, B. (2006). Interest and self-sustained learning as catalysts of development: A learning ecology perspective. *Human Development*, 49(4), 193-224. doi:10.1159/000094368

- Beck, I. L. (1997). *Questioning the author: An approach for enhancing student engagement with text*. Order Department, International Reading Association, 800 Barksdale Road, PO Box 8139, Newark, DE 19714-8139.
- Bernstein, R. J. (1983). *Beyond objectivism and relativism: Science, hermeneutics, and praxis*. Philadelphia, PA: University of Pennsylvania Press.
- Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals*. New York, NY: Longmans, Green.
- Bolkan, J. V. (2014). 13 Resources to help you teach digital citizenship. *T/H/E/ Journal*, 21-23.
- Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: Artistry, choice, and leadership*. San Francisco, CA: Jossey-Bass.
- Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.
- Bransford, J. D., & National Research Council. (2004). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Acad. Press.
- Brennan, K., & Resnick, M. (2012). *Using artifact-based interviews to study the development of computational thinking in interactive media design*. Paper presented at annual American Educational Research Association, Vancouver, Canada.
- Brodahl, C., Hadjerrouit, S., & Hansen, N. K. (2011). Collaborative writing with web 2.0 technologies: Education students' perceptions. *Journal of Information Technology Education*, 3(10), 73-103.
- Brody, C. M., Cohen, E. G., & Sapon-Shevin, M. (2004). *Teaching cooperative learning: The challenge for teacher education*. Albany, NY: State University of New York Press.

- Brookfield, S. D., & Preskill, S. (2012). *Discussion as a way of teaching tools and techniques for democratic classrooms*. Hoboken, NJ: John Wiley & Sons, Inc.
- Brooks, M. G., & Brooks, J. G. (1999). The courage to be constructivist. *Educational Leadership*, 57(3), 18-24. Retrieved from <http://www.ascd.org/publications/educational-leadership/nov99/vol57/num03/The-Courage-to-Be-Constructivist.aspx>
- Bruner, J. (1960, 1977). *The process of education: A landmark in educational theory*. Cambridge, MA: Harvard University Press.
- Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Callison, D., & Preddie, L. (2006). *The blue book on information age inquiry, instruction, and literacy*. Westport, CT: Libraries Unlimited.
- Cambourne, B. (1995). Toward an educationally relevant theory of literacy learning: Twenty years of inquiry. *The Reading Teacher*, 49(3), 182–190.
- Childress, V. W. (2016). Twenty-first century skills: Student learning outcomes, beyond the traditional, need to be crafted for the 21st-century learner. *Technology and Engineering Teacher*, 76(4), 25-32.
- Cipielewski, J., & Stanovich, K. E. (1992). Predicting growth in reading ability from children's exposure to print. *Journal of Experimental Child Psychology*, 54, 74–89.
- COE, ECU. (2018). International educational doctorate promotion video. *YouTube*, YouTube, 13 July 2018, www.youtube.com/watch?v=-5F5a4unx18

- Cline, J. C. (1995). A correlation between what teachers know about adolescent characteristics and needs and how teachers behave as perceived by their students. *Dissertation Abstracts International*, 56(07).
- Coghlan, D., & Brannick, T. (2005). *Doing action research in your own organization* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Coles, R. (1990). *The call of stories: Teaching and the moral imagination*. Boston, MA: Houghton Mifflin.
- Conole, G. (2008). Listening to the learner voice: The ever-changing landscape of technology use for language students. *ReCALL*, 20(2), 124-140. Retrieved from <https://doi.org/10.1017/S0958344008000220>
- Copeland, M. (2005). *Socratic circles: Fostering critical and creative thinking in middle and high school*. Portsmouth, NH: Stenhouse Publishers.
- Cousins, N. (1979). *Anatomy of an illness as perceived by the patient: Reflections on healing and regeneration*. New York, NY: Norton.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Csikszentmihalyi, M. (2009). *Creativity: Flow and the psychology of discovery and invention*. Nashville, TN: Harper Collins.
- Cuban, L. (2001). *Oversold and underused: Computers in the classroom*. Cambridge, MA: Harvard University Press.
- Cuban, L. (2016.). The AltSchool: Progressivism redux (part 2). Retrieved from <https://larrycuban.wordpress.com/2016/11/27/the-altschool-progressivism-redux-part-2/>

- Daniels, D. H., & Perry, K. E. (2003). "Learner-centered" according to children. *Theory into Practice*, 42(2), 102-108.
- Darling-Hammond, L., Barron, B., Pearson, P. D., Schoenfeld, A. H., Stage, E. K., Zimmerman, T. D., & Tilson, J. L. (2008). *Powerful learning: What we know about teaching for understanding*. San Francisco, CA: John Wiley & Sons, Inc.
- Deci, E. (1995). *Why we do what we do: Understanding self-motivation*. New York, NY: Penguin Books.
- del Campo, J. M., Negro, V., & Núñez, M. (2012). The history of technology in education. A comparative study and forecast. *Procedia—Social and Behavioral Sciences*, 69, 1086-1092. Retrieved from <https://doi.org/10.1016/j.sbspro.2012.12.036>
- DeVoss, D. N., Eidman-Aadahl, E., & Hicks, T. (2010). *Because digital writing matters: Improving student writing in online and multimedia environments* (Kindle ed.). San Francisco, CA: Jossey-Bass.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York, NY: The Free Press; a division of Macmillan.
- Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.
- Dewey, J. (2013). *The school and society and the child and the curriculum*. Chicago, IL: University of Chicago Press.
- Equity and Excellence Commission. (2013). For each and every child: A strategy for education equity and excellence. *U. S. Department of Education*. Retrieved from <https://www2.ed.gov/about/bdscomm/list/eec/equity-excellence-commission-report.pdf>
- Elder L., & Paul, R. (1998). The role of Socratic questioning in thinking, teaching and learning. *Clearing House*, 71(5), 297-302.

- Ferlazzo, L. (2018, October 9). Response: “Building relationships with students is the most important thing a teacher can do.” *Education Week Teacher*. Retrieved from http://blogs.edweek.org/teachers/classroom_qa_with_larry_ferlazzo/2018/10/response_building_relationships_with_students_is_the_most_important_thing_a_teacher_can_do.html
- Fielding, L. G., & Pearson, P. D. (1994). Synthesis of research reading comprehension: What works. *Educational Leadership, 51*, 62-62.
- Fisher, D., & Frey, N. (2014). Speaking volumes. *Educational Leadership, 72*(3), 18-23.
- Fouts, J. T. (2000). Research on computers and education: Past, present and future. *Bill and Melinda Gates Foundation*. Retrieved from <https://pdfs.semanticscholar.org/0325/6f8005d915b304c7d8955c79c8abebbd8dbb.pdf>
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Herder and Herder.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books Inc.
- Gardner, H. (1991). *The unschooled mind: How children think and how schools should teach*. New York, NY: Basic Books Inc.
- Gates, V. (2017, September 14). My personalized learning approach isn’t about tech. It’s about dignity. EdSurge. Retrieved from www.edsurge.com/news/2017-09-14-my-personalized-learning-approach-isn-t-about-tech-it-s-about-dignity
- Gawande, A. (2017, January 23). The heroism of incremental care. *The New Yorker*. Retrieved from <http://www.newyorker.com/magazine/2017/01/23/the-heroism-of-incremental-care>
- Giroux, H. A. (1978). Developing educational programs: Overcoming the hidden curriculum. *The Clearing House, 52*(4), 148-151.

- Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning*. Westport, CT: Bergin and Garvey Pub., Inc.
- Goldstein, D. (2014). *The teacher wars: A history of America's most embattled profession*. New York, NY: Doubleday.
- Graham, S., & Harris, K. R. (2016). A path to better writing. *The Reading Teacher*, 69(4), 359-365.
- Gregory, A., & Ripski, M. B. (2008). Adolescent trust in teachers: Implications for behaviour in the high school classroom. *School Psychology Review*, 37(3), 337.
- Greenwood, D. J., & Levin, M. (2013). *Introduction to action research: Social research for social change* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Guajardo, M. A., Guajardo, F., Janson, C., & Militello, M. (2016). *Reframing community partnerships in education: Uniting the power of place and wisdom of people*. New York, NY: Routledge.
- Gutmann, A. (1987). *Democratic education*. Princeton, NJ: Princeton University Press.
- Gutmann, A. (2008). Great expectations for higher education in the 21st century. *Pullias Lecture, University of Southern California*. Retrieved from <https://president.upenn.edu/meet-president/pullias-lecture-2008>
- Hamilton, B. (2007). *It's elementary! Integrating technology in the primary grades*. Washington, DC: International Society for Technology in Education.
- Hancock, H., & Dickey, L. (2015). *Herbie Hancock: Possibilities*. New York, NY: Penguin Books.

- Hardison, J. (2012). *The sidekick and the superhero: Using Google Drive for peer- assessment*. Paper presented at the IEEE 12th International Conference on Advanced Learning Technologies, Athens, Greece.
- Harris, C. J. (2016). The effective integration of technology into schools' curriculum. *Distance Learning, 13*(2), 27-37.
- Harvey, S., & Goudvis, A. (2007). *Strategies that work: Teaching comprehension for understanding and engagement*. Portsmouth, NH: Stenhouse Publishers.
- Haste, H. (2009). What is “competence” and how should education incorporate new technology’s tools to generate “competent civic agents.” *The Curriculum Journal, 20*(3), 207-223. Retrieved from <http://dx.doi.org/10.1080/09585170903195845>
- Herr, K. G., & Anderson, G. L. (2005). *The action research dissertation: A guide for students and faculty*. Thousand Oaks, CA: SAGE Publications, Inc.
- Hewett, B. L. (2014). Fully online and hybrid writing instruction. In H. Brooke Hessler, Amy Rupiper Taggart, and Kurt Schick (Eds.) *A Guide to Composition Pedagogies* (2nd ed.), pp. 194-211. Oxford, England: Oxford University Press.
- Hewett, B. L. (2015). *Reading to learn and writing to teach: Literacy strategies for online writing instruction*. Boston, MA: Bedford/MacMillan.
- Highfill, L. (2014). “HyperDocs: Changing digital pedagogy, 2014 Mountain View, GTA MTV.” *Google Sites*, Available from sites.google.com/a/googleteacheracademy.com/2014-07-30/agenda/room3.
- Hinton, S. E. (1967). *The outsiders*. New York, NY: Viking Press.
- Hopkins, G. (2007). “Sustained silent reading” helps develop independent readers (and writers). *Education World*. Retrieved from https://www.educationworld.com/a_curr/curr038.shtml

- Hunter, L., Emerald, E., & Martin, G. (2013). *Participatory activist research in the globalized world: Social change through the cultural professions (Explorations of educational purpose)*. New York, NY: Springer.
- International Society for Technology in Education. (n.d.). ISTE standards. *ISTE*. Retrieved from <http://www.iste.org/standards/standards>
- Irving, W. (1822). *The sketch book of Geoffrey Crayon, gent: No. 2*. New York, NY: Printed by C.S. Van Winkle.
- Israel, E. (2002). Examining multiple perspectives in literature In J. Holden, J., & Schmit, J. S. *Inquiry and the literary text: Constructing discussions in the English classroom*. Urbana, IL: National Council of Teachers of English.
- Jago, C. (2004). *Classics in the classroom: Designing accessible literature lessons*. Portsmouth, NH: Heinemann.
- Kellems, R. O., Grigal, M., Unger, D. D., Simmons, T. J., Bauder, D., & Williams, C. (2015). Technology and transition in the 21st century. *TEACHING Exceptional Children*, 47(6), 336-343.
- Kemmis, S., & McTaggart, R. (1982). *The action research planner: Action research in curriculum*. Waurin Ponds, AU: Deakin University Press.
- Kerman, S., Kimball, T., & Martin, M. (1980). *Teacher expectations and student achievement*. Bloomington, IN: Phi Delta Kappa.
- Kohn, A. (1996). *Beyond discipline: From compliance to community*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kohn, A. (2017). Progressive education: Why it's hard to beat, but also hard to find. *AlfieKohn.org*. Available from www.alfiekohn.org/article/progressive-education/.

- Knight, J. (2016). *Better conversations: Coaching ourselves and each other to be more credible, caring, and connected*. Thousand Oaks, CA: Corwin, A Sage Company.
- Kozma, R. B. (1994). The influence of media on learning: The debate continues. *SLMQ*, 22(4), 1–13.
- Kuhlthau, C. C., Maniotes, L. K., & Caspari, A. K. (2015). *Guided inquiry: Learning in the 21st century* (2nd ed.). Santa Barbara, CA: ABC-CLIO, LLC.
- Labaree, D. F. (2008). The winning ways of a losing strategy: Educationalizing social problems in the United States. *Educational Theory*, 58(4), 447-460. doi:10.1111/j.1741-5446.2008.00299.x
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teaching for African-American students*. San Francisco, CA: Jossey-Bass
- Lambert, L., Zimmerman, D. P., & Gardner, M. E. (2016). *Liberating leadership capacity: Pathways to educational wisdom*. New York, NY: Teachers College Press.
- Lambright, L. L. (1995). Creating a dialogue: Socratic seminars and educational reform. *Community College Journal*, 65(4), 30-34.
- Lee, W. (2006). *The relationship between teachers' beliefs and perceptions about student use of computers and how they integrate technology into curricular instruction* (Doctoral dissertation, University of California at Los Angeles).
- Lipman, M. S. (1991). *Thinking in education*. Cambridge, England: Cambridge University Press.
- Lowry, L. (1993). *The giver*. Boston, MA: Houghton Mifflin.
- Lyman, F. T. (1987). The ThinkTrix: A classroom tool for thinking in response to reading. *Reading: Issues and Practices, Yearbook of the State of Maryland International Reading Association Council*, 4, 15-18.

- Lyman, F. (2015) *Thinktrix: Tools to teach 7 essential thinking skills*. San Clemente, CA: Kagan Cooperative Learning.
- Lyman, F. T., Lopez, C., & Mindus, A. (2017). *The shaping of thought: A teachers guide to metacognitive mapping and critical thinking in response to literature*. Lanham, MD: Rowman & Littlefield.
- Markham, T. (2013, May 20). Inquiry learning vs. standardized content: Can they coexist? *Mind Shift*. Retrieved from <http://blogs.kqed.org/mindshift/2013/05/inquiry-learning-vs-standardized-content-can-they-coexist/>
- McClenaghan, B. A., & Ward, D. S. (1987). Health and physical education. In C. A. Maher & S. G. Forman (Eds), *A behavioral approach to education of children and youth* (pp. 131-151). New York, NY: Routledge.
- McCormick, M. P., & O'Connor, E. E. (2015). Teacher-child relationship quality and academic achievement in elementary school: Does gender matter? *Journal of Educational Psychology, 107*(2), 502.
- McTighe, J., & Lyman, F. T., Jr. (1988). Cueing thinking in the classroom: The promise of theory-embedded tools. *Educational Leadership, 45*(7), 18-24. Retrieved from http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_198804_mctighe.pdf
- McTighe, J., & O'Connor, K. (2005). Seven practices for effective learning. *Educational Leadership, 63*(3), 10-17. Retrieved from http://edu583resources.wikispaces.com/file/view/seven_practices.pdf/45792285/seven_practices.pdf

- McTighe, J. (2015, December 12). Check out Dr. Frank Lyman's ThinkTrix, an elegant cognitive tool for developing students' thinking skills. <https://t.co/1W0D6TzWex>. Retrieved from <https://twitter.com/jaymctighe/status/675812357659041793>
- Merriam, S. B. (1988). *Qualitative research and case study applications in education*. San Francisco, CA: Josey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook*. Los Angeles, CA: SAGE.
- Militello, M., Rallis, S. F., & Goldring, E. B. (2009). *Leading with inquiry and action: How principals improve teaching and learning*. Thousand Oaks, CA: Corwin.
- Moeller, V. J., & Moeller, M., V. (1985). *Socratic seminars in middle school: Text and films that engage students in reflective thinking and close reading*. London, England: Routledge Publishers.
- Moore, D. C. (2013). Bringing the world to school: Integrating news and media literacy in elementary classrooms. *Journal of Media Literacy Education*, 5(1), 326-336.
- Moore, G. E. (1965). Cramming more components onto integrated circuits. *Electronics*, 38(8), 114-117.
- Morrison, K. A. (2008). Democratic classrooms: Incorporating student voice and choice in teacher education courses. *Educational Horizons*, 87(1), 50-60.
- Nachmanovitch, S. (1990). *Free play: Improvisation in life and art*. New York, NY: Tarcher/Putnam.
- National Education Association. (2015). Preparing 21st century students for a global society: An educator's guide to the "four Cs". *National Education Association*. Retrieved from <http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf>

- Nepo, K. (2017). The use of technology to improve education. *Child & Youth Care Forum*, 46(2), 207-221. doi:10.1007/s10566-016-9386-6
- Oakeshott, M. (1962). *Rationalism in politics*. London, England: Methuen.
- Overbaugh, R., & Lu, R. (2008). The impact of a NCLB-EETT funded professional development program on teacher self-efficacy and resultant implementation. *Journal of Research on Technology in Education*, 41(1), 43-61.
- Palestini, R. H. (2012). *Leadership with a conscience: Educational leadership as a moral science*. Lanham, MD: Rowman & Littlefield Publishing Group.
- Partnership for the 21st Century. (2016) *Framework for 21st century learning*. Retrieved from <http://www.p21.org/about-us/p21-framework>
- Patton, M. Q. (1989). *Qualitative evaluation methods*. Beverly Hills, CA: Sage Publications, Inc.
- Pellegrino, J., & Hilton, M. (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Washington, D.C. National Research Academy.
- Perkins, D. (1993). Teaching for understanding: To memorize and recite or to think and do. *American Educator* 17(3:8), 29–33.
- Perkins, D. N., (1995) *Smart schools: Better thinking and learning for every child*. Washington, DC: Free Press.
- Piaget, J. (1994). *The equilibration of cognitive structures: The central problem of intellectual development*. Chicago, IL: University of Chicago Press.
- Pink, S. (2001). *Doing visual ethnography*. Thousand Oaks, CA: Sage Publications, Inc.
- Pourrajab, M., & Ghani, M. F. (2014). The influence of location and gender on the level of Total Quality Management. *Global Journal of Human-Social Science*, 14(8), 18-24.

- Pranikoff, K., Cherry-Paul, S., & Johansen, D. (2017). *Teaching talk: A practical guide to fostering student thinking and conversation*. Portsmouth, NH: Heinemann.
- Quinn, J. (1994). Connecting education and practice in an instructional design graduate program. *Educational Technology Research & Development, 42*(3), 71–82.
- Raphael, T. E., Florio-Ruane, S., & George, M. (2001). Book club *plus*: A conceptual framework to organize literacy instruction. *Language Arts, 79*(2), 159-168.
- Ravitch, D. (1985). *The schools we deserve: Reflections on the educational crises of our times*. New York: Basic Books.
- Reis, H. T. (2014). Responsiveness: Affective interdependence in close relationships. In M. Mikulincer & P. R. Shaver (Eds.), *Nature and development of social connections: From brain to group* (pp. 255-271). Washington, DC: APA Press.
- Resnick, M. (2013a). Learn to code, code to learn. *EdSurge*. Retrieved from <https://www.edsurge.com/news/2013-05-08-learn-to-code-code-to-learn>
- Resnick, M. (2013b). Lifelong kindergarten. *Cultures of Creativity*. Retrieved from <http://web.media.mit.edu/~mres/papers/CulturesCreativityEssay.pdf>
- Resnick, M. (2014). Give P’s a chance: Projects, peers, passion, play. *Constructionism and Creativity conference*, Opening Keynote. Vienna.
- Resnick, L. B., Asterhan, C. S. C., & Clarke, S. N. (Eds.). (2015). *Socializing intelligence through academic talk and dialogue*. Washington, DC: American Educational Research Association.
- Rigby, J. G. & Tredway, L. (2015). Actions matter: How school leaders enact equity principles. In M. Khalifa, N. W. Arnold, A. Osanloo, & C. M. Grant, *Handbook on urban educational leadership* (pp. 329-346). New York: Rowman & Littlefield.

- Rimm-Kaufman, S., & Sandilos, L. (2011). Improving students' relationships with teachers to provide essential supports for learning. www.apa.org/education/k12/relationships.aspx#
- Robb, L. (2010). *Teaching reading in middle school* (2nd ed.). New York, NY: Scholastic.
- Robb, L. (2016). *Read, talk, write: 35 lessons that teach students to analyze fiction and nonfiction*. Thousand Oaks, CA: Corwin Literacy.
- Robb, L. (2017). Read, talk, write: Developing 21st-century skills. *Voices from the Middle*, 24(4), 19-23.
- Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale, IL: Southern Illinois University Press.
- Rothstein, D., & Santana, L. (2011). Teaching students to ask their own questions: One small change can yield big results. *Harvard Education Letter*, 27(5), 1–2. Retrieved from http://hepg.org/hel-home/issues/27_5/helarticle/teaching-students-to-ask-their-own-questions_507
- Rudestam, K. E., & Newton, R. R. (2001). *Surviving your dissertation: A comprehensive guide to content and process*. Thousand Oaks, CA: Sage Publications, Inc.
- Ruskin, J. (1903). *Sesame and lilies*. London: G. Allen.
- Saettler, P. (1968). *History of instructional technology*. New York, NY: McGraw-Hill Inc.
- Sacks, A. (2013). *Whole novels for the whole class: A student-centered approach*. San Francisco, CA: John Wiley & Sons.
- Sacks, A. (2018). "Why we might consider teaching less this year." *Education Week*. Available from blogs.edweek.org/teachers/whole_story/2018/08/why_we_might_consider_teaching.html.

- Schmoker, M. (1999). *Results: The key to continuous school improvement* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Scott, W. R., & Davis, G. F. (2017). *Organizations and organizing: Rational, natural and open systems perspectives*. New York, NY: Routledge.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.). New York, NY: Teachers College Press.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. London, England: Random House.
- Seuss, D. (1990). *Oh, the places you'll go!* New York, NY: Random House.
- Shor, I. (1996). *When students have power: Negotiating authority in a critical pedagogy*. Chicago, IL: The University of Chicago Press.
- Smith, T. M. (1997). *The condition of education 1997*. Washington, DC: U.S. Dept. of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- Solley, K. (2011). Accelerated Reader can be an effective tool to encourage and bolster student reading. *Knowledge Quest*, 39(4), 46.
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. New York, NY: Guilford.
- Stratham, D. S., & Torell, C. R. (1996). *Computers in the classroom: The impact of technology on student learning*. Boise, ID: Army Research Institute.
- Stringer, E. (2013). *Action research* (4th ed). Thousand Oaks, CA: Sage Publications, Inc.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge, England: Cambridge University Press.

- Tharp, R. G., & Gallimore, R. (1991). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge, England: Cambridge University Press.
- The Brainwaves Video Anthology. (2014, October 9). Jerome Bruner—How does teaching influence learning? [Video file]. Retrieved from <https://www.youtube.com/watch?v=aljvAuXqhds>
- The Emerging Future. (2012). Estimating the speed of exponential technological advancement in five years, ten years, twenty years, thirty years, forty years, fifty years. *The Emerging Future*. Retrieved from <http://theemergingfuture.com/speed-technological-advancement.htm>
- Thompson, J. G. (1998). *Discipline survival kit for the secondary teacher*. Center for Applied Research in Education.
- Tolkien, J. R. R. (2012). *The hobbit: Or, there and back again*. Paradise, CA: Paw Prints Press.
- Tomlinson, C. A. (2017). *How to differentiate instruction in academically diverse classrooms*, (3rd ed.). ASCD.
- Tomlinson, C. A. (2018). One to grow on / dignity in the classroom. *Educational Leadership*, 76(2), 86-88. Retrieved from <http://www.ascd.org/publications/educational-leadership/oct18/vol76/num02/Dignity-in-the-Classroom.aspx>
- Tredway, L. (n.d.). *Learning exchange protocol: Personal narrative journey lines*. Retrieved from <http://iel.org/sites/default/files/iel-lt2-journey-lines.pdf>
- Tredway, L. (1995). Socratic seminars: Engaging students in intellectual discourse. *Educational Leadership*, 53(1), 26–29.
- Tyack, D. B., & Cuban, L. (1995). *Tinkering toward utopia*. Boston, MA: Harvard University Press.

- Vella, J. (2007). *On teaching and learning: Putting the principles and practices of dialogue education into action*. San Francisco, CA: Jossey-Bass.
- Vygotsky, L. S. (1978). *Mind and society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1978). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (pp. 34-40). New York, NY: Scientific American Books.
- Vygotsky, L.S. (1962.) *Thought and language*. Edited and translated by E. Hanfmann and G. Vakar. Cambridge, MA: MIT Press.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1990). What influences learning? A content analysis of review literature. *The Journal of Educational Research*, 84(1), 30-43.
doi:10.1080/00220671.1990.10885988
- Winebrenner, S., & Brulles, D. (2008). *The cluster grouping handbook: A schoolwide model: How to challenge gifted students and improve achievement for all*. Minneapolis, MN: Free Spirit Pub.
- Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance*. San Francisco, CA: Jossey-Bass Inc.
- Wolf, M., & Stoodley, C. J. (2008). *Proust and the squid: The story and science of the reading brain*. New York, NY: Harper Perennial.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Zahorik, J. A. (1987). Reacting. In M. J. Dunkin (Ed.), *International encyclopedia of teaching and teacher education* (pp. 416-423). Oxford, UK: Pergamon Press.

Zeiderman, H. (2012). *Touchstones® volume A: teacher's guide*. Annapolis, MD: Touchstones®
Discussion Project.

Zehm, S. J., & Kottler, J. A. (1993). *On being a teacher: The human dimension*. Newbury Park,
CA: Corwin Press.

Zeiss, E., & Isabelli-Garcia, C. L. (2005). The role of asynchronous computer mediated
communication on enhancing cultural awareness. *Computer Assisted Language Learning*,
18(3), 151–169.

Zwiers, J. (2008). *Building academic language: Essential practices for content classrooms,
grades 5-12*. San Francisco, CA: Jossey-Bass.

APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/ORIC/irb

Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: [Michael Purser](#)
CC: [Matthew Militello](#)
Date: 8/17/2017
Re: [UMCIRB 17-001476](#)
Pump Up the Volume

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 8/11/2017 to 8/10/2018. The research study is eligible for review under expedited category #6, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Child Assent Form	Consent Forms
Interview Protocol	Interview/Focus Group Scripts/Questions
Purser-Michael-Dissertation-Proposal.pdf	Study Protocol or Grant Application
Study Consent Form	Consent Forms

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: PERMISSION LETTER



Thai-Chinese International School

โรงเรียนนานาชาติ ไทย-จีน

泰國中華國際學校

June 9th, 2017

To Whom It May Concern:

The Thai-Chinese International School (TCIS) recognizes the benefits of participating in relevant, well-designed research studies proposed by qualified individuals. Approval for conducting such studies is based primarily on the extent to which substantial benefits can be shown for TCIS and its mission of educating students. The purpose of this letter is to notify you of the **approval** to conduct your dissertation study titled, "Justice for all: Implementing a technology program that gives voice to all students in a Grade 7 international middle school English Language Arts classroom" with participants in our school. We also give permission to utilize the following spaces at TCIS to collect data and conduct interviews for his dissertation project: Classrooms, Reading Room in Middle School, School Library, Technology Center and other rooms as agreed upon.

The project meets all of our school/district guidelines, procedures, and safeguards for conducting research on our campus. Moreover, there is ample space for Michael Purser to conduct his study and his project will not interfere with any functions of TCIS. Finally, the following conditions must be met, as agreed upon by the researchers and TCIS:

- Participant data only includes information captured from the state data collection strategies.
- Participation is voluntary.
- Participants can choose to leave the study without penalty at any time.
- Any issues with participation in the study are reported to the school administration in a timely manner.
- An executive summary of your findings is shared with the school administration once the study is complete.

In addition to these conditions, the study must follow all of the East Carolina University IRB guidelines.

We are excited to support this important work.

Respectfully,

Dr. John McGrath

Head of School

Thai-Chinese International School

101/177 Moo 7 Soi Mooban Bangpleenives

Prasertsin Road, Bangplee Yai

Samutprakarn 10540 Thailand

Email Address: john.mcgrath@tcis.ac.th

086-352-6764 (Local Cell) +66892039702 (International Cell)

Skype Name: john.j.mcgrath1

101/177 Moo 7, Soi Mooban Bangpleenives, Prasertsin Road, Bangpleeyai, Bangplee, Samutprakarn 10540, Thailand.

101/177 หมู่ 7 ซอยหมู่บ้านบางพลีนีเวสน์ ถนนประเสริฐศิลป์ บางพลีใหญ่ บางพลี สมุทรปราการ 10540

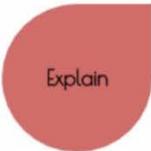
Tel : (66 2) 751 1201-6 Fax : (66 2) 751 1210 Website : www.tcis.ac.th E-mail : registrar@tcis.ac.th

APPENDIX C: TECHNOLOGY TOOLS AND THEIR USES

Technology Tool	Use
Google HyperDocs	Hyperdocs is a term used to describe a Google Doc that is embedded with hyperlinks.
Flipgrid	Flipgrid is an online discussion tool that is designed to give students a voice in their classroom. Students capture short videos and share with classmates who in return respond to those videos.
Padlet	Padlet is an online bulletin board.
Playposit	Playposit is an online tool that allows educators to embed dynamic questions into online videos and track student understanding.
Timeglider	Timeglider is an online interactive timeline application.
Google Drawing	Google Drawing is an online software that allows users to work together to create flowcharts, mind maps, and diagrams.
Google Word Art	Google Word Art is an online tool that allows users to create word art in fun and creative ways.
Google Presentations	Google Presentations is an online tool to create presentations.

APPENDIX D: I'M BECOMING AN EXPERT AT THE TCIS HYPERDOC

I'm becoming an Expert Learner at TCIS!

	 <p>Check out this video!</p>
	<p>Learning Profile</p> <p><u>Who am I as a Learner?</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> What are my <i>strengths</i>? <input type="checkbox"/> What are my <i>challenges</i>? <input type="checkbox"/> What are my <i>preferences</i> and <i>needs</i>? <input type="checkbox"/> What are my <i>interests, talents, aspirations, and passions</i>? <p>Step 1 Step 2 Step 3</p>
	<p>Personal Learning Backpack</p> <p><u>What do I need to learn best?</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> What <i>tools, apps</i> and <i>resources</i> help me learn? <input type="checkbox"/> What <i>learning skills</i> and <i>strategies</i> to I use to help me learn? <input type="checkbox"/> What <i>goals</i> will I work on to become an expert learner? <p>Step 4</p>
	<p>Personal Learning Plan</p> <p><u>What is my game plan?</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> What are my <i>plans</i> to accomplish my <i>learning goals</i>? <input type="checkbox"/> What are my <i>plans</i> to accomplish my <i>personal goals</i>? <input type="checkbox"/> What are my <i>plans</i> to accomplish my <i>college, career and/or citizenship goals</i>? <p>Step 5</p>
	<p><i>"The capacity to learn is a gift; The ability to learn is a skill; The willingness to learn is a choice." ~Brian Herbert</i></p> <p>As the year progresses, we will come back to this each term and have a conference to see how your game plan is coming along.</p>

This information comes directly from Chapter 4 of [How to Personalize Learning](#) by Barbara Bray and Kathleen McClaskey

APPENDIX E: THE ONE WORD HYPERDOC

One Word

 <p>Engage</p>	<p>What is your #OneWordEDU? Have you heard of making a New Year's Resolution? Have you ever made one?</p> <p>If you are unsure, a New Year's Resolution is a promise that you make to yourself to start doing something good or stop doing something bad on the first day of the year. (http://en.wikipedia.org/wiki/New_Year's_Resolution)</p> <p>Instead of making a list of resolutions let's think about and pick One Word that defines your goals, dreams, ambitions and who you want to be during this 2017-2018 school year.</p>
 <p>Explore</p>	<p>Reflect on Last School Year Think about it...</p> <ul style="list-style-type: none">• What did you accomplish?• What are you proud of?• What drives you?• What were you passionate about?• What do you want to continue in the new year?• What did you leave unfinished?• What do you hope to improve upon? <p>Make a bulleted list of your thoughts below:</p> <ul style="list-style-type: none">•
	<h3>Get Some Inspiration</h3> <p>Step 1: Inspirational Song Playlist Get some inspiration! Click Here to explore these songs. You don't have to listen to all of them or listen to a whole song.</p> <p>Step 2: Motivational Posters Click Here and read through these Motivational Posters</p> <p>Step 3: Watch these videos! Facing the Giants "Death Crawl"</p> <p>And this video from one of my favorite movies Hoosiers!</p> <p>And, last one from Dead Poets Society.</p>

<p>Explain</p>	<p>Choose your #OneWordEDU</p> <p>Check out the picture ----->>></p>  <p>These are all examples of One Word that people have chosen as their focus in the past. One of these may work for you too! Think about what your One Word will be and type it in the box below. My OneWord for 2017 is...</p> <ul style="list-style-type: none"> •
<p>Elaborate</p>	<p>Create your One Word Graphic!</p> <p>Now for the fun part! Read through all directions first and use the hyperlinks to assist you in creating your One Word graphic.</p> <ol style="list-style-type: none"> 1. Click and highlight the x below 2. On the toolbar, click insert then select Drawing. 3. Start by adding a background image 4. Click actions & choose Word Art. Type your One Word. Use different colors and cool fonts! <p>Ready? Let your creativity flow!</p> <div data-bbox="581 1556 1279 1640" style="border: 1px solid black; text-align: center; padding: 10px;"> <p>X</p> </div>

 <p>Evaluate/ Extend</p>	<h2>Share It</h2> <ol style="list-style-type: none">1. Download your One Word graphic as an image.2. Then join Padlet and share the image on this Padlet  <ol style="list-style-type: none">3. Once shared, look through all the other One Word images <h2>Go Further & Talk About It</h2> <p>Click the Flipgrid logo below and share your voice!</p> 

Thanks. @SeanJFahey and inspired by @KarlyMoura

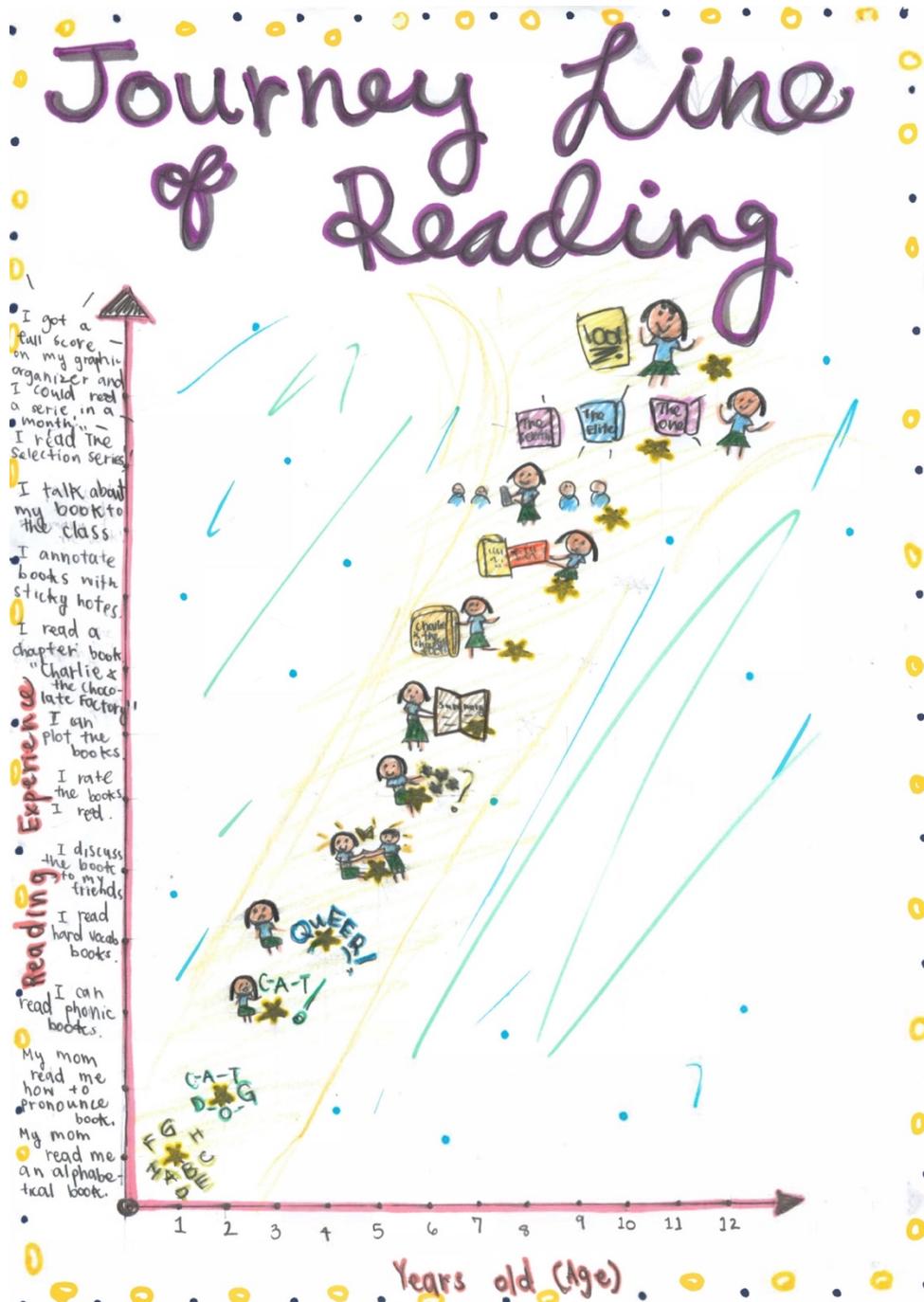
APPENDIX F: ONE WORD HYPERDOC CREATED ON PADLET

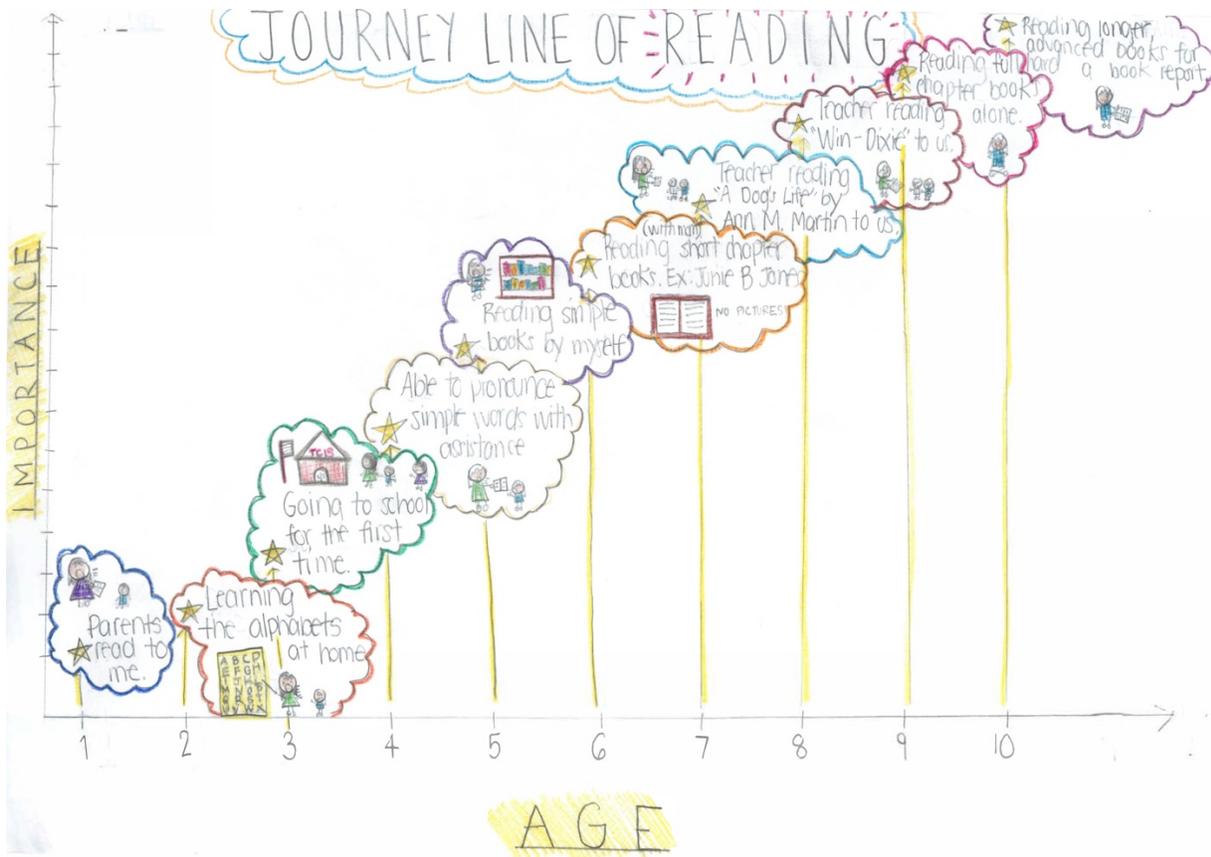
Number	One Word
TCIS-F-001	
TCIS-F-002	
TCIS-F-003	
TCIS-F-004	
TCIS-F-006	

<p>TCIS-F-007</p>	
<p>TCIS-F-008</p>	
<p>TCIS-F-009</p>	
<p>TCIS-F-0010</p>	
<p>TCIS-F-0011</p>	
<p>TCIS-M-001</p>	

<p>TCIS-M-002</p>	
<p>TCIS-M-003</p>	
<p>TCIS-M-005</p>	
<p>TCIS-M-006</p>	
<p>TCIS-M-007</p>	
<p>TCIS-M-008</p>	

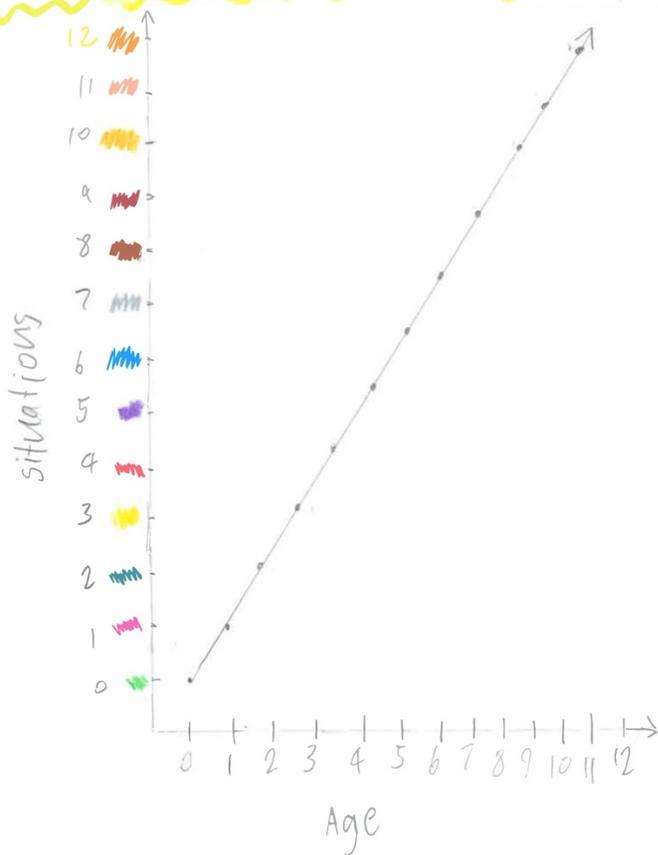
APPENDIX G: JOURNEY LINE OF READING





Journey line of reading

-  = New to the world, can't read
-  = Still can't speak nor read.
-  = start speaking, learn simple vocalles
-  = have parents read easy picture books to me.
-  = start reading easy picture book by myself.
-  = start reading very easy chapter books (thin ones)
-  = start reading harder chapter books.
-  = start learning about the details of character, setting, plot, etc.
-  = Reading Non-fiction books
-  = Start talking about the book to classmates.
-  = Enjoy reading more
-  = Understand a very thick chapter book.
-  = Able to annotate while reading.



Journal Line of Reading



I told my mom to buy a book for me. (I started to like reading)

I read "Where The Mountains Meets the Moon" and that's my favorite book of that time.

I read "The Fault in our Stars" the second time and it made me cry.



My dad read a Chinese book to me: Peter Pan.

(Started from manga)

Ms Beth recommended the book "Gone with the Wind" and that became my favorite book.

I have almost no time to read because of my homework.

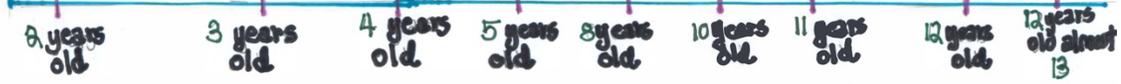
I read an Roald Dahl book by myself.

SCARY

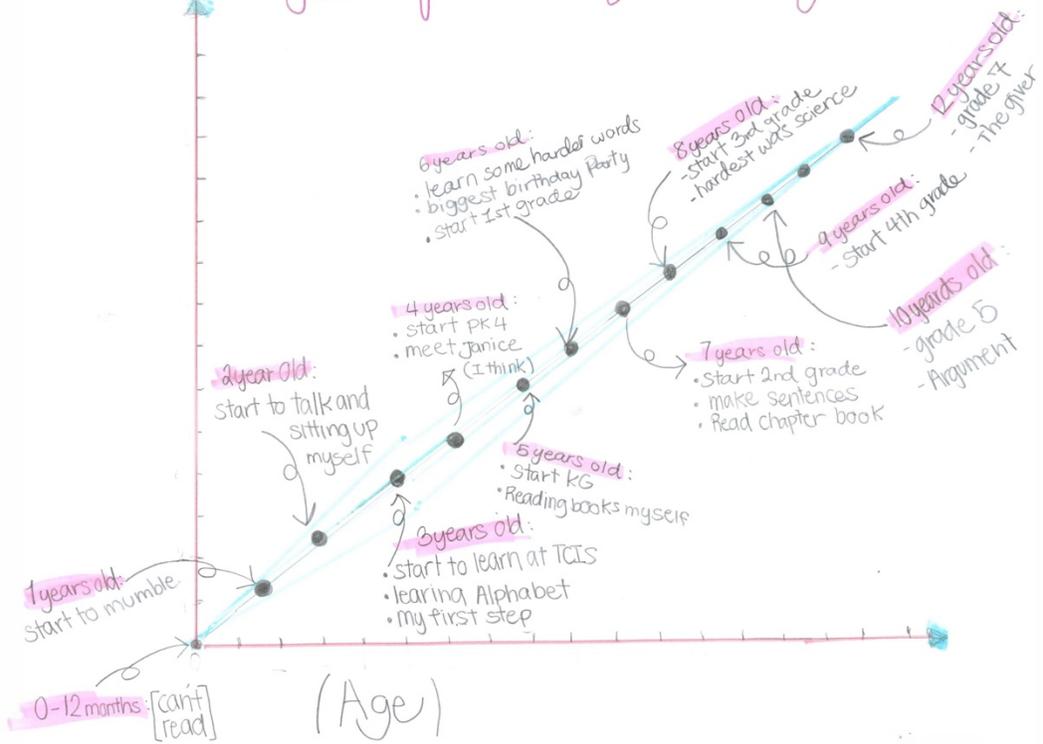


My mother read a Thai book about dogs to me.

I always got distracted while reading at home by my parents, because they want me to read Chinese books.

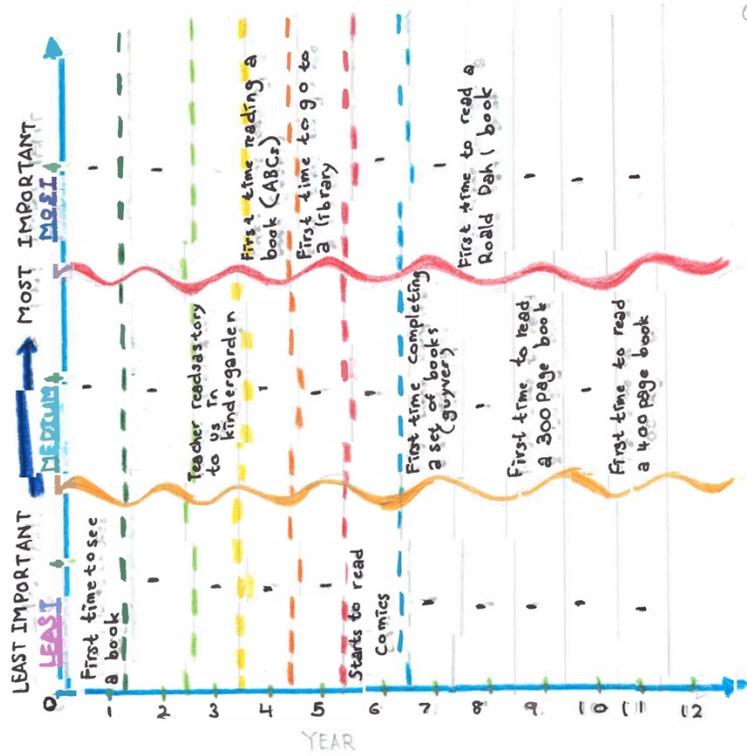


Journey line of Reading





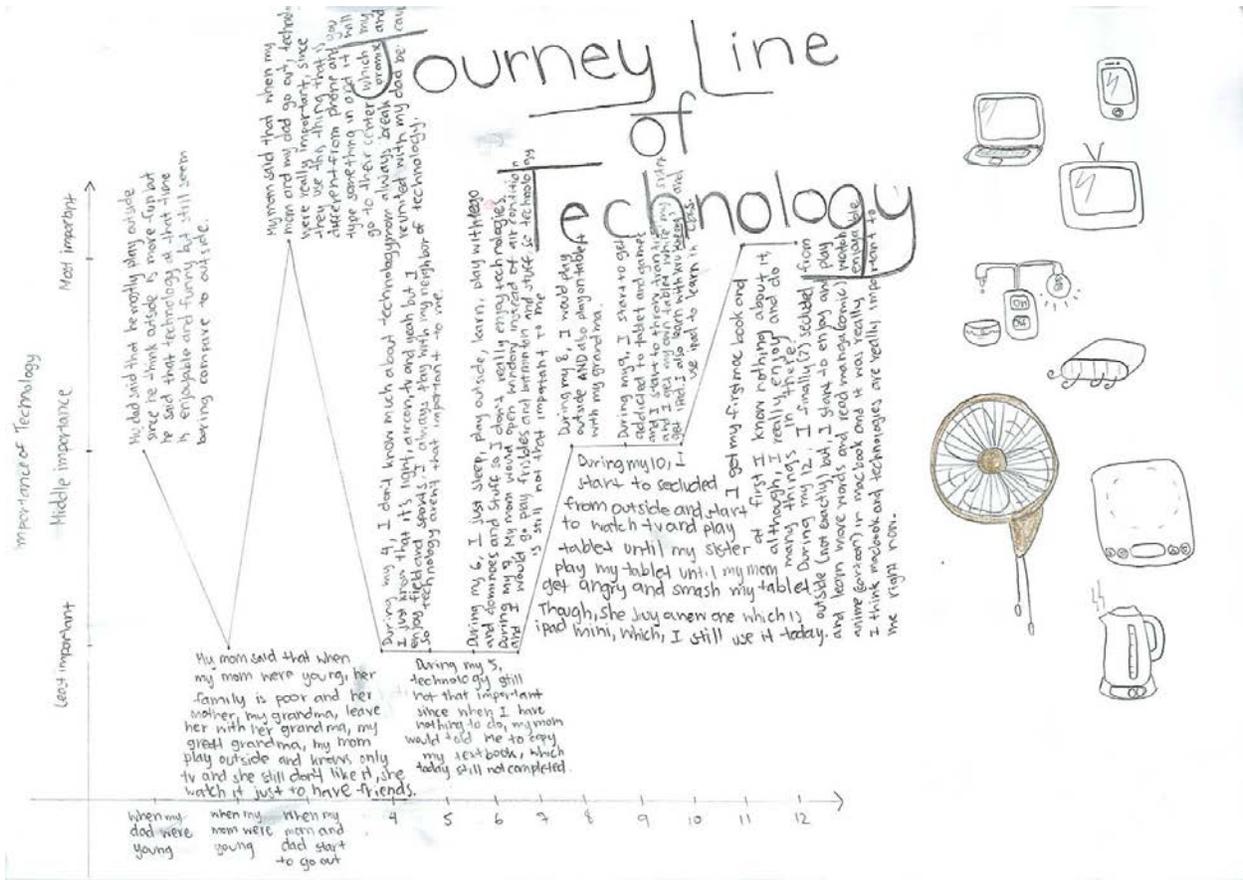
3



67



APPENDIX H: JOURNEY LINE OF TECHNOLOGY

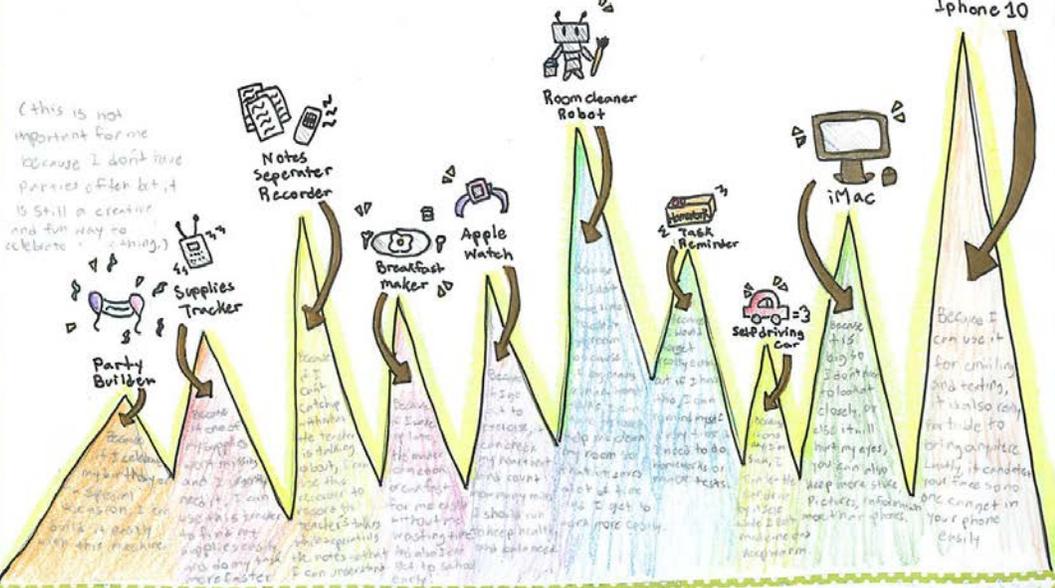


Technology Journeyline

(this is most important for me because I can use this in high school and college to help me with things without anyone having to help me)

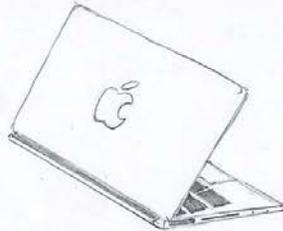
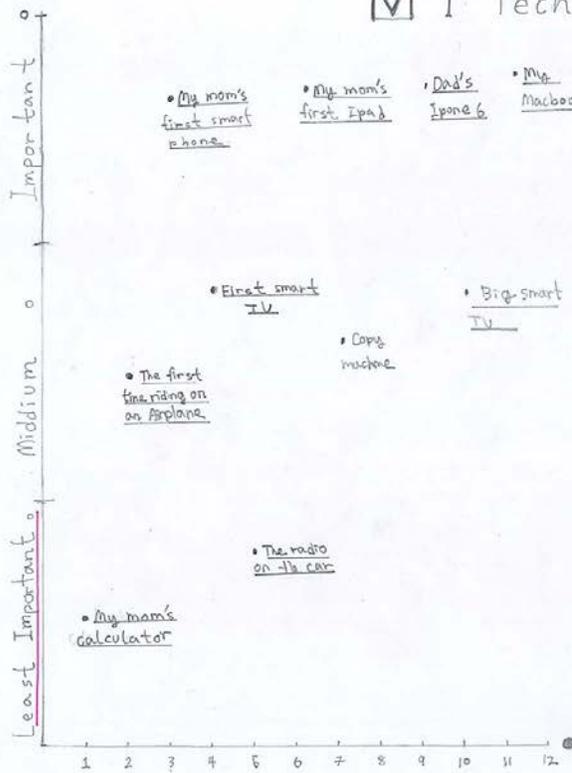
Ages

18
6
24
17
14
16
25
12
20
15

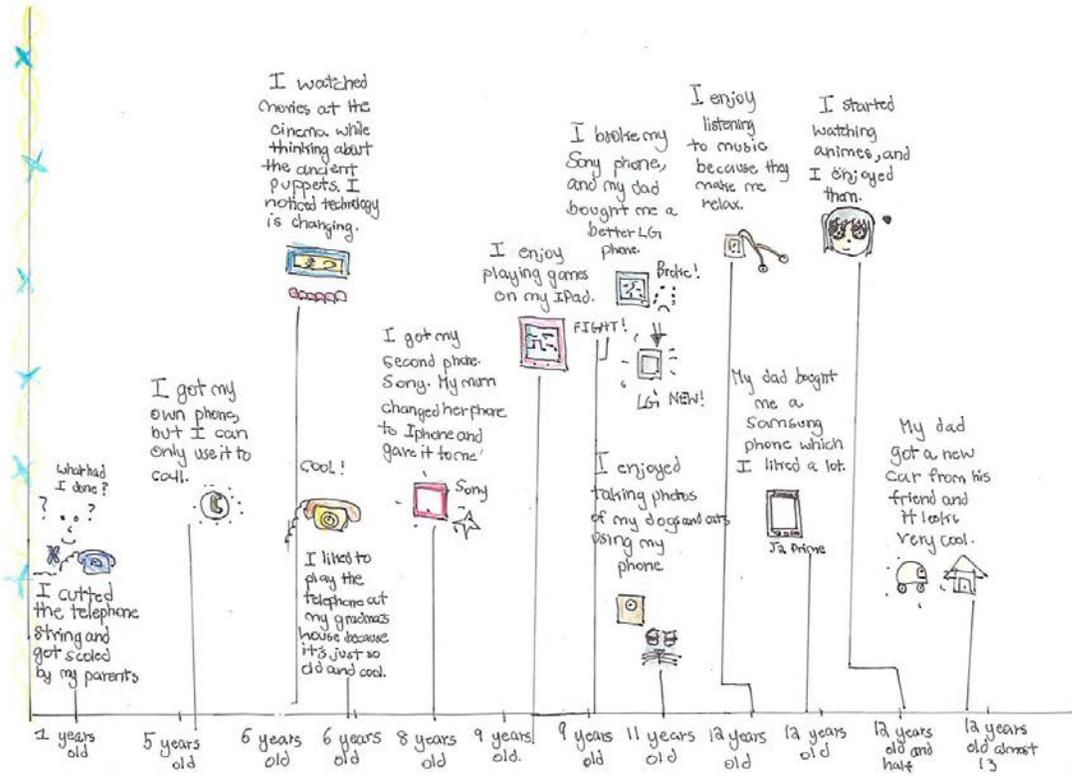


Technology

MY technology Life

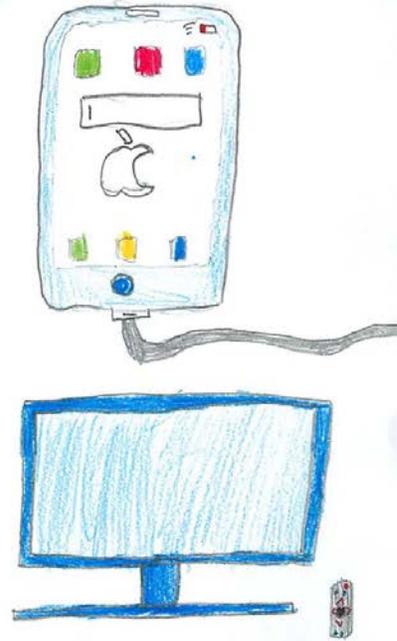
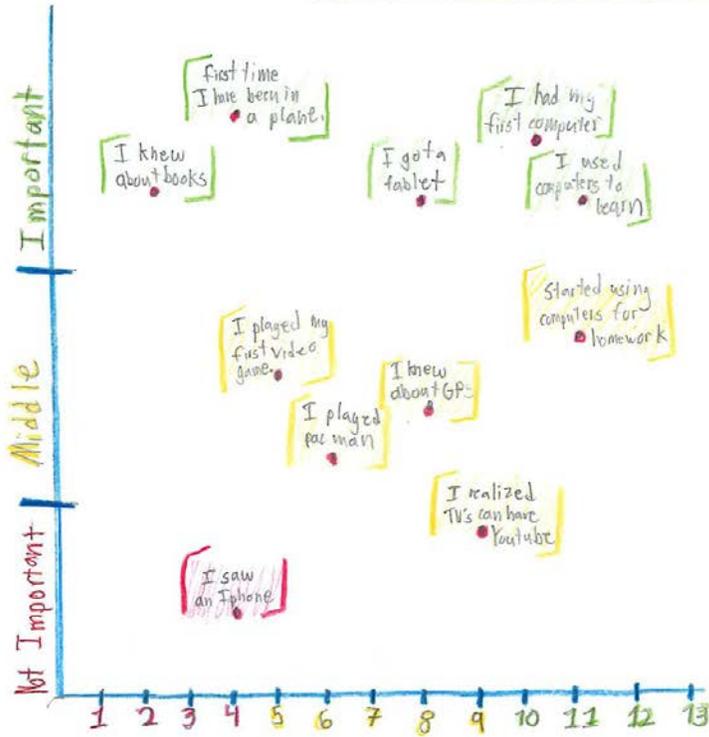


Journey Line of Technology



My Technology Life 6

November 13, 2017
English LA



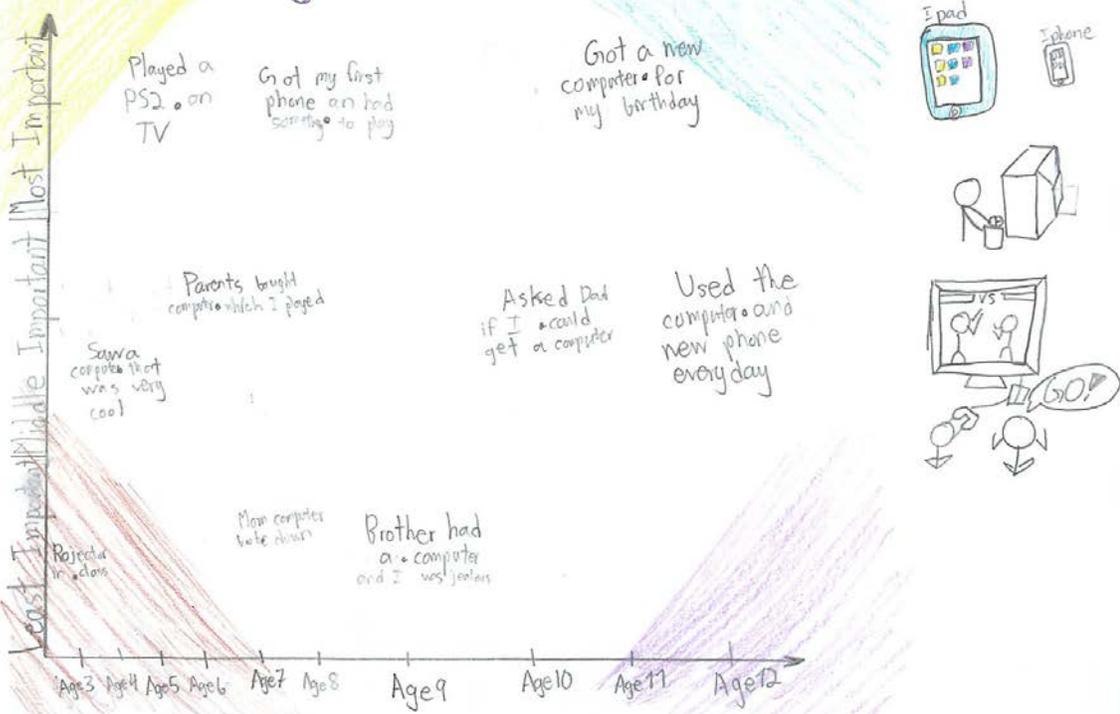
Journey Line of Technology

Importance (experience)

I got a MacBook Pro with a black cover and touched screen.
 My mom gave me my first samsung, which is samsung 8.
 I began being professional at computers.
 I got a MacBook Pro for school work.
 Ms. shaneze taught me how to use technology advantagegly.
 I began to watch movies on phones.
 I am allowed to play my mom's & dad's phone.
 I got to play a huge iMac at home.
 My mom let me play a pronouncing app.
 My mom open songs from her phone to calm myself to sleep.



Journey Line of Technology



APPENDIX I: THE REIMAGINED THINKTRIX TEMPLATE

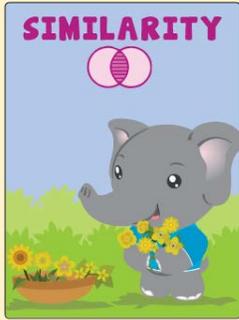
The *ThinkTrix* Online Template

English Language Arts

(Put the name of Book Here)

Type of Thinking	Focus Area: Setting	Focus Area: Plot	Focus Area: Conflict	Your Choice: Character or Moral	Question Starters
<p>Recall</p>  <p>Recall, plot design, sequence, detail, summarize</p>					<p>Who is ___? How did ___? What is ___? Where did ___? When did ___?</p> <p>The simplest type of Think Trix question. The answer is in the text.</p> 

Similarity



Analogy, ration, comparison, intersection and common element

How are ____ and ____ alike?

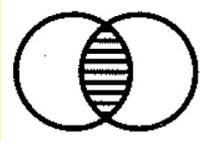
What Similarities do ____ and ____ share?

Compare ____ and ____.

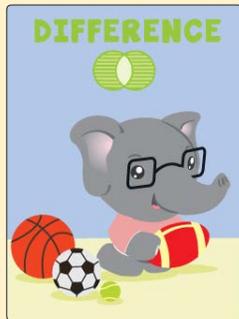
____ is to ____ as ____ is to ____.

What is like ____?

The Think Trix question where you compare. The answer is not in the text.



Difference



Contrast, comparison, distinction, discrimination, and differentiation

What is the difference between ____ and ____?

What distinguishes ____ from ____?

Contrast ____ and ____.

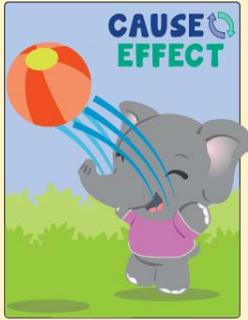
Why is ____ not like ____?

What's different about ____?

The Think Trix question where you contrast. The answer is not in the text.



Cause/Effect



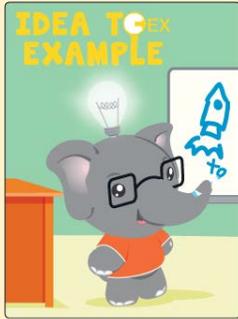
Cause, effect/result, motive, consequence, inference, prediction and hypothesis

What caused (or causes _____)?
What are the effects of _____?
What would happen if _____?
What influence / impact did _____?
If _____ then _____?

The Think Trix question where you infer, predict, and consider. The answer is not in the text.



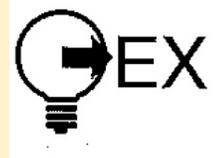
Idea to Example



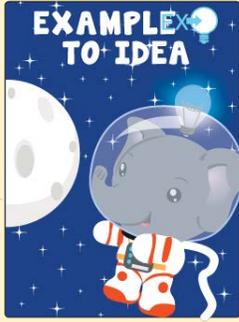
Categorization,
deduction,
substantiation,
analogy and support

What are some examples of _____?
Give an example of _____.
Support your idea.
List the types of _____.
What kinds of _____?

The Think Trix question where you make analogies, support your reasoning, and give examples. You are taking an idea from the text and giving an example of it.



Example to Idea



Induction,
conclusion,
generalization and
finding essence

What is the main
idea of _____?

What word best
describes _____?

What is your
hypothesis?

_____ and _____ are
examples of
_____.

What type of _____
is _____?

The Think Trix
question where
you summarize,
conclude, and
generalize. You
are taking an
example from the
text and finding an
idea.



Evaluation



Ethical consideration, judgment, rating and weighing evidence

Do you agree or disagree with ____? Why?
 What was the most important ____? Why?
 How would you rank ____? Why?
 Were they right or wrong to do that? Why?
 Do you like ____? Why?

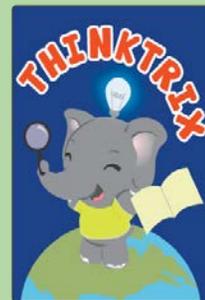
The most complex ThinkTrix question. You consider ethics, evaluate, judge, and weigh your evidence.



ThinkTrix
 Developed by Frank Lyman

ThinkTrix Online Template by Michael Purser adapted from Frank Lyman's *ThinkTrix* Matrix

Illustrations by Michael Purser
 @socraticseminar.com



APPENDIX J: ENJOYMENT OF READING

Question: Do you enjoy reading more this year?

TCIS-F-001	I have enjoyed reading more this year because I have found the types of books I like to read this year and I get to choose those books as opposed to the teacher telling me what to read. I need to read daily to keep up.
TCIS-F-002	I like reading more because I can understand more this year because we are making notes in our books and it helps me to understand more. When I have to get 25 points for Accelerated Reader, it requires me to read every day, even on weekends.
TCIS-F-003	I read more this year than ever before, but it is not because I enjoy it more, it is because you (Mr. Michael) require us to read every day.
TCIS-F-004	I get to read anything I want, and I like reading vampire novels and teachers in the past did not let me read those kinds of books as they said I was too young. I enjoy reading whenever I have free time.
TCIS-F-005	I enjoy it more because we are given more choices of things to read. Also, I like the chance to learn about new types of books.
TCIS-F-006	You (Mr. Michael) make us think more about what we are reading this year and I understand it better. I didn't understand as much in the past so I'm glad I can now understand most of what I read in English.
TCIS-F-007	I like picking out my book from the library. I like when we go to the library and my friends can recommend what books they like and make suggestions.
TCIS-F-008	Because we are required to read and annotate every day 30 pages, I got into a routine and now even read on days I don't have to read.
TCIS-F-009	Sometimes I like to read but sometimes there is not time to read at night and it is hard.
TCIS-F-0010	I have always loved to read. I don't think I enjoy it more this year, but I am reading more this year. I like challenging myself with harder books because I get more points on Accelerated Reader tests and we have to do daily reading to keep up with our grades.
TCIS-F-0011	I want to read better so that I can have more opportunity to get better grades in high school and college.
TCIS-M-001	I enjoy reading because I want better grades and to learn English better in order to go to college.

TCIS-M-002	I like reading Percy Jackson and books like that and there are so many books in that series that I keep finding more to read.
TCIS-M-003	I don't like reading in English as it is hard.
TCIS-M-004	I don't know. But I want to get good grades.
TCIS-M-005	I like reading more when we read together as a class.
TCIS-M-006	My dad expects me to get good grades and I have to read. I know more vocabulary words now.
TCIS-M-007	I like reading Diary of a Wimpey Kid.
TCIS-M-008	This is the first year I have read novels. My other school we only read text books and online stories. Reading books is different and more fun than before and I understand them more. I like choosing what I read because books teachers choose are boring.

APPENDIX K: ACCELERATED READER POINTS GOAL FOR QUARTER 1

Name	Gender	Accelerated Reader Goal
TCIS-F-001	Female	118.8%
TCIS-F-002	Female	115.8%
TCIS-F-003	Female	120%
TCIS-F-004	Female	163.5%
TCIS-F-005	Female	133.5%
TCIS-F-006	Female	110.5%
TCIS-F-007	Female	115.2%
TCIS-F-008	Female	117.6%
TCIS-F-009	Female	100.5%
TCIS-F-0010	Female	355.2%
TCIS-F-0011	Female	103.5%
TCIS-M-001	Male	103.5%
TCIS-M-002	Male	123.5%
TCIS-M-003	Male	94.1%
TCIS-M-004	Male	82.9%
TCIS-M-005	Male	92.5%
TCIS-M-006	Male	4.1%
TCIS-M-007	Male	0%
TCIS-M-008	Male	103.5%

11 out of 11 Females met their goal at 100%

3 out of 8 Males met their goal of 100%

6 out of 8 males met their goal at least 80%

**APPENDIX L: FLIPGRID DISCUSSION OF LITERAL, INFERENTIAL AND
CRITICAL THINKING SKILLS –TRANSCRIPTIONS**

ID	Transcription
TCIS-F-001	<p>For the last few weeks I have been annotating my independent reading book, using literal, inferential, and critical statements. In many ways this has actually helped me to understand the text better.</p> <p>Example. When you have to write a critical statement, you will question about the text more. You will try to guess what is going to happen next. And it actually helps us think deeper.</p> <p>When you have to write an inferential statement, you have to really pay attention to what is written in the book in order to write an inferential statement.</p> <p>And a literal statement can actually help you notice the fact that is a very little fact--and it actually helps us to understand the text better.</p> <p>And using these kinds of statements actually helped me to think differently in other parts of my life. Example; I find myself making up a lot of things at a lot of times, and by writing these statements it actually helps me see the differences between an actual fact or things that I worry about that is not going to happen. And it actually helps me think deeper about a lot of things. Thank you.</p>
TCIS-F-002	<p>The first question is did annotating the book help us understand the book more? And my answer is yes. The first is, it helps me focus more and more of the book. It makes me think a lot of the book.</p> <p>And the second is it makes me feel more and more confident of the book. It makes me think a lot, like a lot.</p> <p>I feel really, really confident when writing those notes, the three--critical, inferential, and literal. I really like that.</p> <p>The second question is which is the hardest--literal, inferential, or critical? And my answer is, of course, critical.</p> <p>It's sometimes really, really hard to find in the book because it's hard. You need to think a lot. You need to keep thinking of your mind, and sometimes it makes you tired.</p>

	<p>And inferential, I like it--because it's not hard, and it's not easy. It's the middle. So I enjoy doing that. And literal, it's really easy. Really easy. Just the facts. For example, the dog escapes. And my answer, of course, critical. It's hard. Really hard.</p> <p>The third question is does doing literal, critical, inferential help us think more about parts of our life or other subjects? And my answer is yes. And sometimes no. It depends on situations.</p> <p>For example, in science class I keep[?] making hypotheses about things, so it helps me in science class. Critical helps me a lot. It's sometimes hard, but it helps you. The hard one helps you. Literal sometimes also helps me in thinking about facts of science that I read.</p> <p>But it does not help me in math class. In math class, critical, inferential, and literal doesn't help me in any part, because sometimes I'm in a hurry to solving equations and expressions. And critical does not help me think deeper and deeper. Literal does not help me, too. They're not facts. But they are just numbers. Yeah, numbers. But in word problems they sometimes help me. So it really depends on situations that I'm in. Yeah, it depends.</p>
TCIS-F-003	<p>For the last few weeks I have been annotating my independent reading book, using literal, inferential, and critical statements. In many ways this has actually helped me to understand the text better.</p> <p>Example. When you have to write a critical statement, you will question about the text more. You will try to guess what is going to happen next. And it actually helps us think deeper.</p> <p>When you have to write an inferential statement, you have to really pay attention to what is written in the book in order to write an inferential statement.</p> <p>And a literal statement can actually help you notice the fact that is a very little fact--and it actually helps us to understand the text better.</p> <p>And using these kinds of statements actually helped me to think differently in other parts of my life. Example: I find myself making up a lot of things at a lot of times, and by writing these statements it actually helps me see the differences between an actual fact or things that I worry about that is not going to happen. And it actually helps me think deeper about a lot of things. Thank you.</p>
TCIS-F-005	<p>Good morning, everyone. Today I am presenting the LIC annotating. Annotations. My name is [Name], and I am learning in English language arts, seventh grade.</p>

	<p>For the last few weeks we have been annotating our independent notebooks, reading books, and using inferential, critical statements. Since I've been using LIC, it helps me a lot. Because when I do some graphic organizer work I can just flip through pages and read my notes. It helps me provide the summary and the details. And also, my opinions, when I read the book.</p> <p>It helps me to read again, and to understand the book more--because every time I do notes I always flip to the pages and find the best one to write.</p> <p>I think inferential is the hardest one, because inferential--the author didn't write it for you. The author provided the information, but very vague.</p> <p>I think literal is the easiest one, because the author wrote the sentences and we can just revise or copy it.</p> <p>And critical is medium, because it's your opinion. You can think of anything you want.</p> <p>And I think the LIC annotations help me in different kind of learning, because when I do the note-taking when my teacher is speaking--and I have to do the notes--I can just think of LIC and write the details around, and I can flip through and read the summary easily.</p> <p>This is my LIC annotation answers. Thank you.</p>
TCIS-F-006	<p>The first question is does annotating help you to understand the book better. Annotating really helps me understands the book, in many ways.</p> <p>The first thing is I usually read books really quickly, and I [inaudible]. But when I'm annotating I have to read at a slower pace, and [inaudible].</p> <p>I also got to really see all the details in the book, because I was reading slower. I also had to pause and think about the book intensely, to be able to write down the critical, [inaudible] or inferential [inaudible]. Also, a literal [inaudible].</p> <p>I was also more focused because of annotating, which really made me understand the book much more. And I usually; would not focus and I read really quickly.</p> <p>Annotating the book also makes me able to express my opinions towards the book, and write all of my opinions in the critical sticky[?] notes, so it made me understand more and have more [inaudible] towards the characters feelings, which made me understand [inaudible] more.</p> <p>The next question is which statements LIC, which is literal, inferential, and critical, [inaudible] find [inaudible]? I think that literal is the hardest to find,</p>

	<p>because the more I start writing inferential sticky notes [inaudible] my mindset was kind of [inaudible] inferential sticky notes. [Inaudible] was all about writing inferential things, and critical things--and not really literal.</p> <p>Literal is also ... literal statements are also really hard to find for me because they are kind of hidden; you can't really find them often, when you keep writing about inferential stuff. And the books we read now are advanced, so there isn't much literal stuff--and there is mostly critical and inferential.</p> <p>The last question is has using these statements helped you to think differently in other parts of your life? I think that writing the statements helped me in many parts of my life, because I was able to understand books better and I find that I read very differently.</p> <p>I can also use these statements--write these statements--when I'm in other subjects, like Thai [inaudible], which are other language [inaudible]. So reading in those subjects is [inaudible].</p> <p>They also [inaudible] organize the [inaudible], so I understood it more. And I think that reading just became a thing that I did every day because I was required to annotate a book and read 30 pages a night and it just became easier every night.</p> <p>Lastly, it really helped me because ... the last thing is I was able to read books deeper.</p>
TCIS-F-007	<p>Thinking about what the book is about, and what is happening in the book. It also helps me express my feelings about what I think about the book [inaudible] the book without saying because I don't ... I'm not a speaker. I like writing things down more.</p> <p>Which statement was hardest for me to find? I found the inferential statements hardest to find, because you can't really see the inferential statements in the book--so you have to include your ... what you think, and what you think characters want to say, into the book. And I find that really hard to do.</p> <p>Inferential, you have to think and you have to ... you have to look into the book, to find the inferential statements.</p> <p>The third question is has using these statements helped me think differently in life? It has, because now when I think about things I think about them deeper--and I find more information about what it's about.</p> <p>And it has helped me, because now annotating books is part of the homework--so now we do it every day. So I've practiced doing it, and now I think about things deeply. Thank you.</p>

<p>TCIS-F-008</p>	<p>By doing the literal, inferential, and critical statements, it has helped me understand the book better--because I think about the book more; not like usual. Usually I would just read through the book. This would make me miss small details.</p> <p>By missing the small details, I can miss some of the most important parts, and do not understand the book better. Doing this helped me notice the small details of the book.</p> <p>The most difficult statement for me to do is inferential, because I can't seem to assume[?] things easily.</p> <p>Critical, I can just write my own opinion of the book, or of the characters. And literal is just copying from the book. But inferential is different. We have to make our opinion, based on the book or the text. It helped me with science, because in science we need to make predictions. By doing this, it helped me make better predictions in science because of the inferential statements.</p>
<p>TCIS-F-0010</p>	<p>Hello, everyone. Today I am going to be answering questions about taking LIC notes. The first question is does LIC help you understand the book better? Personally, I would say no, because I just find that it's just me taking a bunch of notes and busy putting them into categories. It's actually not making that much difference, apart from making me waste more time putting it into categories. So, sorry; but this idea does not work.</p> <p>Second question. Between LIC, which one of them is the hardest for me to find? Personally, it depends on the book I read and how I analyze it. But to be rather honest, when I read it, the last thing I come back and do is the literal. Because when I read, I don't take notes on literal. I tend to take notes on inferential and critical.</p> <p>The third question. Has using LIC helped you view things differently? Well, it has helped me view certain things differently. But it has not really been that good for me. What it does is help me see that many times before we do something we have to think it over. And the different details matter. But it's not really that changing[?], either.</p>
<p>TCIS-F-0011</p>	<p>Hello, everyone. My name is [Name], and over this school year we've been annotating our independent reading books using literal, inferential, and critical statements. I am going to be answering a few questions.</p> <p>The first question is in what ways has this helped you to understand the text better? This helped me understand the book better because while annotating I can review the things I have read, and it could be like in my mind.</p> <p>Has using these kinds of statements helped you to think differently in other parts of your life? Yes, because right now in Thai class we are learning about Thai literature, and I can annotate the things in the poem and it really helps.</p>

	<p>What are the hardest to find; literal, inferential, or critical? In my opinion, I personally think that literal are the hardest to find, because in the book it's mostly character's feelings--not the things they're doing. But if characters do more stuff and not really feel much, I feel like there is going to be more literal statements. Thank you.</p>
TCIS-M-001	<p>Hey, guys. Today I will be answering the three questions Mr. Michael gave to us.</p> <p>So the first question. I think taking down these notes haven't helped me much, actually. Because I have been taking those notes in my mind, lately, while I read them from lower school, actually.</p> <p>And for the second question, I think that inferential is the most difficult for me because I ask myself--maybe this is critical, maybe this is actually literal.</p> <p>And for the last question, I think the notes actually impacted my life because when I walk around in school I answer some questions, I always answer it critically--because of the critical notes. And I practice them basically every day.</p>
TCIS-M-002	<p>The system of literal, critical, and inferential has helped me understand my book better by making me be able to take my notes easier when I'm reading the books, and get better at using literal, critical, and inferential.</p> <p>The hardest one for me to take notes might be critical, because critical must be my own opinion; nothing from the book. It must be my own opinion. So that has been a little bit hard for me, so I always save it for last.</p> <p>This system of taking notes has helped me, because it has helped me to practice my notes and take better notes in other subjects.</p>
TCIS-M-003	<p>Hello, everyone. Today I'll be answering Mr. Michael's question [inaudible]., The first answer for me is using literal, inferential, and critical statements help me understand the book better.</p> <p>The second answer for this person is I think literal was the most difficult statement to find.</p> <p>And the third answer is it helped me by taking literal, inferential, and critical notes in all subjects.</p>
TCIS-M-004	<p>By taking the literal notes, this helped me understand the book when I would just want to look at the summary in that chapter of that book.</p> <p>The hardest to find is inferential, because sometimes I get confused if it's the [inaudible] or critical.</p>

	<p>By taking notes, it doesn't help me in other subjects or in the real life, but helps me in reading books.</p>
TCIS-M-005	<p>Hi, guys. My name is [Name]. And today I am going to answer the questions of the LIC notes. The first question is does the LIC notes help me understand better for the text. I think it helped me understand better, because it creates little thoughts that help me understand what the story is about.</p> <p>The second question is which LIC notes is the hardest for me to take notes on. I think the hardest for me to take notes on is the critical, because it needs to be an opinion--and that is a little bit hard for me.</p> <p>The third question is does this method impact my life. I think taking LIC notes helps me understand the text more, and helps me take better notes of different kinds of subjects, and helps me answer questions.</p>
TCIS-M-006	<p>Taking notes on inferential, literal, and critical have been helping me, because if I can't remember some part of the book I could go back and read the notes, so I could remember the part and remember.</p> <p>Which one has been the hardest--literal, inferential or critical? Sometimes all of them is hard, because of the book is not the same, and sometimes we can't find what to write.</p> <p>And the third question is have you seen this kind of study would help with [inaudible] in other parts of your life? Critical has been helping me for some part of my life, because I could think critically and remember the parts in my life.</p>
TCIS-M-008	<p>I think by using literal, inferential, and critical really helped me a lot, and I could understand the text better. It helps me because whenever I get lost in the book I could come back and read the notes again. So I could understand the things that are currently going on in the book.</p> <p>The second question. I think that the critical were the hardest to find in the book, because I really needed to understand the text and to analyze it and think about it.</p> <p>And last, I think that it could help me in part of my life, because I think that if I could think critically I would make better decisions and think about the things more deeply. Thank you.</p>

APPENDIX M: THINKTRIX STUDENT RESPONSE AFTER READING THE GIVER

Number	Response
TCIS-F-001	We can see all of the people's ideas written and combining them together helps understanding.
TCIS-F-002	To compare to contrast better, and to think deeper.
TCIS-F-003	That it is important to ask questions.
TCIS-F-004	It helps me to understand the story more and it tells me a lot of detail in the story.
TCIS-F-005	It is a very useful and the organized template for taking notes because I feel like I could understand the book clearer.
TCIS-F-006	I learned that it is a way to organize our thoughts.
TCIS-F-007	How to spread out the ideas.
TCIS-F-008	I learned that it helps us think more about what is happening in the book by asking us questions to help us think.
TCIS-F-009	It helps me a lot with separating and understanding things.
TCIS-F-0010	I have learned that it is important to read it daily and refresh your mind about the information.
TCIS-F-0011	To be curious about the book.
TCIS-M-001	That you need to think really hard to get a good point in.
TCIS-M-002	How to compare things.
TCIS-M-003	I learned about Jonas's community and how to organize ideas.
TCIS-M-004	Better organized and review before a test.
TCIS-M-005	We can share our thoughts together.
TCIS-M-006	I learned to organize the information we read into a very in-depth way.
TCIS-M-007	It kind of makes it easier to understand the story.
TCIS-M-008	I learned some questions I don't know, and it really did help me in some of the questions in the test.
TCIS-F-009	It helps me a lot with separating and understanding things.

APPENDIX N: SAMPLE FLIPGRID VIDEO TRANSCRIPTIONS

FROM JANUARY 2018

Question 1: Hello everyone, my name is TCIS-F-001 and today I'm going to talk about my critical question for Chapter Six. In page 106, Bilbo had escaped the goblins, but he did not know where he was. "He had lost hood, cloak, food, pony, his buttons and his friends. He wandered on and on until the sun began to sink westward behind the mountains." And my question for Chapter Six is that, do you think Bilbo is brave from escaping from the goblins?			
Student Name	Response in Seconds	Count of Words	Transcript
TCIS-M-006	35	71	Hello everyone, today I'm going to be replying to TCIS-F-001 evaluation thinking(GS). I think Bilbo is brave enough to escape the goblins because he is ... I thought it was very brave because if he hides he needs to have brave to not so the goblins don't see or if you want to be brave you need to have the bravery or confidence that you can run faster than the goblins (MT).
TCIS-M-003	17	86	Hello guys today I'm going to reply to TCIS-F-001 critical question (GS). TCIS-F-001's critical question was, was it brave for Bilbo to escape from goblins(CRQ). The goblins' are creatures that kill anything in their way, so if Bilbo escaped from that I thought it was really brave because if he hides he needs to have bravery to not move so the goblins don't see or if he want to run away he need to have the bravery and confidence so that he can run faster than goblins.
TCIS-F-003	23	48	Hi, I'm going to be answering TCIS-F-001 question (GS). TCIS-F-001's question is, do you think Bilbo was brave for escaping from the goblins(CRQ)? My answer is yes. He's really brave for escaping the goblins because the goblins are the type of creatures who everyone hates and are scared of.

APPENDIX O: NEWSELA DATA FROM 2017-2018

Name	Reading Level September 2017	Reading Level September 2018	Avg. Time in Article	Total hours reading articles	Quiz Average	Tests Taken
TCIS-F-008	5.2	8.4	7	10.21	74.8	107
TCIS-M-002	4.9	7.8	6	11.45	77.1	71
TCIS-F-007	5.1	6.2	8	13.26	82.4	81
TCIS-F-003	4.8	7.4	6	10.31	73.1	78
TCIS-F-006	5.4	8.8	5	8.16	78.7	82
TCIS-M-005	5.7	12.8	4	10.18	67.1	79
TCIS-M-004	6.1	12.9	2	2.47	88.8	80
TCIS-M-008	5.3	10.2	3	6.31	72.8	100
TCIS-F-0010	11.5	13.5	3	4.21	95.6	96
TCIS-F-009	4.3	7.4	5	8.10	60.5	86
TCIS-F-002	10.8	13.2	3	5.26	91.7	102
TCIS-F-0011	6.8	7.8	4	5.56	81.4	86
TCIS-M-001	5.8	8.4	8	11.29	73.6	70
TCIS-F-001	4.2	6.9	16	26.08	84.1	80
TCIS-M-007	5.0	8.6	6	12.01	66.7	66
TCIS-F-005	5.9	8.9	5	9.11	66.8	125
TCIS-M-003	3.8	5.6	4	7.59	59.8	69
TCIS-M-006	5.3	7.8	6	9.01	65.2	69
Average	5.8	9.0	5.6	9.45	75.5	84.8
Total				170		1527

APPENDIX P: TCIS ENGLISH REQUIREMENTS FOR 2018-2019

Grades 5-12

Middle School

- Teachers should use the Writing Process and have wall charts for each student in their room. See the English Department Folder for Printouts.
- Teachers should teach 3-4 Writing Units from Lucy Calkins book. Check out a book set from the library.
- Teachers should teach 4 novels as class novels. These novels must be the four novels highlighted in the novel Study Unit. See the English Department Folder for additional materials. See Curriculum Maps for Unit Plans. If no unit plan, please work with Mr. Michael to create one.
- Teachers should assign 4 independent reading novels per year. One per quarter is suggested. These must be on the approved list for the Novel Study Unit or approved by HOD (Grades 5-12).
- Each teacher should work with students on adding four pieces of writing to their digital portfolio each year. They should also work with students to add 4 photos or videos of projects or other class units. Ex: a video made as part of a novel study.
- Each teacher should record a Digital Portfolio grade quarterly based on what students add to their digital portfolio. Work added to each portfolio should not be added until it has gone through the Writing Process and been peer edited and approved by the teacher.
- Each teacher should start a Vocabulary Word Bank for students and regularly check they are adding additional words. Word Bank examples are in the English Department Folder.
- Each teacher should prepare students for the TCIS Speech Competition in March. This is a persuasive speech contest. Teaching suggestions and materials are in the English Department Folder.
- Each teacher needs to prepare a unit on movie making. Use Pixar Short Films to teach Plot Development. Use a Storyboard to plot the story. Students should record this in any medium they choose but it must be able to be put on the school YouTube account. Pixar Movies, storyboard examples, and story maps are in the English Department Folder. The material will be provided for teachers.
- Accelerated Reader will be used by all teachers. Points should be recorded at a Major Project Grade for each quarter.
 - Grade 5—12 points = 100%
 - Grade 6—15 points = 100%
 - Grade 7—20 points = 100%
 - Grade 8—25 points = 100%

Grades 9-12

High School

- Teachers should teach 4 novels as class novels. These novels must be the four novels highlighted in the novel Study Unit. See the English Department Folder for additional materials. See Curriculum Maps for Unit Plans. If no unit plan, please work with Mr. Michael to create one.
- Teachers should be knowledgeable of the Writing Process and incorporate as much into their writing assignments as possible.

- Teachers should assign 4 independent reading novels per year. One per quarter is suggested. These must be on the approved list for the Novel Study Unit or approved by HOD.
- Academic rigor is expected in reading, writing, listening, and speaking and all teachers should incorporate all four skills into each unit of study.
- Each teacher should require the use of MLA formatting for all papers and essays. Direct students to: <https://owl.english.purdue.edu/owl/>
- Each teacher should require students to submit all major writing assignments to Turnitin.com Consequences for plagiarism are listed in our handbook.
- Plagiarized work should be given a zero but students are given a second chance for the first offense. An incident report should be filed for every offense and teachers with the consultation of divisional leaders should determine consequences.
- Each teacher should work with students on adding four pieces of writing to their digital portfolio each year. They should also work with students to add 4 photos or videos of projects or other class units. Ex: a video made as part of a novel study.
- Each teacher should work on a college essay as part of a writing unit in each grade.
- Each teacher should record a Digital Portfolio grade quarterly based on what students add to their digital portfolio. Work added to each portfolio should not be added until it has gone through the Writing Process and been peer edited and approved by the teacher.
- Teachers of Senior English Classes should work with students to prepare Yearbook comments. These should be peer edited and teacher approved before submitting to the Yearbook Committee.
- Each teacher should prepare students for the TCIS Speech Competition in March. This is a persuasive speech contest. Teaching suggestions and materials are in the English Department Folder.
- Each teacher needs to prepare a unit on movie making. Middle School teachers use Pixar Short Films to teach Plot Development and then develop a Storyboard to plot a story. Students should make a movie in any medium they choose but it must be able to be put on the school YouTube account. Pixar Movies, storyboard examples, and story maps are in the English Department Folder. More details on the Movie Day will follow.
- Accelerated Reader will be used by 9th Grade teachers. Points should be recorded at a Major Project Grade for each quarter.
 - Grade 9—30 points = 100%

APPENDIX Q: STUDENT EXAMPLE OF TEXT ANNOTATION

Recall:
Who is Mathilde Loisel?
Ans: A pretty lady who was born into a petty official family. She is marry to a minor civil servant at the ministry of Education. She envies the rich.

Similarity:
Compare Madam Loisel to Madame Forestier.
Answer: Both women treat each other kindly. They also respect and trust each other. If Mathilde had not respected her friend, she would have just disappear, not buy a replacement necklace.

Difference:
What distinguishes Madam Loisel from Mister Loisel?
Answer: Mister Loisel isn't as proud as his wife. She refused the wear flowers as an accessory while he was okay with it.

Cause & Effect:
What are the effects of Madam Loisel losing her friend's necklace?
Answer: Mathilde and husband lost all their money buying a replacement and had to live in poverty.

Idea to example:
What are some examples of settings in this story?
Answer: Some examples of setting in this story consist of Madame Loisel's house, Madame Forestier's house, the ball, and etc.

Example to main idea:
What is the main idea of "The Necklace"?
Answer: I think that main idea of "The Necklace" is you don't know what you have until it's gone because Mathilde thought that she was poor but when she experienced real poverty and change.

Mathilde
he matter? Oh, what's the matter? she conquered her grief wet cheeks. "Nothing. Only this. Give your card to some colleague in despair. Come, let us see, Madam, which you could use on for a higher social class."

Answer: 9/10 because is a nice person but she hasn't done something that is special enough for a 10.

She's very cunning
She reflected several seconds, making her calculations and wondering also what sum she could seek without drawing an immediate refusal and a frightened exclamation from this economical government clerk. Finally, she replied hesitating, "I don't know exactly, but I think I could manage it with four hundred francs."

She thinks that if she is gonna buy a dress, it must be perfect.
She threw her arms round her friend's neck, kissed her passionately, then fled with her treasure.

She was a new woman because of her necklace and clothes.
The night of the ball arrived. Madame Loisel was a great success. She was more beautiful than any other woman present, elegant, graceful, smiling and wild with joy. All the men looked at her, asked her name, sought to be introduced. All the Cabinet members wished to waltz with her. The Minister himself even noticed her.

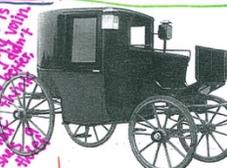
She thinks that she is better than others just because she is rich. She will lose it, so she is very happy.
She danced with rapture, with passion intoxicated by pleasure, forgetting all in the triumph of her beauty, in the glory of her success, in a sort of cloud of happiness comprised of all this homage, admiration, these awakened desires and of that sense of triumph which is so sweet to the heart of a woman.

Madame Forestier is so nice
The day of the ball drew near and Madame Loisel seemed sad, uneasy, anxious, even though her trunk was ready. Her husband said to her one evening, "What is the matter? Come, you have seemed very strange these last three days."
And she answered, "I hate not having a single jewel, not one stone, to wear. I shall look so dowdy. I would almost rather not go at all."
"You might wear natural flowers," said her husband. "They're seen as very stylish at this time of year. For ten francs you can get two or three magnificent roses."
She was not convinced. "No, here's nothing more humiliating than to look overly-stricken among a lot of rich women."
"Wait, you silly thing!" her husband cried. "Go look up your friend, Madame Forestier, and ask her to lend you some jewels. You know her well enough to do that, don't you think?"
She uttered a cry of joy. "True! I never thought of it."
The next day she went to her friend and told her of her distress. Madame Forestier went to a wardrobe with a mirror, took out a large jewel box, brought it back, opened it and said to Madame Loisel, "Choose whatever you like."
She saw first some bracelets, then a pearl necklace, then a Venetian gold cross set with precious stones, of admirable workmanship. She tried on the ornaments before the mirror, hesitating, unable to bring herself to take them off, to give them back. And she kept asking, "Haven't you any more?"
"Why, yes. Look for yourself. I don't know what you like."
Suddenly, she discovered, in a black satin box, a superb diamond necklace, and her heart throbbed with overwhelming desire. Her hands trembled as she took it. She fastened it snugly round her throat, outside her high-necked dress, and was lost in ecstasy at her reflection in the mirror.
Then she asked, hesitating, filled with anxious doubt, "Will you lend me this, just this one?"
"Why, yes, certainly."

She is obsessed w/ this diamond necklace

She was a lot of people think about her.
He brought her wraps so that they could leave and put them around her shoulders. The plain wraps from her everyday life whose shabbiness jarred with the elegance of her evening gown. She felt this and wished to escape so as not to be remarked by the other women, who were enveloping themselves in costly furs.
Loisel held her back, saying, "Wait a minute. You'll catch cold outside. I will call a cab."
But she did not listen to him and rapidly descended the stairs. When they reached the street, they could not find a carriage, searching in vain for one, shouting after the cabmen passing at a distance.
They went toward the Seine in despair, shivering with cold. At last, they found one of those ancient night carriages which, as though they were ashamed to show their shabbiness during the day, are never seen round Paris until after dark. The cab took them to their dwelling in the Rue des Martyrs, and sadly they mounted the stairs to their flat. For her, it was all over. And he was thinking that he had to be at the Ministry by ten.
She removed her wraps before the mirror to see herself once more in all her glory. But suddenly, she uttered a cry. The necklace was gone; there was nothing around her neck.
Her husband, already half undressed, said, "What's the matter?"
She turned toward him in a frenzy. "The...the necklace - it's gone!"
They will buy a new one and go bankrupt in the morning.

She lost the necklace.



Mathilde is worried.

Diamond necklace that didn't come with a case? Could be fake.

Her dress has a pocket? I think that is just figurative language.

Mathilde & her husband spent 36,000 francs buying a replacement necklace.

Mathilde is worried about being called a thief but real diamond have serial numbers, she could have proved that she brought a real replacement.

He got up, thunderstruck.
 "What did you say?...What?...Impossible!"
 And they searched the folds of her dress, the folds of her wrap, the pockets, everywhere. They didn't find it.
 "You're sure you had it on when you left the ball?" he asked.
 "Yes, I remember touching it in the hallway of the Ministry."
 "But if you had lost it in the street we should have heard it fall. It must be in the cab."
 "Yes, probably. Did you take his number?"
 "No. And you - didn't you notice it?"
 "No."
 They looked at each other in utter dejection. At last, Loisel put on his clothes. "I shall go back on foot," he said, "over the whole route, to see if I can find it."
 He went out. She sat waiting on a chair in her ball gown, without strength to go to bed, overwhelmed without any fire, without a thought.
 Her husband returned about seven o'clock. He had found nothing.
 He went to police headquarters, to the newspaper offices to offer a reward; he went to the offices of the cab companies - in a word, wherever there seemed to be the slightest hope of tracing it.
 She spent the whole day waiting, in a state of utter hopelessness before such an appalling catastrophe. Loisel returned at night with a hollow, pale face. He had discovered nothing.
 "You must write to your friend," he said, "that you have broken the clasp of her necklace and that you are having it mended. That will give us time to decide what to do."
 She wrote at his dictation.
 By the end of the week, they had lost all hope. Loisel, who had aged five years, declared, "We'll have to replace the necklace."
 The next day they took the case in which it had been kept and went to the jeweler whose name was found within. He consulted his books.
 "It was not I, madame, who sold that necklace," the jeweler said. "I must simply have furnished the case."
 Then they went from jeweler to jeweler, searching for a necklace like the other, trying to recall it, both sick with grief.
 In a fashionable shop near the Palais Royal, they found a diamond necklace they decided was exactly like the other. It was worth 40,000 francs. They could have it for 36,000 francs.
 They asked the jeweler to hold it for them for three days, and they stipulated that he should take it back for 34,000 francs if the other necklace was found before the end of February.
 Loisel possessed 18,000 francs which his father had left him. He

would borrow the rest.
 He did borrow, asking a thousand francs of one, five hundred of another, a hundred here, fifty there. He signed promissory notes, took up ruinous obligations, dealt with usurers and all the race of lenders. He compromised all the rest of his life, risked signing a note without even knowing whether he could meet it; and, frightened by the trouble yet to come, by the black misery that was about to fall upon him, by the prospect of all the physical privations and moral tortures that he was to suffer, he went to buy the new necklace, laying upon the jeweler's counter 36,000 francs.
 When Madame Loisel returned the necklace, Madame Forestier said to her in a faintly waspish tone, "You could have returned it a little sooner; I might have needed it."
 She did not open the case, as her friend had feared she might. If she had detected the substitution, what would she have thought, what would she have said? Would she not have taken Madame Loisel for a thief?
 Thereafter, Madame Loisel came to know the awful life of the poverty-stricken. She bore her part, however, with unexpected fortitude. The deadfulness must be paid. She would pay it. They dismissed their servant and they changed their lodgings, renting a garret under the roof.
 She came to know all the heavy household chores, the loathsome work of the kitchen. She washed the dishes, wearing down her pink nails on greasy casseroles and the bottoms of saucepans. She washed the soiled linen, the shirts and the dishcloths, which she dried upon a line; she carried the slops down to the street every morning and carried up the buckets of water, stopping for breath at every landing. Dressed like a working-class woman, she went to the fruiterer, the grocer, the butcher with her basket on her arm, bargaining, outraged, contesting each sou for her pitiful funds.
 Every month they had to meet some notes, renew others, obtain more time. Her husband worked evenings, making up a tradesman's accounts, and late at night he often copied manuscript for five sous a page.
 And it went on like that for ten years.



Mathilde may think that she is better than her husband on a reader basis, but when she's stressed, she wants help.

Madame Loisel kinda blames her self for them going into the life of poverty. She's angry because she worked so hard to know after ten years, they had paid everything, including the usurious rates and the compound interest. Madame Loisel looked old now. She had become the woman of impoverished households - strong and hard and rough. With frayed hair, skirts askew and red hands, she talked loud while washing the

THEME: You don't know you have until it's gone.

floor with great swishes of water. But sometimes, when her husband was at the office she sat down near the window and she thought of that thrilling evening of long ago, of that ball where she had been so beautiful and so admired.
 How would things have turned out if she hadn't lost that necklace? Who could tell? How strange and fickle life is! How little it takes to make or break you!
 Then one Sunday, having gone to take a walk along the Champs Elysees to refresh herself after the labors of the week, she suddenly perceived a woman who was leading a child. It was Madame Forestier, still young, still beautiful, still charming.
 Madame Loisel started to tremble. Should she speak to her? Yes, certainly. And now that she had paid the debts, why shouldn't she tell the whole story?
 She approached her friend.
 "Hello, Jeanne."
 The other, astonished to be familiarly addressed by this plainly dressed woman, did not recognize her at all and stammered, "But, madame, I do not know. You must have mistaken."
 "No, I am Mathilde Loisel."
 Her friend uttered a cry. "Oh, my poor Mathilde! How you've changed!"

She still wants to be a mistress.

Madame Forestier's real name is Jeanne.

She's still young because she hasn't over-worked or she isn't stressed.

"Yes, I've been through some pretty hard times since I last saw you and I've had plenty of trouble - and all because of you!"
 "Because of me? What do you mean?"
 "Do you remember that diamond necklace you lent me to wear to the ball at the Ministry?"
 "Yes?"
 "Well, I lost it."
 "What do you mean? You brought it back."
 "No, I brought you back another exactly like it. And it has taken us ten years to pay for it. You can understand that it wasn't easy for us, for us who had nothing. At last it is ended, though, and I am very glad."
 Madame Forestier stopped short.
 "You say you bought a diamond necklace to replace the other one?"
 "Yes. You didn't even notice them? They really were exactly alike."
 And she smiled, full of a proud simplicity.
 Madame Forestier, profoundly moved, took Mathilde's hands in her own.
 "Oh, my poor, poor Mathilde! Mine was false. It was worth five hundred francs at the most!" [Resolution]

Mathilde is still kind of a spoiled, brat, she still blames others for her own problem.

Mathilde paid back her debt & learned that the necklace that she lost was a fake.

Questions

On a separate sheet of paper, answer the following questions. To receive credit, you must write complete, thoughtful sentences.

1. Did Mathilde Loisel deserve the punishment she received? Explain your answer.
2. Some readers believe that the ten years of hard work changed Mathilde's spoiled nature and made her a better person. Give two pieces of evidence that support this position.
3. Other readers argue that, although Mathilde matured during this time, she wasn't completely transformed. Give two pieces of evidence from the end of the story that show Mathilde is still not a completely mature person.
4. Give two examples of personification from the story. Write down the full sentences in which the personified elements exist.
5. Give two examples of alliteration from the story. Write down the full sentences in which the alliterative elements exist.
6. The story's ironic ending is part of what makes this tale so famous. The author, however, gives a few hints about the tragic twist. Look back over the story and find an element of foreshadowing. Paraphrase this element of the story and then explain why you believe it is a good example of foreshadowing.
7. Closely examine the passage at Madame Forestier's house when Mathilde discovers and borrows the necklace. What symbolic elements are being used here by the author? Explain.
8. To what degree is Mr. Loisel also to blame for the misery he endures. Dig deep into your analysis of this character.

This is why diamonds have serial numbers, to tell the real ones from the fakes.

Mathilde is happy that her friend didn't notice the change while Jeanne kept house in her sick & aged friend.

