Advancing AVID Tutoring:

Blended Professional Learning for College Tutor/Mentors in AVID

by

Michael B. Garcia

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Approved March 2018 by the
Graduate Supervisory Committee:

Pamela Kulinna-Hodges, Chair
David Carlson
Dennis Johnston

ARIZONA STATE UNIVERSITY

May 2018

ABSTRACT

In an effort to better prepare K-12 students for college and career readiness, Advancement Via Individual Determination (AVID) has created a college and career readiness system that is implemented in schools across the United States and in many international locations. Part of this system of schoolwide transformation, is the AVID Elective class, designed for students in the academic-middle. In the AVID Elective, students are supported in their efforts to attend four-year universities. A critical aspect of the AVID Elective class is the weekly implementation of AVID Tutorials, ideally led by trained college tutor/mentors.

The purpose of this action research study is to investigate support structures of AVID Tutors beyond the current tutor training system, in order to see how additional methods can contribute to continual improvement of the tutor training system. Findings from this study indicate that expanding current tutor-training practice to include a blended-learning, on-the-job model, might be beneficial for AVID Tutors and AVID Students.

Through a mixed methods action research study, both qualitative and quantitative data collection tools were employed to help understand the effect of additional tutor training supports. Interviews, tutor assignments, observations of tutorials, and pre- and post-tests provide the bulk of the data studied. Further, this study could provide critical information for key AVID stakeholders who seek to offer training to tutors in AVID.

i

DEDICATION

For my mother, Angela, who always said I would be a doctor one day. May you rest

knowing that, one way or another, we did this together.

For my father, Albert, who has always been supportive of my education, every step of the

way. Thank you.

For my wife, Trisha, who believed in me and supported me throughout this entire project.

May you receive the generosity and support that I have received as you finish your

doctoral journey.

For all of my former students and current students of AVID. For my extended AVID

family. May this work continue our dialogue.

ACKNOWLEDGMENTS

I consider myself very privileged for having found AVID as a young teacher and for the opportunity to continue to work with an organization the fuels my passion for learning and teaching. I am profoundly grateful for the members of by extended AVID family who are the many voices of meaningful change in the field of education.

I am also thankful for the many professors at Arizona State University who gifted their time and knowledge throughout this process. The wisdom you have provided has been invaluable. I will always be grateful that you have pointed me in this direction and have lit an insatiable spark of curiosity in me. Most importantly, thank you to Dr. Pamela Kulinna-Hodges, my committee chair, who has provided all of the *warm demand* and nurturing a student could desire. To Dr. David Carlson, who taught me that there is more to our stories than numbers can ever tell us. Thank you for helping me find the beauty that comes from listening to others. Gratitude is also owed to Dr. Dennis Johnston who worked with me on the AVID-related aspects of this project. Your attention to precision, integrity, and general mentorship throughout this process has been so important to this work.

Thank you to Dr. Linda Brock, who gifted her mentorship and additional funds through a generous scholarship contribution. Your generosity and care for future leaders in education is greatly appreciated.

I did not do this work alone. There many others who were involved along the way. To my Class of 2018 doctoral cohort, thank you for your support and sharing your stories and struggles with me along the way. To the many AVID Tutors, teachers, and

AVID staff who were willing to participate in this study. Your willingness to contribute to this research made it all possible.

Thank you to my wife, Trisha, who gave me the space in our busy lives to do the work necessary for this project. Thank for the many conversations that helped me along the way. Thank you for believing in me and inspiring me to be my best every day.

I treasure all of you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION AND CONTEXT

A Renewed Hope for Higher Education

Nearly a decade ago, in 2009, I was fortunate enough to attend the Arizona State University commencement ceremony where President Barack Obama delivered the keynote speech. It was certainly a unique moment in ASU's history. During his speech, President Obama addressed some of the more pressing issues related to college attendance in the United States, a topic very close to those on the field that evening.

One of the most salient themes, as the President spoke to the soon-to-be college graduates, was the significance of the college degree as a stepping stone to solving the greater problems faced by our global society. At one point in the speech, the President urged students to persevere, despite the obstacles they might face as while tackling the world's most pressing problems of the future. The President advised, "No matter how much you've done, or how successful you've been, there's always more to do, more to learn, more to achieve" (Obama, 2009). President Obama also acknowledged that a college degree was one of the most likely pathways for students in this country to accomplish their own *American Dream*, whatever it may be. He commended students for beginning their journey in the "great American story," by finishing their bachelor's degree and urged graduates to think earnestly about what was next to come.

I was also fortunate enough to know that a handful of my former students were actually on the field that night. At the time, I was a high school English and Advancement Via Individual Determination (AVID) teacher. As I was listening to the

encouraging words of the President of the United States, I could not help but think about

the students who would be sitting in my high school classroom the next morning—the

ones who still had so many challenges to overcome before they would ever be sitting on

that field. I wondered how many of my students would ever participate in a college

commencement ceremony. I wondered how many of the students who walked the halls of

my high school would be able to accomplish their *American Dream*. I wondered how

many would go to college. How many of them would finish with a degree? Sadly, I

already knew the answer. Not enough of them.

At the time, I worked at a large comprehensive high school of over 3,400

students. Statistically, the students at my school weren't substantially different than those

in the rest of the nation's high schools. Generally, they would not be likely to finish

college and achieve their *American Dream*, if college was indeed the path they needed to

take.   In 2008, the same year the President gave this commencement speech, roughly

70% of high school seniors in the United States enrolled in their first college class, either

at a two- or four-year college (National Center for Education Statistics, 2013). Initially,

this statistic can be perceived as quite encouraging. The 70% figure from 2009 is nearly

10% higher than it was just a decade before (NCES, 2013). But unfortunately, of the 70%

of students who attended college classes for the first time in 2009, only 60% actually

returned for their second year of college (NCES, 2013). Further, only 55% of 2009

college attendees achieved a bachelor's degree in six years or less (National Center for

Higher Education Management Systems, 2015). This data suggests that nearly half of all

college students left college before they had the opportunity to obtain a bachelor's

degree. In this same trend from year to year, the data continued to suggest that a majority of students who attend college, did not finish (NCES, 2013).

Compounding this issue are the college attendance and completion statistics from low-income and minority populations, which when analyzed, show success rates were far smaller for this group of students. This group of students—those from the lowest socio-economic categories—were the majority of *my* students. In 2009, nearly 90% of my students participated in the federal free and reduced lunch program, which was an indicator of being from a "low-income" family (AVID Center, 2015d). Nationally, only 53% of 2009 high school graduates considered to be "low-income" entered college (NCES, 2013). Compounding the issue, racial minorities, who typically have been underserved populations at four-year universities and community colleges, also didn't fare well in terms college attendance immediately after high school. Latinos enrolled at just 27%, African Americans at just 37%, and American Indians at just 29% (NCES, 2013). Over 50% of my students at the time were Hispanic or Latino. According to the above NCES statistics, their odds of going to college, especially at a four-year university were not very good compared to their "upper-class," more privileged counterparts.

Therefore, when President Obama stood on the stage and commended the ASU graduating class of 2009 for all their accomplishments, I reminded myself that he was only speaking to those who had "made it." Although there were a handful of my former students on the field, I had taught so many hundreds more. Where were they? The fact of the matter was, the President was speaking to the few who were fortunate enough not to

become unfortunate statistics because of the myriad problems within our education system.

President Obama's commencement speech that night at ASU, was part of a larger national campaign to improve the state of higher education in America. That same year back in Washington, the Obama administration initiated an effort to increase college affordability and completion because the United States was ranked as 12th in the world for college completion with a rate of only 45% (US Department of Education, 2009). On their website, the US Department of Education (2009) reminded young Americans of two very important points: (a) a college education has never been more *important* and (b) a college education has never been more *expensive*. As a result, several historical initiatives for college affordability were been put in to action under the guidance of President Obama's administration, including historical increases in Pell Grants, expansion of loan repayment options, and the American Opportunity Tax Credit of 2009 which gave parents of students attending college expanded tax credit assistance to help with college tuition costs. An even more important move by the administration involved the 2015 proposal to make two-year community colleges in the US free to all Americans, so they could more readily obtain critical workforce skills and the first half of a bachelor's degree at no cost. Although there has been progress since the 2015 proposal, college tuition assistance has yet to reach more than a handful of community colleges (44) in fewer than half of states (24), under both the Obama or Trump administration (Mulhere, 2017).

However, the President's words and actions indicated college attendance had become a priority in American politics and a necessary pathway for the future prosperity

of American society. If this is so, we must think about what can be done about the 55% of students that same year in 2009 who started college, but didn't make it to commencement? (NCES, 2011). What about the 30% who never even enrolled in college after high school completion? (NCES, 2011) What has become of them? More recently, in the fall of 2017, enrollment in all sectors of higher education continued to decline. There was a 1.4% drop in 2016 from the previous year (National Student Clearing House, 2017).

Additionally, what about the national achievement gap that has persisted for decades? (NCES, 2011). Although the national achievement gap between minority students and white students has modestly decreased about 2% over the last 20 years, the data still shows that an overall achievement gap between minority students and their Caucasian counterparts still persists (NCES, 2011). With respect to this final question, one teacher in one classroom in San Diego, California has had a solution for the achievement gap problem for decades—one that has dramatically changed the landscape of education for years to come.

The Emergence of AVID

Rewind to 1978. In that year, a federal court ordered San Diego Unified School District (SDUSD) to integrate its schools, requiring the district to bus students from more ethnically diverse and low-income areas to more affluent high schools, one of which was Clairemont High School, where Mary Catherine Swanson taught English Language Arts. Recognizing the need to address the incoming population and the way teachers approached working with the new student body, veteran teacher Mary Catherine

Swanson, in collaboration with the University of California San Diego, designed a system

for students to prepare them for four-year college entry (AVID Center, 2015a). This

system operated under the fundamental belief that all students could succeed with the

appropriate level of rigor and support. The system was named, and is still named today,

Advancement Via Individual Determination, or AVID. After 36 years, AVID has become

a premier force in college readiness and was recently recognized by the White House as

one of the Bright Spots in Hispanic Education for its 38 years of success in bridging the

gap between minority students and successful college enrolment and completion (AVID

Center, 2015a). In addition, AVID Teacher Sean McComb from Baltimore, Maryland

was named as the National Teacher of the Year in 2014 (Strauss, 2014) and in 2016

AVID teacher Dana A. Hubbard of Springfield, Virginia was honored as a "Champion of

Change" by President Obama (Jones, 2016).

Even in its early days, AVID realized nearly immediate success. Four years after

AVID's inception by Swanson, not only did all 30 of the participating students attend

college (28 to four-year universities and two to two-year colleges), but school-wide

college readiness practices drastically changed because of AVID's emphasis on more

rigorous expectations for all students, especially those in the academic middle. It soon

became clear to Swanson that she had developed a winning formula to address the

achievement gap for the low-income and minority students who were being bused to her

high school. She also recognized the power that AVID had to increase school-wide

achievement and college enrollment. It was for these reasons that Swanson began the

ambitious task of disseminating AVID, and its success, throughout all of San Diego

County. By 1987, AVID was being implemented in 30 sites across San Diego County

schools. Because of its continued record of success over the last 35 years, AVID now reaches 4,837 schools across all 50 states and even 97 schools in countries outside the US (AVID Center, 2015a).

Local Context

Becoming AVID District Director. When I began teaching in 2003, AVID was relatively new in my district, although it had already begun to flourish in California. The district didn't begin to implement AVID at any of its schools until 2001 when two schools implemented pilot programs. At the time, the district's superintendent had heard about AVID from a parent who moved to the district from California and was wondering why our district didn't have the program that had been so successful in helping her daughter. After learning more about it, the district superintendent attended an AVID Summer Institute in San Diego, California and put a plan in place to implement AVID the next year.

In 2004, AVID was to be implemented at the school where I was teaching. I was a second-year English teacher at the time. The high school was a relatively typical comprehensive high school in the East Valley of the Metropolitan Phoenix area. At the time, the school served roughly 2,600 10th- through 12th-grade students (AVID Center, 2015c). Demographically, our students were approximately 48% Hispanic or Latino, 48% Caucasian, and 4% other (AVID Center, 2015c). About 80% of students were reported to be on free or reduced lunch (AVID Center, 2015c). Since then, the school has seen a 10% increase in poverty levels and Hispanic or Latino students have taken over as a *minority-majority* (AVID Center, 2015c). Even back in 2003, however, the school was the ideal

candidate for a college readiness system like AVID. According to National Student

Clearinghouse (2012) data, only 26% of our 2003 graduates enrolled in a four-year

college following their senior year of high school. *Most* of our graduates, were not

enrolling in college after graduation. That year, I was asked by my principal to be one of

the first AVID Elective teachers in our first year of AVID implementation. In 2004, I

taught a mixed sophomore and junior AVID Elective class—the same class started by

Mary Catherine Swanson in the 80s to support students in the academic middle with

college potential.

At each AVID school, there is an AVID Coordinator who facilitates the

implementation of AVID at the site level. The following year, our school's AVID

Coordinator changed positions and I was offered the role of leading AVID at my high

school. During my time as AVID Coordinator, our high school became an AVID

National Demonstration School in 2012, an honor bestowed upon less than 2% of all

AVID schools (AVID Center, 2015). This honor recognized our school's exemplary

success at implementing the AVID Elective class with a high level of fidelity. By that

point, our school participation in the AVID Elective had risen from just around 2% of our

school population in 2003 to 12% in 2012 (AVID Center, 2015c).

Over that time period, I progressively became more passionate about AVID as I

saw firsthand the effect that AVID had on the lives of first-generation college-potential

students, as well as the effect AVID could have on entire communities for generations to

come. As I gained more experience as an AVID teacher and coordinator, I regularly

witnessed students achieving at high levels, despite the statistical odds against them.

Most of them attributed their success primarily to the support they were provided by AVID. This sentiment is supported in several comprehensive studies conducted by AVID Center on the AVID Elective course (Watt, Johnston, Huerta, Mendiola, & Alkan 2008). Highlights from these studies will be reviewed in Chapter Two.

Although the work of AVID was successful at AVID schools on a small scale, greater district effects from AVID were still relatively minimal until recently. At the end of the 2013 school year, the success in implementing AVID that I had experienced at the high school level was recognized by our district superintendent and I applied for the position of AVID District Director. I officially began the position in 2014 with the directive to expand the influence of AVID in the district. We are currently implementing AVID at six comprehensive high schools, 10 junior high schools, and 33 elementary schools, with the goal of expanding AVID to all 84 of our schools over by 2021.

Over the first year of my position as AVID District Director in my district, I had the opportunity to visit all of our AVID schools on two to three occasions each. The purpose of my visits was to observe AVID implementation at various levels and to provide coaching feedback to site leaders as they aimed to take AVID to deeper levels of implementation (more on this later). As part of my AVID site observations, it was common to visit the AVID Elective classrooms. During my AVID classroom observations, I had the opportunity to observe AVID teachers, students, and tutors in action. After visits to several AVID sites, I began to notice a pattern in relation to one of AVID's critical components: AVID Tutorials. A more detailed description of the AVID Elective class and the tutorial process is forthcoming in Chapter Two. For now, it should

be understood that AVID Tutorials consist of 40% of the weekly experience for AVID students. They are arguably the most powerful teaching and learning component of the AVID Elective class.

AVID Tutor preparation as a problem of practice. Because of the complexity of AVID's Tutorial System (Appendix B), college students who typically work as AVID Tutors are in need of rigorous training before they are equipped to effectively run AVID tutorials. The current AVID Tutor training model is well-intentioned and contains an exceptional curriculum. However, upon further observations of our tutoring system in action, it became apparent to me that the current training model wasn't enough to yield the quality of AVID Tutoring necessary to sustain a strong AVID system. Something more seemed to be needed.

Later on, through interviews, I discovered that current AVID Tutors and AVID Teachers also believed that the current AVID Tutor training system wasn't getting the results we wanted and some additions were in need. In addition, an examination of AVID-related data indicated that most AVID schools were only meeting the minimum certification when it came to AVID Tutor support and training. As stated, the current AVID Tutor training curriculum is well-designed by AVID Center, however, delivery of the training is highly dependent on a face-to-face training model which front-loads a majority of the tutor training content *before* tutors have any real practical experience in the classroom. In essence, tutors were expected to learn the *theory* of AVID Tutoring up-front and then go out to the schools to tutor, rather than learn while on the job in a more authentic context. For these reasons, my purpose as a researcher-practitioner has been to

examine ways to address several of the obstacles inherent in the current AVID Tutor

preparation model by augmenting the current training model to better meet our needs.

The following chapter, outlines an in-depth overview of AVID literature as it

relates to this study. The chapter will go into more detail regarding AVID's history,

effectiveness, and structure. These components will come before the theoretical

frameworks guiding the intervention because an orientation to AVID is necessary for

most readers unfamiliar with AVID. Following, I will review the theoretical frameworks

that came to be foundational in the formation of my eventual intervention to address the

problems I observed within our AVID Tutoring system. Finally, a more detailed

description of the problem of practice is included with the rationale for my proposed

intervention.

CHAPTER 2

LITERATURE REVIEW

Chapter one provided an overview of the national and local context of this study. This chapter will begin with a literature review to help the reader understand the broader aims of Advancement Via Individual Determination (AVID) in relation to this study. Next, this chapter will outline the theoretical perspectives and other related research guiding the intervention: Vygotsky's Sociocultural Theory (1978), Bandura's Social Learning Theory (1971), and Schoen's Reflective Practitioner Theory (1983). Following, a rationale for the problem of practice and rationale for the proposed intervention will be presented. The chapter concludes with a short description of the study's purpose and the research questions.

Review of AVID Scholarship

In the following section, pertinent contextual literature regarding the AVID College Readiness system is reviewed. The areas reviewed are those most relevant to this action research study and are referenced throughout the written report of the study: AVID's college readiness system, AVID's effectiveness, AVID students, AVID's Eighth Essential/Systems Domain, and cultural capital in the AVID Elective. Where appropriate, supporting materials are included in the appendices of this paper.

Overview of AVID's system. The AVID organization has consistently achieved success by fostering a system of rigorous instruction and high expectations for *all* students on a campus, while supporting both teachers and students with research-based best practices to equip them for this challenge. Generally, AVID has challenged the idea

that low-income minority cannot succeed in a rigorous college preparatory curriculum

(Peak, 2010). To accomplish this level of sustained success over the last 38 years, the

AVID Schoolwide college readiness system and the AVID Elective program still

function on the foundational philosophies set by AVID's founder, Mary Catherine

Swanson, when she designed the program decades ago:

> 1) A non-traditional classroom setting meeting the academic and emotional needs
> of individual students.
> 2) The teacher as advisor/counselor/student advocate.
> 3) An emphasis on objective data.
> 4) The student at the center of decision-making regarding educational goals.
> 5) A student contract outlining willingness to work and setting learning goals.
> 6) Student support from teachers and skilled, trained tutors.
> 7) A curriculum emphasizing academic reading and writing.
> 8) Reliance on the Socratic process.
> (AVID Center, 2016b)

Today, AVID is being implemented in over 5,000 K-12 schools and over 50 institutions

of higher education in the United States. AVID also implements in several countries

around the world at United States Department of Defense schools. AVID's mission is to

"close the achievement gap by preparing all students for college readiness and success in

a global society" (AVID Center, 2016b) and their tag-line reads, "Proven Achievement.

Lifelong Advantage" (AVID Center, 2016b), a testament to AVID's long-standing

success as an education reform.

   AVID's Eleven Essentials/Schoolwide Domains. To consistently reproduce

AVID on this scale, various systems have been put into place to encourage the highest

level of fidelity to AVID across all aspects of its implementation. One way that AVID

has maintained a high level of consistency has been through the use of the AVID Eleven

Essentials as outlined in AVID's resource *AVID Elective Essentials* (McGinnis, Mertler, & Schiro, 2014). Until 2017, this resource served as the implementation guide for AVID at the secondary level. In the summer of 2017, however, AVID introduced the Coaching and Certification Instrument (CCI) in which the original Eleven Essentials were reorganized and augmented with other schoolwide college and career ready practices. Since both certification tools spanned the course of this intervention, I will provide a brief overview of both as they relate to AVID Tutoring.

Prior to the 2017 transition to the CCI, AVID schools used a certification document called the Certification Self Study (CSS), which included detailed descriptions of the Eleven Essentials to which every AVID school was held accountable if they sought to become certified as an AVID site. Table 1 consists of an overview of AVID's Eleven Essentials as they existed in the original certification document, the CSS.

Table 1
AVID's Eleven Essentials

Essential	Evidence
1. Recruitment must focus on students in the academic middle.	The AVID student profile describes "students in the middle" as students with academic potential, with average to high test scores, and who have the desire and determination to go to college.
2. AVID program participants, both students and staff, must choose to participate in the AVID program.	Documentation is required from teachers and students indicating that they chose voluntarily to participate in the program.
3. The school must be committed to full implementation of the AVID program, with students enrolled in the AVID year-long elective class(es) available within the regular academic school day.	Documentation is required that provides evidence that AVID classes are scheduled within the day, usually a master schedule for the school where AVID is offered.
4. AVID students must be enrolled in a rigorous course of study that will enable them to meet requirements for university enrollment.	This usually means students are enrolled in Pre-Advanced Placement or Advanced Placement courses. Student schedules are presented as evidence to verify compliance with this essential.
5. A strong, relevant writing and reading curriculum provide a basis for instruction in the AVID classroom.	Students in the AVID elective class spend time each week receiving instruction in writing-to-learn strategies and using the AVID writing curriculum.
6. Inquiry is used as a basis for instruction in the AVID classroom to promote critical thinking.	AVID students develop and practice critical thinking skills, note taking (Cornell Notes), and questioning strategies as part of the AVID class.
7. Collaboration is used as a basis for instruction in the AVID classroom.	AVID students collaborate to solve problems each week in the AVID classroom using strategies like think-pair-share and jigsaw readings.
8. A sufficient number of tutors must be available in AVID elective classes to facilitate student access to rigorous curriculum. Tutors should be students from colleges and universities and they must be trained to implement the methodologies used in AVID.	At least twice a week students receive tutorial support from trained AVID tutors following the basics of the AVID tutorial process.
9. AVID program implementation and student progress must be monitored through the AVID Center Data System, and results must be analyzed to ensure success.	Data are collected twice a year on AVID students, and a separate data collection is required of AVID senior students.
10. The school or district has identified resources for program costs, has agreed to implement all AVID implementation essentials and to participate in AVID certification. It has committed to ongoing participation in AVID staff development.	Funding for AVID is defined in school and campus budgets. AVID should also be included in the campus and district improvement plans. Teachers and administrators from each campus are expected to attend AVID's summer professional development.
11. An active interdisciplinary AVID site team collaborates on issues of student access to and success in rigorous college preparatory courses.	An AVID site team includes interdisciplinary teachers and a site administrator, counselor, and AVID elective teacher. The team writes and implements a site plan. The team also meets frequently to collaborate on planning and logistical issues as well as data analysis on AVID student success in the rigorous curriculum of advanced courses.

Note: Source is (McGinnis, et al. 2014).

The CSS document containing the AVID Eleven Essentials also functioned as an implementation tool, much like an Innovation Configuration Map (Hall & Horde, 2015). Schools used the CSS twice per year as a self-assessment and reflection tool and as a basis for developing a yearly AVID Site Plan. To get a flavor of the document, the section on Essential Eight regarding AVID Tutorials has been provided in Appendix A. An examination of Essential Eight in Appendix A should give the reader a solid idea of how the document was structured. Within each essential, there are several rigorous indicators that a school is required to meet at an acceptable level to maintain status as an AVID school. By contract, a school that is not certified is not contractually allowed to use the AVID name or function as an AVID school (more on this later). Therefore, it is very important that AVID sites meet the minimum certification requirements outlined in this document.

Each year, using the CSS tool, an AVID school was required to verify compliance with the Eleven Essentials to receive certification. This report was reviewed by the local AVID District Director (me) as well as verified by a regional AVID Program Manager or AVID State Director. For each of the essentials, schools also had to provide evidence to their local District Director, who verified attainment of each essential. This evidence was gathered through classroom and school observations as well as artifacts submitted by AVID implementers. Thus, when speaking of fidelity to AVID, a lay person could understand this to mean a school was adhering to the Eleven Essentials of AVID by implementing the system consistently with how it was designed and intended.

The Coaching and Certification Instrument. In 2017, AVID transitioned away from the Certification Self Study (CSS), which contained the original Eleven Essentials. The new instrument adopted was called the Coaching and Certification Instrument. The CCI shifted from an Eleven Essential model to a Four Schoolwide Domain model. The CCI maintained all of the original language in the Eleven Essentials, but also added additional indicators under each of the Schoolwide Domains: Instruction, Systems, Leadership, and Culture. For accountability purposes, the CCI is to be used in the same manner as the CSS. Schools will still use the tool to assess their level of AVID implementation, the difference being that more schoolwide components are assessed versus a focus on the AVID Elective program. A snapshot of the formatting of the CCI can also be viewed in Appendix A.

AVID Effectiveness. Since its first implementation in 1980, AVID has become synonymous with college and career readiness as one of the foremost college-readiness systems. AVID seeks to prepare students in the academic middle, often from low-income households, for the rigors of the university. AVID has provided professional development to thousands of teachers each year through its Summer Institutes and has made a tremendous impact on addressing the achievement gaps in a wide array of school districts (Lozano, Watt, & Huerta, 2009). For example, 93% of 2014 AVID seniors in the state of California completed four-year college acceptance requirements compared to the national rate of only 36% (AVID Center, 2015a). Additionally, when the data for meeting four-year college acceptance requirements is disaggregated by race, AVID students consistently met acceptance requirements at a rate higher than 90%, essentially closing the achievement gap in this regard (AVID Center, 2015a).

Several studies conducted over the last decade continue to suggest that AVID plays a substantial role in preparing first-generation college-goers for college enrollment and success. In a 2008 study, Watt, Johnston, Huerta, Mendiola, and Alkan (2008) found that students understood the importance of the AVID teacher as a critical factor for gaining access to college application/enrollment information, and attributed their "college knowledge" to their AVID teachers. In addition, a study by Martinez and Klopott (2005) was able to link AVID to proactively raising achievement and increasing college preparedness for "at risk" students within a school because AVID deliberately addresses the predictors of college-going behavior.

In a more recent evaluation of AVID by the Minneapolis Public Schools district, AVID students outperformed non-AVID students in areas of academic progress such as Reading and Mathematics (Jacobs-Cassuto & Roberts, 2013). The study also revealed no apparent achievement gap between all ethnic groups in both Reading and Mathematics assessment scores. Similarly, the Houston Independent School District (2012) published that AVID participants showed increases in other college preparation indicators. Similar results appeared in reports published by several other school districts from various states, including Fairfax Country Public Schools, Madison Metropolitan School District, and Clark County Schools (AVID Center, 2016b).

Moreover, AVID has been linked with schoolwide success in addition to individual student success. A study on AVID effectiveness by Portland Public Schools (2015) found that after two to three years of AVID implementation, schools increased their state performance standing or rank by one level. Further, overall graduation rates at

AVID schools increased, graduates of AVID persisted more into their second year of college, and AVID students cited their participation in AVID during high school as having a significant impact on their college performance. In addition, a study of AVID implementation in Texas schools, Watt, Yanez, and Cossio (2002) were also able to link the implementation of AVID with the expansion of access to courses of rigor (such as AP courses) as well as AVID student success in those courses. Research studies such as these indicate a positive effect from AVID for *all* students on a campus, not just those enrolled in the AVID Elective program.

The AVID Elective vs. School-wide AVID. As a comprehensive college-readiness system, AVID is implemented on two simultaneous levels at the secondary campuses. These two levels are commonly known as the AVID Elective class and AVID School-wide.

The AVID Elective class functions like an academic intervention which exists as a component of AVID Schoolwide and is commonly called "the AVID program." AVID students are selected to take part in this AVID Elective class based on nationally defined criteria. The AVID Elective class targets students in the academic middle (average grades and test scores) with the goal of helping students develop college-ready skills. Although the AVID Elective is like an intervention, participation in the course is voluntary.

The AVID Elective class is recommended to begin in the 6th or 7th grade and continue until high school graduation. Once in the AVID Elective class, students receive a college readiness curriculum and tutoring to support them in their academic courses. A typical week in the AVID Elective Class is outlined in Table 2.

Table 2

A Typical Week in the AVID Elective Class

	Monday	Tuesday	Wednesday	Thursday	Friday
Day Type	Curriculum Day	Tutorial Day	Curriculum Day	Tutorial Day	Team Building Day
Activity	● Writing ● College and Careers ● Strategies for Success ● Critical Reading	● Collaborative Study Groups ● Writing Groups ● Socratic Seminars	● Writing ● College and Careers ● Strategies for Success ● Critical Reading	● Collaborative Study Groups ● Writing Groups ● Socratic Seminars	● Binder Evaluations ● Field Trips ● Guest Speakers ● Motivational Activities ● Team Building

Note: Schools may decide to flip curriculum and tutorial days due to availability of AVID Tutors.

Beyond the AVID Elective class, AVID defines school-wide implementation to occur when "a strong AVID system transforms the instruction, systems, leadership, and culture of a school, ensuring college readiness for all AVID Elective students and improved academic performance for *all* students based on increased opportunities" (AVID Center, 2016b). The AVID School-wide component involves the four domains now housed in the Coaching and Certification Instrument (CCI): *Instruction*, *Systems*, *Leadership*, and *Culture*. When a school is said to be implementing AVID Schoolwide, *all* teachers on a campus are implementing AVID instructional practices and creating a culture of academic rigor and college-readiness for *all* students. Additionally, leaders have put systems into place to increase college and career readiness, especially in terms of preparation for entrance into four-year universities.

AVID students. According to the CCI under Schoolwide Domain Two, *Systems,* AVID students selected for the AVID Elective class should be students in the academic

middle. This is distinction can be defined in many ways, but typically it means that a student falls somewhere in the "average" range of course grades or standardized test scores. For example, one guideline is that students who enter AVID might have a GPA in the range of 2.0-3.5. These are typically students who are capable of completing a more rigorous curriculum to reach their full potential.

AVID students must express the desire and have the potential to attend a four-year university. Once received, applications are reviewed to ensure students are truly in need of the elective course and then placed in the AVID Elective class. The junior high schools in our district each receive between 50-100 applicants to enter AVID each year. Roughly 60 are admitted at each school. At the high school level in our district, each school receives well over 100 applicants each year, with a range of 30-100 admitted at each school, depending on the size of the AVID Elective program at the school. Additionally, students sign student agreements once they join the AVID Elective class. The agreements are an attestation that students are voluntarily participating and are determined to complete the work necessary to prepare for entry into a four-year university.

The Eighth Essential/Systems Domain and AVID Tutoring. As mentioned, the previous and current AVID Certification documents were designed around the components that originally made AVID successful at Clairemont High School in San Diego County in 1980. For example, one of the Eleven Essentials, Essential Eight, focused on the use of college tutor/mentors, who I will refer to as AVID Tutors. In the CCI, this language now falls under Schoolwide Domain Two, *Systems,* Subdomain One,

21

"Management of the AVID Elective." In the early 1980's, AVID's founder, Mary Catherine Swanson, understood that for students in the academic middle to be successfully accelerated, they needed academic support embedded into their regular school day. Swanson has famously been quoted saying, "Rigor without support, is a recipe for failure. Support without rigor, is tragic waste of potential."

Swanson's solution was to devise a system where students were supported by college students who acted as AVID Tutors. The AVID Tutors function both as academic and personal mentors, especially since many of them today are often former AVID students themselves. From the earliest days of AVID, Swanson utilized college-age tutors to assist AVID students and subject area teachers in utilizing AVID's WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) instructional best-practices. To this day, AVID Tutors remain one of the critical support structures in place in the AVID Elective component of the AVID College Readiness System. This is why each AVID Elective class is supposed to strive to have a sufficient number of AVID Tutors available, according to the CCI. The 7:1 tutor ratio is defined in the AVID Essentials and is understood to be the minimum ratio to implement tutorials with fidelity. It is a belief among AVID Center that groups around seven students can be adequately supported by one AVID Tutor.

Although there has been substantial research on the AVID College Readiness System as a whole (Black, McCoach, Purcel, & Siegle, 2008; Guthrie & Guthrie, 2002; Lozano et al., 2009; Martinez & Kloppott, 2005; Mendiola, Watt, & Huerta, 2010; Watt, Yanez, & Cossio, 2002; Watt, Powell, Mendiola, & Cossio, 2004; Watt, Powell, Mendiola, & Cossio, 2006; Watt et al., 2008; Watt, Huerta, & Lozano, 2007), there remains a gap in the literature on AVID Tutors specifically. Research in this area is

important because of the potential impact AVID Tutors can have on AVID students. As Table 2 illustrated, AVID Tutorials are 40% of the student's week in the AVID Elective class. Therefore, the support of highly trained AVID Tutors in the AVID Elective class is paramount for students who are accelerated before they may be ready to take on the rigors of their new coursework.

AVID Tutors come to the AVID class twice per week to facilitate formal tutorial sessions. These sessions typically take place on Tuesdays and Thursdays. In addition to the student to tutor ratio of 7:1, which is an essential component for meeting certifiable levels in the CSS and CCI, there are very specific guidelines that outline the process for the AVID Tutorial as well as the training that is expected for AVID Tutors. For example, in AVID Essential Eight of the CSS, it is indicated that AVID Tutors should receive a minimum of 16 hours of formal training to be certified as an AVID tutor. Figure 1 shows the specific excerpt from the CSS expressing this requirement. This requirement is also mirrored in the current CCI document.

| 2. ❑ There is no evidence that AVID tutorial training has occurred using the most current *AVID Tutorial Guide*; no documentation of the required 16 hours of AVID tutorial training exists. | ❑ There is a Tutor Training Plan to ensure that tutors have participated in at least 16 hours of tutorial training in AVID methodologies based on the most current *AVID Tutorial Guide*; tutors demonstrate the AVID methodologies and WICOR strategies in their work with students in the AVID Elective class. | ❑ Trained site personnel provide ongoing coaching and debriefing to support tutors in the AVID tutorial process. Evidence exists that teachers coach the tutors in a collaborative inquiry-based process, as modeled in the most current *AVID Tutorial Guide*, videos, and materials. | ❑ There is documentation that the site has established the infrastructure to support tutorial training in all units of the most current *AVID Tutorial Guide* and fully implement the site's Tutor Training Plan. |

AVID Criteria	Tutors do *not*...	Tutors...	Trained tutors...
Trained Tutors	☐ follow guidelines established in the *AVID Tutorial Guide*, and do *not* promote student-centered discussions. (CSS, 8.1.0)	☐ follow guidelines established in the *AVID Tutorial Guide*, promote student-centered discussions, and check student presenters' understanding. (CSS, 8.1.1–8.1.2)	☐ ensure **AVID Elective students** use collaborative structures and develop effective critical thinking skills. (CSS, 8.1.2–8.1.3)

Figure 1. AVID CSS 8.6 and CCI II.1.14 Regarding AVID Tutor Training Requirements.

23

The reason for the 16 hour training requirement is that AVID Tutoring is not like the traditional form of tutoring with which most people have become familiar. Instead of the traditional model of one-on-one tutor-led instruction, the AVID Tutorial process (Appendix B) follows a strictly regimented procedure to promote a collaborative-inquiry model over the traditional one-on-one tutoring model. Thus, the AVID model of tutoring is very student-centered. Tutors' main objectives are not to help students find "answers," but instead teach them to become collaborative problem solvers. AVID's philosophy is that collaborative inquiry is an essential skill for students to develop through the AVID Tutorial process. It is a skill that will transcend learning the answer to any individual problem. With that being said, this philosophy isn't AVID's belief alone. There are several notable scholars who have contributed to leading AVID to a model of collaborative-inquiry (Barkley, Cross, & Major, 2005; Bruffee, 1999; Cooper, 2003; Cuseo, 2002, 2003; Dewey, 1916; Jonson, Johnson, & Smith, 1991; Kagan & Kagan, 1998; Millis, 2010; Vygotsky, 1972).

Fidelity to Essential Eight. Based on my own observations from visiting AVID Elective classrooms and an analysis of yearly data reports, there has still been much difficulty in achieving a *high level* of fidelity with respect to the AVID Tutorial system and AVID Essential Eight. For the most part, the AVID sites in our district meet a minimum acceptable level of implementation, but struggle to go beyond basic certification levels for AVID Tutoring under essential eight. Table 3 displays the percentage of overall Essential Eight ratings for certified AVID schools in the district over the last three years. It should also be noted that there is yet to be data collected on

this indicator in the CCI, since the instrument was instituted for the first time during the 2017-2018 school year.

Table 3

% of AVID Schools Overall Essential Eight Ratings

Essential Eight Ratings	Not AVID (0)	Meets Certification Standards (1)	Routine Use (2)	Institutional-ization (3)
2013 (N=7)	0.0%	20.0 %	55.0%	25.0%
2014 (N=10)	33.3%	16.7%	33.3%	16.7%
2015 (N=14)	0.0%	54.0%	29.2%	16.8%
2016 (N=16)	0.0%	50.0%	50.0%	0.0%

Note: Source is AVID Center (2016)

Overall AVID's CSS rating scale for each essential ranges from three to zero. Three ("Institutionalization") is highest rating. A level two ("Routine Use") is the next highest. A level one ("Meets Certification") follows. And zero ("Not AVID") is the lowest rating. For minimum certification to be granted by AVID Center, a rating of one ("Meets Certification") must exist in every essential, including essential eight. Based on the certification levels represented in Table 3, a very small percentage of AVID schools excel at a rating of three ("Institutionalization"). The highest scoring year for a level three rating is 2013, but that percentage is skewed since there were fewer AVID schools in 2013. In 2014, one-third of the AVID sites did not even meet AVID's minimum certification level for this essential with a rating of zero ("Not AVID").

Further, meeting the AVID Tutor training requirement spelled out in the Essential Eight indicators has also been a major factor in why AVID schools have had difficulty in moving toward a level three, "institutionalization." As previously noted in Figure 1, under "Meets Certification Standards," AVID Tutors must receive at least 16 hours of tutorial training based in AVID methodologies. These methodologies include several strategies to promote rigorous, inquiry-based, collaborative tutorials.

To meet training requirements, previous district leaders have attempted to meet the training requirements by delivering eight hours of the required 16 hours of training over two face-to-face workshops, while classroom teachers have been expected to fulfill the other half of the eight hours of training in an on-the-job model. This model is relatively typical outside of the school district and is in line with the current suggestions from AVID in terms of AVID Tutor training. Within AVID's *Tutorial Support Curriculum Resource Guide* (AVID Center, 2011), the four tutor training modules provided by AVID outline the workshop activities which make up the 16 hours of training. However, in our district, tutors have not historically received all 16 hours of training from a centralized district level. Even if they did, the training model proposed by AVID is very heavy in front-loaded theory rather than helping tutors learn while on-the-job.

For my first two years as AVID District Director, I carried over the tutor training model from my predecessors. However, that model continued to yield only the minimum level of certification at sites. Also, with the variation in the level of on-the-job training beyond the face-to-face training, the resultant situation leads to tutoring scenarios that are

inconsistent from school to school. Two such scenarios at each extreme of the spectrum are described next to provide the reader with an example of possible AVID tutoring situations in the classroom.

Tutoring scenarios. Currently, if an observer visited an AVID Elective classroom on a tutorial day at one of our secondary schools, a visitor might see a wide variation of implementation in terms of the AVID tutorial process. To illustrate more concretely what an AVID tutorial session should look like, first, assume we have visited a highly effective AVID tutorial utilizing college tutors and then an AVID tutorial situation that was less consistent with the AVID guidelines. Both of these situations are hypothetical in nature.

The highly effective AVID classroom. In a highly effective AVID classroom during an AVID tutorial day, students are seated at tables in a horseshoe pattern, facing a large white board as described in AVID Essential Eight. At each table, five to seven AVID students are seated with an AVID Tutor (Figure 2).

Figure 2. An AVID Tutorial in Progress.

AVID students take turns standing at the board to present a "Point of Confusion" (POC) drawn from their rigorous coursework outside of AVID. The POC is derived from a problem in another academic class and is expressed through the Tutorial Request Form (Appendix C). The AVID Tutor encourages students in the group to be active in a collaborative-inquiry process as group members ask Socratic-style questions of the student presenter to help guide the presenter in critical thought about the POC. By utilizing the Socratic Method, which takes substantial skill and time to develop, the tutor only interacts with the group members as a facilitator; not as the "teacher." Use of the facilitator role was intentional in the AVID Tutorial process, which has been designed to teach AVID students to take ownership of their own learning and build a community of students who are accountable for each other's success (AVID Center, 2011). As this process occurs, the AVID college tutor also takes notes for the student presenter and encourages the participation of the other group members.

After the group members have successfully guided the student presenter to arrive at a solution to her POC, the student presenter is asked to summarize the thinking process that went into arriving at the solution. The group members and college tutor then check for understanding of the original POC. This process (Appendix B) is then repeated for each of the group members in the tutorial group until every student has had an opportunity to present his POC for the day.

In ideal classrooms, the aforementioned description would apply to all groups of students and tutors. There would be perhaps four or five groups of seven students in the highly effective AVID classroom on an AVID tutorial day. In addition, the classroom

teacher would play an active role in roaming from group to group, further coaching this process. The teacher also would keep record of student participation and engagement while providing coaching tips to the AVID college tutor after the session is complete. For further reference, a video of a virtual mock tutorial, modeling this entire process can also be found on YouTube, titled *Tutorial Video for Tutors* (Garcia, 2016).

The ineffective AVID classroom. By comparison, let us assume we visited a classroom in which a weaker implementation of the AVID Tutorial process was carried out. The tutorial environment in an ineffective classroom is much less structured. There is less accountability to the AVID tutorial process outlined in Appendix B. The teacher may not be as actively engaged in coaching. Instead, the teacher may be seated at a desk or absent from the room completely, abdicating control to the AVID college tutors. The absence of teacher monitoring is often where the accountability chain begins to break down.

The tutorial groups in the weaker classroom appear to be much different than in the highly functioning AVID classroom. Student presenters may be at the whiteboard, but they stand in isolation. They are not part of a collaborative community who is invested in the inquiry process. Their group members are not actively directing the thinking of the student presenter into rigorous thinking via the Socratic Method. Such a situation would leave the student presenter to quietly work out her POC on the whiteboard while there is little, if any, interaction from the other group members. Moreover, the AVID Tutors are not prompting students to participate or holding students accountable for participation. In this classroom AVID Tutors are often silent. In many cases, students are off task and

have turned to working on other homework or have become distracted by games or social media on their personal electronic devices.

The high level of learning and academic support that is supposed to be happening in the AVID Tutorial is not. The student presenter who came to class to receive help in her academic coursework is not getting the help she should be getting from her group members and her AVID college tutor. In this case, the AVID tutorial is dysfunctional, rendering it irrelevant to the students it was designed to help. Even worse, one of the major components of the AVID College Readiness System, acceleration and support, is rendered ineffective.

The consequences of poor tutorials. This wide variation in delivery of tutorials can occur in AVID classrooms despite clear expectations stated in the procedures for the AVID Tutorial process. When this lack of fidelity occurs, the AVID elective is at risk of losing its effectiveness due to the inability of AVID students to receive the support they need in their rigorous coursework. This would the scenario that Mary Catherine Swanson called, "a recipe for failure" (rigor without support) (Swanson, 2000). When this ineffective delivery continues long term, the AVID Elective class can seem irrelevant to the student and retention of AVID students becomes much more difficult (Watt et. al, 2008). Although dysfunctional tutorials are not necessarily the reason students drop out of AVID, national data has suggested a substantial drop-off in participation in AVID between the 10th- and 11th-grade years and the 9th- and 10th-grade years (AVID Center, 2015). Although tutorials aren't specifically linked to student attrition in the literature, it can be presumed that dysfunctional tutorials can't help the cause.

The AVID Elective and AVID Tutor as Builder of Cultural Capital. Further,

Cultural Capital theory (Bourdieu, 1982) is useful in the context of understanding the role

the AVID Tutor plays in helping historically disadvantaged students from low-income

populations thrive in the AVID Elective class. As previously stated, the AVID Elective

class, has been established to close the achievement gap among the middle-achieving

students and the highest-achieving students in a school (McGinnis et al., 2014). However,

the goal of accelerating students academically and providing them with academic support

is only part of the theory behind the role of the AVID Tutor. According the *AVID*

Tutorial Support Activity Guide, AVID Tutors should also serve as a "role model/mentor

to AVID students" (AVID Center, 2011, p.14). In essence, AVID is supposed to help

build *cultural capital* among historically underserved populations in higher education,

especially those who would potentially be first-generation college students.

   The AVID Elective class and cultural capital. To better understand how the

AVID Elective class has helped to build cultural capital among its students, Bourdieu's

(1982) conception of cultural capital in its *embodied* state might first be considered.

Bourdieu situated the *embodied* state of cultural capital alongside the *institutional* and

objectified states. In the *embodied* state, cultural capital takes on the form of long-lasting

internal affects, as opposed to external forms of cultural capital such as in the

institutional and *objectified* states (Bourdieu, 1982). Although there are *institutional* and

objectified factors that affect AVID students outside of the elective class, the AVID's

certification document, grade level standards, and curriculum (McGinnis et al., 2014)

reflect an effort to explicitly teach students social practices that will help them navigate

the cultural hierarchies of secondary school and later the post-secondary landscape.

According to Swartz (1998), accumulating this kind of cultural capital in its *embodied* state requires specific pedagogical action and invested time from parents and trained professionals to sensitize a student to this unfamiliar set of cultural norms.

Bourdieu (1982) suggested cultural capital in its *embodied* state takes time to manifest, much like building a muscular physique or obtaining a sun tan. Cultural capital in its *embodied* state cannot be transferred instantly like money or property rights in the *objectified* state. This gradual, slow-drip, accumulation of cultural capital in the embodied state has been one of the underlying foundations of the AVID Elective class, particularly for a population of students who require the long-term building of cultural capital as they transform from novices in the college-going culture to experts (Roderick, Coca, & Nagaoka, 2011). This is why AVID seniors stated that they typically needed between two and a half and three years in the AVID Elective program to feel prepared to attend a four-year university (Watt et. al., 2008).

Additional data shows that students who have been in AVID Elective classes for three years or more are much more likely to attend a four-year university (AVID Center, 2015). For example, over half (55%) of the AVID African-American students who participated in AVID for three years enrolled in four-year colleges, compared to a national average of 33%. Similarly, 43% of the Latino students who participated in AVID for three or more years enrolled in four-year colleges, compared to the national average of 29% (AVID Center, 2015).

The AVID tutor and cultural capital. In terms of cultural capital, the typical AVID student is commonly lacking the necessary, comprehensive set of experiences,

which Bourdieu (1982) would call *habitus.* This is often attributed to the lack of cultural capital in the home (Roderick, Coca, & Nagaoka, 2011). For example, in 2014, 79% of all AVID graduates in my district came from homes without a college educated parent (AVID Center, 2014). Without these cultural experiences embedded in the home (e.g. applying to colleges, conducing career research, applying for scholarships, etc.), students would otherwise struggle compared to their peers who have these cultural experiences as they attempt to successfully gain admission and succeed in attending college.

Aside from a professionally trained teacher, who is essential in providing the *pedagogical action* (Swartz, 1998) needed to help sustain cultural capital building among students over multiple years in the AVID Elective, the assistance AVID Tutors, also play a crucial role in the transmission of important cultural knowledge to AVID students. Further, because the AVID Tutorial consists of two-fifths of the AVID Elective class meeting time, the AVID Tutor has become is potentially a highly impactful agent in the long-term cultural capital construction of AVID students. The AVID Tutor can potentially contribute to the transmission of cultural knowledge in two main ways.

First, as described in AVID Essential Eight and in the CCI Systems Domain, the AVID tutor facilitates student access to a rigorous curriculum. In short, the AVID tutor, over time, helps the AVID student understand the "hidden curriculum" of schools and transmits important college-going cultural knowledge in relation to academics. For example, the AVID tutor typically teaches students to take ownership of their own problems and to think through them critically. Tutors do this by teaching AVID students how to apply the Socratic Method as they work through POCs in various academic work

(see the AVID Tutorial Process in Appendix B). This problem-solving method is an essential college survival skill for students who will later be navigating the landscape of highly rigorous content in post-secondary education (Conley, 2010). Additionally, these are skills that are not necessarily *explicitly* taught in any other academic course the way they are in AVID Elective classes through AVID Tutorials.

The second way in which an AVID Tutor is an integral agent in the transmission of college-going cultural knowledge is by acting as a college role model to AVID students who may lack similar models outside of the school setting. Because of this, it has been the intention of AVID to specifically hire college students to be AVID Tutors, especially those who were former AVID students. As part of the AVID Tutorial structure, AVID Tutors are encouraged to engage in casual conversations about college and to even bring in their own artifacts to share with students, such as Cornell notes, planning tools, and stories of college experiences. These informal interactions serve as an important conduit of cultural knowledge transmission as AVID Tutors explicitly model the cultural behaviors and narratives of a typical college student.

The WICOR Framework and Collaborative Inquiry. To understand the broader curricular scope in which the AVID Tutorial functions, it is also important that the reader understands how the AVID Tutorial is situated within AVID's instructional framework. When training educators, AVID places a large emphasis on a framework of five instructional areas, which are designed to scaffold student learning of rigorous content (AVID Center, WICOR, 2015). These five instructional areas are *writing, inquiry, collaboration, organization*, and *reading* or as AVID calls them, the "WICOR."

The WICOR framework provides a learning and teaching model that educators can use to scaffold student learning even as the content becomes increasingly more rigorous. For this reason, according to AVID Center, rigorous instructional design should aim to include as many areas of WICOR as possible, if not all of them (WICOR, 2015). Further, AVID claims that the WICOR model promotes the skills that students need in life beyond college graduation, because through WICOR, college-ready students will develop interpersonal skills, communication skills, and the ability to generate creative solutions to new problems in collaborative ways (WICOR, 2015). In addition, several aspects of the WICOR framework are based off of the work many educational researchers of the likes of Conley (2010); Marzano, Pickering, and Pollock (2001); and Vygotsky (1972), to name a few.

Collaborative-inquiry. In terms of WICOR, it is important for the reader to understand the areas of WICOR that relate most to the AVID Tutorial process, so that the reader can more broadly conceptualize the embedded nature of WICOR in the tutorial process. In the AVID Tutorial process, two areas of WICOR have been highly emphasized, although all five areas of WICOR are included at some level. These two main instructional areas of emphasis in AVID tutorials are the "C" and "I" of WICOR, or *collaboration* and *inquiry*. The AVID tutorial process itself, is called by AVID, a process of "collaborative-inquiry" (AVID Center, WICOR, 2015, p. 89). According to AVID Center, collaborative-inquiry involves:

> Intentionally designed student groups engage in "co-laboring" toward meaningful learning outcomes, using active engagement activities planned to maximize learning, and facilitating the sharing of workload (Barkley, Cross, & Major, 2005, p. 117).

In addition, as part of AVID's WICOR framework, collaboration has come to mean teachers and AVID Tutors serve as *facilitators*, not direct instructors, in a learning community where students work together for the success of the group (AVID Center, WICOR, 2015). Some might call this type of instruction, *student-centered* (Land & Hannafin, 1996). According to Land and Hannafin (2009), student-centered learning environments shift the focus from the educator as communicator of new information onto the person integrating the new information, the student. Student-centered learning has been a foundational concept in AVID instructional design and is also a foundational component of the AVID Tutorial. As previously stated, the objective of the AVID Tutorial is to teach students to take ownership of their own learning (student-centered) and to become independent of the instructor. This aids in students gradually becoming more self-sufficient as they prepare for the rigors of college (McCombs & Miller, 2009).

The inquiry method, or the "I" in WICOR, is the second component of the AVID framework emphasized in AVID's tutorial model. Inquiry-based instruction is not a new concept to most educators (Bruner, 1961; Dewey, 1916; Piaget, 1985; Vygotsky, 1978) but it is one that AVID has emphasized as essential in teaching students to think critically. AVID's commitment to these aspects of the tutorial model are supported by the notion that "critical thinking is not driven by *answer*s, but by *questions*" (AVID Center, WICOR 2015, p. 73). This method of inquiry has been traced back to as early as Socrates (Overholser, 1993) and his very widely used method of instruction, which has capitalized on the use of skilled questioning and dialoging. In general, AVID instructional practices often Socratic methods, along with a core understanding of Bloom (1956) and Costa (2001) in terms of levels of thinking and questioning.

When placed together, the foundational structures of collaboration and inquiry provide the foundation that drives the development of the ten-step AVID Tutorial process (Appendix B). This complicated ten-step process is what AVID Students and Tutors must follow to complete the cycle of collaborative inquiry throughout AVID Tutorial. Because AVID Tutors are challenged to guide students through this complex process of collaborative inquiry, again, adequate training becomes critical to prepare them to be highly adept at the skills of fostering collaboration and inquiry within their own tutorial groups. These are skills that even the most seasoned teachers must work at to perfect.

Criticisms of AVID. Since AVID is a comprehensive college readiness system that has been in existence for over 37 years, there have been numerous studies regarding the effectiveness of AVID. However, one of the criticisms of AVID related research is that much of the research conducted thus far has focused on college readiness and college enrollment (Guthrie & Guthrie, 2002; Hays, 2004; Huerta, Mendiola, & Alkan, 2008; Lipovski, 2004; Mendiola, Watt, & Huerta, 2010; Watt, Johnston, Huerta & Watt, 2015). This perceived myopic focus has opened the door for some critics of AVID to claim that AVID has not significantly studied the academic achievement of AVID students. Some go as far to argue that AVID lacks effectiveness, pointing to studies that suggest AVID students do not significantly outperform non-AVID students across various academic measures, such as standardized reading, writing, and math exams (Lake, 2009; Nagaoka, Roderick, & LaForce, 2010; Rorie, 2007). Other criticisms have suggested that previous studies on AVID have not met an acceptable level of rigor. For example, in a Chicago-based 2010 review of AVID research, Nagaoka, Roderick, and LaForce reviewed 66

AVID studies and concluded that only *one* met the *What Works Clearinghouse* (WWC) evidence standards for research.

Although there may be some validity to these criticisms, a reader of these studies should be cautioned to consider other important factors before making a final judgment of AVID. First of all, most of these criticisms come from the review of *quantitative* studies. Although numbers can provide valuable information in terms of educational research, they often don't tell the whole story. Anyone who has been involved with AVID for a significant amount of time has likely been exposed to an excess of informal *qualitative* evidence that AVID works. We have heard from our own students time and time again through the letters they write us and have seen it in the smiles upon their faces when they graduate high school as college-ready students. It is true that much of this evidence is anecdotal and may not meet the rigorous research standards heralded in the realm of empirical science, but, it is still meaningful. All one has to do ask any AVID educator to describe the impact AVID has had on him and his students. The reader would likely hear stories just like the dozens of AVID Summer Institute speeches given by AVID students and educators over several years of AVID Summer Institutes. Conducting a quick search on YouTube for these speeches will quickly reveal the meaningful impact AVID has had on individual students, teachers, and parents.

Moreover, many of these studies in criticism of AVID fail to consider the long-term impact AVID has on students. Instead, they seek to make a one-time comparison between the standardized test scores of non-AVID and AVID students. Robert P. Gira, the Executive Vice President of AVID cautions that the Chicago-based WWC study,

which claims AVID does not have the impact it purports to have, was too short-term to be conclusive enough. Gira suggests that this is because AVID student academic gains *accumulate* over a student's high school career (Nagaoka, Roderick, & LaForce, 2010). "We expect 9th graders to be making some progress, but the real payoffs start to happen two to three years later," said Mr. Gira (Sparks, 2011). This notion is supported by further studies conducted on AVID effectiveness, which find that it takes between two and a half and four years for students to experience the "AVID Effect" (academic growth) in comparison to their non-AVID peers (Guthrie & Guthrie, 2000; Watt, Powell, & Mendiola 2005).

Most importantly, a majority of the studies seeking to compare achievement scores of AVID and non-AVID students often ignore another critical factor: AVID students typically come from low-income, minority, and often English as a second-language backgrounds. AVID students must often overcome significant *opportunity and expectation gaps* (Ladson-Billings, 2013; Reed, 2009) as well as *achievement gaps*. With this in mind, the fact that rigorous research such as the Chicago-based WWC study found that AVID students still had a slightly better average GPA in English and Mathematics than their non-AVID peers is actually an indicator that AVID is accomplishing its mission to close these gaps. In most cases, it would be expected for the most disadvantaged students to fall far below their peers in comparison. However, research continues to suggest that there is still an "AVID Effect" which evens the playing field among AVID students and their non-AVID peers (Guthrie & Guthrie, 2002; Watt, Powell, & Mendiola 2005).

Finally, as someone who has implemented AVID for eleven years at a comprehensive high school and as someone who has led the implementation at several AVID sites across the district in my role as AVID District Director, I would suggest that the reader consider perhaps the most important factor in quality AVID implementation: school context. A failing AVID system may not be an indictment on the program itself, but on the implementers of the program. This is due to the fact that the level of AVID implementation at any school site depends greatly on the individual school's context. How many times has the principal changed in the last five years? What is the teacher turnover rate? What other programs and initiatives have been thrust upon the school? All of these factors and many more can significantly affect AVID implementation with fidelity. And although many AVID schools do their best, none are perfect. Therefore, I would ask the reader to consider the fact that any shortcomings presented in research regarding AVID also take school context into consideration. The perceived lack of AVID effectiveness may not be a symptom of AVID as a college readiness system itself, but instead a symptom of the challenges embedded within individual campuses.

Theoretical Frameworks and Perspectives Guiding the Intervention

This next section will outline the major theoretical frameworks and perspectives influencing the intervention, which is a blended-learning AVID Tutor training model designed to enhance the quality of AVID Tutor training. Each framework served as the basis for the design of crucial elements in either the curricular focus or structure of the intervention. The theoretical frameworks and perspectives which will be reviewed are Vygotsky's Sociocultural Theory (1978), Bandura's Social Learning Theory (1971), and Schoen's Reflective Practitioner Theory (1983).

Vygotsky and Sociocultural Theory in Relation to AVID Tutorials. The

theoretical basis for both AVID's method of collaborative-inquiry and the reason for

emphasizing these same components in the professional learning of AVID staff,

including AVID Tutors, has been well supported by the work of Vygotsky (1978, 1981,

1986). According to Vygotsky's perspective on sociocultural learning, both learning and

development have taken place in socially and culturally shaped contexts, which is

precisely the domain in which the AVID tutorial has been positioned. Within this

theoretical perspective, both social influences and ever-changing cultural influences have

determined how individuals have internalized learning. According to John-Steiner and

Mahn (1996), this process cannot fully be understood without first having understood

Vygotsky's use of the dialectical method, which they claim distinguishes Vygotsky's

conception of internalization from other theoretical perspectives.

Dialectical method. In contrast to much earlier schools of thought regarding

empirical logic, such as Aristotelian logic, which situated facts as fixed and unchanging,

Vygotsky (1978) argued that cognition of fact is always changing. Vygotsky viewed

higher mental functions as "developmental processes in a constant state of dialectical

change" (John-Steiner & Mann, 1996, p. 195). He believed that through dialectics, or

discussing the truth of opinions, a "synthesis of contradictions" led to greater

understanding of truth. As Weber (1992) described the concept in plain terms, "the claw

hammer is used both to pound in and pull out nails; the pencil is used to create and

erase." In essence, human thought is constructed from social interactions with others, or

shared discourses, especially when people bring their diverse viewpoints to the discourse.

Learning is both individual and social at the same time and is the result of a drawn-out

process of developmental events (Vygotsky, 1978). Further, because learning is greatly influenced by our interactions with others, learning is seen as being internalized, appropriated, transmitted, or transformed in formal and informal learning settings (John-Steiner & Mann, 1996).

Keeping in mind Vygotsky's (1978) notion that knowledge is constructed through formal and informal learning settings, the *dialectical method* (shared discourse) acknowledges the influence of others in the construction of knowledge. This influence, a synthesis of opposing ideas, is viewed by Vygotsky as a positive influence on human development and learning because all meaning is, in some sense, socially constructed (Vygotsky). Wells (2000), a social constructivist, has more recently taken this concept further, suggesting that inquiry is an energizing force for real questioning and is to be at the heart of every curriculum. Wells argues that questioning forms the foundation of how knowledge is constructed, and the social interaction between learners in the form of dialogue is the essential ingredient in the constructing of truth.

Scaffolding and the ZPD. Further, Vygotsky (1978) posited that social interaction plays a critical role in cognitive development, which can also be applied to the learning expected of AVID Tutors as they navigate the online and in-person training modules which comprise intervention. Vygotsky suggested that there were three critical components that promoted cognitive growth. First, social learning preceded development. Second, Vygotsky proposes that a more knowledgeable other (MKO) is needed to help foster growth. Third, Vygotsky proposes the zone of proximal development (ZPD), which is also critical in cognitive development among learners (a concept deeply tied to the

42

aforementioned WICOR framework). The ZPD involves identifying a student's current level of understanding and then pushing that student to the next "zone" or higher level of rigor.

Bruner (1957), explored related cognitive development concepts in his own work. Bruner (1957) agreed with Vygotsky that a child's environment, especially the social environment played a particularly important role in development. Both Bruner and Vygotsky concurred that adults can play an important role in creating environments where children can develop. In essence, the adult needs to be aware of the abilities that the child currently possesses and where the child could progress with adult assistance (ZPD/scaffolding).

Online learning environments and socio-cultural theory. Over the last decade there has been a proliferation of educational research in the area of *e-learning*, also known as *distance learning, blended-learning*, *hybrid learning*, and *online learning*. This has been followed by the rapid growth in initiatives urging schools find ways to increase access to technology following the 2010 National Technology Plan, initiated by the U.S. Department of Education (US ED, 2010). As a result there have been numerous studies about which types of technology are best suited for the classroom. Although there are plenty of research studies that focus on online learning, or *e-learning*, few of those provide an examination of e-learning in terms of its sociocultural significance and potential as a platform for socially constructed knowledge (Remtulla, 2008).

In the global society that today's internet and computer technology has afforded us, Vygotsky's (1978) concept of social and cultural learning takes on a much larger

scale. Instead of social and cultural influences that were once very localized to a home, a school, a town, or even a country, social and cultural influences from a global perspective can now be drawn from a much larger group. One just has to look at how quickly a *meme* or a video on YouTube can go viral or how political views can be shaped and influenced through social media platforms to see how quickly cultural knowledge can spread across the globe.

What can't be ignored is that the internet and other e-learning technology has become a significant mediator between people and culture. As Vygotsky (1978) claimed, "mediational means are what might be termed 'the carriers' of sociocultural patterns and knowledge" (p. 204). This is precisely where online learning becomes relevant in the field of education—at the crossroads between pedagogy and appropriate use of the technology as a vehicle to deliver instruction. Additionally, because of the convenience of online learning when working with a diverse group of learners from various backgrounds, online learning provides an environment where collective social perspectives and cultures can come together in a forum that helps to mediate the social discourse and construction of meaning.

In addition, studies in socio-cultural theory and e-learning by Warschauer (1997), Liu (2004), Remtulla (2008), and Tankari (2012), all suggest that like in-person learning, the learner in the e-learning environment becomes an actor in a social forum. This means that the learner, by nature of virtual social interaction, is still influenced by others through shared discourse. Through the arguments developed by these researchers, who each apply sociocultural theory in various ways, common threads in their research lead back to the

classical themes previously from Vygotsky (1978), albeit in online learning environments instead of traditional classrooms. Essentially, the once face-to-face social interaction studied by Vygotsky can be substituted by online social interaction as surrogate. The aforementioned more recent studies of social learning in online spaces still indicate that learning is not as strong individually as it is socially (Liu, 2004; Remtulla, 2008; Tankari 2012; Warschauer, 1997). Further, as noted by Liu (2004), it is the very convenience and flexibility of e-learning that increases the motivation for learners to participate in the learning. This concept is taken further by Rose (2001) and the concept of *Universal Design for Learning*.

      Universal design for online learning as it relates to online learning. Although the concept of *Universal Design for Learning* (UDL) (Rose, 2001) does not directly relate to Vygotsky's social learning theory, UDL is an important component of online social learning. Derived from the principles of architecture, Rose (2001) and later Rose and Gravel (2012) establish the concept of a UDL According to Rose (2001), the "fundamental idea behind universal design for learning is injecting flexibility into the materials and methods used in the classroom" (p. 66). Rose further contends that where there is flexibility in materials, the potential for students to maximize their learning is much higher. With this in mind, learning materials can be made flexible in myriad ways. This flexibility is a critical aspect of UDL because of the way Rose describes the function of the human brain. Rose, in the same vein as Gardner (1993), suggest that students have not one learning style, but multifaceted learning capacities. Different parts of the brain and its networks recognize meaning and act on meaning in different ways depending on

the learner and the learning situation. In essence, Rose contends that individual brains differ substantially and that should strongly be considered in the process of learning.

Rose (2001) defines three separate but interrelated cognitive domains to consider when teaching students. He suggests that we need to teach students to: a) recognize essential cues and patterns, b) master skillful strategies for action, and c) engage in life-long learning. According to Rose, successful instruction draws on materials and methods that support and challenge students in each of these learning domains. However, because no two students are alike, overcoming learning barriers requires flexible teaching strategies and materials that cover a broad range of learning styles. Some of the teaching strategies mentioned by Rose include providing multiple and *flexible* methods of presentation, providing multiple and *flexible* methods of expression and apprenticeship, and providing multiple and *flexible* options for engagement. In all, these three UDL principles in summation lead to the suggestion that the best teaching practices vary and provide students with a wide variety of options.

Further, in the field of instructional design for *online* learning, designing instruction that can be accessible by the greatest number of learners aligns with the work of other researchers such as Kays and Sims (2006); Reigeluth (1999); and Sims and Stork (2007). Each of these researchers has contributed similar suggestions in terms of online instructional design. Also, because the advances in learning technology have rapidly evolved since Rose's 2001 publication outlining UDL, Rose and Gravel (2012) created an updated manual on online course design which provides revised guidelines for educators.

Bandura's Social Learning Theory. One of the most critical theories that drove the design of the AVID Tutor training intervention was the concept of apprenticeship and social learning. This concept cannot be implemented without paying due respect to the seminal work of Bandura's (1971) Social Learning Theory (SLT). Before the establishment of SLT, proponents of the predominant theories in psychology once argued that human behavior was either driven by inner forces such as motivation or controlled somewhat helplessly by environmental factors. However, with the famous Bobo Doll Experiment, Bandura (1971) produced compelling evidence that human behavior is learned vicariously. With this research, Bandura suggested social models can dramatically influence human learning.

Social modeling. According to Bandura (1971), for social learning to take place, four factors are necessary to consider. They are *attention, retention, motoric reproduction*, and *reinforcement.* The first of the four, attention, seems obvious in the sense that attention is key to observation. For a person to learn by observing, a high level of attention must be committed to the model so the relevant key aspects of the behavior are internalized by the learner. Second, a learner must retain the memory of the behavior he wishes to emulate. Bandura (1971) describes the importance of *rehearsal* in terms of retention, either symbolically in mental form or even better by performing the modeled behavior, which dramatically increases retention of the behavior. Thus, the learner needs time to process and "play around" with the observed behavior. Further, Bandura indicates there must be a perception of some positive incentive for imitating a behavior and if this positive incentive is in place then it is more likely to be translated into action. This has been used to explain why children imitate behaviors of models who possess high social

status or desired standing in a peer group. By imitating these models, the incentive is that they could then also possess these behaviors and be considered as part of the group.

Continuing Bandura's progression, the rehearsal of the behavior, either symbolically or in action, eventually leads to the *motoric reproduction* of the behavior, if the observer decides that there is some reward in emulating the behavior. It is notable, however, that this reproduction, requires the learner to have the physical capacity to reproduce the behavior. Depending on the complexity of the behavior, the learner may have to overcome several deficits before being able to perform the behavior, some being more difficult than others. For example, watching Michael Jordan slam dunk a basketball by jumping from the free-throw line generates interest to pay attention, is retained rather easily, and may result in some form of symbolic rehearsal, but actually gaining the motor skills necessary to accomplish such a feat will generally take onlookers a very long time to develop, if ever.

What Bandura's (1971) work on SLT ultimately suggests is that behavior is learned by observing models who possess the "desired" behaviors of the learner and that in most cases this behavior should strongly consider the influence of modeling on learner behavior.

Social modeling in online learning. Because the vehicle for providing the necessary professional development for AVID Tutors existed in an online learning environment, social modeling embodied virtual forms in addition to in-person forms. Just as Vygotsky's (1978) socio-cultural theory on learning can move easily to online spaces, so can Bandura's (1971) theory. Interestingly, Bandura expressed the insight that

48

media would eventually dominate social modeling in American culture. With shockingly accurate foresight, Bandura (1971) declared:

> Considering the large amount of time that people spend watching televised models, mass media may play an influential role in shaping behavior and social attitudes. With further developments in communication technology, it will be possible to have almost any activity portrayed on request at any time on remote television consoles. (p. 10)

Although Bandura couldn't have predicted the ease with which mass media has now been accessed via the internet and media portals such as the aforementioned YouTube, he was certainly very wise with his prediction of how televised media and similar forms would dominate human attention in the time to come.

Transactional distance in relation to SLT and the blended-learning model. It should also be acknowledged that online education can, however, lack certain aspects of SLT, as addressed by Moore (1993), in his theory of transactional distance. Moore contends that the "distance" from the course, by nature of it being online, is likely to result in students not being as engaged in their education as they would be with an in-person setting. According to Moore, this may be attributed to the varying degrees of course dialogue, structure, and learning autonomy that occurs in online learning. This effect can be problematic and potentially lead to lower retention rates and engagement in online programs versus in-person programs. With this in mind, it is acknowledged that online education by definition lacks the full ability for students to interact socially and engage authentically in observation and modeling at all times. While students might observe at a distance through the "virtual" forms of observation, the central aspect found in Bandura's (1977) theory is *physically* absent, but not *theoretically* absent.

49

However, Moore (1993) is critical of online learning because students in the online classrooms face additional deficiencies which must be addressed, such as: the connection between learner-learner, and learner-institution. This is again, why following various trends in online learning, many schools have turned to a blended-learning course model. As defined by Brunner (2006), a blended-learning course, or hybrid course, seeks to utilize limited, yet beneficial, face-to-face class time as a convenience to distance learners while working in concert with online content. Users of the blended-learning model, then seek to mitigate the transactional distance (Moore, 1993) by taking advantage of this limited in-person class sessions to increase the effect of social interactions among students. In addition, data collected between 2010 and 2013 by Ekwunife-Orakwue and Kayode (2014) further suggests that dialogic interactions (even in online spaces) can mitigate the effect of transactional distance on social learning.

Schön's (1983) reflective practitioner. An essential aspect to the proposed intervention in this study was the concept of learning through reflective practice. As Russel and Munby (1991) claim, "Ask any teacher or professor, 'How did you learn to teach?' As likely as not, the response will be 'by teaching'" (p. 164). While it has been widely understood that performances are learned through experience, Schön (1983) expands the literature on understanding the interactions between the practitioner and practice. In particular Schön addresses the connection between the practitioner and reflective practices as a means of learning.

In his 1983 work, Schön cites a crisis of confidence to solve complex problems among professionals. This crisis is characterized by a limited number of solutions to very

50

complex problems, resulting from an emphasis on what he calls *technical rationality*. In a state of technical rationality, the model for professional problem solving is based on the application of previously designed theories and techniques, rather than newer creative solutions. Under this system of problem solving, a problem is stated, categorized, and solved with a pre-existing solution of best fit. Essentially, technical rationality assumes that there is already an existing solution to any problem that arises. So, when a problem arises, all one needs to do is apply the "correct" methodology from the professional repertoire to solve the problem.

In Schön's (1983) opinion, there can be more sophisticated levels of problem solving in the work place, one of which is *reflective practice.* Schön (1983) estimates that over 90% of actual problems encountered by professionals are not "textbook" cases. They are instead cases which require unique attention. In an effort to find more unique solutions, Schön proposes that true professionals exhibit behaviors he calls "reflection-in-action" and "reflection-on-action." As the slight variations in the types of reflection imply, "reflection-in-action" deals with the real-life, in the moment, reflection that occurs during an experience. "Reflection-on-action" happens after the event occurs. Nonetheless, both "reflection-in-action" and "reflection-on-action" present scenarios in which a problem of practice can be examined through reflection.

The concept of reflection and reflective teaching certainly isn't new. Although the concept can be traced back to Dewey (1933), Schön presents reflection specifically in the context of professional knowledge. Schön's (1983) discussion of reflection attempts to examine the relationship between professional knowledge and professional action.

Further, Schön's reflection-in-action describes a reflective process that is a "reflective

conversation with the situation" (p. 76). A brief summary of this cycle of action as

outlined by Schön, follows:

> 1) A problem situation appears.
> 2) The practitioner experiments in reframing the problem.
> 3) Past experience is brought to bear on the unique situation.
> 4) On-the-spot experimentation takes place. These experiments are "local," nested in the larger problem.
> 5) The situation will "talk back."
> 6) "Moves" (on-the-spot experimentation and talk back) and evaluation of these moves "keep the puzzle alive."
> 7) Judgment of the problem setting is made by the quality of the reflective conversation.
> 8) The practitioner assesses, "Do I like what I get when I solve this problem?"
> 9) Possible reframing of problem—unintended changes may promote further inquiry.
> (Deli'Olio, 1993)

When considering this cycle in the context of professional development practices,

Schön's cycle of reflection-in-action provides an excellent model for those who seek to

implement "on-the-job" training models. If one accepts the limitations of the technical

rationality method of problem solving, in that most real workplace problems don't have

"textbook" solutions, then Schön's reflection-in-action cycle can provide a staff

developer the opportunity to teach a practitioner how to approach solving myriad

ambiguous problems on the job.

   Reflective practices for professional learning. When considering reflecting

practices in terms of teacher education and professional learning, there are many more

recent studies that one might come across (Freeman & Richards, 1996; Richards &

Lockhart, 1994; Richards 1998; Shrum & Glisan, 2000). In these cases, practitioners are

often encouraged to engage in reflective practices as a means of professional learning. In

the context of AVID Tutors, who are practitioners in the AVID the classroom, it would stand to reason then that this suggested practice would also serve their professional learning needs.

In line with Schön's (1983) "reflection-in-action" and "reflection-on-action" concept, Britzman (1993) argues that "action" or "practice" is where the real learning occurs. It is the dialogic discourses that come from these real experiences (such as reflective practices) that have the most lasting effects on the learner.

Further, Britzman (1993) continues Schön's (1983) affinity toward reflective practice as an effective means of professional learning. Similarly to Schön, Britzman critiques the conformity to traditional training, in which "correct" methods as opposed to individualize methods for problem solving take on an oppressive form. According to Britzman, simply teaching people the "correct" methods limits their potential by mechanizing learning narrowing it to what is already known. Britzman further contends that the traditional model of teacher preparation, is more about "imitation, recitation, and assimilation" (p. 46), rather than being about allowing the participant to construct her own knowledge throughout the learning process. Additionally, Britzman reminds the reader that the traditional method of education, even for pre-service teachers, was designed to be an "efficient" process where knowledge is broken down into discrete measurable components in order to transform all learning into observable outcomes. This process fails to acknowledge the individual learner altogether by relying only on "received" knowledge instead of lived experience.

These observations regarding the preparation of future teachers made by Britzman (1993), further indicate that the individual experiences of learners, even in a professional development situation, may lead to a less oppressive approach to learning by individualizing the learning experience. Britzman suggests that *practice* itself improves practice. In other words, the act of *doing* the practice in and of itself lends itself to learning. For example, new teachers (like AVID Tutors) may enter the classroom with practical theories and knowledge about their work, but without the real experience of *practice* and the individual knowledge that conveys, teachers will never come to know classroom life in its real form. Reflective practices, however, provide the space for the lived experience to enter the learning process.

Further, Jasper, Elliot, and Koubel (2011) recommend that using reflective writing within professional practice provides various insights into the challenges arising from an employee's practical experience. The researchers further claim that when writing is a purposeful learning activity, the writing itself helps the participant learn from her experiences (Jasper, Elliot, & Koubel, 2011). Further, the authors suggest that reflective writing also leads to higher levels of knowledge and professional accountability. In terms of professional and personal development, as well as critical-thinking, reflective writing can be a strong component of any professional development experience.

Conclusion

In review, several studies have been conducted on the effectiveness of AVID as a well-established college readiness system. Also, it has been established that AVID's implementation is governed by the AVID Eleven Essentials, one of which is Essential

54

Eight, relating to AVID tutoring. AVID is still transitioning to the Coaching and

Certification Instrument (CCI), which carries over the language from AVID Essential

Eight. In addition, other critical components of AVID, such as the tutor as a source of

cultural capital and the WICOR framework, have provided further context for AVID.

Finally, theoretical frameworks come together to inform the construction of the AVID

Tutor training blended-learning model as part of an action research project (Creswell,

2015). The intention behind each aspect of the AVID Tutor training model has been

designed and grounded in the work of Vygotsky (1978), Bandura (1971), and Schön

(1983). The following chapter will discuss purpose of the research study, the previous

cycles of research, the intervention, and the methods utilized to study the intervention.

CHAPTER 3

METHOD

Introduction

As described in Chapter Two, the AVID Tutorial system is a complex process that takes a significant amount of time and practice for AVID Tutors to master (Appendix B). With the current model of AVID Tutor training, AVID systems within the district have managed to maintain minimums, but struggled to excel to AVID certification levels above the minimal level of certification. Although AVID has created a set of valuable resources to train AVID Tutors, these resources are most effective *if* teachers, or someone else in the district, takes it upon themselves to consistently implement them across all AVID sites. This aspect of the training implemented presented many challenges in a district my size, with over 40 AVID Tutors and constant influx of new tutors. Therefore, an intervention involving the centralization of AVID Tutor training through introducing the blended-learning model was put into place as a necessary means for deepening the support provided to new AVID Tutors.

Chapter Three Overview. The purpose of this chapter is to describe the methods and procedures used to develop the intervention as well as the methods used to collect and analyze the data resulting from the intervention. The first part of this chapter will review the previous AVID Tutor training obstacles which led to the need and purpose of the intervention. Then, the setting and participants in this study will be described. Next, I will discuss the development of the intervention and the refinement of methods used by describing the previous cycles of research in this action research study (Mertler, 2014).

Then, I will explain the intervention in detail. Following that section, I will describe the methods used for data collection and my reasoning for utilizing those methods. Finally, I will discuss threats to validity inherent in this study.

Previous AVID Tutor Training Obstacles

When I took the position as District Director of AVID four years ago, I was quick to realize that the inherited model of tutor training was not sufficient enough to move schools to higher certification levels in the AVID CSS (and now CCI), especially with the rapid growth of AVID. Without a centralized model, it has been difficult to attain consistency, which fosters a wide range of implementation problems. In a district our size, a change to the deliver model was necessary in order to increase the quality of tutor training.

Further, as the District Director of AVID, I am accountable at the district level for overall AVID fidelity, which includes AVID Tutor fidelity. Nevertheless, there are limits with respect to accountability because of the size of the system. For example, there is one AVID District Director to fulfill the duties associated with implementing AVID across 48 schools. One of the many duties I am required to perform as AVID District Director is to make site observations and provide coaching feedback. A focal area of this coaching is often AVID Tutorials. As the AVID District Director, I also continually provide AVID Elective teachers (2-3 times per school year) with professional development to help them continuously refine their implementation of AVID to ensure greater fidelity to AVID's components, such as AVID Tutorials. Despite continual coaching, it remains difficult to provide the level of support that is necessary through site visitations alone.

57

When I took over as AVID District Director, a front-loaded face-to-face tutor training model had been established as a consistent delivery method for tutor training. This was sometimes followed up by a second face-to-face training.   Because AVID was relatively small then and more locally manageable because of the more limited number of school sites, it was easier to survive with this model. However, as AVID has expanded to more campuses, we have been presented the scaling problem of "got us here, but won't get us *there"* discussed by Sutton and Rao (2014, p. 28). As AVID continued to grow under my directorship, it became clear that a revised model for tutor training needed to be explored as AVID expansion moved forward.

Embedded in this issue is the fact that responsibility for AVID tutorial had historically been at the school level. Previously, a bulk of the recommended 16 hours of training for AVID tutors had been placed upon the AVID classroom teacher (8-12 of the 16 recommended hours). Unfortunately, this model for training resulted in inconsistencies from school to school as well as low minimally competent ratings on the AVID Certification Self-Study (CSS).

As it stands, two primary limitations have contributed to the challenges with AVID Tutor training: (a) a bulk of the training (8-12 hours) had been dependent upon individual teachers instead of being centralized, and (b) there were time constraints with respect to AVID Tutor availability due to the fact that AVID Tutors were college students placed across 16 different secondary schools with varying availability. As a result, the former district-supported and school-based model of training helped the AVID tutorial system to survive, but not thrive. Consider the former training model in Figure 3.
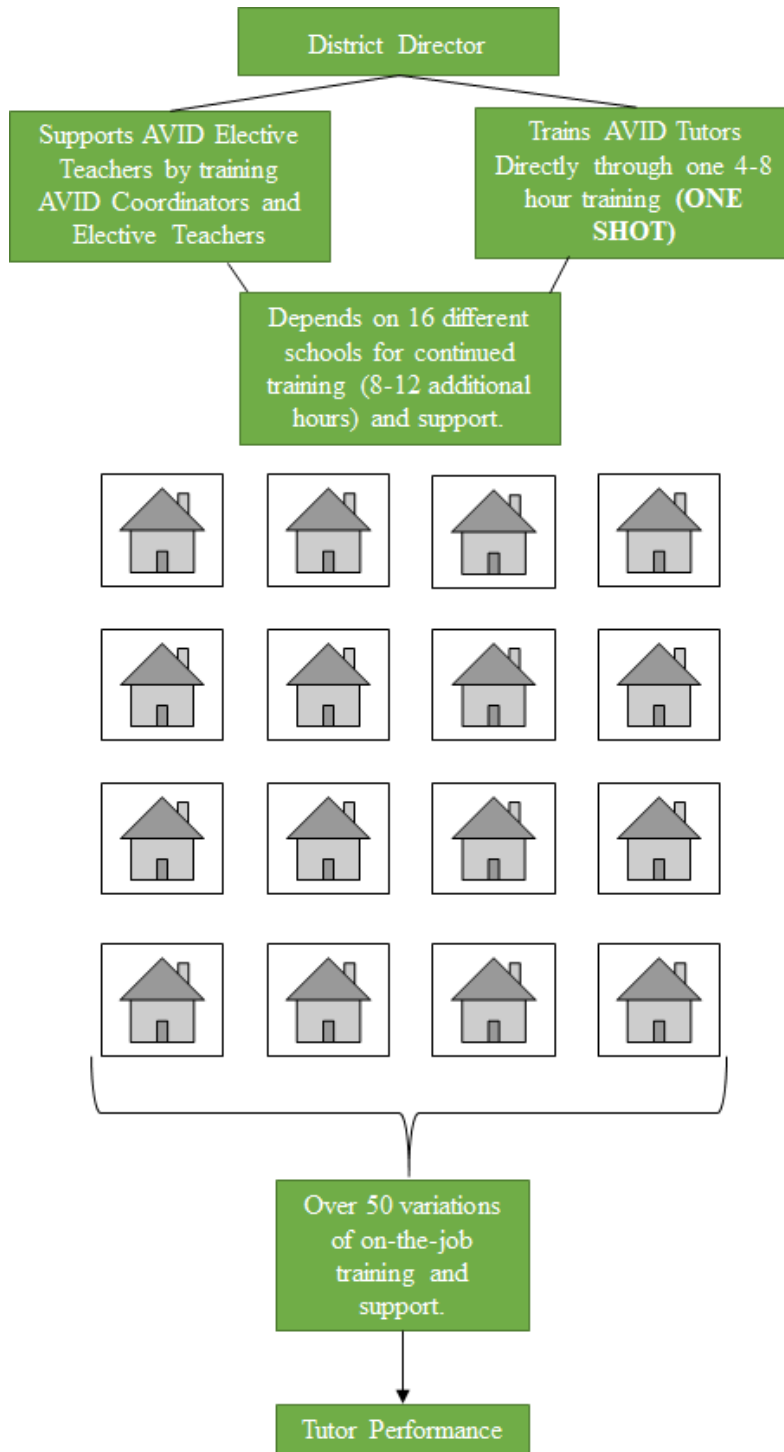
Figure 3. Current Tutor Training Model.

As can be seen in Figure 3, the expectation of AVID teachers to provide AVID Tutor training under the former model, presumes that teachers will deliver an additional 8-12 hours of AVID Tutor training on top of the district provided four-hour face-to-face training. The model also presumes that AVID Elective Teachers across various schools understand how to deliver on-the-job training consistently, have the time, and are committed to implementing continued AVID Tutor training with fidelity. This is also difficult since every year there are new AVID Elective teachers added to our system who will not take their own formal AVID Tutorology training until year-two of their training sequence. Also, as mentioned in Chapter One, a review of the certification data (CSS) from AVID sites, indicates that the former model wasn't resulting in advancement to higher levels of AVID certification (AVID Center, 2016a).

In addition to the understandable lack of time teachers have to assume the role of AVID Tutor trainer, there was also a struggle to maintain consistent preparation of AVID classroom teachers, who had been struggling to serve as the primary provider of training for AVID Tutors. This was indicated by a consistently low rating of "one," among district schools, on the sixth indicator under AVID Essential Eight in the Certification Self Study (CSS). This indicator specified the requirements for teacher training, which entailed taking a 16 hour professional development course on AVID Implementation and another 16 hour professional development course on Tutorology (Appendix A) (AVID Center, 2016a). Due to regular turnover, there have continually been AVID Teachers new to the job each year. These teachers often haven't even been thoroughly trained themselves, let alone trained in how to support AVID Tutors. In 2016, for example, 14 of the 54 AVID Elective teachers were new to AVID and had not yet gone through the AVID Tutorology

training, which would better equip them to act as a trainer. Further, it is likely teachers will continue to be in this situation as regular turnover continues from year to year among AVID Teachers. Further, the previous model not only lacked the consistent support of AVID Elective teachers after the training occurs, but it was also front-loaded with theoretical conceptualizations of AVID Tutoring *before* AVID Tutors had any practical experience in the classroom. This front-loading model lacked the ability for AVID Tutors to experience authentic tutoring and understand the full context of what they were learning in the initial training sessions. Now consider the training model in Figure 4.

In the current blended-learning model in Figure 4, the obstacle of teacher variation in the delivery of effective on-the-job training to AVID Tutors was mitigated by the centralization of AVID Tutor training. Although teacher variability in their own classroom application of AVID Tutorials wasn't addressed by this intervention, what was addressed is the consistency of the delivery method and timeframe of the training. In this model, the AVID District Director supported AVID Elective teachers and Coordinators through continued training on tutorial practices, but the bulk of the AVID Tutor training moved to online spaces where AVID Tutors received the most up-to-date AVID Tutoring curriculum. Another added benefit of this model was that tutoring theory wasn't frontloaded, but was instead scaffolded throughout the training sequence, delivering instruction of tutoring practices *while* tutors were on the job and in a more authentic context. The revised AVID Tutor training model will be discussed further in a later section.

District Director

Directs centralized Blended-learning Training for AVID Tutors at 16 different sites over 50 different classrooms **(ON-THE-JOB Model instead of ONE SHOT)**

Supports AVID Elective Teachers by Training AVID Coordinators and Elective Teachers

ONE centralized version of on-the-job training and support.

Tutor Performance
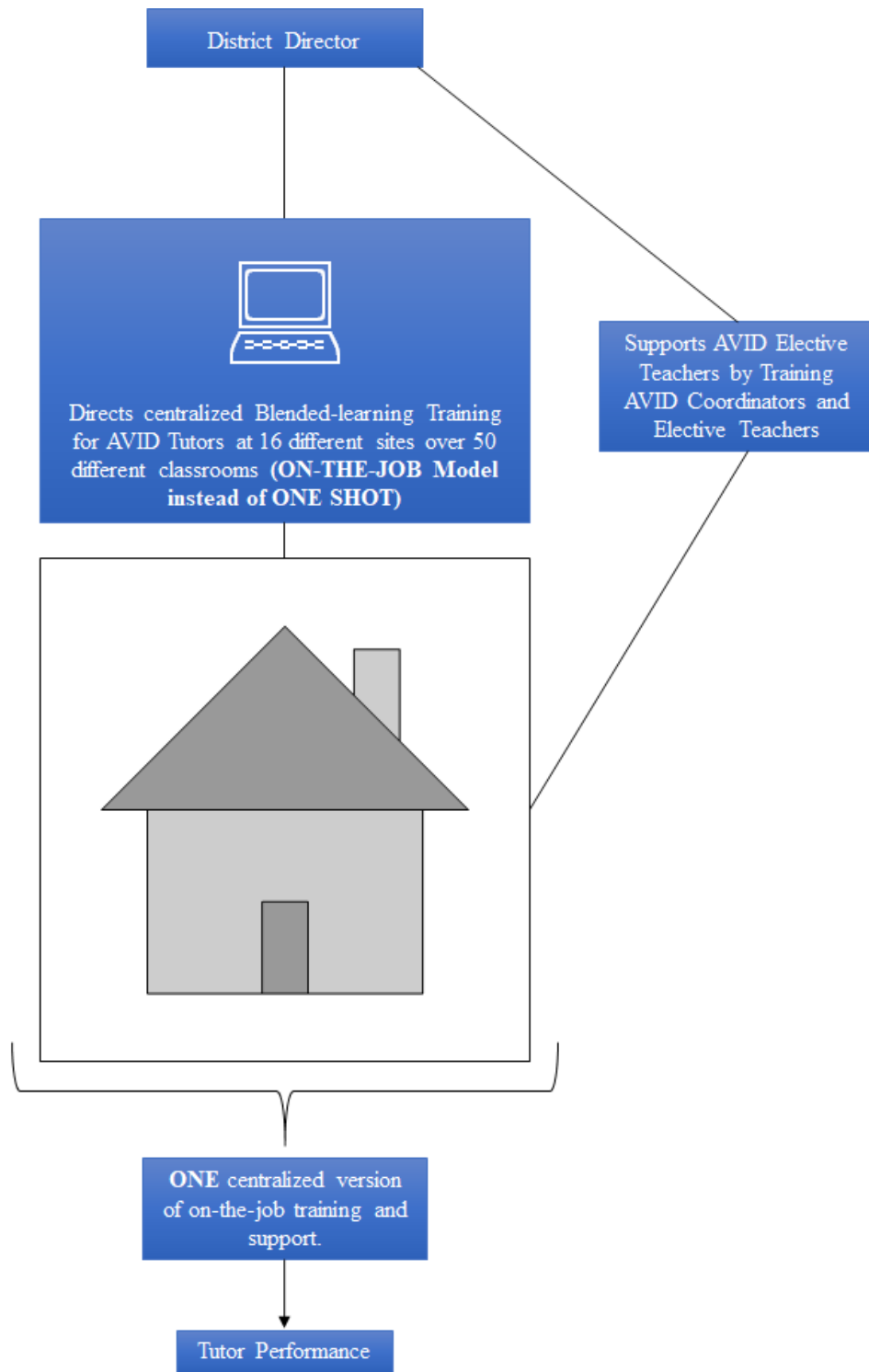
Figure 4. Revised Tutor Training Model

Purpose of the project. Because of the need for additional supports in successfully delivering the AVID Tutor training model, the purpose of this action research study was to explore the implementation of an innovative AVID Tutor training model which is designed to see how and augmented version of the tutor training model might offer tutors a different training experience compared to the prescribed tutor training model.

Research questions. This study was designed to investigate two main research questions related to the augmented AVID Tutor training model and one secondary question designed to further inform future iterations of the tutor training model:

RQ1: How does practice-based professional development contribute to AVID Tutors' learning of AVID Tutoring practices?

RQ2: Do AVID Tutors' involvement in a blended-learning AVID Tutor professional development model relate to increased understanding of AVID and fidelity to the AVID Tutorial System?

RQ3: What common barriers emerge from AVID Tutors throughout the AVID Tutor training process?

Setting

The district in which this study took place is my own school district. In action research studies, it is typical for the researcher to be embedded in his own context in an effort to conduct a systematic inquiry into a phenomenon (Mertler, 2014). Therefore, as an employee in the district, I was able to take a pragmatic approach to the research process which allowed me to combine multiple methods and techniques in order to meet the unique needs of my particular context (Greenwood, 2014).

63

My school district consists of fifty-four elementary schools, ten comprehensive junior high schools and six comprehensive high schools and is nestled in a highly populated suburban area of Phoenix. The district is rather large in both population and physical expanse, with nearly 25 miles separating the two schools at the western and eastern-most ends. Over 68,000 students are served by over 3,000 teachers in the district. The elementary schools enroll anywhere from 300-700 students each. Each of the junior high schools enrolls 1,000 to 1,200 7th-and 8th-grade students. Each of the high schools enrolls 2,600 to 3,600 9th- through 12th-grade students. Further, all but one of the 54 elementary schools is a Title I school. This is an indicator of low socio-economic status among our elementary population. Also, during the 2016-2017 school year, 63% of the junior high students qualified for free or reduced lunch, 71% claimed English as their primary home language, and 23% come from one parent families. In the high schools during the 2016-2017 school year, 54% of the students qualified for free or reduced lunch, 72% claimed English as their primary home language, and 21% came from one-parent families. The ethnicity demographics at each level can be found below in Table 4.

Table 4.

Ethnicity Demographics by School Level

School Type	White/ Cauc.	Hisp. or Lat.	Black or Afr. Am.	Nat. Am. or Am. In.	Asian	Pac. Island	Other
Elementary	12.0%	53.0%	12.0%	18.0%	1.0%	1.0%	3.0%
Junior Highs	42.0%	45.0%	5.0%	5.0%	2.0%	0.5%	0.5%
High Schools	48.0%	40.0%	5.0%	4.0%	2.0%	0.5%	0.5%

In Table 4, it should be noted that demographically, the majority of students came from either White or Hispanic ethnic backgrounds, with very small populations from each of the other categories. Also, as the elementary demographics indicate, a majority of the students entering the district at the earliest levels were in groups typically categorized as *minority* (non-White) groups. This is an indicator that the district is going to overwhelmingly be a minority-majority district in the years to come.

Advancement Via Individual Determination (AVID) within the district.
Within the district, Advancement Via Individual Determination (AVID) was being implemented at 32 elementary schools, at all ten junior high schools, and all six high schools. The elementary model follows a grade-wide system, built into an AVID school-wide system. In AVID Elementary schools, every classroom is an "AVID" classroom. Under this model, educators work together under one articulated instructional system that utilizes WICOR instructional practices to support college and career readiness. At the junior high and high school level, AVID is first implemented at the AVID Elective class level with the addition of AVID school-wide at varying degrees.

To monitor the local implementation of AVID at each secondary site, various groups of key educators are involved on a regular basis: the AVID Coordinator, who is the site coordinator for all AVID functions at the school; the AVID Elective Teachers, who are the classroom teachers responsible for teaching one or more sections of the AVID Elective; the AVID site team, consisting of staff members who volunteer to assist with AVID implementation; and the AVID Tutors, who facilitate the prescribed tutorial method two days per week in the AVID Elective.

Another aspect of AVID that should be considered is that all 16 AVID upper-level schools were at various stages of implementation at the time of the intervention. Some of the schools involved in this study had been implementing AVID since 2001, whereas others had just begun their implementation of AVID within the last couple of years. Because of the variation from site to site in levels of implementation, corresponding differences with respect to fidelity of implementation would also be expected. It would be expected of schools that have been implementing AVID for a longer period of time to have a deeper level of implementation with fidelity to the AVID College Readiness System, especially in the areas of instructional strategies and college-going culture (Guthrie & Guthrie, 2002). The various implementation stages of schools are displayed below in Table 5.

Table 5

Varying Implementation Stages of 16 Secondary AVID Schools

	New to AVID (0-2 Years)	Implementing (3-4 years)	Implementing (5-10 years)	Implementing (10 or more years)
Affiliate Site	-	-	1	-
Certified Site	1	3	7	2
National Demo Site	-	-	-	2

Note: Affiliate sites have not met the nationally defined minimum criteria to be AVID certified. Certified criteria means that sites have been rated at an average of at least one ("Meets Certification Standards") across the eleven essentials. Demo sites cannot have any ratings less than two ("Routine Use") across the eleven essentials.

Of the 16 sites, two high schools and two junior highs had been implementing AVID for ten years or more. These two high schools in particular were also considered to be

National Demonstration Schools, meaning that they are recognized as schools who implement AVID at the highest possible standard—a distinction that is given to less than 2% of all AVID schools.

Participants for Cycles One and Two

All participants for Cycles One and Two were selected using purposive sampling, which allows researchers to choose study participants who can best provide insights into a phenomenon or event (Onwuegbuzie & Leech, 2007). See Table 6 for an overview of participants.

Table 6

Cycle One and Two Participants

	N	Avg. Yrs. Exp.	Mal	Fem	Age 18-24	Age 25-35	Age 36-45	Age 46 +	W	H	B	N	A	M
Cycle 1														
Researcher	1	14	1	-	-	-	1	-	-	1	-	-	-	-
New AVID Tutors	13	0	-	13	13	-	-	-	3	5	2	1	-	2
AVID C/ET	17	17	2	15	-	3	10	4	16	1	-	-	-	-
Total	**31**	**10**	**3**	**28**	**13**	**3**	**11**	**4**	**19**	**7**	**2**	**1**	**-**	**2**
Cycle 2														
Researcher	1	14	1	-	-	-	1	-	-	1	-	-	-	-
New AVID Tutors	14	0	1	13	14	-	-	-	4	8	-	-	1	1
AVID C/ET	17	17	2	15	-	3	10	4	16	1	-	-	-	-
Total	**32**	**10**	**4**	**28**	**14**	**3**	**11**	**4**	**20**	**10**	**-**	**-**	**1**	**1**

Note: C/ET= Coordinator/Elective Teacher, W= White/Caucasian, H= Hispanic or Latino, B= Black or African American, N= Native American or American Indian, A= Asian or Pacific Islander, M=Multiracial

For Cycles One and Two of this action research study, new AVID Tutors were purposively selected to participate in this study because they were the participants directly receiving the intervention. AVID Coordinators were purposely included in this group because their participation allowed me to obtain a school-wide AVID perspective through Cycle One and Two interviews, since the AVID Coordinator oversees all AVID operations at the site. I also worked with AVID Coordinators to monitor and encourage the completion of the intervention for their new AVID Tutors. AVID Coordinators also served as AVID Elective Teachers, where they have direct contact with the AVID Elective students and tutors on a daily basis. The AVID Coordinator/Elective Teachers also played a critical role in the intervention because they provided the classroom environment for the "on-the-job" training component of the intervention. Finally, AVID Coordinator/Elective teachers participated in the piloting and validation of this instruments eventually used in Cycle Three of this study. This will be discussed in more detail later in the chapter.

Identifying a Need in Practice through Mixed Method Action Research (MMAR) Cycles

   Action research. In recent years, *action research* has emerged as method of research widely used in the field of education (Mertler, 2014). According to Mills (2011), action research can be defined as follows:

   Action Research is defined as any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process or environment for the purpose of gathering information about how their particular schools operate, how they teach, and how their students learn. (p. 5)

As described in Mills' definition above, action research was built for someone like me: a researcher/practitioner embedded in the same context I sought to study. Like many other action researchers, I had a direct and vested interest in learning about my organization through an action research study. As the District Director for AVID, action research allowed me to investigate a problem directly related to my context, while studying the application of an intervention which sought to address those problems.

In this sense, Mertler (2014) further suggests that action research allows practitioners to bridge the gap between research conducted in "ivory towers" and research that takes place in the "trenches." Thus, action research deals with the researcher's own problems, not someone else's. In essence, the research conducted by an action researcher takes the theories from "outside" research a step further by applying that theory to the practitioner's authentic "inside" context. From a pragmatic viewpoint, this process provides value to an organization because the research findings are then directly applicable to helping improve the organization in which the researcher works. Therefore, the intent of action research is not necessarily *generalizability* for the reader. This is why the readers of action research studies are typically cautioned to carefully consider the implications of the research study within their own situated contexts (Mertler, 2014). That is not to say that an intervention in an action research study cannot be successfully applied to another context, it should just be done with caution and critical analysis.

Another well-known authority on action research, Creswell (2015), establishes that there are two major forms of action research: practical (pragmatic) or participatory. *Practical action research*, also known as *pragmatic action research*, is when educators seek to enhance their own practice through the systematic study of a local problem

(Creswell, 2015). Participatory action research refers to when the researcher conducts a social inquiry by involving key representatives of a community (Creswell, 2015). This study followed the former approach and can be considered a *practical* or *pragmatic* action research study.

Because this study took on the form of practical action research, the problem of practice calls for a plan of action, or an *intervention.* This process does not happen right away, however. As the researcher, I first conducted initial cycles of research to further understand the problem of practice and to shape the intervention. In essence, the intervention evolved through cycles of practice and reflection in respect to nearly all of its components. To accomplish this, I designed and piloted the intervention as well as the data collection tools in an effort to continuously refine each component of the study. It was only then that the latest intervention and data collection tools for this study were devised. Before I discuss the previous cycles of inquiry, which led to my method and development of the data collection instruments, the reader would gain deeper perspective from considering how the various data collection methods were utilized in this *mixed methods action research* study.

Mixed Methods Action Research. In addition to this study falling into the category of action research, it can be further categorized as of a particular type of action research, commonly known as mixed methods action research or MMAR. As previously written, action research takes place in the social realm, which in my case is the researcher's own place of work. According to Jennifer Greene (2007), a well-known expert on the subject of MMAR, conducting research in the social realm should recognize

the complexities arising from studying human behavior. Further, Greene claims that

mixing methods, or capitalizing on the strengths of both qualitative and quantitative

methods, is a way to negotiate the challenges of what another educational researcher,

David Berliner calls "the hardest science of all" (Berliner, 2002, p. 18). Berliner makes

this claim due to the many facets of educational research, such as the power of contexts,

the ubiquity of social interactions within that context, and short-lived nature of

educational research findings. Because of these complexities, Greene (2007) claims that a

mixed methods way of thinking is a research orientation that provides multiple ways of

seeing and hearing as well as multiple ways of knowing.

Thus, the purpose of a MMAR is to create a better, multi-faceted understanding of

the social phenomena being studied (Green, 2007), rather than relying on only one set of

methods. This better understanding could include enhancing validity or credibility of

findings, generating deeper and more inclusive understandings, as well as engaging in

research from multiple discordant perspectives. Further, Ivankova (2015) and Creswell

(2012) make similar claims connecting mixed methods to the paradigm of action

research, citing a number of features that make the integration of mixed methods and

action research justifiable, while rejecting a qualitative and quantitative incompatibility

thesis. In other words, these researchers believe that both qualitative and quantitative

methods can be particularly useful to enhance action research by providing and

complementarity of data from a wide variety of sources.

Concurrent Mixed Methods. There are many ways in which both quantitative and

qualitative data can be mixed in an action research study. One of which is known as

71

concurrent mixed methods. The particular type of concurrent mixed methods action

research used in this study is what is known as *Concurrent Qual + Quan Mixed Methods*

Action Research (MMAR). According to Ivankova (2015), this type of design includes

two strands, during which quantitative and qualitative data are collected and analyzed

separately. The primary purpose of this model is to compare both quantitative and

qualitative results for *complementarity* among different types of data and produce

validated conclusion from a variety of lenses. Ivankova (2015) claims that this is a

commonly used method in action research, citing that 73% of a reviewed 108 MMAR

studies utilized this type of mixed methods, most frequently used to evaluate the effects

of an intervention. In this sense, a practitioner/researcher, such as myself can utilize this

design to compare both qualitative and quantitative findings for a merged analysis. To

view how the Concurrent Qual + Quan MMAR model was utilized in this particular

study, see the conceptual model in Figure 5.
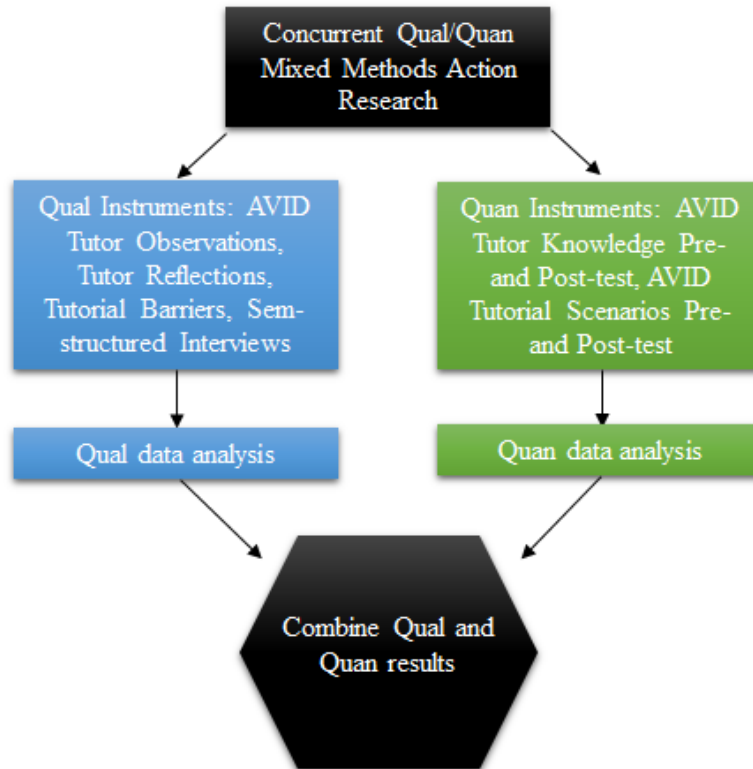
Figure 5. Concurrent Qual + Quan MMAR Model for the Study

As can be seen in Figure 5, two separate strands of data collection, one each for

qualitative and quantitative data, were utilized to collect data over the course of the study.

Although the strands were unique in terms of qualitative or quantitative collection and

analysis methods, the two were combined during the results phase, where a thematic

analysis will characterize the overall results of the complementary data collection tools.

Further discussion of the particular methods used for both qualitative and quantitative

data collection are discussed later in this chapter, with the overall structure outlined in

Figure 5 still in mind.

Next, I will review the previous cycles of this MMAR study and the lessons

learned from each cycle of research. To fully understand how the study evolved, it is

important for the reader to understand the previous cycles of research. For each of the early cycles, various aspects of the study were piloted and analyzed to enhance the quality of each data collection tool that eventually became the third and most current cycle of research.

Earlier Cycles of Research. Since this study falls under the category of *action research,* the research process is inherently iterative. As Creswell (2015) states, "action researchers engage in a *dynamic process* involving iterations of activities, such as a 'spiral' of activities" (p. 589). Although there are many methods in the field of action research for "spiraling" back and forth between reflection about a problem, data collection, and action, the general method I followed was one suggested by Stringer (2007). Stringer's model places emphasis on the importance of "looking," "thinking," and "acting." See Figure 6.
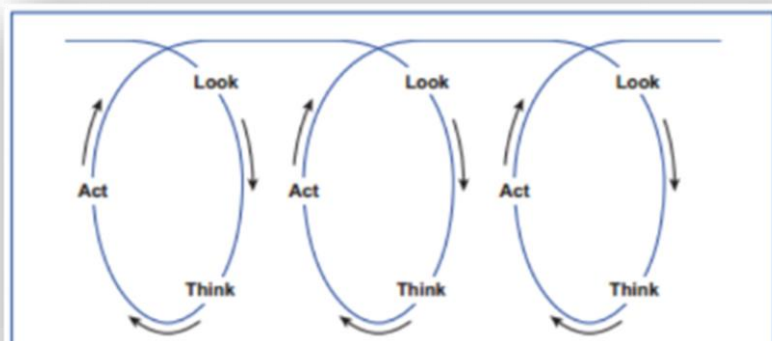
Figure 6. Stringer's Action Research Interacting Spiral.

According to Stringer, when in the "look" phase, the researcher first spends time constructing the problem by communicating to stakeholders. Then, in the "think" phase, the researcher moves on to identify a specific action (intervention). Finally, in the "act" phase, the researcher carries out the objectives of the intervention. Since this is a reflexive process, the cycle is then repeated and elements of the action (intervention) are refined for future iterations.

In Cycles One and Two of my research process, I followed a similar pattern. The following sections briefly summarize what occurred during each cycle.

Cycle One Method

During Cycle One, I developed a preliminary research question. This research question has since changed, but at the time it read, "What do stakeholders believe about the current AVID Tutor Training model?" During the first cycle of research, this preliminary research question led me to conduct initial interviews to gather information regarding the proposed intervention for AVID Tutor training and pilot the first iteration of the online modules. In action research, this phase is also known as *reconnaissance* (Mills, 2011). The method used for these data collection tools is briefly described next.

Cycle One interviews. First, I conducted semi-structured interviews of four of the new AVID Tutors from various sites and two of the AVID Coordinator/Elective Teachers regarding tutor training. A simple semi-structured interview protocol was followed (Brinkman & Kvale, 2015), utilizing five pre-written questions and follow up questions as necessary during the interview process. To characterize some of the Cycle One interview items, here are a few sample questions that were part of the protocol:

a) In as much detail as possible, describe your AVID tutor training experience.

b) Describe why you think that training model was used.

c) What would you change about the way you were trained to do your job as an AVID tutor? Why?

The interviews were recorded allowing me to take *in vivo* notes (first-cycle coding) on the key phrases I heard throughout the interviews, compiled the key phrases, and sorted them into common themes (after-cycle coding) (Saldaña, 2016).

The purpose of the interviews was to simply gather information about the phenomenon of AVID Tutor training in its, then current, state. With the initial interviews, I was able to collect feedback about my ideas for the blended-learning AVID Tutor training model as well as listen to the ideas of both AVID Coordinator/Elective Teachers and AVID Tutors. Many of their ideas contributed in a meaningful way to the crafting of the first iteration of the intervention.

Cycle One iteration of online modules. For Cycle One, I concurrently designed the first pilot of the intervention and tested it with AVID Tutors. The pilot modules consisted of five units of learning housed on our district AVID website. The AVID Tutor training components of the Cylce One intervention included curriculum components from the *AVID Tutorial Support Curriculum Resource Guide* (AVID Center, 2011); however, some of the items were revised in ways that make them more useable and accessible in an online environment. The content, objectives, and scope and sequence remained generally the same as outlined in the original training manual in an effort to maintain fidelity to the AVID Tutor training system. For the most part, only *format* changes were made to the original curriculum in order to aid in the online delivery of the content.

Each unit consisted of seven to eighteen specific components, some of which were chosen to strategically incorporate into the online modules. Due the comprehensive nature of the *AVID Tutorial Support Curriculum Resource Guide,* I had to be selective in the activities I chose to include. Including all of the activities would have been overbearing. Therefore, I chose activities that were relevant to the "basics" of AVID Tutoring since the course was designed as an orientation.

Each unit was designed to teach AVID Tutors about the stages of the AVID Tutoring process and included modules titled, "AVID Overview," "Before the Tutorial," "During the Tutorial," "After the Tutorial," and "Debriefing the Tutorial." Each module contained reading materials and/or videos as the content of pertinent knowledge related to each phase of tutoring. There were then 25 assignments for tutors to complete, such as interviewing AVID Elective teachers, observing tutorial sessions, and writing summaries (to name a few). Overall, 13 new AVID Tutors were able to participate in this pilot and complete the online modules.

After the modules were complete, I solicited feedback from AVID Tutors and AVID Teachers who completed the modules via semi-structured interviews. Additional feedback was collected anecdotally as I observed AVID Tutorials and spoke with AVID Teachers at various AVID sites.

Cycle One Analysis and Results

Cycle One interview analysis. To further analyze the data collected from reconnaissance interviews from Cycle One, I employed a method where I created and list of common concepts and then themes using the *in vivo* codes (Saldaña, 2015) from the

notes I took on the recorded interviews. To accomplish this, I followed a procedure where I first created an initial grouping of the common *in vivo* phrases. I then condensed those common phrases into common concepts. Finally I complied the common concepts into overall themes. Table 7 displays some of the emergent concepts and themes from the notes on the initial interviews.

As is displayed in Table 7, four major themes emerged. Tutors and AVID Teachers reported that the AVID's original training model presented a workload that was too demanding for AVID Teachers. Also reported was the perception that the original training model was "scarce" and was perceived as lacking effectiveness. AVID Tutors and teachers also talked about inconsistency as an obstacle to tutor training. Finally, the participants provided positive feedback on the first iteration of the blended-learning model.

Table 7

Emergent Themes from AVID Tutor and AVID Teacher Reconnaissance Interviews

In Vivo Phrases/Sentences	Common Concepts	Theme
"AVID Coordinator has to take responsibility" "easier now that I'm a more experienced Coordinator" "a lot to do as AVID Coordinator"	• AVID Coordinator • Responsibility • Experience • A lot to do	AVID Coordinator workload is demanding
"minimal" "don't think there was any" "very minimal" "don't remember any training" "not sure elective teachers did it" "had to work on my lunch time" "was not very good" "once a year, if that"	• Minimal • Don't remember much of it • Time constraints	Scarcity of AVID Tutor training and perceived lack of effectiveness
"teacher to teacher difference" "challenge is consistency" "up to how much the Coordinator pushes it" "left up to the school" "different in each classroom" "they all expect different things" "it happens differently from class to class"	• Inconsistency • Coordinator/leader role	Inconsistency is an obstacle to tutor training
"the online modules are phenomenal" "far more prepared" "training has been increased" "it is nice that they (tutors) are trained before they come to school" "online is good because it is hard to keep pulling sources from other places" "they can practice what they learn" "they (tutors) seem more confident than they were before"	• More prepared • Positive reactions • Confidence • Online benefits	Positive feedback regarding blended-learning model

Cycle One interview results. As a result of the interviews, I learned that both

AVID Tutors and AVID Coordinator/Elective Teachers held beliefs that the current

AVID Tutor training system was adequate, but could be improved. Due to this initial data

from Cycle One, I believed that there was justification beyond my own observations and

perceptions that the current AVID Tutor training model was not fully meeting the needs of our AVID sites. I was also more confident in the hunch to move a bulk of the training to online spaces, since it received positive feedback after the first pilot of the online training course. To get a sense of how the online modules evolved over Cycle One, I will now discuss them in more detail.

Cycle One iteration of online modules analysis. Feedback from both AVID Tutors and AVID educators was collected formally through semi-structured interviews and informally in an anecdotal sense as I worked with them through the first semester of the pilot. I compiled notes of individual feedback, which led me to make a two critical changes in the way the course was delivered. Originally, the course was placed on a website with links to each module (Figure 7*).
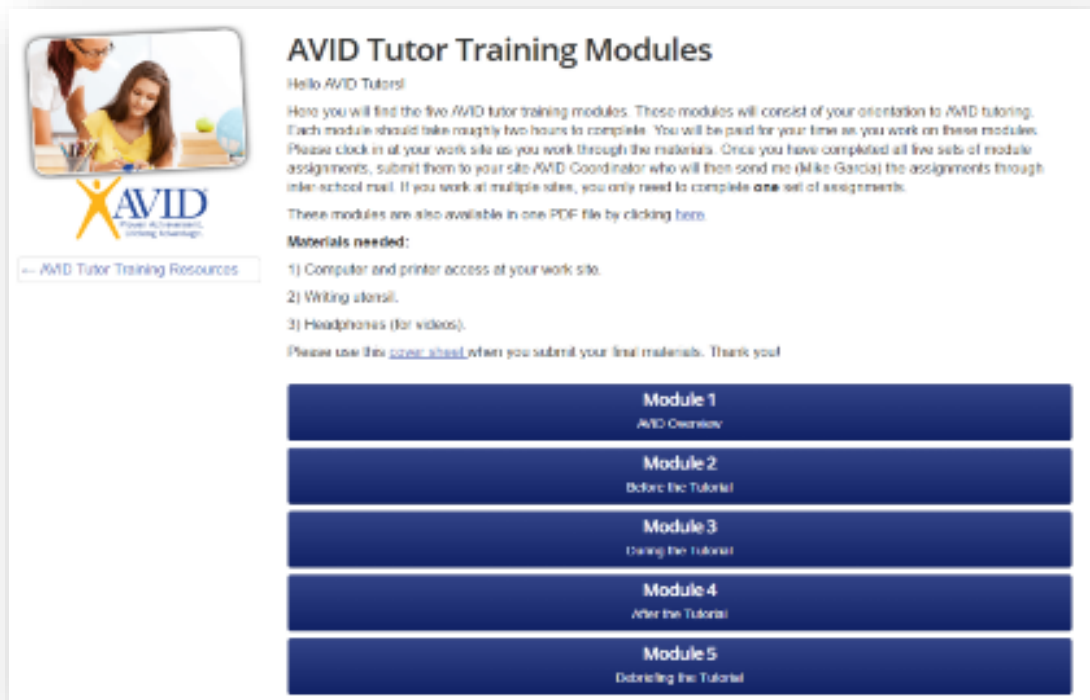
Figure 7. AVID Tutor Training Modules from Cycle One.

After receiving feedback, there were some key limitations that were expressed to me about this web-based model. First of all, the assignment forms that tutors had to complete in the original format needed to be printed and filled out by hand. This resulted in issues at schools where tutors: a) did not have access to computers or printers and b) had to send large packets of paper to me once they completed the training. Secondly, I discovered that AVID Center limits the materials which can be posted in public view on the internet due to copyright restrictions. This meant that I had to move the materials into a password protected space that only employees of the district could access. These obstacles presented difficulties with the first iteration of the online training model that needed to be further addressed in future iterations.

Cycle One results for the first iteration of the online modules. After analyzing the feedback on the first iteration of the online tutor training modules, there were a few limitations that were expressed to me about the web-based model, which needed to be addressed. Thus, a principle revision that was made because of this cycle was that I moved the modules off of the website platform into an online course platform called *Canvas.* A screenshot of the *Canvas* classroom can be seen in (Figure 8).
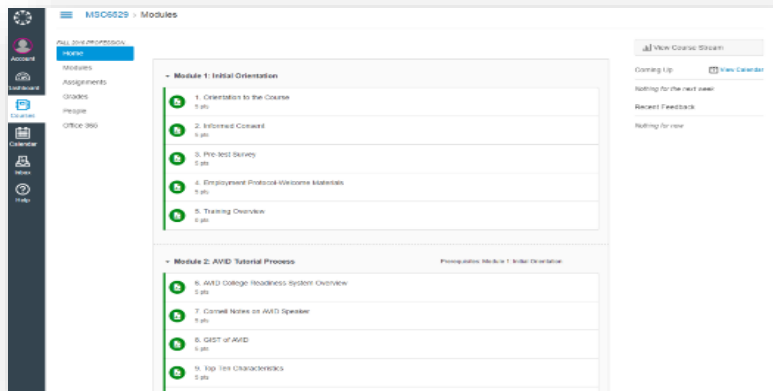
Figure 8. Canvas Course Student View

For most people who have used Blackboard in online or blended-learning college coursework, *Canvas* is similar. *Canvas* was also convenient because it was the platform supported by my district. Moving the modules over the *Canvas* allowed me to protect copyrighted information, eliminate the need for paper print-outs, and also connect the AVID Tutor orientation more formally to our district Professional Development system. This last benefit allowed AVID Tutors to receive district recognized credit and pay for completing the course.

Cycle One Conclusion

During Cycle One, I was also able to conduct semi-structured reconnaissance interviews and complete a pilot of the first iteration of the online tutor training components. This process was valuable as I was able to "think" about and "act" to revise these processes as well (Stringer, 2007) as part of my iterative research process. The lessons learned from these activities helped me rehearse interviewing and coding protocols, as well as led to significant changes in the online delivery of the content for AVID Tutors.

Cycle Two Method

During Cycle Two, my primary focus was on piloting the revised AVID Tutor training modules on *Canvas.* I was also able to test the functionality of the modules in the new format, pilot the pre- and post-tests, and pilot a revised AVID Tutorial Observation Tool.

Cycle Two online training modules. During this cycle, 14 AVID Tutors were able participate in the online *Canvas* training as well as take part in the face-to-face training sessions. The online *Canvas* components followed a similar course design as in the earlier iteration of the intervention. There were five modules (previously mentioned) leading the AVID Tutor through the prescribed curriculum outlined by AVID Center (2011) for tutor training. AVID Tutors signed up for the *Canvas* course through our district's Professional Development Department and worked through the modules at their own pace from September of 2016 to December of 2016.

A principle difference in the *Canvas* update was that all assignments were able to be completed and submitted digitally. This component added the benefit of me being able to provide timely feedback and interact with AVID Tutors when they had misunderstandings or questions about the AVID Tutoring process. This enhanced the interaction between me as the "instructor" and the tutors as "students." When tutors asked questions, they received specific responses from me as the instructor, which helped to differentiate the learning of each tutor to meet unique needs. Also, due to the password protected nature of *Canvas,* the copyrighted AVID materials were protected from public view.

Cycle Two Pre- and Post-tests. During this cycle, I was also able to pilot an AVID Tutor Knowledge Pre- and Post-test and on a smaller scale the AVID Tutorial Scenario Pre- and Post-test. The original AVID Tutor Knowledge Pre- and Post-test (Appendix D) consisted of 25 scaled items (a questionnaire at first), which sought to measure AVID Tutors' knowledge of AVID History and the AVID Tutorial process. The

original questionnaire was embedded into the online modules in the *Canvas* course. The second questionnaire, the AVID Tutorial Scenario questionnaire was added later as I discovered tutors were struggling with common tutor scenarios at the first face-to-face training (Appendix E).

Cycle Two observation protocol. During Cycle Two, I was also able to pilot my observation protocol for observing AVID Tutorials. The initial observation protocol involved using an AVID Tutorial observation form created by AVID Center (2011) which rates AVID Tutorial performance on a scale of 0-3, "Not AVID" to "Collaborative." The tool is designed to be used to observe key participants in the AVID Tutorial, including teachers, students, and tutors. A sample of the form can be seen in Figure 9.

Not AVID	Tutor-Centered	Student-Centered	Collaborative
☐ Grades papers/ plans lessons ☐ Does not monitor student behavior ☐ Works one-on-one with a student for entire period ☐ Does not model higher-level thinking ☐ Does not check that student presenter has resources ☐ Tutors one tutorial group	☐ Observes tutorials ☐ Coaches tutor to monitor student behavior ☐ Works with a number of students one-on-one during the period ☐ Sometimes models higher-level thinking ☐ Checks that the student presenter has resources to support tutorial questions	☐ Monitors tutorials ☐ Coaches students to monitor their own behavior ☐ Stays with one or two groups the entire period ☐ Models higher-level thinking ☐ Checks that the student presenter uses resources to support tutorial questions	☐ Coaches students and tutors in the tutorial process ☐ Coaches students/tutors to share responsibility for monitoring their own/each other's behavior ☐ Rotates to all groups during the period ☐ Models higher-level thinking; validates students who ask higher-level questions ☐ Checks that the student presenter uses resources to support tutorial questions and for group member questions

(row label: Teacher)

Figure 9. AVID Tutorial Observation Form Sample (AVID Center, 2011).

From October 2016 to November 2016, I used this form to rate AVID Tutorials when I visited the classrooms where new AVID Tutors were working. Overall, I visited between 11 AVID classrooms where this observation tool was used. As I utilized the tool, I marked my ratings by checking the appropriate boxes as I noted various tutoring behaviors and took field notes in the margins of the forms to further explain my markings.

Cycle Two Analysis and Results

As a general note on this section of Cycle Two results, the reader should exercise caution in assuming that the AVID's current model wouldn't produce similar results. Keep in mind that this action research study was not designed to compare the relative effectiveness of the two training models. It was designed to understand the effectiveness of the revised blended-learning model.

Cycle Two refinements to the online modules. Generally, the online tutor training modules worked as intended, with only some minor issues. There were three minor problems that occurred throughout the implementation of the online modules are as follows: a) difficulties in getting tutors to sign up for the course in a timely manner, b) broken or malfunctioning hyperlinks to videos and other resources, and c) some directions were unclear, resulting in some assignments that were not completed accurately.

Initially, because I placed the *Canvas* course in a password protected location, tutors had to wait to receive their official credentials before being able to start the course. This meant that in future iterations, I would need to be sure that AVID Tutors had

adequate access to their log in credentials before I asked them to access the course. For those seeking to implement a similar system, access to the online modules was certainly a consideration to make.

Next, minor refinements to the *Canvas* course itself were made. Because the online components were finally "live," I was able to work out minor bugs, such as broken hyperlinks or unclear directions. Most of these adjustments came as a result of informal feedback from AVID Tutors as they worked through the online modules.

Further, as I began to read and comment on various assignments, it came to my attention that some results were not what I desired as the instructor. This meant that I had to go back and check to see if expectations were clearly defined in the instructions for each assignment. This occurred on only 2-3 occasions, but it was a necessary adjustment to make in an attempt to yield more quality work from AVID Tutors.

To deepen my understanding of the end-user experience, I conducted two Cycle Two interviews with AVID Tutors who participated in the online modules. One tutor, Stephanie (pseudonyms used), was brand new to AVID Tutoring before the AVID Tutor training. The other tutor, Heather, was a former AVID student, but still new to the role of AVID Tutor. After speaking with each tutor, I first learned that they both had positive feedback to provide about their training experience.

Stephanie commented on the fact that the interaction with video and live tutor models was one of the most crucial aspects of the online training for her. She said, "I think [the training] really helped me because there were videos that showed how other schools do their tutorials, which helped give me new ideas on how I could do my

tutorials." She later cited specific videos, such as the "Grouping Students" video and how that was useful for her because it showed her an authentic example of how to apply the practice in the AVID classroom. Further, Stephanie added that it was the live observations of more knowledgeable tutors also significantly contributed to her learning as a new tutor.

When I spoke with Heather, she had similar comments to make about the AVID Tutor training model. According to Heather, the most valuable aspect of the online training was engaging in the "Practices of the Week," which involved observing model tutors through video recordings or by observing live tutors. Similar to Stephanie, Heather said that, "These were the most valuable parts of the training because I learned the most by watching how other tutors tutored." Both the comments from Stephanie and Heather lead me to be more confident in the intentional incorporation of social modeling concepts into the training model (Bandura, 1971; Vygotsky, 1978), as they both affirmed that these aspects of the training were one of the most important features for them.

Additionally, I was able to review the final reflections of AVID Tutors who participated in the Cycle Two pilot of the online modules. For the final reflection, tutors were asked to respond to the open-ended question, "As a result of this online training, how have you evolved as an AVID Tutor?" Comments made by tutors generally indicated positive reception to the AVID Tutor training experience and that the experience had added value. Based on the viewpoints of AVID Tutors, three initial themes emerged: growth in AVID background, new perspectives, and holding higher expectations.

First in terms of "growth in AVID background," Meredith said, "I feel that because of *this* training, I have become more knowledgeable of the parts of AVID that I did not understand as a student." Another AVID Tutor, Stephanie, mentioned:

> "I came into this semester with extremely limited knowledge about the AVID program. I think the online training has done a great job of introducing me to ideas and particular parts of the AVID process that may have otherwise gone overlooked."

Finally, in terms of growth in AVID background, another Tutor, Alex stated, "I feel as though I have been introduced and immersed into important AVID techniques or processes." Although there were more tutor perceptions along these general lines, these three examples demonstrated to me that AVID background knowledge components of the training were meeting their intended goals. Several of the tutors mentioned some form of growth or deeper understanding of AVID as an organization as well as its principle instructional strategies. It should be noted that what these comments revealed was that the blended-learning model was likely having its intended effect.

Another initial theme that emerged from the overall reflection was the theme of "new perspectives." On this topic, Meredith commented, "I feel like I have a renewed view on AVID." Further, she said, "With this new view, I am able to be a better tutor." Another tutor, Stephanie, said, "I gained a greater respect for the process and for the importance of the entire program itself that I may not have learned about in so much detail had I not participated in this online training." Additionally, Sam stated, "We are all getting a lot more comfortable with one another and we are slowly, but surely getting past the quiet shy stage, which is really making me happy." The use of particular words such as "renewed," "better," and "greater" can all be viewed as indicators of a *transformation,*

which was a good signed there was a common shift in perspective because of the training itself. Again, this was a positive indicator that the training model had met its intended goals.

Finally, there emerged a theme of "holding higher expectations." I was somewhat surprised by this theme, since there was no intentional instruction on the concept of setting high expectations built into the course. However, tutors commented on how the training materials encouraged them to hold high expectations for students and for themselves as tutors. For example, Alex stated, "This training has made me realize it is okay to expect a little more from students." She followed that comment up by stating, "I have realized that there must be a certain level of effort on the students' part as well as my own." These comments indicate an understanding that because of the training, Alex was aware that holding high expectations was an important part of the AVID Tutorial process. Further, Sam said, "All in all, I am working really hard to challenge the students to improve." This comment from Sam further indicated that she understood the importance of not just going through mechanics of the tutorial process, but that *challenging* students was a core concept behind the tutorial process.

As can be seen in the course reflections of a few of the participants from Cycle Two, each expressed the value of their tutor training experience. Again, the reader should exercise caution in assuming that this model is better or more effective than the current AVID Tutor training model due to the fact that this study was not designed to determine relative effectiveness. However, this preliminary Cycle Two data from the initial pilot of

the course is highly encouraging in that this alternative delivery method appears to have had the intended effect of the AVID Tutor training curriculum.

Cycle Two refinements to the pre- and post-tests. Originally, items on the Pre- and Post-test questionnaires were designed to be perceptions of knowledge, rated on a five point scale. Items consisted of statements such as, "I am able to accurately describe the mission of AVID." Ratings went from 1= not at all to 5=confidently. What I discovered upon analysis is that most AVID Tutors thought very highly of their knowledge and rated themselves at the highest levels on just about every question. This, of course, was puzzling since most of the tutors were new and probably didn't have the prior knowledge they attested to have. In another sense, I realized that there was a *Hawthorne Effect* (Smith & Glass, 1987) probably in play, causing the tutors to try to please me with their responses, rather than answer honestly.

To increase the validity of the tool, I realized that changes were necessary to the scale and design of the questionnaires. Since I intended to truly measure pre- and post- knowledge with the instruments, my next iteration excluded the scale items and instead included open-ended questions, such as "What is AVID's mission?" and "How did AVID begin?" These open-ended questions allowed for more authentic responses from AVID Tutors and minimized the Hawthorne Effect in which the participants aimed to please me, the researcher, with inflated scale ratings.

However, rather quickly, a new problem inherent in the open-ended nature of the responses emerged as a result of this adjustment. Due to the variation of open-ended responses I experienced difficulty with reliable scoring. When scoring each item, it was

90

very cumbersome to agree on a "correct" item, even with another rater. Therefore, a third

iteration of the pre- and post- questionnaire consisted of a three-item multiple choice

format, based on the responses from the open-ended items from the previous iterations of

the data collection tool (Appendix D). The instrument will be more thoroughly discussed

later in this chapter.

It should also be noted that during the face-to-face training component of this

cycle, a new research question emerged, leading to the development of another pre- and

post-test:

RQ3: What common barriers emerge from AVID Tutors throughout the AVID
Tutor training process?

This question came about during one of the activities during the face-to-face training

when AVID Tutors were asked to identify on-the-job obstacles for AVID Tutoring.

Initially, the obstacles were collected on individual "sticky notes" and were validated

through a sorting process utilizing a backpack metaphor. Obstacles that were in the scope

of the tutor's control were placed "inside" the backpack because they could "carry" the

responsibility of dealing with them. Obstacles that were outside of the scope of the tutor's

control were placed on the "outside" of the backpack because they shouldn't be "carrying

the burden" of factors outside of their own local control. Figure 10, depicts an example of

this activity from one of the pilot groups.
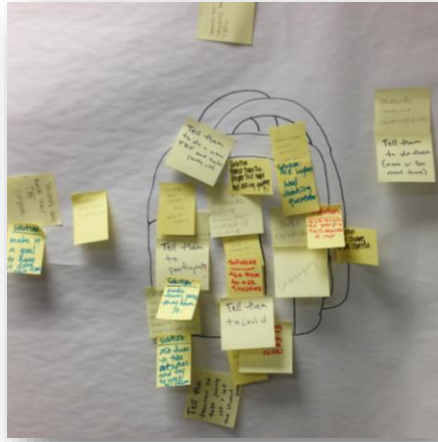
Figure 10. Sample Obstacles from AVID Tutor Training

The list of obstacles that AVID tutors created was comprehensive and very informing. It made sense to me that collecting information about perceived obstacles from AVID Tutors as a continued feature of the face-to-face training would contribute to the possible creation of new content to support AVID Tutors in future iterations of the online training modules. In addition, the obstacles inspired a second Pre- and Post-test which was piloted in Cycle Two. This Pre- and Post-test was designed to assess whether or not tutors knew how to correctly handle the most difficult tutoring scenarios that emerged from this cycle. This pre- and post-test is described in detail later in this chapter.

Analysis of AVID tutor knowledge pre- and post-test items. In a pilot of the pre- and post-tests with a group of conveniently sampled AVID Coordinators (15 of the 17), an items analysis was run on the pre- and post-test for the purpose of validating the items on the instrument. The process involved recoding test responses to "1" for "correct" and "2" for incorrect. Then, using SPSS, an items analysis first yielded the results in Table 8.

Table 8. *Total Item Statistics of the Pilot for the AVID and Tutorial Knowledge Pre- and Post-test*

	Valid	Missing	Mean	Std. Deviation
Raw Score	15	0	14.33	1.63

N=15, 17 total items

As can be seen in Table 8, the mean score among AVID Coordinators, who participated in the pilot test was 14.33 out of 17 total items, or 84%. Since it is assumed that AVID Coordinators should have a relatively deep understanding of the AVID Tutorial process, they should likely have a relatively high expected score than the average tutor should.

Because I would have liked "experts" to score in the 90% or above range, I ran an analysis of items to see if any of the individual items were problematic. First, I checked the Cronbach's α coefficient for each of the two constructs on the Pre- and Post-test (AVID Knowledge and AVID Tutorial Knowledge). Table 9 displays the Cronbach's α statistics for each of the two constructs.

Table 9. *Cronbach's Alpha Statistics for Each Construct, AVID and Tutorial Knowledge, on the Pre- and Post-test*

	N of items	Cronbach's α	Cronbach's α on Standardized Items
Construct One: AVID Knowledge	5	0.709	0.797
Construct 2: Tutorial Knowledge	8*	-0.235	-0.244

*Four items were excluded due to no variance. Participants *N*=15, Items *N*=17

For Construct One, AVID Knowledge, the Cronbach's α score is in an acceptable range of 0.709, which indicates that the items are rated as moderately reliable for such a small N. However, for Construct Two, Tutorial Knowledge, a negative Cronbach's α resulted. Because of the negative α rating, I was led to believe that some of the items may be problematic. An item analysis revealed that item numbers 14, 15, 16 and 17 were a problematic items due to the fact that they might be part of a different construct other than Tutorial Knowledge. In addition, I found that item number 14 contained two responses that could be construed as correct. Once these items were removed from the analysis, the pre- and post-test yielded a much higher Cronbach's $α$ score for Construct Two ($α = 0.426$). Although this $α$ score isn't in the highest range, removing the four items from the test did still strengthen to instrument enough for me to be more confident in moving forward with it into the next cycle, minus the problematic items. This confidence was due to the fact that there were still four items on the test that yielded zero variability, meaning that responses were perfectly consistent on those items. If they had been included in the Cronbach's α calculation, the internal reliability would likely be much higher. Due to the fact that this tool is still being piloted, yielding a relatively small *N,* users should revisit the internal reliability statistics on this tool as the tool is used by more participants. Cronbach's α coefficients tend to yield a more accurate measure with an *N* at 30 or greater (Yurdugul, 2008).

   Analysis of AVID tutor scenario pre- and post-test items. Similarly, in a pilot of the Tutorial Scenario pre- and post- with a group of conveniently sampled AVID Coordinators (17 of 17), an items analysis was run on the pre- and post-test. The process

involved recoding test responses to nominal variables of "1" for "correct" and "2" for incorrect. Then, using SPSS, an items analysis first yielded the results in Table 10.

Table 10. *Total Item Statistics of the Pilot for the Tutorial Scenario Pre- and Post-test*

	Valid	Missing	Mean	Std. Deviation
Raw Score	17	0	7.94	1.09

N=17, 10 total items

As revealed in Table 10, the mean score among AVID Coordinators, who participated in the pilot Tutor Scenario test was 7.94 out of 10, or 79%. Since it is assumed that AVID Coordinators should have a relatively deep understanding of how to respond in AVID Tutorial scenarios, they were expected to have a relatively high score, which showed up in the statistics.

However, to further validate the instrument, I also ran an items analysis to identify any potentially problematic items. Table 11, demonstrates the reliability statistics in terms of Cronbach's α for the Tutorial Scenario Pre- and Post-test.

Table 11. *Cronbach's Alpha Statistics for the Tutorial Scenario Pre- and Post-test.*

	N of responses w/ variance	Cronbach's Alpha	Cronbach's Alpha on Standardized Items
Tutorial Scenario Items	13	0.294	0.405

*Four items were excluded due to no variance. Participants *N*=17, Test Items *N*=10

According to the Cronbach's α data for the Tutorial Scenario Pre- and Post-text, it appears that items are only mildly correlated, however, it should be noted that there are a

total of four out of the ten items that resulted in zero variance. Therefore, I concluded that although the Cronbach's α statistic isn't as high as the 0.70 range one would expect, the positive correlation of standardized items (0.405) with the consideration of the fact that all 17 participants answered four of the ten questions exactly the same way, made me confident enough to move forward with continued use of the instrument into the next cycle. I would also recommend that this statistic be revisited as the tool is used by more participants, yielding a higher *N* due to the fact that a Cronbach's α score is more reliable with 30 participants or more (Yurdugul, 2008).

Cycle Two refinements to the observation protocol. During Cycle Two I was also able pilot the Tutorial Observation Tool created by AVID Center. The use of this tool in a practical context and in the context of an action research study led me to believe that this particular observation tool was not one that would work for me as I continued this study. Upon attempting to use the form, it became clear that the form's purpose wasn't congruent with my research purpose. Again, the intent of the original observation form, was to account for observed behaviors of tutors by the AVID Elective teacher for *coaching* purposes and not necessarily to acquire a score relating to tutor fidelity.

Because this form did not serve my research needs, I created and piloted a revised observation form (Version 1.0), which can be found in Appendix F. This next-generation form allowed me to collect score-able ratings across a consistent horizontal scale, allowing for data collection leaning more towards a measure of fidelity, rather than data collection for coaching and reflective purposes.

To pilot this form, I personally utilized the form to rate AVID Tutorials during 8-10 regular classroom visits. Additionally, I piloted the instrument when observing new and experienced AVID tutors. A few District Directors from other AVID districts around the country also piloted the new observation protocol. Then after making revisions to the observation tool, I re-tested the form with AVID Coordinators and AVID Tutors.

Content Validity. Further, I utilized the expertise of AVID Elective teachers to validate the categories and associated items within the observation tool (Appendix F). This was a measure taken to see if the instrument descriptors could be fairly categorized by "experts" in the field. It made sense for AVID Elective Teachers to participate in the content validation because they are the ones who have daily contact with AVID students and AVID tutors. For each of the 22 items, 17 AVID Elective Teachers blindly sorted each descriptor into the category in which they believed them to belong: Teacher, Tutor, Student Presenter, and Group Members. The descriptors were presented in survey form, in a random order, allowing for Elective Teachers to select one of the four categories for each descriptor. The frequency of each possible response per item was then cross referenced with the correct category. Frequencies for each item are displayed in the Table 12.

Table 12

Frequency of Correct Matchings of AVID Tutorial Descriptors on the AVID Tutorial Observation Form.

Descriptor	Correct Role	Freq. Correct	% Agrmt
1. Holds students accountable for coming to class with pre-work complete by utilizing a system for checking TRFs before tutorials	Teacher	12	71*
2. Coaches tutors and students on TRF revisions before tutorials	Teacher	12	71*
3. Coaches both students and tutors in the tutorial process	Teacher	17	100
4. Coaches both students and tutors to use higher level thinking	Teacher	16	94
5. Coaches both students and tutors to use resources to support tutorial questions	Teacher	16	94
6. Facilitates, coaches, and works with one group the entire period	Tutor	13	77
7. Sits with tutorial group, away from the student presenter	Tutor	16	94
8. Encourages active participation from *all* tutorial members	Tutor	16	94
9. Uses Socratic method to push thinking of students to a higher level through the inquiry method	Tutor	8	47*
10. Takes three-column notes for the student presenter and encourages all students to take three column notes	Tutor	10	58*
11. Checks for student presenter's and entire group's understanding before tutorial ends	Tutor	15	88
12. Follows 30 second speech protocol by introducing the original problem, steps tried so far, key vocabulary, and POC.	St. Pstr.	15	88
13. Works collaboratively with group members and tutor by pro-actively engaging them	St. Pstr.	12	71*
14. Records own thinking, tutor-driven notes, and group member thinking on the white board	St. Pstr.	13	77
15. Works together with group members to gather appropriate resources	St. Pstr.	4	23*
16. All group members contribute to the tutorial by actively asking questions of the student presenter	Group Mmbr.	16	94
17. All group members take responsibility for ensuring the pre-work and POC is quality, and if not, encouraging the presenter to refine it	Group Mmbr.	14	82
18. All members actively take three-column notes and work ahead to generate questions for the student presenter	Group Mmbr.	15	88
19. All group members stay on task/topic during the whole tutorial process	Group Mmbr.	8	47*
20. All group members engage in discussion without prompting from the tutor	Group Mmbr.	15	88
21. All group members assist in checking for the student presenter's understanding and check for own understanding. If necessary, ask clarifying questions.	Group Mmbr.	16	94
Overall Agreement		279/357	78

Note: N=17. Also scores that fell below a threshold of 75% agreement are marked with an asterisk (*).

According to the data in Table 12, the overall agreement when blindly matching the descriptors of tutorial behaviors with the associated category, the 17 AVID Coordinator/Elective Teachers agreed on 78% of the overall descriptors, which is deemed adequate according the Nunnally (1978) criteria for cutoff score of 70% agreement for interrater reliability.

In addition, an asterisk (*) marks the descriptors that resulted in less than 75% agreement. At first glance, an interpreter of these lower scores might assume that these are "faulty" items and I should consider removing them from the tool. However, upon closer analysis of these items, it appeared that there were understandable confusion between the descriptor and the role associated with it due to the fact that multiple participants in tutorials are expected to exhibit similar behaviors. For example, item number 15, "Works together with group members to gather appropriate resources" scored the lowest out of all of the descriptors with only 23% of AVID Elective teachers correctly categorizing the descriptor as "Student Presenter." This was an item that was confused with the Group Members (41%) and the Tutor (24%) by respondents. However, both group members and AVID Tutors are also expected to perform the same behavior "working together with group members to gather appropriate resources," which can account for the confusion with this item. All other items scoring below 75% exhibited similar scenarios, where the descriptor could have been applied to more than one tutorial role.

If all items with an asterisk were removed from the observation tool, respondents would have agreed on the item categorizations at a rate of 89%. However, I decided to

keep the items since the overall original agreement was still relatively high at 78% and the items are already categorized on the observation form, hopefully mitigating the confusion inherent in the "blind" categorization. The agreement level of 78% is acceptable enough to move forward, with the caveat that over time, the validity of this instrument should probably be revisited after more use yields a higher *N*.

Internal consistency and interrater reliability. To evaluate the internal interrater reliability, pilot data from the new version of the AVID Tutorial Observation Tool was collected from AVID Coordinator/Teachers (*N*= 17), who each made independent ratings on the same set of participants from a video recording of an AVID tutorial. The pilot ratings allowed me to assess the Cronbach's α reliability among the items on the AVID Tutorial Observation Tool. Based on the independent ratings of each of the AVID Coordinators, a Cronbach's *α* of 0.979 was calculated, indicating a very high level of reliability among the various users of the instrument. However, due to the relatively low *N* at this phase, it is acknowledged that this reliability statistics warrants further evaluation upon expanded use of the instrument.

In addition, I randomly selected ten of the raters to run tests of interrater reliability in terms of percent agreement. In this way, the percent agreement is measured by the percentage of consistent ratings among ten randomly chosen raters. The percent agreement on Version 1.0 of the observation tool can be seen in Table 13.

Table 13

% Agreement Between 10 Randomly Chosen Raters on the Revised Observation Tool (Version 1.0)

	A	B	C	D	E	F	G	H	I	J
A		57.1	61.9	47.6	52.4	61.9	52.4	57.1	61.9	47.6
B			52.4	57.1	57.1	52.4	52.4	47.6	52.4	47.6
C				47.6	66.7	52.4	42.9	33.3	57.1	42.9
D					71.4	47.6	52.4	42.9	38.1	57.1
E						52.4	42.9	42.9	57.1	52.4
F							42.9	52.4	52.4	47.6
G								42.9	42.9	42.9
H									47.6	47.6
I										47.6
J										

Note: Overall mean agreement is 50.7%.

As can be seen in Table 13, the percent agreement ranged between 33.3% (between raters C and H) to 71% (between raters D and E) with an overall mean percent agreement of only 50.7%. Of all of the possible interrater comparisons, a total of 23 comparison scenarios resulted in over a 50% total agreement. This implies that although the overall internal consistency of the observation tool yields a Cronbach's α of 0.978, there is still enough disagreement between raters to suggest that when using this tool, raters should either discuss the ratings to come to a consensus before deciding on the final ratings or the tool was in need of revision.

The next iteration of the AVID Tutorial Observation Form (Version 2.0). Based on the data analysis resulting from the piloting of the new AVID Tutorial Observation Form, I made the decision to revise the format of the observation form in an attempt to

increase interrater reliability. Since the form's content and internal reliability were previously validated, the changes I made were to add more clear directions on how to rate the tutorial scenarios as well as decrease the scale from a 1-4 scale, to a 1-3 scale. This was due to feedback from users who stated it was difficult to distinguish between a rating of 3 and 4. Therefore, I eliminated one item on the scale to simplify the rating process. Some minor changes to the wording of certain items were also made to add clarity. The changes can be seen in Appendix F, under "Version 2.0" of the AVID Tutorial Observation Form.

Internal consistency and interrater reliability on the new tool. This next iteration of the observation form was initially piloted with another group of users, AVID Tutors (*N*=14), as they all viewed the same live tutorial session. The tutors were asked to rate the tutorial session using the revised (Version 2.0) observation form. The resulting data, from 14 participants yielded an overall Cronbach's α of 0.529 on standardized items. This Cronbach α coefficient may not seem to indicate an instrument of high reliability at first, however, this coefficient calculation excluded 13 of the items which had *zero variability* (perfect agreement). Therefore, I concluded that the combined Cronbach's alpha of 0.529 along with the 13 of the 21 items that had no variability, the instrument could be interpreted as a reliable instrument—arguably more reliable since the majority of items yielded no variability at all.

Next, it was important to see if the revisions to the form yielded more interrater agreement. Therefore, I again chose 10 random raters and ran tests of interrater reliability in terms of percent agreement on ratings. The results can be viewed in Table 14.

102

Table 14

% Agreement Between 10 Randomly Chosen Raters on the Revised Observation Tool (Version 2.0)

	A	B	C	D	E	F	G	H	I	J
A		81	100	95.2	100	100	90.5	90.5	100	100
B			81	76	81	81	81	81	81	81
C				95	100	100	90.5	90.5	100	100
D					95.2	95.2	85.7	85.7	95.2	95.2
E						90.5	100	100	100	100
F							90.5	90.5	100	100
G								100	90.5	90.5
H									90.5	90.5
I										100
J										

Note: Overall mean % agreement is 92.4%.

As can be seen in Table 14, the overall percent agreement ratings represented much higher scores than the ratings from the first version of the observation tool displayed in Table 13. The percent agreement between raters ranged from 76% (between raters B and D) and 100% (among several raters). The overall mean percent agreement was 92.4%, which is well over the range of acceptable of 70% percent agreement among users. Therefore, I concluded that the revised Tutor Observation Tool produced reliable and valid scores in similar samples to move forward with its use in future cycles of research.

Cycle Two Conclusion

As demonstrated by the lessons learned from previous cycles of research, the *action research* method has been a valuable model in helping me refine both my intervention and several of the data collection tools as I have moved forward through this

103

study. A key result was that I could pilot and further refine my pre- and post-tests and make revisions to further improve the instruments. Another key result from this cycle of research is that I collected data on the AVID Tutorial Observation Tool as well as pilot an even more refined version of the form with stronger internal and interrater reliability. The next section will discuss the intervention as it took form after the previous cycles, starting with a discussion of the training obstacles leading to the need for the intervention.

Curriculum and Tutor Training Program Design Considerations

As previously discussed, the intervention was designed to address a need for enhanced AVID Tutor training within my school district. This intervention moved several of AVID's tutor training components to online spaces (*Canvas)*, providing the platform for AVID Tutors to engage in professional learning concurrently as they learned the nuances of the job in the AVID Elective classroom. As discussed in Chapter Two the guiding principles of the professional learning were based on the foundational of Vygotsky's (1978) socio-cultural theory, Bandura's (1971) social learning theory and Schön's (1983) reflective practitioner theory. For more clarity, the next section provides details about the curriculum and the scope and sequence for intervention, followed by further justification from the literature reviewed in Chapter Two.

AVID Tutor Training Curriculum. Again, it should be noted that the curriculum used to design the blended-learning modules for AVID Tutors came from the *AVID Tutorial Support Curriculum Resource Guide* (AVID Center, 2011). This curriculum came in the form of a printed guidebook with supporting online resources such as videos and material updates hosted on AVID's own website. The curriculum was

divided into four separate units: (a) AVID Overview, (b) Before the Tutorial, (c) During the Tutorial, and (d) After the Tutorial. Some of the example activities and topics included in this curriculum were: "Summarizing the 'GIST' (Generating Interactions between Schemata and Text) of AVID", "Comparing and Contrasting Expectations of Various AVID Roles," "Fostering Collaborative Inquiry," "Checking for Student Understanding, and Providing Feedback to Students." The online modules generally followed the original sequence outlined by AVID Center and included many of the original assignments as previously described (modified for online learning).

   Universal Design for Learning (UDL) and the intervention. More specifically, outside influences, such as the *Universal Design for Learning* (UDL) also informed the creation of the online modules. With the advent of online learning, "texts" have moved beyond the standard textbook or workbook. There are many other ways that students can access information and process the information while utilizing various online platforms. In comparison, the textbook "in-print" format has very limited means of navigation (e.g. turning pages with fingers, handwriting only in spaces provided, etc.) (Rose & Gravel, 2012). Computer technologies now allow for navigation to happen in nearly infinite ways. By providing a variety of hyperlinks for learners or prompting searches through popular search engines, the navigability provided by online learning is nearly limitless in variety. In addition, the types of texts students can access, such as online videos, pictures, blogs, social media, etc. all add variety and the variation in choice that Rose and Gravel contend is essential for enhancing the learning of students.

Thus, the AVID Tutor blended-learning considers the fundamental aspects of the Universal Design for Learning (UDL) outlined by Rose and Gravel (2012). Within the various modules, I followed the three suggestions from Rose (2001) and Rose and Gravel (2012) which included providing multiple and flexible methods of presentation, expression and apprenticeship, and engagement. For example, in one particular module, students had the choice to either observe a live model AVID Tutor in the classroom or choose to observe a "virtual" tutor model via an animated video on the internet (Garcia, 2016). In other exercises, AVID tutors were asked to summarize their learning in a wide variety of ways that addressed diverse learning styles: artistic representations, a concrete poem called a "summarizing pyramid," Cornell notes, and reflective writing, to name a few. Overall, when designing the course content, the concept of variety of methods of instruction and expression was at the forefront of my mind. This design concept was in direct relation to Rose's contention that the needs of diverse learning styles must be met in quality instructional design—a major principle also shared by the AVID organization.

Curriculum scope and sequence for training. The AVID Tutorial professional learning curriculum was designed to span seven weeks of time. The curriculum's scope and sequence is outlined in Table 15.

Table 15

AVID Tutorial Support Curriculum Scope and Sequence

Wk	Phase	Curricular Focus
1	Module 1: Initial Orientation (O)	• Orientation to the Course • Informed Consent Form • Tutor Knowledge and Tutorial Scenario Pretest • Employment protocols • AVID Tutor Training Overview
2	Module 2: AVID Tutorial Process (O, OTJ)	• AVID College Readiness System Overview • AVID Speakers Cornell notes • GIST of AVID • Characteristics of an AVID Tutor • Expectations of the AVID Tutor • Tutorial Process Summarizing Pyramid • Practices of the week: Observing another tutor at work (real or virtual). Reflecting on the steps of tutorials
3	FACE TO FACE training at some point during the Fall Semester - AVID Tutor Training Orientation (F2F)	• Collaboration/Team Building • AVID College Readiness System Overview • Characteristics of an Ideal Tutor • Tutorial Process Overview • Ideal Tutor and Student • Mock Tutorials
4	Module 3: Before the Tutorial (O, OTJ)	• AVID Student Binder • Cornell Notes • Interview and AVID Elective Teacher • Preparing Tutorial Request Forms (TRFs) • Practices of the week: Completing a TRF as a model for AVID students. Reflecting on assessment of TRFs.
5	Module 4: During the Tutorial (O, OTJ)	• Getting into Tutorial Groups • "30 Second Speech" Protocol • Socratic Dialogue (Inquiry Model) • AVID Tutorial Scenarios • Practices of the week: Using an "inquiry model" for facilitation. Observing another tutor at work and coaching the tutor, using the "Tutorial Observation Form." Reflecting on tutorial observations.
6	Module 5: After the Tutorial (O, OTJ)	• Tutorial Reflection • Sample Tutorial Reflection Videos • TRF Grading • Debriefing the Tutorial • Practices of the week: Providing verbal and written student feedback. Soliciting verbal feedback from students. Reflecting on feedback.
7	FACE TO FACE training at some point during the Spring Semester- Professional Learning Reflection (O, F2F)	• Socratic seminar on skills and lessons learned • Tutorial barriers • AVID Tutor Agreement • Feedback on blended-learning course

Note: O= online training, F2F= face to face training, OTJ= on the job components

For further clarification, another visual model of the blended-learning training sequence is contained below in Figure 11.

Modules 1 & 2, Online before tutoring.	First Face-to-Face Training	Modules 3-5, Online while on-the-job	Second Face-to-Face Training
• Orientation • Informed consent • Pre-tests • Employment protocols • Tutorial Process details	• Collaboration/team building • AVID overview • Tutorial process overview • Mock tutorials	• Before the Tutorial • During the Tutorial • After the Tutorial • Final Reflection • Post-tests	• Wrap-up • Tutorial barriers • AVID Tutor Agreement • Feedback on blended-learning

Figure 11. The Blended-Learning Sequence.

One key feature of this scope and sequence are the two face-to-face (F2F) components, which were planned at strategic points in the AVID Tutor training progression. First, for practical reasons, the first F2F training did not come until after tutors had access to "Module One" and "Module Two." This was due to the fact that tutor hiring generally occurred during the first month of the school year as AVID Tutors returned to their college campuses. While I was still hiring new tutors, the tutors who were already placed could then get right to work on the first two modules. Upon hiring, they gained access to the online "Module One" and "Module Two" and completed six to eight hours of of content related to the AVID Tutorial basics. The first module functioned somewhat like a self-guided employee orientation or boot-camp. The second module consisted of an AVID and AVID Tutorial overview. Of course, tutors were not ready to be highly effective after completing these initial modules, but they were exposed to enough knowledge to get started with AVID Tutoring in our classrooms. It is also

understood that it is ideal to train tutors more formally before they enter the classroom. However, for practical reasons, this is very challenging as multiple tutors are being hired and placed at different points in time.

After the hiring process was complete and most tutors were able to complete both "Modules 1-2," I then gathered all new tutors together for the first F2F training, which was designed to reinforce the learning from "Module One" and "Module Two" as well as prepare the tutors for the more in-depth training coming through "Modules 3-5." The final F2F training served the purpose of wrapping up the training sequence and gathering the final feedback and reflections from AVID Tutors. Some AVID Tutors were also interviewed at this time.

The F2F components of the blended model were critical in terms of taking the online learning to a deeper level as well as providing time and space for AVID Tutors to work collaboratively to support each other in practicing the Socratic (dialogic) method components of the tutoring process (mock tutorials). It isn't often that AVID Tutors get together in person since they are spread out over many campuses.

In the following sub-sections, theoretical frameworks as discussed in Chapter Two will be reviewed in specific relation to how they informed the design of the structure and content of the intervention.

Socio-cultural theory as it relates to the design of the intervention. As reviewed in Chapter Two, Vygotsky's (1978) perspective on socio-cultural learning provided an important connection to the AVID Tutorial process for students and AVID Tutors. By using a method of collaborative inquiry in the AVID Tutorial process, AVID students are

engaged in a continual process of synthesizing meaning in a social setting. Although the AVID Tutorial process occurs formally in the AVID Elective classroom, the main objective of the tutorial is to encourage these types of shared discourses outside of the AVID Elective and even beyond high school (once AVID students mature enough to see the value in this type of practice).

Given that this process has shown to be valuable for AVID students, it seemed that it might also be a valuable process for AVID Tutors as they developed their tutoring skills. If tutors were to facilitate this method in practice, it made sense to me that they have the experiences of learning through shared discourse in a social setting similar to the one they would be required to use in an AVID tutorial. By creating an opportunity for AVID tutors to construct their understanding of the AVID tutorial process socially, by sharing their own problems and approaches to solving these problems, and by sharing ideas and strategies and integrating their shared developing expertise as AVID Tutors, they would hopefully develop a much deeper understanding of what it meant to be an AVID Tutor.

For this reason, a component of the intervention, the blended-learning tutor training model, was that tutors learned about the dialectic process and its importance in the AVID Tutorial. As part of the training, tutors were asked to first learn the basic concepts of Socratic dialogue, or the inquiry method, and then view expert models utilizing this dialogue (more to come on these models later in this chapter). After viewing the expert models engaging students in Socratic dialogue during AVID tutorials, tutors were then asked to utilize their learning from various texts and models by applying the

Socratic method to their own tutoring. Next, AVID Tutors were asked to reflect on this process and express what they learned from the exercise.

As an extra level of support, a component of the in-person training also included group practice and modeling of the Socratic Method. During the in-person training, tutors had the opportunity to practice dialectical learning among their peers and reflect further on the process. Finally, AVID Tutors engaged in problem-solving during the face-to-face components of the training. It is during these problem-solving sessions that tutors were encouraged to socially construct solutions to various obstacles they perceived on the job. The combination of online learning and in-person practice all draws from the classical concept of Vygotsky's (1978) socio-cultural theory.

Scaffolding as it relates to the design of the intervention. The concept of scaffolding has been widely applied throughout AVID's curriculum using the WICOR framework (AVID Center, WICOR, 2015). Scaffolding is also very commonly applied to the professional learning of teachers within the AVID organization as described in their training document AVID Professional Learning Practices (APLP, 2013). As previously discussed in Chapter Two, AVID's WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) framework was designed as an instructional framework teachers can use to guide students through materials and concepts at increasingly complex levels within any particular discipline (AVID Center, WICOR, 2015). Essentially, the WICOR framework provides an array of practical teaching strategies to scaffold student learning. Importantly, scaffolding is widely used by AVID to train its teachers and students, as well as its tutors, and has held an important place in moving

student and adult learners from newcomers to experts in the implementation of AVID. Thus, the intervention scope and sequence is also designed with the concept of scaffolding in mind to better aid in guiding tutors through the rigorous learning process one step at a time.

In the previous training regimen for AVID Tutors, long term scaffolding had not historically been part of the learning process. Instead, AVID Tutors were given a workshop packed full with "theoretical information," but not expected to undergo a long-term, scaffolded, learning process. Further, given the complexity of becoming a proficient AVID Tutor, scaffolding provided by "adult guidance" or a "more capable peer" (Vygotsky, 1978, p. 86) could be a very useful aspect of the AVID Tutor training process. Because my district had about a 50% retention rate of AVID Tutors from year to year, there was plenty of access to "more knowledgeable others" who acted social models for new AVID Tutors as they learned to master the AVID Tutorial process. Capitalizing on the collective experience pool that naturally existed within the AVID Tutor *community of practice* (Lave & Wenger, 1991) seemed prudent to me.

Social modeling and the "practices of the week" as they relate to the design of the intervention. Another critical component of the scope and sequence were the "practices of the week." The "practices of the week" occurred four times during the online module sequence. These activities were important components in the sense that they were an effort to take the "theory" learned in the online modules into "practice" in the AVID classroom. These components were also where a great deal of the AVID Tutor reflection on practice occurred. Each of the "practices of the week" were structured in a

112

similar way. First, AVID Tutors learned a practice by reading about and/or watching videos related to the practice. Tutors were then asked to observe an expert tutor (or virtual tutor) during their next tutoring session. AVID Tutors then took notes as they observed the expert tutor, focusing on elements of the particular practice for the week. Next, AVID Tutors worked on employing the practice in their next tutorial session. Finally, AVID Tutors were asked to reflect on the experience and turn the reflection in to me as the course instructor.

As reviewed in Chapter Two, Bandura (1971) describes the importance of *rehearsal* in terms of retention, either symbolically in mental form or even better by performing the modeled behavior, which dramatically increases retention of the behavior. Thus, the learner needs time to process and "play around" with the observed behavior. This component is essential in relation to the "practices of the week" activities embedded in the tutor training modules.

In the case of preparing AVID Tutors for the complex task of AVID tutoring, the concept of social modeling was critically important. Informed by Bandura's (1971) SLT, the use of expert AVID Tutor models, who exhibit the desired behavior of the ideal AVID Tutor, were a valuable asset in training novice AVID Tutors to perform in a similar way on the job. The logic behind the instructional design of the AVID Tutor training modules followed this line of thought. Further, opportunities for novice AVID Tutors to retain and internalize relevant behaviors of model AVID Tutors, then rehearse the modeled behaviors, were also valuable aspects of an instructional design for

professional development. This is precisely why such activities entered the scope and sequence of the designed AVID Tutor training.

Social modeling in the online learning format. Given the circumstances presented by blended-learning, it has been established that social modeling can still occur (Ekwunife-Orakwue & Kayode, 2014), although in somewhat of a limited fashion for some of the AVID Tutor participants. Due to the realities of some tutor placements, where tutors were isolated as the only tutor, or only new AVID Tutors were placed in the same school, it was not always convenient for novice AVID Tutors to observe live model AVID Tutors. However, in an online learning environment, videos of model AVID Tutors performing the job at the desired level of fidelity still helped to serve the purpose of modeling. In the online course, there were a variety of live AVID Tutors to observe and one virtual animated AVID Tutor to observe. Even though Bandura (1971) posits that learning takes place by observing and interacting with others within a social setting, online venues can still mimic the traditional "physical" space for learners to observe modeled behaviors from others (Ekwunife-Orakwue & Kayode, 2014).

Further, with certain limitations that often make online learning a necessity (time, money, space, convenience, etc.), modeling in the form of videos still does not seem to be a poor substitute compared to the alternative, especially since this type of modeling is something most learners have become accustomed to in the television and internet age. There are currently well-known uses of the internet as social modeling, which is most notable with YouTube's many instructional videos such as the famous, "How to Tie a Tie," which has received over 29 million user views since it first appeared in 2008. A

114

simple search on a website such as YouTube will reveal a proliferation of educational

social modeling is infiltrating web spaces (Biel & Gatica-Perez, 2011). For example, a

search for "model lesson" on YouTube yields over 23,000 results. Therefore, distance

from learning can be a limitation, but not to the extent that it would prevent me from

moving forward with the blending of online learning and SLT.

The role of reflection in the intervention. In a practical fashion, Schön's (1983)

concept of reflection-in-action has informed the reflective components of the AVID

Tutor training intervention. As reviewed in Chapter Two, Schön's reflection-in-action

suggests a many-stepped process:

> 1) A problem situation appears.
> 2) The practitioner experiments in reframing the problem.
> 3) Past experience is brought to bear on the unique situation.
> 4) On-the-spot experimentation takes place. These experiments are "local," nested in the larger problem.
> 5) The situation will "talk back."
> 6) "Moves" (on-the-spot experimentation and talk back) and evaluation of these moves "keep the puzzle alive."
> 7) Judgment of the problem setting is made by the quality of the reflective conversation.
> 8) The practitioner assesses, "Do I like what I get when I solve this problem?"
> 9) Possible reframing of problem—unintended changes may promote further inquiry.
> (Deli'Olio, 1993)

This process provided a framework for the reflective components of the AVID Tutor

training modules. As previously mentioned, for part of the online learning tutors were

asked to learn a "practice of the week" at various points in the intervention. The

"practices of the week" were strategically chosen from typical problem areas, such

"Socratic questioning" or "providing verbal feedback." By presenting AVID Tutors with

a "practice of the week," I invoked the stage of Schön's cycle where "a problem situation appears," typical to AVID Tutoring.

Next, tutors were asked to observe more experienced tutors and reflect on how the experienced tutors implemented the "practice of the week." This is where steps two and three of Schön's (1983) cycle appeared: "the practitioner experiments in reframing the problem" and "past experience is brought to bear on the unique situation." In this phase, the observing AVID Tutor was reframing the problem in the context of a more experienced AVID Tutor and also relying on the knowledge gained from the online modules to inform the situation.

Following the observation of a more experienced AVID Tutor, the AVID tutor "apprentice" was then asked to incorporate this practice into her own tutoring situations. This is where steps four through seven of Schön's (1983) process of reflection-in-action came into the picture. In these phases the new AVID Tutor was be able to experiment on reflect/adjust on the spot as the situation "talks back."

Afterwards, new AVID Tutors were asked to create a written reflection of the experience, where they evaluated the practice observed by the more experienced AVID Tutor and evaluated their own practice of the newly learned skills. This is where steps seven, eight, and nine of Schön's (1983) "reflection-on-action" (after the event) appeared. Through the written reflection, the AVID Tutors were able to decide if adjustments needed to be made the next time around, or if their handling of the tutoring practices were satisfactory. Finally, to promote further inquiry (step nine), AVID Tutors were asked to pose questions to the training facilitator (me), which provided me the opportunity to assist with further coaching.

The sum of these reasons is why the act of reflection was an essential part of the AVID Tutor training scope and sequence. In addition, the reflective writing components provided a valuable data collection source in the effort to answer my research question regarding the learning of AVID Tutors through their experience with the blended-learning AVID Tutor training.

Setting and Participants for the Dissertation Study: Cycle Three

Setting. Similar to the setting for Cycles One and Two of this Action Research study, my research took place in a large suburban district, consisting of fifty-four elementary schools, ten comprehensive junior high schools, and six comprehensive high schools. Since AVID Tutors work in the Junior High and High Schools, only these locations took part in the study. The school sites provided the setting for AVID Tutorials to take place within the AVID Elective class time. Thus, this is where AVID Tutors performed their on-the-job duties and where observations were made of new AVID Tutors as they participated in the intervention.

Participants. Again, similar the previous two cycles of research, participants included AVID Tutors, AVID Coordinators/Elective Teachers, and an AVID Center Program manager. I am also included as a participant as the researcher. During the third cycle, the dissertation cycle, the role and quantity of participants is described in Table 16.

Table 16

Dissertation Study Participants

Role	Reason	*N*
Researcher	EdD candidate investigating research questions.	1
AVID Tutors	The direct participants in blended-learning tutor training. Completed assignments and Pre- and Post-tests. Five were interviewed.	21
AVID Coordinators/Elective Teachers	Reliability partners during some observations. Provided insights through post-observation interviews.	5
AVID Center Program Manager	Served as regional support to AVID districts. Reliability partners during some observations.	1

Although participants were generally described in the previous table, the following tables provide further information, should these details be of interest to the reader. First, Table 17 describes the participating AVID Tutors. Then, Table 18 describes the participating AVID Coordinator/Teachers.

Table 17

AVID Tutor Participants

N=21

Tutor (Pseudonym)	Age	Gender	Former AVID Student	School (Pseudonym)
Trisha	20	F	Yes	Meridian High
Ellen	19	F	Yes	West High
Krista	18	F	Yes	West High
Linda	21	F	Yes	East High
Carlo	19	M	Yes	Mountain Shadows Junior High
Milos	18	M	No	East High
Brittani	19	F	Yes	Bradbury Junior High
Valerie	19	F	Yes	Huxley Junior High
Blanca	19	F	Yes	Huxley Junior High
Karen	24	F	No	East High
Ryan	18	M	No	East High
Jesse	19	M	Yes	East High
Dan	19	M	Yes	Meridian High
Nicole	18	F	No	Meridian High
Angela	19	F	Yes	Grand Canyon High
Sue	18	F	Yes	Bradbury Junior High
Kathy	20	F	Yes	Skyview High
Ronnie	19	M	No	Skyview High
Taylor	19	F	Yes	Atwood Junior High
Tanner	18	F	Yes	Orwell Junior High
Albert	19	M	Yes	Twain Junior High

Note: All AVID Tutors were new hires and new to the role of AVID Tutor

Table 18

AVID Coordinator/Teacher Participants
N=5

Coordinator/Teacher (Pseudonym)	Age	Gender	Years Teaching	Years Teaching AVID	School (Pseudonym)
Ms. Summer	39	F	14	10	Twain Junior High
Ms. Winter	44	F	20	4	Orwell Junior High
Ms. Spring	33	F	10	3	Mountain Shadows Junior High
Ms. Autumn	38	F	16	3	Atwood Junior High
Ms. Bloom	49	F	27	9	Meridian High

Note: AVID Tutors worked with a number of other teachers, but these teachers took part in the interviews.

It should also be noted that in the AVID Tutor participant population there were five AVID Tutors who were completely new to AVID and 16 AVID Tutors who had previous experience with AVID as an AVID student.

In Chapter Four, results will refer to the pseudonyms of the participants as results from interviews and other data collection are discussed.

AVID Tutors. Although there were over 40 AVID Tutors working in AVID upper-level schools throughout the district, 21 of the newly hired tutors from both junior highs and high schools participated in this action research study. All of the new AVID Tutors were current college students, either enrolled full time in a community college or four-year university. This meant that all AVID Tutors were relatively close in age to the students with which they worked, ranging from 18-24 years of age. Many of the new

AVID Tutors involved in this study attended Arizona State University, some of whom were in the Honors College. Whereas others attended Maricopa Community Colleges. Because of their full-time student status, AVID Tutor schedules typically allowed for a range of 6 to 28 hours per week of part-time work as AVID Tutors. The average number of hours per week an AVID Tutor worked was around 10. Further, all of the AVID Tutors were paid employees who made an hourly wage to perform their duties. This means that they were also compensated for their time spent on the blended-learning training aspect of the intervention.

Further, it should be noted that many of the AVID Tutors working in the district were former AVID students themselves. There were 16 out of 21 tutors, who were former AVID students involved in Cycle Three. This is because one of the common goals of employing AVID Tutors is to reach out to former AVID students because they know the AVID system very well and can relate to the students with whom they work on a deeper level. To aid in this process, the AVID Center in San Diego, provides a database for accessing information that leads to the recruitment of former AVID students as tutors. Therefore, some of the participating tutors might have had much more exposure to the AVID College Readiness System due to their participation in the system as a student.

All of the new AVID Tutors, despite their prior AVID experience as a student, still needed to learn how to perform the role of AVID Tutor. Therefore, it was the most ethical move to include them as participants in the intervention. However, to differentiate between tutors who have had AVID experience and tutors who were completely new to

AVID, I considered AVID experience as a student within my analysis. This distinction was made clear when reporting the results of this study.

AVID Coordinator/Elective Teachers. Each AVID Coordinator worked directly with the administration on each campus to coordinate AVID and also served as the program manager for the other AVID Elective Teachers on any given campus. The role of the AVID Coordinator was critical in continuing the progress of AVID implementation on campus since the Coordinator led the efforts toward continuous improvement. The AVID Coordinator was responsible for the day-to-day implementation of AVID, which entails a wide range of responsibilities. Since AVID Coordinators directly supervised AVID Elective Teachers and were the direct supervisors of AVID Tutors, they represented an important population that provided additional insights after the intervention in this action research study.

Five AVID Coordinators served as participants in this study to help provide schoolwide AVID perspectives on the phenomenon of AVID Tutor training and fidelity to the AVID Tutorial system after the intervention. AVID Coordinators also provided further insights via one on one semi-structured interviews. For the purpose of this study, the AVID Coordinators represented a purposive sampling of our junior high school AVID programs and high school AVID programs—basically, wherever the selected new AVID Tutors participating in the study were employed.

Participating AVID Coordinators also took on the role of AVID Elective Teacher, where they were in charge of the daily instruction in the AVID Elective class. From the perspective of AVID Elective Teacher, they were able to provide insights into AVID

Tutoring within the classroom context. These teachers' classrooms were also the physical space in which AVID Tutors practiced the craft of AVID Tutoring and utilized the space as an "on-the-job" learning environment in concert with the online training modules. AVID Elective Teachers were responsible for supporting the implementation of AVID Tutoring in the context of their classrooms by allowing AVID Tutors to participate in the practicum portion of their training.

AVID Center Program Manager. As a component of AVID's regional support for AVID districts and schools, AVID employs Program Managers to work with District Directors such as myself. The Program Managers accompany District Directors on site visits and provide coaching to promote further advancement of AVID at individual sites and in the district as a whole. Since these Program Managers are highly trained in AVID observation protocol and get to see a wide variety of AVID Tutorials across different districts, including districts in different regions and states, the incorporation of one Program Manager from AVID Center made an excellent interrater reliability partner as part of the AVID Tutorial observation protocol.

The Role of the Researcher

As a researcher, I am considered a participant in this action research study as a facilitator and researcher. This is a characteristic of action research due to the pragmatic nature of action research design (Plano, Clark, & Creswell, 2015). As District Director for AVID, I had a vested interest in studying and improving the AVID system at large as well as its constituent components, such as AVID Tutoring.

It should be noted that because I held a position of influence in AVID, effects from my positionality likely influenced some of the results of this study. This is why AVID Elective Teachers and AVID Coordinator insights were included to provide other perspectives. Also, a complementarity of data exists through the collection of multiple data sources at multiple points in time to more fully explain the results (Greene, Caracelli, & Graham, 1989). Ultimately, complementarity was important because distancing myself completely from this study was not a realistic expectation, nor should it be in action research. A variety of data from multiple sources helped to inform the results from multiple perspectives, thus reducing this threat of bias. This will be discussed further in later sections.

Instruments and Data Sources for the Dissertation Study: Cycle Three

Recognizing the value a mixed-methods study can bring to this type of research, this study employed both quantitative and qualitative data collection tools to investigate the research questions relating to AVID Tutor involvement in a blended-learning AVID Tutor training model. According to Plano, Clark, and Creswell (2015), a mixed methods design is a procedure for collecting, analyzing, and mixing both quantitative and qualitative instruments in a single study. A mixed methods approach was appropriate for this study because both quantitative and qualitative data helped to provide me, as the researcher, a deeper understanding of my research questions. In the case of this study, the collection of both quantitative and qualitative sources capitalized on the strengths of each data collection style. Three quantitative tools and a total of four qualitative tools were used to collect data. Each of the data collection tools provided insights about the research

questions and were designed to provide many points of data to aid in validity through *complementarity* (Greene, Caracelli, & Graham, 1989). Further, an inventory of data collection tools is presented in Table 19.

Table 19

Quantitative and Qualitative Data Collection Tools Used in Cycle 3 of the Study.

Type	Data Tool	Detail	Construct(s)	RQ
Quan.	AVID Tutor Knowledge Pre- and Post-test (Appendix D)	● Pre/Post Innovation ● Two constructs ● Multiple choice ● 21 items	● AVID history ● Tutorial process knowledge	2
Quan.	AVID Tutorial Scenarios Pre-and Post-test (Appendix E)	● Pre/Post Innovation ● One construct ● Multiple choice ● 11 items	● Tutoring process knowledge	2
Qual./ Quan.	AVID Tutor Observations (Appendix F)	● Pre-, mid-, post-observations. ● Using "Tutorial Observation Tool (Version 2.0)" (Appendix F) ● 5-10 new AVID Tutors ● Artifacts collected ● AVID Coordinators, AVID Teachers, and AVID Program Managers will be sources of inter-rater reliability	● Fidelity	2
Qual.	AVID Tutor Reflections and Assignment Excerpts	● From Modules 3, 4, 5, & 6 ● 10-15 AVID Tutors	● Tutorial process knowledge	1
Qual.	Tutorial barriers from face-to-face training	● Collected during activities at the 1st face-to-face training ● 10-15 AVID Tutors	● Tutorial barriers	3
Qual.	1:1 Semi-structured Interviews	● Post Intervention ● Transcribed ● Coded	● Tutorial process knowledge ● Fidelity	1, 2

Quantitative data sources. Three primary quantitative data collection tools were utilized in this study in the form of AVID Tutor observation ratings and pre- and post-intervention tests. The following sections provide more detail about each instrument.

125

Tutorial Observation Ratings. The tutorial observations were designed to result in both qualitative and quantitative data in alignment with research question two, "Do AVID Tutors' involvement in a blended-learning AVID Tutor professional development model relate to higher levels of understanding and fidelity to the AVID Tutorial System?" To gather data, I employed an observation protocol involving an observation tool, collecting artifacts, and taking field notes. In this section, the quantitative aspects of the observation tool are described and then the rationale for the artifacts and the field notes are described later when I discuss the qualitative aspects of the Tutorial Observations.

Tutorial observation tool. This data collection tool was utilized to measure the construct of fidelity to the AVID Tutorial system. I used this tool during observations before the intervention, at a mid-point, and after the intervention. The "Tutorial Observation Tool" can be viewed in Appendix F (Version 2.0). The observation form was divided into four categories in the first column, one for each participant in the AVID Tutorial: the student presenter, the group member, the teacher, and the tutor. Each category contained ideal behaviors that should be observed from each type of tutorial participant and is rated on the following scale: 3 = fully observed, 2= partially observed, 1= not observed. Further definitions of each rating were described in the document.

A reader of the observation form might question how the behaviors of other actors in the tutorial process relate to AVID Tutor fidelity. This would be a fair question. In response, I would argue that although the tutor doesn't have full control over the behaviors of the Student Presenter or Group Members, as the facilitator of the group, the AVID Tutor should be coaching students to perform their roles with fidelity to the

process. Therefore, if the Tutor is performing her role with fidelity, the actions of others (Student Presenter and Group Members) can be a fair assessment of Tutor performance, just as student behavior in a classroom can be a reflection of teacher performance.

Over the course of the study, I observed 21 new AVID Tutors utilizing the observation tool. The same population of tutors was observed in each instance in order to track data as AVID Tutors progress through the online training. For analysis, a random sampling of observations were chosen from each observation point.

Further, reliability and validity measures were carefully considered due to the subjective nature of collecting observation data. DeMonbrun and Finelli (2015) assert that good validity in an observation protocol ensures the instrument measures what it is intended to measure. DeMonbrun and Finelli also add that observation tools involving behavioral observations present unique challenges because they assume the observer knows precisely what the "observed" is doing. To protect against this threat, Maxwell (2012) recommends utilizing an interrater system as well as observing on multiple occasions can help protect against this threat. As previously mentioned in the Cycle Two write-up, significant revisions were made to the observation tool increase interrater reliability.

Further, the tool was used to collect the raw observation data and then ratings were later entered into a Google Form, which made it relatively easy compile observation data over multiple observations. As recommended by Maxwell (2012), I utilized the assistance of AVID Program Managers, AVID Coordinators, or AVID Teachers as interrater partners on at least 10% of the observations. The interrater partners and I certified that we agreed on at least 85% of the ratings as an additional standard for our

inter-rater reliability. Also, as stated earlier, the Version 2.0 of the form was piloted and yielded an acceptable internal reliability coefficient (0.529 Cronbach's α with 13 items excluded due to no variability) and a 92.9% mean agreement among 10 randomly chosen raters. In addition, as mentioned in the Cycle Two section, a pilot content validation of this observation tool also yielded an acceptable level of agreement for use of the descriptor categories (78%).

Further, because Google Forms automatically populates spreadsheets containing the results of the forms, the format also allowed me to continue to assess the level of agreement between raters. This is a method suggested by Creswell (2015) as a means of negating bias that any one individual may bring to scoring. To further clarify the observation process for each observed AVID Tutor, consider Figure 12.

Pre-intervention
Observation Tool Score 1

Mid-intervention
Observation Tool Score 2

Post-intervention
Observation Tool Score 3

O1 and O3 scores analyzed with a repeated measures t-test to see if there was significant change in means.
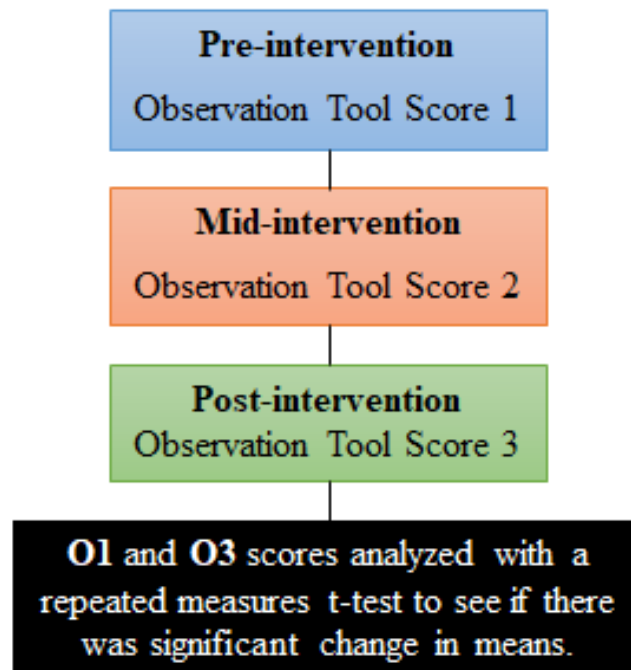
Figure 12. AVID Tutorial Observation Sequence.

As demonstrated in Figure 12, the observations of AVID Tutors occurred on three occasions. "Observation one" occurred pre-intervention. "Observation two" was a mid-point observation. Finally, "observation three" occurred post-intervention. Since "observation one" was a pre-intervention observation and "observation three" was a post-observation intervention, the data collected also enabled me to compare the mean scores of a group of randomly selected tutors individually and as a group with a paired samples t-test. This analysis allowed me to explore any changes in tutor fidelity from "observation one" to "observation three."

Pre- and post-tests. Two different pre- and post-tests were administered: The AVID Tutor Knowledge and the Tutorial Scenario tests. Both tests remained in the same form in both the pre-intervention administration and post-intervention administration. This approach lead to an opportunity for *repeated-measures t-test* for analysis. According to Mertler (2014), this type of test is "appropriate for designs where, for example, students (participants) are pretested, exposed to some intervention, and then post-tested" (p. 176). In this situation the mean of the pre-test scores was then compared to the post-test mean using the same group of participants. It was acknowledged that there were threats to validity with this sort of measure, including *history, maturation,* and *sensitization.* These threats are addressed in a later section of this paper.

In terms of content validity, the items on the first test, the AVID Tutor Knowledge Pre- and Post-test, were verified as valid questions by experts within AVID Center (two AVID Program Managers) and by district directors in two other AVID districts. The items were also reviewed by all 16 AVID Coordinators within the district

and considered to be valid questions in terms of assessing basic knowledge of AVID and the AVID Tutorial process. During a regular meeting, I was able to ask the AVID Coordinators in my district if they agreed that a) the items were relevant to essential AVID Tutoring Knowledge and b) if they agreed with my choice of "correct" answers. The peer validators agreed that all items on the pre- and post-test were relevant to AVID Tutorial Knowledge and all but two items had a clearly correct answer. As a result, the two items without a clearly correct answer were revised based on suggestions from the group of AVID Coordinators. Additional content analysis was conducted during Cycle Two as described earlier in this chapter. The items are also valid in the sense that they come directly from content in the *AVID Tutorial Support Curriculum Resource Guide* (2011), which has been written by experts in the field. Although I rephrased the original content into questions, the content used for each construct comes directly from various resources in AVID's publication.

The items on the second test, the Tutorial Scenario Pre- and Post-test, were developed during the initial face-to-face training with AVID Tutors during the Cycle Two pilot study. During the training, tutors were asked to identify barriers or obstacles they faced as AVID Tutors. After reviewing the obstacles produced by over forty AVID Tutors, I was able to generate 20 common tutorial "scenarios" that caused AVID Tutors to struggle on the job. I used 10 randomly chosen scenarios to create the Tutorial Scenario Pre- and Post-test. Therefore, the items are valid in the sense that they are authentic representations of the real obstacles faced by AVID Tutors on the job.

It should also be noted by Table 19 that these pre- and post-tests did not serve as the only sources of data collection. Complementarity came from many sources of data outside of the quantitative measures. However, these tests allowed me to gain quantitative perspectives from a descriptive standpoint on various constructs related to AVID Tutoring, such as knowledge of AVID as a whole and the AVID Tutoring process. For more clarity, Figure 13 details the two tests and their components.
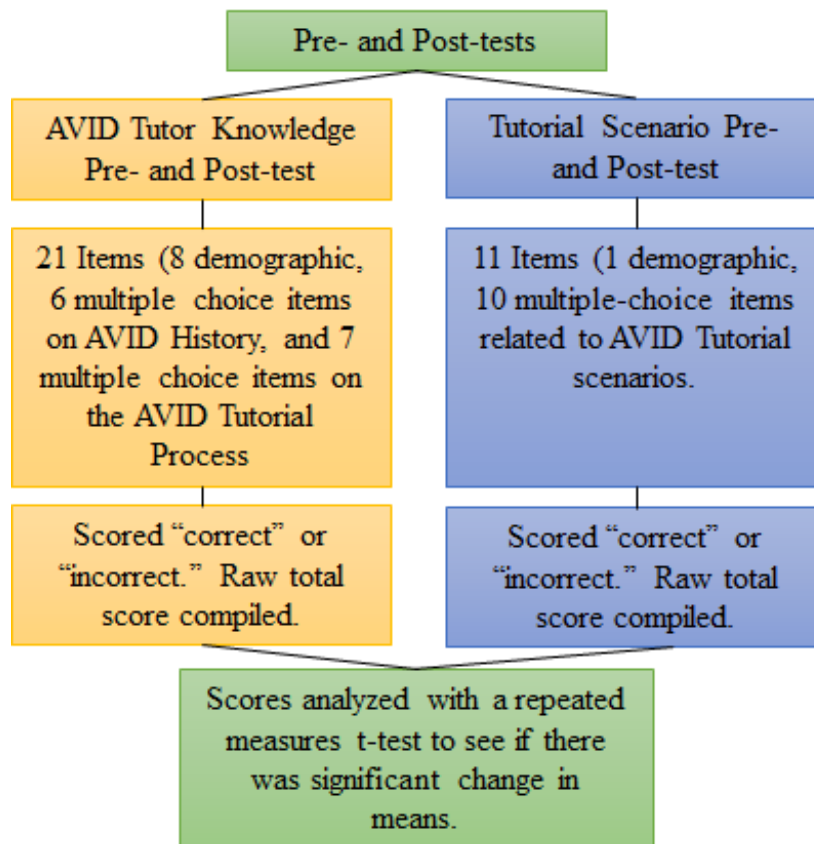
Figure 13. Components of Pre- and Post-tests.

Further, both tests were created using Google Forms, a web-based platform which allowed for the construction of such tests and collected responses in Google's companion software, Google Sheets. This function allowed for easy collection of data and transfer to tables to use in data analysis programs such as IBM's *SPSS* (Green & Salkind, 2014)

once responses were scored and assigned a numerical value. The following sub-sections describe the pre- and post-test instruments in further detail.

AVID Tutor knowledge pre- and post-test. The first questionnaire was developed to measure the constructs of AVID history and knowledge of the AVID Tutorial process (Appendix D). These constructs helped provide data for my second research question regarding levels of fidelity to the AVID Tutorial system. The reason therein is that an understanding of AVID's philosophy and history as well as an understanding the AVID Tutorial process were important pre-requisites for being able to serve AVID students with fidelity to the AVID Tutorial system. First, AVID Tutors needed to demonstrate foundational knowledge of AVID's history so that they understood their role in AVID's mission, to close the achievement gap. Second, knowledge of AVID and the tutorial process related directly to fidelity in the sense that tutors couldn't perform the essential duties of AVID tutoring, unless they know what they were. Measuring these constructs both before and after the intervention, gave me a sense of the extent to which understanding of AVID history and AVID tutorial knowledge changed throughout the intervention by comparing pre- and post-test mean scores. Also, I hypothesized that high scores on the post-test about AVID history and the tutorial process would be an indicator of stronger AVID fidelity.

Although I was able to analyze the scores in terms of the extent of tutor knowledge growth by comparing mean scores between the pre- and the post-test, the data collected also provided me with important information about the common areas of tutor

strengths and weaknesses as they completed the training sequence. This knowledge was critical in the further refining of the tutor training model in future iterations.

> The AVID Tutor knowledge pre- and post-test consisted of 21 items:
>
> 1) Consent and Demographic Information (1-8): consent, college experience, AVID Tutoring experience.
> 2) AVID History (9-14): foundational AVID knowledge and history.
> 3) AVID Tutorial Process Knowledge (15-21): specific AVID tutorial skills and processes.

The items consisted of three-item multiple choice questions, with one "correct" response. The reason for a three item multiple choice test was that according a meta-analysis of multiple choice assessments, Rodriguez (2005) concluded that a three item structure is optimal if the tester is concerned with having high quality items. Rodriguez finds that with the addition of a fourth and fifth item, quality of such items dramatically decreases. Thus, following this suggestion, I decided to make my test items three item multiple choice questions.

The AVID Tutor Knowledge Pre- and Post-test was given to all AVID Tutors who participated in the AVID Tutor training. However, the scores of tutors new to AVID (5 out of 21) were disaggregated from the scores of tutors who were former AVID students during the analysis and discussion phase. As previously mentioned, this was due to the fact that tutors who have been former AVID students may have already had a great deal of pre-requisite knowledge about AVID and AVID Tutoring. Further, it did not make sense to exclude tutors with former AVID experience from the intervention altogether since it was still in their best interest to learn the role of AVID Tutor versus their previous role of AVID Student.

133

Tutorial scenario pre- and post-test. The second test was designed to gather data on the construct tutoring scenario knowledge. Over the course of AVID tutoring, AVID Tutors encountered a variety of tutoring scenarios which were perceived as obstacles. I knew this because of the data collected from AVID Tutors during the pilot fact-to-face training which took place during Cycle Two of this research study. As mentioned previously, at the face-to-face training, AVID Tutors were prompted to identify obstacle scenarios within AVID tutoring over the course of two different activities. The products that tutors created, allowed me to compile a list of common tutoring scenarios which presented AVID Tutors with obstacles during the AVID tutorial process. A sampling of some of the obstacles is listed below:

1) Student group members have trouble asking questions during the tutorial.
2) No one knows how to approach answering a *Point of Confusion*.
3) Students argue over who gets to present.
4) Student group members are "telling" instead of asking probing questions.

The obstacles collected from AVID Tutors during the pilot face-to-face training were coded and sorted into a total of 20 common obstacles faced by AVID tutors while engaging in the AVID Tutorial process. The full list of obstacles can be found in Appendix E.

Identifying these obstacles was key in the development of the Tutorial Scenario test. Similar to the first test, the AVID Tutorial Scenario pre- and post-test was originally designed as an open-ended questionnaire, leading to open-ended responses. However, due to similar issues with reliably scoring the open-ended responses during a pilot of the

134

instrument, this data collection tool became a three item multiple choice test which was informed by the open-ended responses given by tutors in previous cycles.

The AVID tutorial scenario pre- and post-test consists of 11 items:

1) Demographic Information (1): code name assigned from previous tests.
2) AVID Tutorial Scenarios (2-11): ten of the 20 tutorial scenarios identified by AVID Tutors.

The instrument itself can be found in Appendix G. For each item, AVID Tutors were asked the same question, "What do you need to do as an AVID Tutor in this situation?" Then, they were presented with three possible responses, one of which was "correct." Since this is a pre- and a post-test, mean scores before and after the intervention were compared to indicate growth, and similarly to the previous pre- and post-test (AVID Tutor Knowledge), I was able to explore the relationship between post-test results and post-observation results to test.

Qualitative data sources. Four qualitative data collection tools were utilized in this action research study. Each qualitative data source was outlined previously in Table 19, but will be described in detail below with the rationale for each data collection source.

AVID Tutor Observation Artifacts. During AVID Tutorial observations, I collected artifacts such Tutorial Request Forms (Appendix C), three-column notes, and white board configurations. On most occasions, pictures were taken and catalogued in relation to each observation. These supporting forms of evidence served the purpose of corroboration of the observation form ratings as alternative forms of validity. For example, one item on the "Tutorial Observation Form" under the "Tutor" category reads,

"Sits with the tutorial group, away from the student presenter." A photograph of this situation helps to corroborate the rating. Additionally, for the item in the same area of the observation tool, "Takes three-column notes for the student presenter and encourages all students to take three column notes," collecting a sample of the three-column notes as an artifact will also serve to corroborate the claim on the observation form.

Further, the collection of Tutorial Request Forms and white board configurations as artifacts, led to further analysis of tutor quality in two areas. An analysis of Tutorial Request Forms allowed to determine to which extent AVID Tutors were holding students accountable for pre-work via how the tutors assessed student work. An analysis of white board configurations allowed me to assess the extent to which tutors were holding students to a high standard of explaining their tutorial steps. Both of these areas are indicators of quality tutorial sessions.

AVID tutor reflections and assignment excerpts. As part of the blended-learning course, there was a culminating open-ended reflection and there were several assignments that served as data collection tools. The assignment data collection occurred weekly over the course of the five modules and required students to create various products as a result of the lessons within the course. More formal written reflections occurred during modules two, three, four, and five. The nature of the reflections was described in the "Curriculum Scope and Sequence" section of this chapter and in Table 15. More specifically the AVID Tutor reflections related to practice are grounded in Schön's (1983) research on the reflective practitioner. Several of the reflection questions were modeled after Schön's

practices of reflection-in-action and reflection-on-action. Sample reflection prompts are

as follows:

1) What did you notice about the *practice of the week* as you observed it either in
the classroom or virtually? (reflection-on-action)
2) What are two compliments and two improvements you would suggest to the
tutor you observed? Why? (reflection-in-action)
3) When you implemented the *practice of the week* in your tutoring situation, how
did it go? (reflection-on-action)
4) What questions do you still have? (reflection-on-action)

These reflection questions drew from both the AVID Tutor's experience while observing

the practice of the week and after implementing the practice. Hence, some were more like

reflection-in-action and some were more like reflection-on-action in style. Nonetheless,

the reflective responses were useful data collection tools for gaining a deeper

understanding about how AVID Tutors processed their learning and developed their

skills through reflective practices. These reflections also informed me about how tutors

were processing their learning as they learned to tutor with more fidelity to AVID's

system and also shed light on continued obstacles tutors faced throughout tutoring.

At the conclusion of the online AVID Tutor training, a comprehensive reflection

was also collected from participating AVID Tutors. This data collection tool was

intended to be a summative reflection of the journey of AVID Tutors as they participated

in the course. The final reflection was similar in nature to the reflections outlined in the

previous paragraph. However, instead of being specific to a "practice of the week," the

reflection encompassed the whole experience. For the reflection, tutors were asked to

write a 250-500 word response to the question, "As a result of this online training, how

have you evolved as an AVID Tutor in terms of being able to deal with tutorial obstacles

within the tutorial process?" Due to the open-ended nature of this question, a rich variety

of responses helped to provide data for analysis in relation to my research questions,

particularly research question one, "How does practice-based professional development

contribute to AVID Tutor learning of AVID Tutoring practices?"

In addition to the reflective assignments, over 20 other assignments existed within

the scope of the online course. Almost all of these assignments captured open-ended

responses from AVID Tutors as they progressed through the course. The assignments

(Table 19) included products such as Cornell notes about readings or videos, written

summaries, interviewing AVID Elective teachers and reporting on the interviews, as well

as practice completing some of the forms, such as the Tutorial Request Form (Appendix

C), that are commonly used by AVID students. One such assignment asked AVID Tutors

to read about the AVID Tutorial Process and view a video of the process in action. The

AVID Tutors then needed to synthesize what AVID calls a "Summarizing Pyramid,"

(Figure 14) to process what was learned. The objective of all of these assignments was

aligned with the overall objectives of the tutor training outlined by AVID Center and

nearly all of the assignments come directly from AVID's tutor training manual.

```
_____
A synonym for TUTORIALS

_____   _____
People who use TUTORIALS

_____  _____  _____
Three words that best describe TUTORIALS

_____  _____  _____  _____
Arguments for TUTORIALS

_____  _____  _____  _____  _____
Necessary ingredients for effective TUTORIALS

_____  _____  _____  _____  _____  _____
Effects of TUTORIALS

_____  _____  _____  _____  _____  _____  _____
One thing you used to think about TUTORIALS but now know isn't true

_____  _____  _____  _____  _____  _____  _____  _____
One question the TUTORIAL sparked for you
```
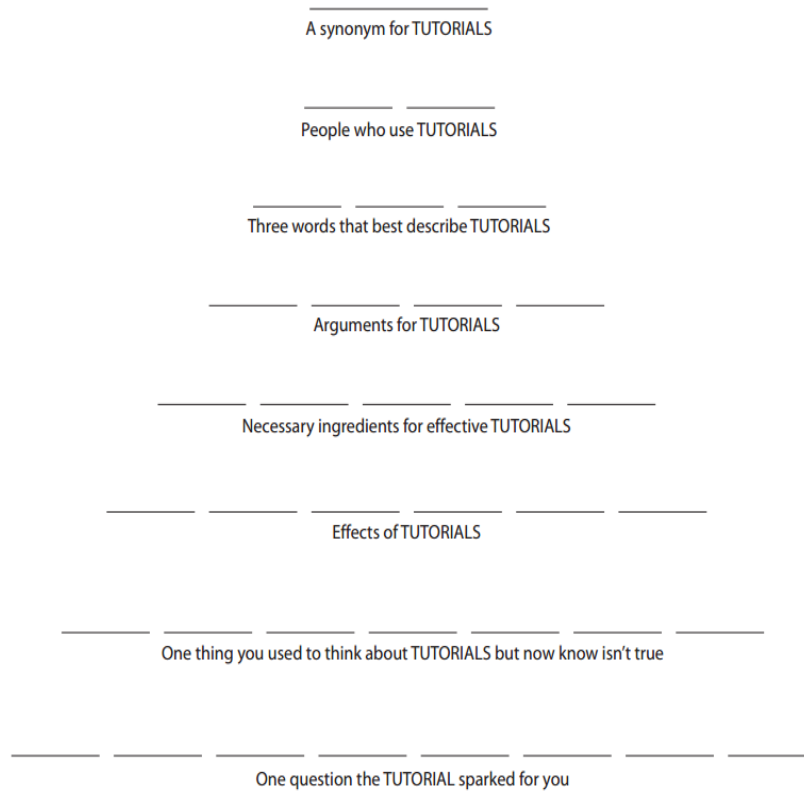
Figure 14. The Summarizing Pyramid

 Since the nature of these assignments were open-ended and many of them asked students to pose questions, or reflect on their learning, the submissions provided yet another layer of data to in regards to how the intervention contributes to tutor learning about the AVID Tutoring process (RQ1).

 Tutorial Barriers. During the first face-to-face training with AVID Tutors, I collected and categorize perceived AVID Tutorial barriers from AVID Tutors. The purpose of this data collection tool was to inform research question three, "What common barriers emerge from AVID Tutors throughout the AVID Tutor training process?" As a practitioner, this data was of interest to me because I could use this data to continue to refine the AVID Tutor training to meet the specific needs of AVID Tutors and provide specific training

tailored to common obstacles. There is value in collecting this data to enhance the intervention for future cycles of research or implementation, particularly in the area of meeting the specific challenges of new AVID Tutors. This data on tutorial obstacles may also be of interest to those outside of my district who also seek to enhance their AVID Tutor training practices.

  Semi-structured interviews. Another form of qualitative data collection in this study were semi-structured interviews. Interviews of participating AVID Tutors, AVID Elective Teachers, and AVID Coordinators were conducted after AVID Tutors completed their online coursework and the face-to-face components of the training. The interviews followed a semi-structured protocol, featuring a mix of pre-determined questions along with follow-up questions used to probe more deeply into the respondents' replies (Brinkmann & Kvalle, 2015). The initial protocol consisted of four pre-determined questions for AVID Elective Teachers and AVID Coordinators, and six pre-determined questions for AVID Tutors. An example of two of the interview items were, "In your opinion, how did the AVID Tutor training model contribute to tutor learning of AVID Tutoring practices?" and "What can you tell me about how your AVID Tutors engaged in the AVID Tutorial training process?" For any of the questions asked, there were multiple follow up questions that probed deeper into the replies of each respondent. The full interview protocol is included in Appendix H. A timeline for the study is also included in Appendix I.

Threats to Validity

  Inherent in the form of action research are common considerations in terms of the validity of findings. According to Fraenkel and Wallen (2005), validity "refers to the appropriateness, meaningfulness, and usefulness of the inferences a researcher makes" (p. 152). Since many studies aim to make inferences based on the data collected, it is important that the reader understands the common "threats" that may affect the interpretation of the data. Many of the "threats" in action research are due to the position of the researcher in action research. As an *insider,* an action researcher is never fully removed from the context being studied. Instead, the researcher is embedded in the setting of the study and usually works closely with the participants. These issues should not devalue action research, because the primary benefactor of the research are those in the researcher's local context, however, any reader of action research studies should be sensitive to the possible threats to validity in such a study. Smith and Glass (1987) provide a comprehensive list of possible threats to validity, some of which I will address next.

  Experimenter Effect. According to Smith and Glass (1987), a common threat to validity is the *experimenter effect.* This threat refers to when the experimenter may provide more help or encouragement to the participants than what was prescribed the researcher. Since the structure of this research study doesn't follow a traditional research paradigm and is instead under the form of action research, it is actually in the best interest of me as the researcher to encourage my participants to do well and to provide explicit feedback on their progress throughout the tutor training modules. By virtue of the intervention, I aim to teach and encourage participants as an active participant myself.

However, during some forms of data collection, such as the pre- and post-tests, I attempted to remove myself as much as possible from influencing participant responses. In the case of "testing" through these tools, I have taken precautions not to influence the participant responses. One precaution I took was making the pre- and post-tests anonymous by asking participants to create a code name. The code names are created using the first two letters of their mother's first name and the last two numbers of their phone number. For example, if my mother's name was Angela and my phone number was 555-5555, then my code name would be AN55. Also, although the pre- and post-tests are delivered through the *Canvas* course, they are not graded or required by participants as part of their learning. There are no "high-stakes" attached to the results of these data collection tools.

Hawthorne Effect. Another threat to validity common in research is the *Hawthorne effect* which is when the knowledge of participating in a study can affect the performance of subjects (Smith & Glass, 1987). The threat inherent in this effect is that researchers may attempt to "please" the researcher rather than respond honestly. One of the strategies I employed to address this effect is described in the previous paragraph with the use of the code names. By giving participants the ability to remain anonymous with responses, this will help to minimize the Hawthorne effect.

The Hawthorne effect can also influence the interviews and observations used as data collection tools in this study. In terms of the interviews and observations, participants did not have the ability to be "anonymous" to the researcher, however, I was sure to inform them that their names would not be used in any publication of the study. I

142

also encouraged participants to be honest and welcomed their honesty in responding. Conducting several interviews also helped to mitigate this threat as patterns were studied over several, and not just one interview.

During observations, it was also reasonable to expect that participants may not be 100% "natural" while being observed. This was acknowledged as a possible threat because of my positionality as a person of authority when conducting observations. It was possible that the observed behavior of the participant took on a Hawthorne-like affect simply because someone of authority was watching the participant on-the-job performance. This was precisely why I was seeking complementarity from several data sources, including data collection at different points in time throughout this study.

History. Another possible threat to validity is the *history effect*, which refers to specific events that are not part of the independent variable, but occur during the time period in which changes in the dependent variable are observed (Smith & Glass, 1987). Although this threat is usually applied to traditional research paradigms, it should certainly be acknowledged as a threat to validity in this particular study, especially in reference to the pre- and post-test data. Claims of causation, meaning that my intervention alone *caused* any particular growth in AVID tutor knowledge measured by the instruments, are not the underlying purpose of the pre- and post-tests. Instead, the data collected from the pre- and post-tests will contribute in a descriptive way to the narrative of *how* participants experienced the intervention. Further, it is acknowledged by the researcher that several outside factors could have influenced the possible differences in pre- and post-test scores. However, as the researcher, I was still interested in

143

understanding these differences and learning how the AVID Tutors arrived at these differences, which came to light in the interviews. Therefore, threats withstanding, the quantitative data collection tools were still an important aspect of the study.

Testing and Pretest Sensitization. With that being said, another threat to validity when using a pre- and post-test format was *testing and pretest sensitization* (Smith & Glass, 1987). This threat is also known as the *practice effect,* meaning that by virtue of taking the pre-test, the knowledge gained from the pre-test can affect the outcomes of the post-test. One way this threat is mitigated is time. There are at least eight weeks between the pre-test and the post-test. Also, since the pre- and post-test weren't "graded" as part of the course, the participants didn't know if their answers were "correct" or "incorrect" on either of the tests. Only I had this information. Finally, as mentioned before, the pre- and post-test data was used in this study to provide additional context for tutor knowledge growth and *how* tutor knowledge changed over time, not to pinpoint causality or make generalizations about the results.

Maturation. *Maturation* should also be acknowledged as a possible threat to validity in data collection. Maturation refers to when internal events of a research participant may be accountable for the differences on the dependent variable (Smith & Glass, 1987). Since my intervention involved training employees while on the job, it is understood that myriad job experiences and life experiences outside of the intervention could have had an effect on changes in the participant. These factors might have included such influences as individual teacher coaching, peer influence, knowledge gained from college classes outside of this intervention, etc. The maturation threat was mitigated by

144

the semi-structured interview protocol, which provided complementary data and will focus primarily on *how* the intervention itself influenced AVID Tutor growth.

Generalizability. Since educational researchers are generally concerned with improving practice in a local context (Mertler, 2015), *generalizability* of the research findings is often a limitation, but not a critical limitation. However, anyone who examines this study should remain astutely tuned in to her own local context and critically consider all elements of this intervention before attempting to apply it locally. Also, readers of this research might consider making what Stake and Trumbull (1982) call *naturalistic generalizations,* where the reader learns through *vicarious* experience. In other words, the researcher observes and records what readers are not conveniently situated to observe themselves, but who, when reading the research, can experience the various scenarios vicariously and extend some level of applicability to their own local context (Stake & Trumbull, 1982). In situations like these, phenomena can be studies from afar that may still have many authentic implications in the reader's local context.

Conclusion

Thus, Chapter Three concludes. In this chapter, I have reviewed previous cycles of research and how they have influenced the evolution of the intervention and this study, I have reviewed the structure and curriculum involved in the intervention, I have reviewed the quantitative and qualitative methods used to collect data throughout the study, and I have discussed possible threats to validity. In the next chapter, I examine the data collected and report on the results of the next cycle (Cycle Three) of the study.

CHAPTER 4

RESULTS

Chapter Four consists of the analysis and results of both qualitative and

quantitative data collected through the Advancing AVID Tutor Training, blended-

learning intervention. This chapter is organized by each research question in order to

address the results of each question separately. At appropriate times, a convergence of

overall results will be discussed, following a concurrent Qual + Quan Mixed Methods

Action Research (MMAR) protocol where qualitative and quantitative results are

combined at the end of data analysis (Ivankova, 2015). As a reminder, the following

research questions guided this study:

RQ1: How does practice-based professional development contribute to AVID
Tutors' learning of AVID Tutoring practices?

RQ2: Do AVID Tutors' involvement in a blended-learning AVID Tutor
professional development model relate to increased understanding of AVID
and fidelity to the AVID Tutorial System?

RQ3: What common barriers emerge from AVID Tutors throughout the AVID
Tutor training process?

Research Question #1: How does practice-based professional development contribute

to AVID Tutors' learning of AVID Tutoring practices?

Two sources of qualitative data were collected and analyzed to inform research

question one. Qualitative sources of information were semi-structured interviews and

assignments from the online learning portion of the training, including reflections by AVID

Tutors. Since there were many opportunities to for students to reflect over the course of the

online portion of the intervention, the assignment data provides additional insight into the

AVID Tutor learning experience.

Semi-structured Interviews. Semi-structured interviews with both AVID Tutors and AVID Elective Teachers took place post-intervention. The interview data was comprised of responses from five purposively sampled new AVID Tutors who participated in the intervention and five purposively sampled AVID Coordinator/Elective teachers who worked closely with AVID Tutors in the classroom as the Tutors participated in the intervention. Participant details were previously described Chapter Three (Tables 17 & 18).

To obtain the following results, interviews were recorded with the permission of the respondents, transcribed, and then coded using HyperRESEARCH (HyperResearch 3.5.2, 2014). While coding, a first and second cycle was utilized. First-cycle coding consisted of *descriptive coding* (Saldana, 2016) to understand the emergent patterns in the data. After the initial cycle of descriptive coding, the first-level codes were then recategorized. Each initial code was grouped by how it was most conceptually related to each theoretical framework that guided the design of the intervention: Sociocultural Theory (Vygotsky, 1972), Social Learning Theory (Bandura, 1971), Universal Design for Learning (Rose, 2001), and the Reflective Practitioner (Schön, 1983). This justified the creation of codes for each framework component to be used for a second cycle of coding from the perspective of the frameworks.

This second cycle coding method is often referred to as the *framework method* (Smith & Firth, 2011). The framework method contrasts with inductive approaches to coding because its aims and objectives are highly focused on a research question and a theoretical structure. The framework method for qualitative coding allowed for insights into how the theoretical frameworks behind the design of the intervention may or may not

147

have materialized in the results. More recently the framework approach for qualitative coding has been gaining more popularity as a means of analysis by providing a specific lens (the framework) for which to view the data (Smith and Firth, 2011). The insights gained from analyzing the data from theoretical frameworks, led to the creation of overall assertions, which were supported with quotes from the original data.

As an added measure for trustworthiness, themes and assertions were verified through *member checking* (Mertler, 2014). All ten interview participants were asked to verify that their ideas were represented accurately. In some cases, minor adjustments were made to more accurately portray the intent of respondent responses. Table 20 represents frequencies of each framework related component as they were mentioned in the interviews, along with assertions and supporting quotations as they were related to the implementation of the AVID Tutorial blended-learning intervention.

Table 20

RQ1: Framework/Components, Assertions, and Supporting Quotations from Semi-structured Interviews w/ AVID Tutors and AVID Teachers (Frameworks: Sociocultural Theory, Social Learning Theory, Universal Design for Learning, and Reflective Practitioner)

N= 10

Framework/ Component	*F*	Assertion	Supporting Quotations
Sociocultural Theory (Vygotsky, 1972)			
Constructing meaning w/ peers	27	Social construction of meaning played an important role in the blended-learning	"It was nice to talk to fellow tutors and get some ideas on what to do in certain situations, or how they do things. I thought that was good." – *Nicole, AVID Tutor* "Especially after they went to the group training and heard other tutors from other schools with similar issues, that that really made the tutoring more effective when they came back." – *Ms. Spring, AVID Teacher*

		model. This included the ability to pose questions at critical times during the training.	"I thought the in-person training was good, because then it allowed us to ask other tutors from other schools who were experiencing similar issues what they do to get their students more involved or what kind of tactics that they use, which I thought was really helpful. "- *Brittani, AVID Tutor*
Scaffolding/ Support	14	The scaffolded approach of the blended-learning model positively contributed to tutor learning.	"I felt like if they only have the online training, or only the face to face training, neither would have been as effective. Because when they did the online training, they were reading everything and practicing everything, and learning things in the online training. And then they would practice it with the students, and apply what they were learning online." *-Ms. Spring, AVID Teacher*
Social Learning Theory (Bandura, 1971)			
Social Modeling	21	The social modeling provided by live more knowledgeable others (MKOs) or virtual MKOs were valued as part of the training for their role in improving practice and confidence.	"I liked where you had one of those videos and then some of the questions that had us do example tutorials and then present them over with the kids. I kind of like that. Because, then you kind of do get a different perspective. 'Oh, maybe next time I should do this,' or, so that was always helpful."- *Kathy, AVID Tutor* "You got us involved with seeing how the other tutors did those practices." *Trisha, AVID Tutor* "I think videos, including videos in the specific lessons each week, I think that's really helpful, because it's one thing to read about the tutorial process, but then to actually see it in practice or to see these steps in a video, it catches my attention a bit more and it gives me a better example as to what a tutorial should look like, and then like, okay, I see how they're doing it." *-Brittani, AVID Tutor* "I can see that they're more, just more confident."*-Ms. Autumn, AVID Teacher*
Universal Design for Learning (Rose, 2001)			
Added Value of blended-learning model	32	The blended-learning model, including the online modules, added value to the AVID Tutor training process.	"We always had the online training to help us learn a little bit better."-*Kathy, AVID Tutor* "I got a lot of tips from the in-person training on how to address that, but then online it gave more examples as to what kinds of questions students could be asking the presenter."-*Brittani, AVID Tutor* "I thought [the online training] was really useful because even though I had tutored before and even though I had understand the process, I still found it really useful to be able to be reminded of the AVID process and how I can personally implement different skills and learn different skills to help students. -*Tanner, AVID Tutor* "[The online component] was really valuable, and some of those little lessons, I stole some little mini things from the

			modules. So, I think being an AVID Elective Teacher and being in that situation, I think the modules are so effective because you can pull different components and then use it with the students." -*Ms. Spring, AVID Teacher* "They learned a lot from the online modules." -*Ms. Bloom, AVID Teacher*
Choice/Variety	19	Having choices from variety of activities added value to the experience.	"Some of the situation [activities] were helpful, because it was harder to visualize from the videos." -*Nicole, AVID Tutor* "As I was going to the modules I was learning different tools to help the students." -*Tanner, AVID Tutor* "Even online, there's plenty of activities that teachers could use if they needed them with their students." -*Ms. Summer, AVID Teacher* "I think the modules are so effective because you can pull different components and then use it with the students."- *Ms. Spring, AVID Teacher*
Reflective Practitioner (Schön, 1983)			
Adjusting/ Improving Practice	45	Practice-based professional learning and reflection on practice led to perceived improvement of tutor practice.	"I felt I got better at definitely asking higher-level questions[...] I improved a lot."- *Nicole, AVID Tutor* "I noticed I was improving as the semester came on and as I was taking the modules […] [I learned] how to help [students] be part of a better tutorial, and to help each other" -*Tanner, AVID Tutor* "I definitely feel like I'm more of a tutor now, because in the beginning I felt like more of a friend." -*Trisha, AVID Tutor* "I think it's better to have the training than not, because to just throw a tutor [in a classroom] without really giving them tips or feedback or anything like that-- sometimes it may not be the most effective." -*Brittani, AVID Tutor* "[Tutors are] more effective now, and stronger, as far as their questioning and the interacting with the other students and guiding the groups to come to the point of conclusion and solving them. […] I could see that as they were going through their modules, and going into in-person tutoring sessions with you, that there is definitely improvement and growth over time."-*Ms. Autumn, AVID Teacher*
Reflecting on Practice	50	Teaching AVID Tutors to reflect on their own practices helped them become more aware of the ways in which they were improving.	"I've noticed how I engage students is a lot different than [other tutors], because the tutors that I work with, they engage the students, but they don't seem necessarily as enthusiastic as I am […] I'm very engaging, very open, and students like that." -*Tanner, AVID Tutor* "I sort of learned what I should be looking out for on [areas] that I can improve in, things that I would've done differently. So the next day, I would take [those areas] into consideration and it really helped out and it really worked." -*Trisha, AVID Tutor* "I talked to [Trisha] more about it […] and she said she was surprised how much she learned from [the training]. I do think it's helpful, because she did tell me, 'Hey, I learned a lot through going through [the training].' -*Ms. Bloom, AVID Teacher*

Experimenting /Rehearsing	7	The act of rehearsal and experimenting with concepts was valued as a component of the training model and contributed to tutor growth.	"If you go to the teacher training, you do observations and you're in the classroom and you do all of that, and then you're a student teacher, where you're in with another teacher first before you're thrown in front of the students. I think coming in and actually [practicing] is helpful."-*Ms. Bloom, AVID Teacher* "At the beginning of the semester I wasn't quite sure what to do, I wasn't quite sure how to approach the students, but I noticed that as I was going through the modules I was learning different tools to help the students."- *Tanner, AVID Tutor*

F= Frequency

The results displayed in Table 20 assert that the individual constructs comprising the intervention seemed to have served their theorized purpose and each construct added value to the blended-learning model. How these results related to other findings for RQ #1 will be discussed a little bit later in this chapter.

AVID Tutor Reflections and Assignment Data. AVID Tutor reflection and assignment data were collected as students submitted required assignments throughout the online portion of the blended-learning intervention. Over the course of the study weekly reflections and overall course reflections were obtained from the 21 AVID Tutor participants. Formative assignments were also collected through the online course for these participants. For the final reflection, AVID Tutors were asked to respond to this prompt with a 250-500 word response:

How has your participation in this tutor orientation, contributed to the development of your AVID Tutoring practices?

The analysis of this data followed a similar process of coding as the interviews, utilizing a constant comparative method (Strauss & Corbin, 1998) with multiple phases of coding. First, weekly written assignments and final reflections were coded. For coding purposes, the same procedures were followed as described in the previous section in

terms of first-cycle (descriptive coding) and second-cycle (framework method) coding, as well as member checking for trustworthiness.

Weekly Written Assignment and Final Reflection Results. The results from the weekly reflections can be viewed in Table 21. The frameworks used in this data set are Social Learning Theory (Bandura, 1971) because the observing of others (social modeling) providing the impetus for the self-reflection of AVID Tutors. Secondly, The Reflective Practitioner (Schön, 1983) was used to analyze this data set since the assignments themselves were designed to be *reflection on action.*

Table 21

RQ1: Framework/Component Themes, Assertions, and Supporting Quotations Related to the Weekly Reflections (Frameworks: Social Learning Theory, Reflective Practitioner)

N=21

Framework/Component	*F*	Assertion	Supporting Quotations
Social Learning Theory (Bandura, 1971)			
Social Modeling	99	Reflecting on the practices of others allows tutors to be critical of tutorial practice in a non-threatening way and leads to adjusting/improving own practice.	"I like how the tutor is kind of stepping back and letting the kids help each other out. It not only allows for more collaboration between students, but stops the presenter from looking towards just the tutor as an ultimate source for the answer." *-Krista, AVID Tutor* "I learned a lot from the other tutors, and they learned from me. We give each other feedback on what we do and it really helps us improve." *-Taylor, AVID Tutor*
Reflective Practitioner (Schön, 1983)			
Experimenting/ Rehearsing	58	Rehearsing new skills, then reflecting on them, leads to greater confidence among AVID Tutors as they try new practices.	"It went well when explaining it to the students, but I was very nervous too! […] At first it was challenging, because the kids were becoming frustrated with their tough point of confusion. As the tutorial started developing, the good questions started and it was a high level of thinking from everyone in the group and the presenter that helped solved the problem." *-Angela, AVID Tutor* "Using the new practice really improved the students' communication with each other." *-Trisha, AVID Tutor*
Adjusting/Improving Practice	115	With guided reflection, tutors can identify their own areas of potential growth.	"I need to be tough on giving a 30 second speech. I sometimes forget to remind them to do that in the first place because I think that they are already use to it, but being freshmen and sophomores they tend to forget." *-Kathy, AVID Tutor* "If no one is asking questions I want to be able to ask who is in the same class and then who is taking the same level of the subject but in a different class." *-Valerie, AVID Tutor*

F= Frequency

Results from written assignments and final reflections further carry on the emerging themes from the semi-structured interviews, that social learning and reflective practices added significant value to the blended-learning training model. The overlapping of these trends will be discussed in the next section.

Observed Trends Across Data Collection Tools for RQ #1. First, AVID Tutors and Teachers identified the social construction of meaning and scaffolding as significant supports (Vygotsky, 1972). The primary theme within the construct of the *Sociocultural Theory* was that tutors highly valued the interactions they had with their peers to construct meaning in both the online and face-to-face components of the blended-learning model. It was when tutors were able to work together, to work through their common struggles, that change in practice was indicated. Thus, the dialogue between tutors was a highly-valued component of the training. Several other comments (27) from tutors and teachers also supported this assertion.

Although the online components of the training model seemed to provide a foundation for AVID and AVID Tutorial knowledge, the two face-to-face components helped tutors both feel validated in their own struggles and glean valuable strategies from each other to overcome these struggles. The ability to pose questions to each other and problem solve together was cited as a valuable tactic within the face-to-face sessions. By design, this concept is also what drives AVID Tutorials in the classroom, where students are expected to learn to pose problems to each other and work collaboratively to arrive at solutions. Therefore, in utilizing the very method tutors were learning to facilitate

154

classroom tutorials, they were able to become better at the practice of tutoring by learning from each other.

Scaffolding was also a key component related to Vygotsky (1972). As opposed to the traditional AVID Tutor Training method where large bulks of material are delivered through eight hour workshops, the blended-learning training model had the advantage of chunking the learning into smaller pieces throughout the online modules. The benefits of both online and face-to-face learning could be maximized with this model, including gradual release of content. Because of the scaffolding, AVID Tutors were able to process smaller bits of information at a time, focusing on just one or two practices per week. Additionally, because tutors were already on the job as they were participating in training, they had more meaningful context for the content they were learning. Scaffolding specific skills one week at a time allowed tutors focus on specific skills and the freedom to "play" with new practices. Their learning from these experiences was then characterized in their interviews and reflections.

Additionally, it appears that scaffolding led to a *small wins* (Weick, 1984) effect benefiting AVID tutors. By breaking their change into more manageable chunks (Heath and Heath, 2010), there was more added value to weekly reflective practices. Because tutors were able to focus on specific areas of their tutoring, they could focus on achievable chunks of learning rather than become overwhelmed by the sum total of tutorial skills. This experience wouldn't have been possible without the scaffolded blended-learning model in place, while tutors were already on the job. If all of the content was taught up-front, in the more traditional model, tutors would have missed out on these

155

weekly affirmations of their blossoming practices and would have lacked the context in which to "play" with these practices as they were learning them.

This leads to the utilization of Social Learning Theory (SLT) (Bandura, 1971) as a guiding principle for the construction of the tutor training. The integration of SLT turned out to be an effective choice. AVID Tutors and AVID Teachers indicated the components of the training model which included the modeling from *more knowledgeable others* (MKOs) were highly valued and effective. Through the observing of MKOs, both virtually and in-person, tutors and teachers expressed an added value to the social modeling aspects of the blended-learning course. Throughout the interviews, there were several comments during interviews (21) and written reflections (99) related to this same concept. Whether the MKO was live or virtual did not seem to matter among participants. In either case, tutors and teachers expressed a valuable benefit of social modeling as a means of improving practice.

One commonly expressed reason why tutors liked this aspect of the training is because they felt safe to be critical of the MKO, while at the same time picking up on strategies and skills they could add to their own practice. The MKOs also provided practical examples of the tutorial process in addition to the theoretical, which many new tutors seemed to value. Further, MKOs contributed to tutor confidence in the sense that many tutors realized that the practices of MKOs were more achievable than initially perceived. In some cases, tutors mentioned that they thought they were actually doing a *better* job than the MKO, thus affirming their current practices.

Further, AVID Tutors continued to affirm that the time allotted for them to safely experiment and rehearse newly gained skills helped them dramatically improve their

156

tutoring practices and most importantly build confidence in applying new tutoring

practices, as was expressed by one tutor, Karen, in this way:

> "At first it was difficult for me to end tutorial sessions a bit earlier
> because I felt like I was cutting into valuable learning time for the
> students. However, after the week finished I noticed how helpful the
> reflection process is for students and saw that the student engagement with
> the materials increased the more they were encouraged to reflect on their
> POCs."

As this quotation suggest, *at first* the tutor was very nervous about implementing the

practice of the week. However, through observation and reflection, she was able to

realize that the change was worth it because it delivered a positive result.

Another key take away about *how* the training model contributed to tutor practice

was in the area of Universal Design for Learning (UDL) (Rose, 2001). UDL also seemed

to have its theorized effect in the case of the blended-learning intervention. On several

occasions (32) during the interviews, AVID Tutors and Teachers commented on the

added value of a blended, or hybrid, format which allowed for more flexibility in the

learning process, especially in the area of *variety*. Respondents indicated that the variety

in delivery method was seen as a valued aspect of the training.

In sum, what became clear from the interviews and reflections is that there was a

perceived value in both the online components and the face-to-face components. One

mode without the other would not have been as effective. One AVID Elective teacher,

Ms. Spring stated, "I felt like if they only have the online training, or only the face to face

training, neither would have been as effective." This sentiment was indicated by others

who commented on the fact that the online training was effective, but it was the face-to-

face training that really gave it life—the face-to-face training sessions made the more

abstract concepts from the online modules more *real*.

A key component of UDL is the concept of creating flexible learning

environments that can accommodate individual learning differences and needs (Rose,

2001). This aspect relates to the flexibility of time and space provided by the online

components. Because the online modules were not tied to any particular location or time,

tutors had flexibility when it came to completing the training in addition to their

responsibilities as a college student, and in some cases, employees at other places of

work. In addition, tutors cited that because the online resources were always "there" for

reference, they could go back to the resources at any time for support. In contrast, while

the face-to-face components were thought of as valuable, they were fleeting experiences.

The online components provided somewhat of an "anchor" for the training model and a

"home" to which tutors could turn as regular reference.

Finally, the reflective components designed around the *Reflective Practitioner*

(Schön, 1983) also appeared to have their desired effect as part of the blended-learning

model. Across all ten interviews and in the written assignments, the concept of reflection

was continually affirmed as adding value to the training experience, especially the role

reflection played in transforming AVID Tutor practice. In frequent occurrences in

interviews (50) and reflections (58) respondents mentioned the value of reflecting on

their practice. In fact, the value of reflection as an agent to transform practice was one of

the more dominant themes throughout all of the interviews and reflections. Further, in

some cases students even talked about success while employing the "reflection in action"

method to transform practice on the job. One particular tutor, Nicole, indicated: "With

certain [situations], I could kind of think back to what I could do in those situations, from the training." This quotation is an example of how through reflective practice, some tutors picked up on the concept of using their newly gained knowledge to *stop* and think about their actions while determining *how* to react to various situations presented during tutoring. This application of reflective practice is in the spirit of Schön's notion was that most problems which arise on the job can be solved through analysis of the situation through experimentation and introspection.

Following this line of thought regarding reflection as a means to solve work-place problem, a common "problem" indicated by tutors was that they had to first overcome their lack of knowledge and experience in the complex tutorial process. This was just as true for tutors who had been AVID students before as it was for tutors who were new to AVID. For all new tutors in the study, learning to be an AVID Tutor presented many obstacles (as is evidenced with RQ #3). A secondary set of problems that tutors also had to overcome were the many micro-obstacles that come with working with adolescents (discipline, motivation, lack of preparedness, etc.). Again, having previous experience with AVID, did not seem to have an osmosis effect in terms of tutor ability. *All* tutors, regardless of previous experience, needed training to develop their new skills as AVID Tutors. The reflective practices became valuable opportunities for tutors to recognize and overcome their obstacles. Overwhelmingly, AVID Tutors expressed that through the practice-based (experimentation) reflective structures (introspection) built into the course, they were able to improve their practice in ways that helped them overcome these obstacles.

More so, the act of regularly reflecting on practice also led AVID Tutors to become more aware (metacognitively) of the ways in which they were improving while gaining confidence as a result. Throughout the interviews, tutors self-identified the act of reflection as a means of improvement. As one tutor, Trisha, stated, "I sort of learned what I should be looking out for on [areas] that I can improve." Comments like this demonstrate that tutors used the reflective process to identify their own areas of growth. Through reflection, tutors were also able to hone in on the specific skills they developed to improve their practice while overcoming the barriers that came about from previously lacking those skills.

As a result, tutors were able to use the reflexive process to identify their own areas of professional growth as AVID Tutors. It can be asserted that these types of realizations would not have been possible without the prompted and purposeful reflection provided within the AVID Tutor training structure. While coding the tutors' reflective work, there were over 115 instances where tutors self-identified areas of improvement in meaningful ways. Many tutors made comments such as Brittani's comment, "Something I will try to do differently next time I implement this is to ensure that every single student sticks to asking questions rather than telling the presenter what to do." This quotation affirms that this tutor has come to the realization that an effective tutorial session involves the asking of questions (Socratic method) and that this is an area of growth for himself.

As tutor reflections were further analyzed, another pattern emerged. In several cases AVID Tutors often identified areas of their own improvement that were previously identified as areas of improvement of their peers. For example, one particular AVID

Tutor observed of a peer tutor, "A thing she could work on is asking the group more questions, and maybe being more clear with her questions" (Nicole, AVID Tutor). Then, in her own reflection on a practice to improve, she wrote, "Next time I feel like I should ask more group questions like the tutor in the video could have also." To see how often this occurred, tutor reflections were re-analyzed for how frequently the suggestions AVID Tutors made for their peers matched their own identified areas of improvement. As a result, 62% of suggestions for improvement made for peers also appeared in the self-identified improvements of Tutors. This further demonstrates how the social modeling aspect of the intervention significantly influenced the tutors' own perceptions of necessary improvements.

Additionally, the most frequent areas of improvement expressed by AVID Tutors were documented. Based on tutor comments in the written assignments, the most frequent self-identified areas of improvement are displayed in Table 22:

Table 22

RQ1: Frequency of Self-Identified Areas of Improvement

N=21

Identified Area of Improvement	*F*	Supporting Quotations
Group management	12	"Get more students involved and not be the one the students turn to all the time." -*Krista, AVID Tutor* "We need to be more efficient in keeping groups between 6-7 and that have similar or the same subject for each group. We also need to keep some students separated." -*Trisha, AVID Tutor* "My goal is to motivate those students to participate more in the tutorial process." -*Tanner, AVID Tutor*
Coaching 30-second speeches/Point of Confusion (POC)	8	"My goal is for students to bring out their resources before tutorials begin so they are prepared to present their point of confusion and aid the student presenter."-*Tanner, AVID Tutor* "Helping the student presenters be able to explain their points of confusions more thoroughly so that the rest of the group members can understand what they are trying to figure out."- *Blanca, AVID Tutor* "My second goal is to have my students become better student presenters." -*Valerie, AVID Tutor*
Getting students to ask Higher Level Questions	6	"Assisting students in creating higher level questions by using the scaffolding method." -*Jesse, AVID Tutor* "My first goal is to have more inquiry with my students in the tutorial session." -*Carlo, AVID Tutor* "Encourage high level questions in overall group collaboration." -*Tanner, AVID Tutor* "Asking more progressive questions that transition into higher level questions." -*Nicole, AVID Tutor*
Coaching students to use resources	5	"Encourage students to keep taking Cornell notes in class even if the majority of the class aren't taking them, they will be beneficial for binder checks." -*Trisha, AVID Tutor* "My goal is for students to bring out their resources before tutorials begin so they are prepared to present their point of confusion and aid the student presenter." -*Tanner, AVID Tutor*
Debriefing the tutorial	5	"Debriefing with other tutors and the teacher in order to come up with better ways to make the tutorial process efficient." -*Jesse, AVID Tutor* "Get them to talk about what they have learned at the end of the tutorial."-*Carlo, AVID Tutor*
Being a mentor	4	"I want to make students feel supported in their academic lives if they don't feel it from their home." -*Angela, AVID Tutor* "I want to encourage students to stay in AVID by explaining to them that I wished I was in AVID knowing what I know now. I would let them know all the benefits of AVID that would have helped me in college, academically and financially." -*Milos, AVID Tutor*
Building Relationships	2	"[My] last goal is to get to know the students better." -*Valerie, AVID Tutor*
Holding higher expectations	2	"I need to hold my students to higher expectations and challenge them to submit their best intellectual work, not work that is easy to get through." -*Karen, AVID Tutor* "When the next semester starts up I need to have a strict guideline and stick to it." -*Valerie, AVID Tutor*

F=Frequency

When identifying their own areas of improvement through reflection, the most commonly identified area of growth was in the management of tutorial groups. Anecdotally, this makes sense. After four years of observing tutorial sessions at 16 different AVID sites, casual observations also indicate this area as a common area of need. Next, tutors identified coaching the Student Presenter's "30-second speech" as the second most frequent area of improvement. This was particularly interesting because, again, based on many casual observations, this is also an area of need. The story that tutors' own perceptions begins to tell is that they can also acutely identify their own areas of growth—*if* they are prompted to do so through guided reflection.

Based on the results from the semi-structured interviews of both AVID Tutors and AVID Elective Teachers as well as the AVID Tutor reflections and other assignment data, the design of the training model appears to have been well-received overall. Participants also provided insights into *how* the theoretical frameworks comprising the training model contributed to tutor knowledge and practices. In whole, practiced-based professional learning, scaffolded through the blended-learning model netted a positive effect when speaking with participants and analyzing their written reflections. The frameworks of Vygotsky (1972), Bandura (1971), Rose (2001), and Schön (1983) proved to be a valuable basis for guiding the construction of this professional learning experience for AVID Tutors.

Research Question #2: Do AVID Tutors' involvement in a blended-learning AVID Tutor professional development model relate to increased understanding of AVID and fidelity to the AVID Tutorial System?

There were four data collection tools utilized to address research question two. Two qualitative measures were utilized: AVID Tutor observation artifacts and semi-structured interviews. Three quantitative instruments were utilized: AVID Tutorial Observation scores, the AVID Tutor Knowledge Pre- and Post-test and the AVID Tutorial Scenarios Pre- and Post-test. Since this research question focused more on fidelity to the AVID Tutorial system, which is a result of tutor understanding of the system, many of the measures were indicators of fidelity. First, the qualitative results are discussed, followed by the results from the quantitative measures as they related to research question two.

Qualitative Results. To further clarify, the first set of qualitative data was the result of three AVID Tutorial observations for each participating AVID Tutor (63 total observations). The observations were made in the context of the AVID Elective classrooms where AVID Tutors perform the job of AVID Tutoring. In addition, the observations occurred at three different points in time: pre-intervention, mid-intervention, and post-intervention. Qualitative data was collected in the form of artifacts, such as images of the student work on white boards (N=57) and AVID Tutorial Request Forms (TRFs) (N=164) to provide further insights into the AVID Tutorial observations. These artifacts were then analyzed using a quantitative method to derive some descriptive statistics about them.

164

The second set of qualitative data for research question two came from semi-structured interviews with five of the 21 intervention participants, AVID Tutors, as well as five of the AVID Elective Teachers who worked directly with the AVID Tutors. The semi-structured interview protocol in Appendix H was utilized during all interviews. These were the same interviews conducted to inform research question one, but with an analysis focus on tutor understanding and tutor fidelity.

AVID Tutor Observations Artifacts. Over the course of three observations per participating tutor, several artifacts were collected to analyze as evidence of AVID Tutor practices. The first set of artifacts collected were images of student presenters working at the white board, during the tutorial (*N*=57). The work on the white boards is of interest to those seeking to analyze the quality of AVID Tutorials (in terms of fidelity) because certain white board features should be in place when a tutorial is being implemented with fidelity:

1. A three-column format with work spaces for the Point of Confusion (POC), Student Work, and Steps. This is how the board work is supposed to be organized across the entire AVID system. A tutor who is following proper protocol would ensure students used this format.
2. The POC should be an *actual* POC and not the *original* problem. In many cases students will not bring in a question that correctly identifies a POC. It is the tutor's job to hold students accountable for revising the POC if this is the case.
3. Steps used to solve the problem should be detailed enough to describe the step and utilize academic language instead of common usage (e.g. "subtract" instead of "take away," or "denominator" instead of "bottom"). If the steps are not acceptable, it is the role of the tutor ask the students to rewrite the steps until they are acceptable

To analyze the board configurations, images of the white boards during AVID Tutor observations at each of the three observations were utilized. Ten photographs from each phase of the observations were chosen at random. The photographs were then uploaded

165

into HyperRESEARCH (HyperResearch 3.5.2, 2014) where they were coded based on the three criteria set above. The codes used were "acceptable" and "unacceptable," for each component of the white board photographs at each observation phase. For each set of this procedure was repeated.
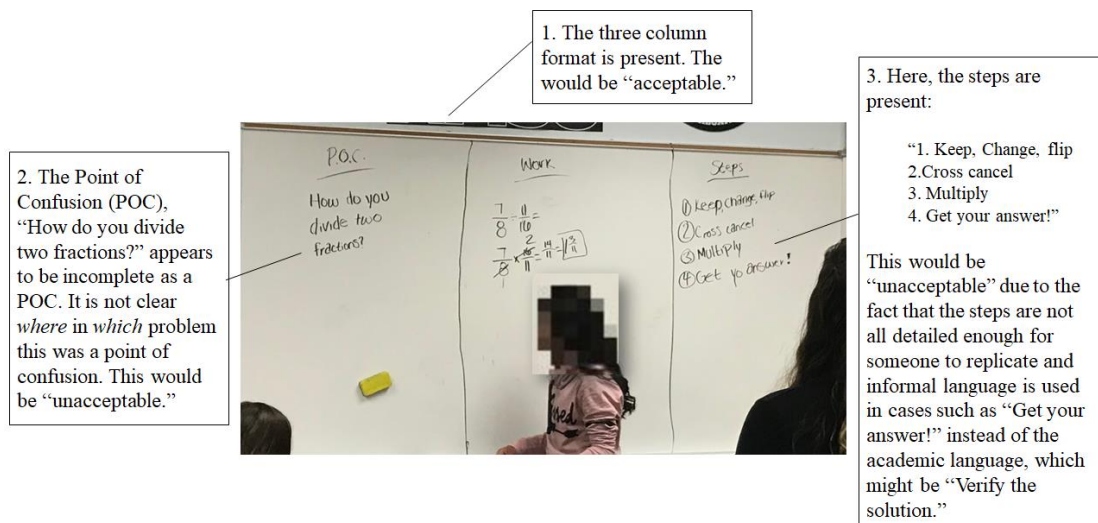
Figure 15. Sample White Board Configuration with Annotations

For example, the board configuration in Figure 15 would be coded as "acceptable" for the three-column formatting, "unacceptable" for the POC, since it is not a real point of confusion, and "unacceptable" for the steps because they are mostly one word steps that don't fully describe the process that was followed to solve the POC. The assess the reliability of my coding, the help of 16 AVID Coordinators was employed to analyze the consistency of the ratings. To do this, five of the ten of the photos were chosen at random and AVID Coordinators were asked to rate them. An agreement level of 82.4% was reached, which is in the acceptable range according to Nunnally (1978). The result of the

coding process led to the following frequencies of "acceptable" and "unacceptable"

ratings by tutors (Table 23)

Table 23

RQ2: Frequency of "Acceptable" vs. "Unacceptable" Board Configuration Ratings by Observation

Observation	Three Column Format		POC		Steps		Total Score	
N= 10	A	U	A	U	A	U	**A**	**U**
1	9	1	6	4	1	9	16	14
2	10	--	8	2	6	4	24	6
3	9	1	7	3	6	4	22	8

Note: A= acceptable, U= unacceptable

Among the ten randomly selected board configurations from each phase of observations,

the "Three-column Format" was relatively strong throughout each phase. This is likely

because the three-column structure is a relatively easy requirement to implement. There

was only one case during observation one and observations three where the three-column

board configuration wasn't acceptable. Overall, AVID Tutors did well in this area. In

terms of the "Point of Confusion (POC)" that was written on the boards, there was a

slight improvement from observation one to observation two, but overall the trend stayed

relatively the same across all three observations. There wasn't a significant change in the

observed POC throughout the intervention.

In the category of the "Steps," however, there was what appears to be a significant

shift in fidelity after observation one. In the photos selected from observation one, there

was only one case where the steps were judged as acceptable. However, in observations

two and three, there were six cases each where the steps were considered acceptable. This

jump is likely due to the timing of the observations. Since observation one was pre-intervention, AVID Tutors had not yet received training on the specific skill of teaching students to use academic language and complete sentences when writing out their steps—a skill that can't be intuited as easily by simply knowing the AVID Tutorial process as the first two categories can.

The overall scores from the observations also made a similar leap from observation one to observations two and three, as would be expected since the tutors were participating in training by the time they were observed on those occasions. From observation one to observation two, the total acceptable scores jumped up eight points. There was a slight dip (-2) from observation two to observation three—a trend that appeared in the other observation data and will be discussed later.

The second set of artifacts that were collected during AVID Tutorial observations were Tutorial Request Forms (TRFs) (*N*=164). TRFs are of interest because as AVID Tutors begin to implement AVID Tutorials with fidelity, students should be held accountable for accurately completing the TRF. To determine this, TRFs were collected over three observations of tutors and analyzed to determine if students received acceptable or unacceptable scoring on their TRFs for the work completed. If AVID Tutors were holding students accountable to high expectations, then TRFs that didn't meet the expectations should have received a reduction in points in each of the scored areas. Figure 16 shows an example of scoring on a TRF.

Figure 16. Sample of Scoring on a TRF.

As can be seen in the circled portions of the TRF, it appears that the tutor has not awarded full points in the categories of "Initial/Original Question" and "Key Academic Vocabulary." The scores would be appropriate since the initial question contains incomplete information about the original problem and the student initially didn't define key vocabulary, but went back and added the definitions (in different color pen) after being prompted to by the AVID Tutor. This would be an indicator that the AVID Tutor is holding the student accountable for the expectations of the TRF and not allowing the student to receive full credit for work that doesn't meet the requirements. For this reason, the scoring on this TRF would be deemed "acceptable." To analyze the TRFs, ten random TRFs from each phase of the observation process were chosen. The random TRF samples were then uploaded into HyperRESEARCH (HyperResearch 3.5.2, 2014) and each graded portion was coded as "acceptable" or "unacceptable." Of most interest is the

category determining whether or not a student is held accountable for an appropriate

Point of Confusion (POC), meaning that it actually indicates a point within a multi-step

process where the student became confused. The intended purpose of the TRF is for

students to arrive at a POC, so whether or not they do should be appropriately assessed

by AVID Tutors. In the case where students do not arrive at an appropriate POC, then the

tutor is supposed to deduct points from the section and ask the student to revise the POC.

An example of a case such as this can be viewed in Figure 17.
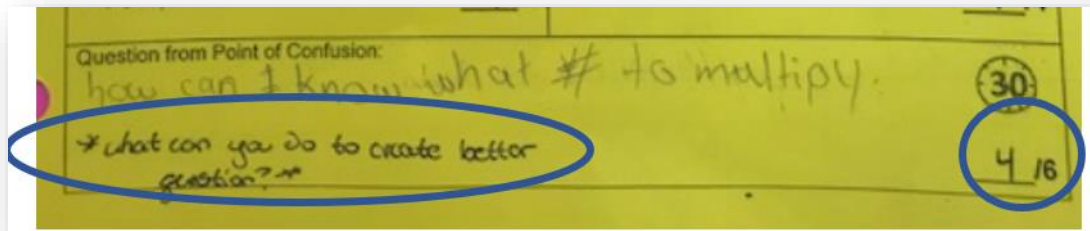
Figure 17. A Case Demonstrating an AVID Tutor Holding a Student Accountable for

Revising a POC.

As can be seen in Figure 17, the AVID Tutor reviewed the POC, awarded partial points

(4 out of 6) and asked the student to revise the POC. This case would be an "acceptable"

case of the student being held to high expectations by the AVID Tutor.

Because determining these ratings can be subjective in nature, for reliability,

again the help of 16 AVID Coordinators was employed to assess five of the ten photos,

chosen at random. An agreement level of 72.5% was reached, which again is acceptable

according to Nunnally (1978). As a result of this analysis, the frequencies in Table

24were recorded.

Table 24

RQ2: Frequency of "Acceptable" vs. "Unacceptable" TRF Scores by Section of Pre-work Inquiry

Obs.	Initial Question		Key Academic Vocabulary		What I Know About My Question		Critical Thinking		General Process and Steps		POC		Total	
N=10	A	U	A	U	A	U	A	U	A	U	A	U	A	U
1	5	5	6	4	6	4	6	4	5	5	3	7	31	29
2	8	2	7	3	8	2	7	3	6	4	6	4	42	18
3	7	3	6	4	5	5	6	4	5	5	4	6	33	27

Note: A= acceptable, U= unacceptable

Again, there appears to be a jump in the total scores for the "acceptable" category from observation one to observation two. Therefore, *after* tutors began to take the AVID Tutor training course, there was an initial jump in the overall fidelity in terms of grading the Tutorial Request Forms (+11). Curiously again, by observation three, it appears that tutors regressed back to their pre-intervention levels, furthering a trend that will be discussed at a later time.

Either way, in the most crucial category, "POC," it appears that tutors seemed to struggle throughout each phase of observations. Observation two was the only instance where there were more acceptable ratings than unacceptable. During the coding of the Tutorial Request Forms, it was noticed that most of the unacceptable ratings assigned to the "POC" category were due to AVID Tutors giving students full credit for POCs when they were not up to standard meeting fidelity. In essence, throughout each observation phase, tutors consistently appeared to struggle with holding students accountable in this area. This indicates that more emphasis on appropriate grading practices might be

beneficial as part of the training curriculum. This was also a trend that appeared in other data sources.

Semi-Structured Interviews. To further address this research question regarding the influence of the intervention on tutor fidelity, the previously discussed semi-structured interviews were approached with a different analytical approach. This time, particular attention was paid to what AVID Tutors and Teachers said about growth in tutor understanding of AVID and AVID Tutorials and their fidelity. Again, five AVID Tutors were interviewed and five AVID Coordinator/Elective Teachers were interviewed. All of the interviews were recorded and later transcribed. Then the interview transcripts were coded using a constant comparative method (Strauss & Corbin, 1998), including a first-cycle *descriptive coding* (Saldana, 2016). A second cycle *pattern coding* (Saldana, 2016) organized the initial codes into broader categories to gain a more precise inferences about how participant understanding of AVID Tutorials and the AVID system was influenced by the training. For each set of interviews, assertions were also made based on the emergent themes. Again, member checking for trustworthiness was employed again to verify my interpretations with participants (Mertler, 2014).

For further trustworthiness, *negative case checking* was employed with this data set (Given, 2008). Negative case checking allows for a nuanced analysis of qualitative data by searching for contradictions to the *main body* of evidence. By explaining a negative case, the general explanation of the typical case can be strengthened (Given, 2008).

Results from Interviews with AVID Tutors and Teachers. After the interviews with the five new AVID Tutors and five AVID Teachers were analyzed through a different approach, the following categories and themes emerged to describe the growth tutors made throughout the training process. Table 25 depicts a summary of the results.

Table 25

RQ2: Categories, Themes, Assertions, and Supporting Quotations Related from AVID Tutor and Teacher Semi-structured Interviews
N=10

Categories	Theme	*F*	Assertion	Supporting Quotation
AVID Knowledge	Deeper understand-ing of AVID and Tutorial Process	30	As a result of the blended-learning model AVID Tutor training, tutor understanding of AVID and the AVID Tutorial Process deepened.	"The training definitely contributed to my growth as a tutor."- *Brittani, AVID Tutor* "The tutors that are coming to us now, they're knowing more about the actual process." *-Ms. Winter, AVID Teacher* "They're more effective now, and stronger." *-Ms. Autumn, AVID Teacher*
Confidence	Confidence in role as a Tutor	13	AVID Tutors gained confidence in their role as a result of the blended-learning model AVID Tutor training.	"It makes me feel good to be able to know that I have the skills to help the students." *-Tanner, AVID Tutor* "I can see that they're more, just more confident." *-Ms. Autumn, AVID Teacher*
Social Modeling	Observing and reflecting on the practices of More Knowledge able Others (MKOs)	13	AVID Tutors grew as a result of observing and reflecting on the practices of more experienced AVID Tutors.	"I liked where you had one of those videos (social models) […]. I kind of like that. Because, then you kind of do get a different perspective."- *Kathy, AVID Tutor* "Especially with the weekly [practices] that we had to do in class, where we focused on the other tutors […]. I thought that was really helpful. […] I really like that experience because you got us involved with seeing how the other tutors did those practices." *-Trisha, AVID Tutor* "And then they would practice [what they observed] with the students, and apply what they were learning online." *-Ms. Spring, AVID Teacher*
Resources	Online tools as a resource	12	AVID Tutors benefited from having the online components to return to as a regular resource.	"I think the follow up [is important]. You have the modules that are provided for them." *-Ms. Summer, AVID Teacher*

F= Frequency of comments by AVID Tutors or Teachers related to theme.

According to the interviews, the most frequent comments from AVID Tutors and Teachers related to how the blended-learning training model had its intended effect of deepening their AVID Tutorial and general AVID knowledge. In many cases, AVID Tutors and Teachers expressed specifically how the training itself was the source of their growth and how they felt tutors were more effective (with fidelity) as a result of the training.

Further, both tutors and teachers also expressed a rise in confidence in the role of AVID Tutor, implying there were affective gains from having participated in the intervention. One tutor, Trisha, summed up this feeling of confidence, by saying, "I definitely feel like I'm more of a tutor now," implying that she now has more confidence in her role. Further, a teacher, Ms. Autumn said, "You can tell that they have more confidence as far as being in their role with students." What statements like these indicate is that an indirect result of the training provided a boost in efficacy among tutors.

Not all tutors felt that each aspect of the training was a positive contributor to fidelity of tutorials. For example, while most tutors felt that the social modeling components were useful means of improving tutoring practice, Nicole expressed confusion with the socially modeled practices of the week. Nicole commented, "It was kind of hard to apply those in person," and, "Those were a little unclear for me." In Nicole's case, she wished there were more instructions/details in how to perform the practices observed from the more knowledgeable others. She did however concede the overall experience was "definitely helpful," despite some confusion in the overall process.

Quantitative Results. The AVID Tutorial Observations also contained a quantitative component from the Tutorial Observation Tool (Appendix F), which allowed for the "scoring" each observed tutorial session for further analysis. In some cases a second observer with AVID tutorial coaching experience was utilized. In some cases the second observer was an AVID Center Program Manager and in other cases the second observer was an AVID Elective Teacher. In 27.9% of cases a second observer collected observation data with 80% agreement on individual component rating. For instruments with more than 5-7 items, an interrater reliability rating about 75% is generally considered acceptable (Nunnally, 1978).

The purpose of scoring AVID Tutorial observations was to determine if and how AVID Tutorial practice shifted over the course of the intervention. As previously mentioned, the Tutorial Observation Tool (version 2.0) was developed specifically in accordance with the AVID Tutorial system as designed by AVID (AVID Center, 2011). The validation of this instrument was discussed in Chapter Three. To track AVID Tutorial practice over time, each participant was observed at three different points in time: pre-intervention, mid-intervention, and post-intervention.

As a result of using the Tutorial Observation Tool to rate tutorial behaviors, scores were compiled from each AVID Tutorial observation for further analysis. It should be noted that although the AVID Tutorial Observation form captures the behavior of the "Teacher" role in the tutorial, only scores from the "Tutor," "Student Presenter," and "Group Member" roles are included because those are the roles the AVID Tutor can influence. Figure 18, represents the mean total score on the AVID Tutorial Observation from, for each observation instance.
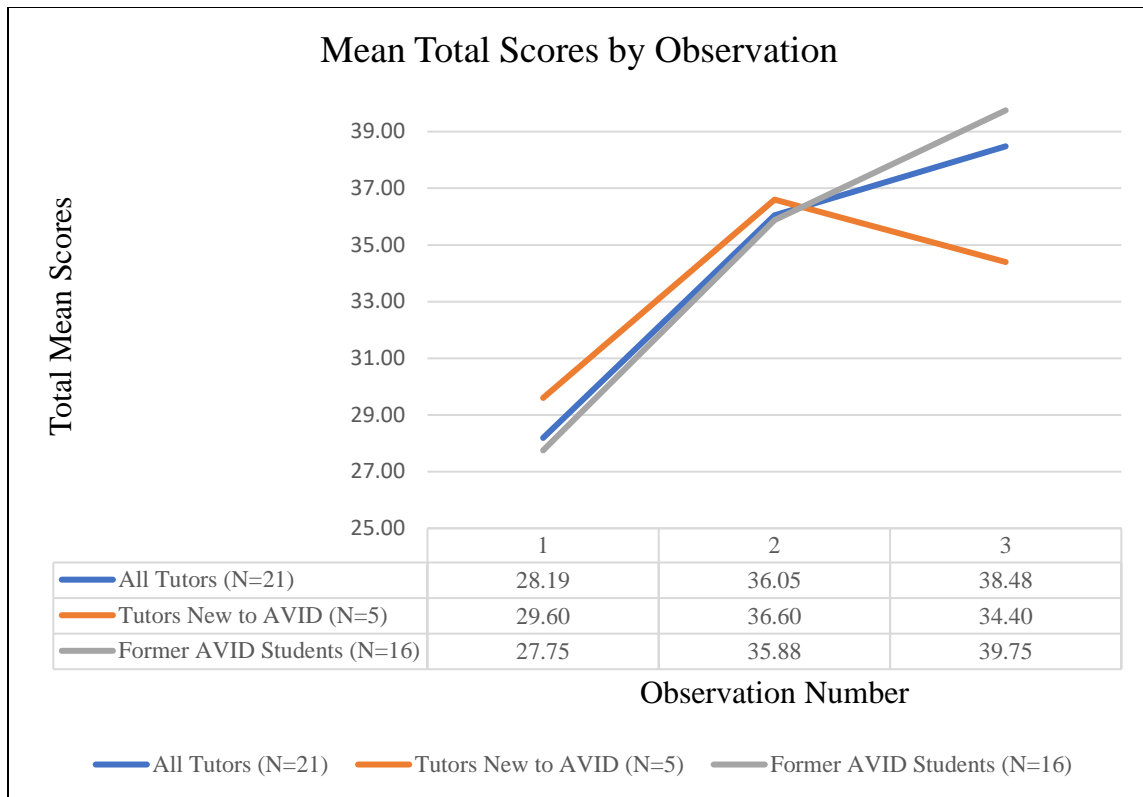
Figure 18. Mean Total Scores by Observation

Overall, the results plotted over time for the three observations indicate that
overall, *all tutors* received higher scores as they progressed through the tutor training.
Interestingly, former AVID students continued on an upward trend, whereas tutors who
were new to AVID experienced a "dip" by the third observation—a trend that continues
to appear in the data in regards to the performance of tutors between observation two and
three. Overall, however, there was a gain of ten points in the mean total scores for all
tutors from observation one to observation three (28.19 to 38.48), with a substantial leap
noted between observations one (pre-intervention) and two (mid-intervention) as well
(28.19 to 36.05). Thus, as tutors begin to participate in the tutor training, their
performance ratings also rise.

As a second measure using the Tutorial Observation Tool scores, I was able to analyze the results by first analyzing the raw scores for the same group of AVID Tutors (from the Tutor, Student Presenter, and Group Member categories). I then ran a paired samples *t*-test between the pre-intervention and post-intervention observation scores to see if there was a significant change in the mean indicators scores (for each individual indicator) *after* the training sequence concluded. Since overall growth was of interest, only observations one and two were included in this particular analysis. The results can be viewed in Table 26.

Table 26. *RQ2: Raw Scores from Tutorial Observations One (pre-intervention) and Three (post-intervention) by Tutor*

N= 21

Tutor	Obs.1 Raw Score Out of 48	Obs.3 Raw Score Out of 48	Diff.
Karen*	29	29	--
Albert	34	34	--
Ronnie*	20	46	26
Carlo	20	45	25
Valerie	25	40	15
Blanca	28	41	13
Dan	26	39	13
Ellen	29	40	11
Linda	23	34	11
Krista	31	41	10
Kathy	32	42	10
Brittani	25	33	8
Milos*	33	40	7
Tanner	28	34	6
Sue	20	24	4
Taylor	28	32	4
Trisha	28	31	3
Nicole*	31	34	3
Ryan*	35	34	-1
Angela	39	38	-1
Jesse	28	26	-2

Note: Tutors who were not previous AVID students are marked with an asterisk (*)

As can be observed in Table 26, the raw scores show that many tutors did gain points from observation one to three, however, not all. The most significant gains were with Carlo, who grew 25 points, and Ronnie, who grew 26 points from observation one to three. In some cases, tutor performance took a minor dip, such as in the cases of Ryan, Jesse, and Angela. In the cases of Karen and Albert, the observation scores remained the same from observation one and three.

In terms of the paired samples t-test, mean scores were analyzed first by total score and then by indicator from tutorial observation one to tutorial observation three. The results can be viewed in Tables 27 and 28.

Table 27. *RQ2: Mean Total Scores for Each Tutorial Participant Category*

N=21		**Obs. 1**		**Obs. 3**				
Tutorial Role	Total Possible	Mean	SD	Mean	SD	*p*	*df*	*t*
AVID Tutor	18.000	11.095	2.965	15.7143	1.875	0.000*	20	7.240
Student Presenter	12.000	6.857	1.682	9.619	1.596	0.000*	20	5.401
Group Member	18.000	10.238	1.868	13.143	2.613	0.001*	20	3.962
Combined Overall Score	48.000	**28.191**	5.026	**38.476**	5.250	0.000*	20	6.567

Note: *Significant at $p<0.05$

Table 28. *RQ2: Mean Individual Indicator Scores for Each Tutorial Participant Category*

N=21		Obs. 1		Obs. 3				
Tutorial Role	Total Possible	Mean	SD	Mean	SD	*p*	*df*	*t*
AVID Tutor	3.000	1.849	0.494	2.619	0.312	0.000*	20	7.240
Student Presenter	3.000	1.714	0.420	2.405	0.399	0.000*	20	5.401
Group Member	3.000	1.706	0.311	2.191	0.435	0.001*	20	3.962
Combined Overall Score	3.000	**1.757**	0.311	**2.405**	0.331	0.000*	20	6.613

Note: *Significant at *p*<0.05

The results present in Tables 27 and 28 further support an assertion that overall growth from observation one to three was significant. First, in both cases there was an increase in total mean score (28.191 to 38.476) and in the individual indicator mean scores (1.757 to 2.405). Statistical significance of these gains is also supported by the *t* values resulting from the data. The greater the magnitude of *t*, the greater the evidence *against* the null hypothesis that there is no significant difference. The closer *t* is to 0, the more likely there isn't a significant difference (Runkel, 2016). In both tables, the *t* scores range from 3.962 to 7.240 with overall *t* scores of 6.567 and 6.613 respectively. Since these figures are relatively far from zero, the data can serve as one indicator that this change was significant. The *p* values are also indicators that the shift in observation scores were significant at *p*<0.05. All fall within an acceptable range in terms of a 95% confidence interval.

AVID Tutorial Knowledge Pre- and Post-tests. As part of the blended-learning AVID Tutor training course, participants were assessed on AVID Tutor Knowledge and AVID Tutorial Scenarios in a pre- and post-test format. The AVID Tutor Knowledge test

179

contained content regarding general AVID knowledge as well as general AVID Tutorial

knowledge. The AVID Tutorial Scenarios test contained a series of hypothetical AVID

Tutoring scenarios and asked tutors to select the most appropriate tutors response to the

scenario. The results from each pre- and post-test are described below. The validation of

the knowledge instruments was discussed in Chapter Three.

AVID Tutor Knowledge Pre- and Post-test Results. The Tutor Knowledge Pre- and

Post-test contained 17 items on AVID Tutorial Knowledge. The results from the pre- and

post-tests of participants can be viewed in the following tables.

Table 29. *RQ2: Overall Raw Scores for AVID Tutor Knowledge Pre- and Post-tests*
N=21

Tutor	Pre Raw Score Out of 17	Post Raw Score Out of 17	Diff.
Trisha	13	13	--
Jesse	14	14	--
Sue	10	10	--
Linda	10	17	+7
Kathy	9	16	+7
Valerie	9	15	+6
Blanca	6	12	+6
Tanner	9	15	+6
Karen*	8	13	+5
Carlo	6	10	+4
Brittani	10	14	+4
Taylor	13	16	+3
Ellen	14	16	+2
Milos*	12	14	+2
Ryan*	13	15	+2
Dan	11	13	+2
Ronnie*	10	12	+2
Krista	15	16	+1
Albert	13	12	-1
Angela	10	8	-2
Nicole*	15	11	-4

Note: Tutors who were not previous AVID students are marked with an asterisk (*).

According to the data displayed in Table 29, in most cases there were gains in the raw scores of AVID Tutors, the most significant gain being +7 by AVID Tutors Linda and Denise. In some cases there was no gain, or a lower score on the post-test, such as in the cases of AVID Tutors Trisha, Omar, Nicole, Angela, Sue, and Albert. In most of these cases, the tutors had already performed well on the pre-test, therefore somewhat limiting their ability to gain points on the post-test.

Table 30. *RQ2: Mean Scores by Category for AVID Tutor Knowledge Pre- and Post-tests*

N= 21	**Pre**		**Post**				
Category	Mean	SD	Mean	SD	*p*	*df*	*t*
Tutor Knowledge	**10.952**	2.674	**13.429**	2.378	0.001*	20	3.729

*Note: *Significant at *p*<0.05

To further analyze the AVID Tutor Knowledge Pre- and Post-test data, a paired samples *t* test was also administered using the raw scores from the participating AVID Tutors. The test resulted in a *t* score of 3.729 and a *p* score of 0.001, which indicates that the change in mean scores were significant well beyond the 95% confidence interval.

AVID Tutorial Scenarios Pre- and Post-test Results. The AVID Tutorial Scenarios Pre- and Post-test contained a list of 10 scenarios AVID Tutors might encounter over the course of facilitating AVID Tutorials. For each scenario, participants were asked to select the "best" response out of the three multiple choice items presented. The results from the AVID Tutorial Scenarios Pre- and Post-test can be seen in the following tables.

Table 31. *RQ2: Overall Raw Scores for AVID Tutorial Scenario Pre- and Post-tests*

Tutor	Pre Raw Score Out of 10	Post Raw Score Out of 10	Diff.
Trisha	7	7	--
Krista	7	7	--
Valerie	7	7	--
Ryan*	10	10	--
Milos*	6	9	+3
Dan	6	9	+3
Ronnie*	3	6	+3
Nicole*	8	10	+2
Kathy	6	8	+2
Albert	7	9	+2
Ellen	7	8	+1
Linda	7	8	+1
Carlo	6	7	+1
Karen*	7	8	+1
Jesse	7	8	+1
Sue	6	7	+1
Taylor	7	8	+1
Tanner	6	7	+1
Brittani	8	7	-1
Blanca	8	7	-1
Angela	9	7	-2

Note: Tutors who were not previous AVID students are marked with an asterisk (*).

According to the raw scores in Table 31, for most tutors there was a modest gain in performance. Due to the fact that many of the tutors did so well during the pre-test, there was little room for growth and some tutor scores remained constant or slightly dipped. To further analyze the Tutorial Scenario Pre- and Post-test data, a paired samples *t* test was again administered with the raw scores to see if there was any statistically significant change in the scores overall.

Table 32. *RQ2: Mean Total Scores for AVID Tutorial Scenario Pre- and Post-tests*

N= 21	Pre		Post				
Category	Mean	SD	Mean	SD	p	df	t
Tutorial Scenarios	**6.905**	1.375	**7.810**	1.078	0.006*	20	3.099

Note: *Significant at *p* <0.05

As the results in Table 32 suggest, the gains made still appear to be significant, although not at the same level as the AVID Tutorial Knowledge tests. In the case of the AVID Tutorial Scenario tests, a *t* of 3.099 resulted with a *p* of 0.006. This *p* level still falls within the 95% confidence interval.

Observed Trends Across Data Collection Tools for RQ #2. Overall, both qualitative and quantitative measures indicated that there was an initial boost in fidelity to the AVID Tutorial expectations from the pre-intervention observations to the mid-intervention observations. But, many of the data indicate a regression by the third observation among tutors new to AVID. For tutors who had previous AVID experience as AVID students, this regressive effect didn't have as strong a magnitude. The boost in indicators of fidelity came at a time when the first face-to-face training had recently concluded and all tutors had also completed the first two online modules. For example, after the first face-to-face training, the frequency of acceptable tutorial board configurations went from 16 to 24, an eight point gain (Table 23). The frequency of acceptable Tutorial Request Form assessments went from 31 to 42, an eleven point gain (Table 24). Mean total tutor observation scores rose from 28.19 to 36.05, about an eight point gain (Table 27). Also, tutors and teachers mentioned in interviews that after the first

face-to-face training there was a palpable boost in tutor practice as one teacher, Ms. Autumn, said, "They're more effective now, and stronger…" in relation to tutors at that point in time.

Interestingly, by the third set of observations, tutors new to AVID regressed in the same measures of fidelity, while former AVID students maintained a steady growth. For example, when looking at the mean total scores from observations, tutors new to AVID dipped from a score of 36.60 to 34.40 (Table 27), which isn't a drastic dip, but still noticeable. At the same time, tutors who were formerly AVID students went from a mean total score of 35.88 to 39.75, netting nearly four points of growth. From observation two to observation three, scores in the fidelity of tutorial board configurations fell from 24 to 22 as well as overall scores in the fidelity of Tutorial Request Form assessment (42 to 33) (Tables 23 & 24).

One possible explanation for the dip in scores among tutors new to AVID could be *fatigue*. By the time the third observations took place, all AVID Tutors had completed AVID Tutor training, but tutorial sessions were also taking place near the end of the semester when most college students were also concerned with final exams and other priorities. Anyone who has ever worked in a public school setting can also relate to the general exhaustion typical at the end of a semester. Another possible explanation exists in the overall effect that AVID has on the persistence of its graduates vs. their non-AVID peers. Research has indicated that former AVID students persist through the difficulties of college at higher rates than their peers (National Clearinghouse, 2010). Many attribute this persistence to the *individual determination* that students develop by being participants in the AVID Elective. It wouldn't be surprising to many familiar with AVID

184

if former AVID students were generally more persistent than their peers when faced with other obstacles.

Although there was a difference in observed tutor performance between former AVID students and their peers, overall, the vast majority of tutors demonstrated an overall net gain in scores related to fidelity, despite the slight dip from observation two to three. When looking at the raw observation scores of individual tutors, some tutors grew as much as 26 points from observation one to observation three and all but five demonstrated growth in their observation scores. It should be noted that the five tutors that didn't demonstrate growth achieved very high initial observation scores, so they didn't have much room to grow. Overall, there was a mean total growth of all AVID Tutors from 28.191 points to 38.476 points (Table 27) from observation one to observation three. That is more than a ten point gain in observed fidelity to the AVID Tutorial system. In terms of growth on each individual indicator from the observations, there was an overall mean growth from 1.757 per indicator to 2.405 per indicator (Table 28), also a significant jump.

Further, the pre- and post-tests also contributed to the story of AVID Tutor growth. Most AVID tutors experienced growth in the demonstration of their knowledge about AVID and the AVID Tutorial process. Overall, the mean scores from pre- to post-test in this category went up from 10.952 to 13.429, about a two-and-a-half-point overall gain. This is modest gain, but still an overall improvement. With the tutorial scenario pre- and post-test, there was a gain from pre-test mean of 6.9 to 7.8 out of ten points. Again, a modest gain.

185

In summary, the observations and the analysis of tutorial artifacts appeared to be stronger indicators of fidelity over the pre- and post-tests, which only revealed part of the story of tutor growth. The overall analysis of the data for RQ #2 indicates that there was generally growth among all AVID Tutors as they participated in the training. Based on responses from semi-structured interviews, it can be asserted that the training model itself have an impact on this growth. This was indicated in the comments from participants directly, as one tutor, Brittani, said, "The training definitely contributed to my growth as a tutor." Or, as an AVID Teachers, Ms. Winters, stated, "The tutors that are coming to us now (after training), they're knowing more about the actual process."

Research Question #3: What common barriers emerge from AVID Tutors throughout the AVID Tutor training process?

This third and final research question was designed to capture perceived tutorial barriers as they emerged through the AVID Tutor training process. Tutorial barriers are of interest to the researcher because tutor-identified barriers can inform the needs for future revisions to the current AVID Tutor training content. During the original selection of the content for the training, previous tutor barriers were integral in planning the content that went into each module. Continuing to collect data on tutor barriers will serve each new generation of tutor training offered.

Qualitative Results. For this research question, qualitative data were collected. Throughout the study, AVID Tutors were asked on several occasions to identify perceived barriers to AVID Tutoring. Over the course of the online portion of the training, tutors were encouraged to ask questions for clarification. These questions,

186

prompted throughout several assignments, also informed the perceived barriers from the online components. The assumption was made was that if a tutor had a question about something tutor related, that this was a possible barrier they were facing. During the face-to-face courses, AVID Tutors were asked to identify specific tutorial barriers through two facilitated activities, the "Name Tent" and "The Backpack for Success" activities. The conclusions made from the tutor-perceived barriers are described next.

Barriers Identified in Online Learning. First, all written assignments that included AVID Tutor questions were downloaded from Canvas and then uploaded into HyperRESEARCH (HyperResearch 3.5.2, 2014) to arrive at *themes* and *assertions* through a constant comparative method (Strauss & Corbin, 1998). During the first cycle of coding, initial codes were created through *descriptive coding* (Saldana, 2016). A second cycle *pattern coding* (Saldana, 2016) organized the initial codes into broader categories to gain a more precise inferences about the barriers that were identified by AVID Tutors during their training. Eventually, assertions were made based on the data, which can be viewed in Table 34.

Table 33. *RQ3: Categories, Supporting Data, Assertions from Online Learning Tutorial Barriers*

Categories	Supporting Data	Assertions
Encouraging student participation in the tutorial process	"…control the side conversations and to know when to punish." -*Milos, AVID Tutor* "Often times it was difficult to have any students who wanted to go up so we only went through a couple of students." -*Jesse, AVID Tutor*	- Tutors need targeted support in encouraging tutorial participation from Group Members and Student Presenters - AVID Tutors struggle with asserting authority to hold students accountable.
Holding students accountable for the Tutorial Request Form (TRF)	"What should be done regarding presenters that have questions that do not require much thinking and processing?" -*Tanner, AVID Tutor* "Are we (tutors) allowed to have our own way of grading or does everyone have to grade the same way?"-*Taylor, AVID Tutor*	Tutors need training on the Grading of AVID Tutorial Request Forms (TRFs) which is linked to holding students accountable for the high expectations of the tutorial process.
Encouraging higher order thinking and questioning	"…to get more students to ask higher ended questions." -*Trisha, AVID Tutor* "…I would suggest for the tutor is to ask her higher level questions." -*Carlo, AVID Tutor*	Tutors need support in asking Socratic questions and *how* to support students to ask Socratic questions, so that students are engaged in higher order thinking.
Figuring out the job.	"How can you facilitate a class that is short on tutors?" -*Ellen, AVID Tutor* "Should I roam the room or stay with one single tutorial group?" -*Kathy, AVID Tutor* "Are tutors allowed miss work over college work?" -*Sue, AVID Tutor*	Beyond understand *how* to do the job of an AVID Tutor, tutors need support in a variety of logistical barriers characterized by each local work site.
Supporting student skill development	"What methods are the most effective for developing personal strength of AVID students? -*Jesse, AVID Tutor* "…vocabulary should be underlined and all the key points need to be studied the next time before coming to class." -*Kathy, AVID Tutor*	Tutors need support in how to help the "whole student" develop life-long academic skills (beyond AVID Tutoring).

Analysis of perceived tutorial barriers resulted in five major categories as displayed in Table 33. These barriers will be discussed later in combination with the barriers identified during the face-to-face training sessions.

Barriers Identified During Face-to-Face Training. In addition to the online

sources for tutor-identified barriers, barriers were also gathered at the first face-to-face

AVID Tutor training. This occurred over the course of two facilitated activities. First,

AVID Tutors were asked to create name tents, identifying their greatest struggles as an

AVID Tutor as one of the components of the name tent. The theme of the first face-to-

face training was "Superheroes," so AVID Tutors were asked to identify their "super

power" (their college major) on the front of the name tent. On the back, AVID Tutors

were asked to identify a "kryptonite," or an area of struggle with AVID Tutoring (a

perceived barrier). An example of a name tent can be seen in Figure 19. The name of the

tutor and the name of the school have been removed.
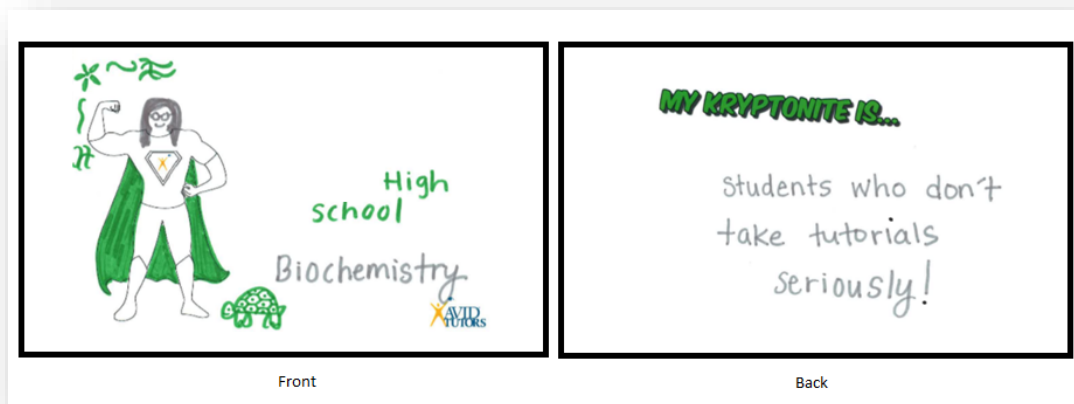
Figure 19. A Sample AVID Tutor Name Tent from the First Face-to-Face Training (Kathy from Skyview High).

As can be seen in Figure 19, the tutor has identified a barrier of "students who don't take

tutorials seriously!" in this case.

A second activity, "The Backpack for Success" allowed for another source of data collection regarding AVID Tutorial Barriers. Over the course of this activity AVID Tutors were asked to identify barriers to AVID Tutoring and categorize them based on their locus of control. The barriers that AVID Tutors could "influence" or "control" were placed inside of the backpack. The barriers that AVID Tutors had "no control" over were placed outside of the backpack. Tutors were then asked to complete a "Gallery Walk" of the various backpack posters and collaborate to brainstorm solutions to the barriers placed inside the backpack. A sample of one backpack poster can be seen in Figure 20.

Figure 20. A Sample Backpack from "The Backpack for Success" Activity.

Then, during the second face-to-face training, tutors were asked to work in "Helping Trios," to pose barriers they were still facing near the end of their first semester tutoring. During "Helping Trios" the AVID Tutors took turns presenting their barriers to their peers while the peers asked questions to help the presenting AVID Tutor arrive at solutions to the identified barrier. This mimicked the Socratic style of AVID Tutorials and put the onus of solving the problem on the presenter.

At the conclusion of the first and second face-to-face training, the name tents, backpack posters, and "Helping Trio" barriers were collected and all of the barriers were recorded verbatim. The barriers were then condensed into one document and coded using *descriptive coding* (Saldana, 2016). After the first-cycle of descriptive coding, the initial codes were then collapsed into categories and the same data was recoded using these new categories. The resulting assertions can be made based on the second-cycle coding of the tutorial barrier data (Table 34).

Similar to the barriers identified in the online training, motivating students to participate, holding them to high expectations, and development of student skills also emerged in the face-to-face sessions. However, a new category relating to the supporting the personal struggles of students came from some of the activities in the face-to-face training sessions. This indicates that tutors are also citing struggles outside of their locus of control as contributing barriers to their work. Tutors describe such barriers as "family issues" or students coming to class "hangry" (informal register for hunger-induced temper).

Table 34

RQ3: Categories, Supporting Data, Assertions from Face-to-Face Training Activities Tutorial Barriers

Categories	Supporting Data	Assertions
Motivating students	• "Getting them to participate." • "Getting students to stay on task." • "Keeping conversations on track." • "Too much talking and getting off topic." • "Low attention span."	• Tutors need specific support around motivating students to stay on task.
Students not prepared	• "Incomplete TRFs." • "Doesn't have any resources." • "Not fully prepared before coming to class." • "Not taking effective Cornell notes in class." • "Fake TRFs" or "Fake POC."	• AVID Elective teachers need to revisit tutorial expectations with students and Tutors need to address student preparedness more in the Tutorial debrief.
Students asking Socratic questions	• "No questions." • "No one knows how to say it in a question." • "Not knowing how to ask critical questions." • "Students who don't ask questions."	• Tutors need more support in helping students ask Socratic questions during tutorials.
Holding high expectations of students	• "Being a harsh grader." • "Being assertive." • "I become overly involved when student participation is slow." • "Grade accordingly."	• Tutor training should include building self-efficacy as an authority figure in AVID Tutorials so that tutors are more confident to assert high expectations of students.
Students' lack of academic and non-cognitive skills	• "Afraid of speaking" or "Being shy." • "Criticizing each other instead of helping." • "Not knowing how to exactly use resources." • "Frustration about challenging problems." • "Can't identify Point of Confusion." • "Not knowing how to do tutorials." • "Hopeless student in certain subjects."	• AVID Elective Teachers need to monitor both academic and non-cognitive skills of (especially *grit and relational capacity*) during tutorials. Tutors need to express these concerns to Elective Teachers during the Tutorial debrief.
Personal/ Home issues of students	• "Family issues" • "No support from family." • "No family." • "Sleepy" • "Hangry" (informal register for hunger-induced temper) • "Values."	• As in other classroom situations, factors outside of school influence student participation. Tutors need support in how to help students cope with these social-emotional obstacles.

Combined Results for Tutorial Barriers. To further analyze AVID Tutorial

barriers as perceived by AVID Tutors, the codes from both the online written assignments

and the face-to-face activities were consolidated to identify overall themes. As part of the final face-to-face training, these barriers were confirmed with the study's participants by asking them if the interpretation of their perceived barriers was accurate. This form of *member checking* contributes to great trustworthiness in reported qualitative data (Mertler, 2014). The results from the combined tutorial barrier collection methods can be seen in Table 35.

Table 35. *RQ3: Themes, Previous Categories, Assertions from Online and Face-to-Face Training Tutorial Barriers*

Themes	Previous Categories from Online and Face-to-Face (F2F) Identified Barriers	Assertions
Student Motivation	• Encouraging student participation in the Tutorial process (online) • Motivating students (F2F) • Personal/Home issues of students (F2F)	Like teachers, Tutors need a variety of strategies to motivate students during the tutorial process. This includes positive reinforcement, correcting inappropriate behavior, and understanding how outside factors affect student motivation.
Student Preparation	• Students not prepared (F2F)	Tutors need strategies and systems, put in place by AVID Elective teachers, for coping with students who do not come prepared (checking TRFs at the door, consistency in grading practices, the tutorial debrief, etc.)
Higher Order Thinking through Socratic Questioning	• Encouraging higher order thinking and questioning (online) • Students asking Socratic questions (F2F)	Tutors need more support in strategies for modeling and supporting students as they ask Socratic questions to support higher order thinking.
Student Academic and Non-cognitive Skills	• Supporting student skill development (online) • Students' lack of academic and non-cognitive skills (F2F)	Tutors need to develop strategies for how to support students who lack pre-requisite skills, both academic and non-cognitive, and need to communicate these obstacles to the AVID Elective teachers so that AVID Elective teachers can build in more support in the AVID Elective.
Efficacy of Tutors	• Holding students accountable for the TRF (online) • Figuring out the job (online) • Holding high expectations of students (F2F)	Tutors need to be viewed as learners who are still figuring out how to be a professional and an authority figure (not a peer) in the classroom, *so that* they can be supported in developing efficacy in their role.

Overall, the perceived AVID Tutor barriers from the face-to face training sessions fit into five major categories: student motivation, student preparation, higher order thinking through Socratic questioning, student academic and non-cognitive skills, and efficacy of tutors.

Trends Across Data Sources for RQ #3. Overall, the barriers that emerged over the course of the tutor training intervention proved to be very informative to those seeking to best meet the diverse training needs of new AVID Tutors. To maximize the support that AVID Tutors receive, thus maximizing their potential for success, these commonly perceived barriers should be highly considered as mandatory components of AVID Tutor training. The further collection of AVID Tutor barriers would also be valuable in continuing to understand what inhibits tutor success.

The most pressing barrier for tutors was encouraging student participation (motivation) in the AVID Tutorial process. Several AVID Tutors noted that one of their greatest struggles was motivating students to be active participants in the tutorial process. When working with tutors, it can't be expected of them to already possess the skills necessary to motivate students. Like teachers, tutors also need training in a variety of strategies such as positive reinforcement, correcting inappropriate behavior, and understanding how outside factors, such as issues at home, can affect student motivation.

Also, in terms of motivation, it became clear that like teachers, tutors also need a toolbox of strategies for motivating students, especially in the area of correcting inappropriate student behavior in an effective way. By the time the second face-to-face training came around, students were taught basic behavior modification strategies:

1. Restate the appropriate expected behavior to the student
2. Explain how the student is not currently meeting that behavior
3. Clarify the consequence should the inappropriate behavior continue

After the second face-to-face training, many tutors expressed that the strategies were very useful in helping them deal with student behavior during tutorials. This indicates the possible need for more discipline-related topics in future iterations of the training model.

The second most common barrier identified by tutors related to holding students accountable for the Tutorial Request Forms (TRFs), which most related to questions around the grading of TRFs. This is a barrier that might also affect training for AVID Teachers. It became apparent that the success of tutors in this area was highly dependent upon the systems put in place by the classroom teachers at each school. In essence, if teachers didn't have solid procedures and guidelines in place or student accountability, it was difficult for the tutor to also hold students accountable. Ultimately, it is the responsibility of AVID Teachers to train students in the procedures for coming prepared to tutorial. Tutors play a supportive role in this area, but have little control as to what happens in the AVID Elective class on non-tutorial days. What tutors do possibly need, however, is a set of coping strategies to deal with students who do not come prepared. In partnership with AVID Elective teaches, tutors need to implement strategies that make student preparation more likely, such as collecting Tutorial Request Forms at the door, developing consistent grading practices, and regularly debriefing the tutorial. As the AVID Tutor training model is revised, the responses from tutors indicates that this may be an area that needs to be further addressed.

Following, encouraging higher order thinking and questioning was identified as a barrier by AVID Tutors. Several tutors indicated that one of the most difficult aspects of

tutoring was, "to get more students to ask higher ended questions," as Trisha put it.

Although the AVID Tutor training system contained lessons on higher order questioning

and resources how to utilize them in tutorials, AVID Tutor responses indicate that

perhaps more emphasis on questioning techniques is necessary. As a trainer, these needs

became apparent and adjustments were made to the second face-to-face training session

to include more concrete strategies for encouraging the use of Socratic questioning,

including methods on how to scaffold students of a "ladder of inquiry," from Costa's

(2001) lower-level questions (Costa's Level One) to higher level questions (Costa's

Level Three). To simplify the process for tutors, tutors were taught three basic questions

that they could go to in a pinch:

1. What do you notice? (Costa's Level One)
2. Why do you think that ____? (Costa's Level Two)
3. If ____, then ____? (Costa's Level Three)

Once tutors learned these questions and their universal application to the tutorial process,

they were able to put them to practice during mock tutorials in the second face-to-face

training. In the area of Socratic questioning, tutor observations scores did go up from

1.545 to 2.429 in the indicator, "Tutor uses Socratic method to push thinking of students

to a higher level through the inquiry method." This is one indicator that the adjustment

made for the second face-to-face training had a positive effect on overall questioning

practices. Nonetheless, it appears that much more attention should be paid to Socratic

questioning as part of the tutorial process since it is such a critical aspect of the

collaborative inquiry process. During final reflections, many tutors also indicated that this

area was a goal for improvement, as one tutor, Jesse, stated his goal as "Assisting

students in creating higher level questions by using the scaffolding method." Another

tutor, Nicole, set a growth goal as, "Asking more progressive questions that transition into higher level questions." These comments further affirm that the adjustment made in the second face-to-face training to include more deliberate practice with this skill was seen as useful for AVID Tutors, further indicating the importance of its expansion in future training models.

Next, AVID Tutors identified barriers in figuring out the job itself. This category included barriers related to the tutorial process itself and in many cases figuring out simple on the job logistics, such as the attendance policy. Additionally, this barrier was also related to tutor self-efficacy. Many tutors expressed concerns in this area, particularly in the struggle of negotiating the difference between being a peer to AVID students versus being an authority figure. This is a struggle also common in novice teachers (Linsin, 2011). For those who are designing training for AVID Tutors, tutors must be viewed as learners who are still figuring out how to conduct themselves in a professional environment and assert themselves as an authority figure (not a peer). Tutors also should be nurtured as they develop self-efficacy in their role as an AVID Tutor. For most AVID Tutors, not only is AVID Tutoring their first job in a professional environment, but it is also difficult for tutors to separate themselves from students in their new role as AVID Tutor—partly due to proximity in age, but also due to lack of practical experience. Based on the discoveries made while investigating this research question, it is apparent that this topic *should* be addressed in AVID Tutor training and would also be a beneficial topic in the training of AVID Teachers who are the day-to-day support for AVID Tutors. It is also important that AVID professionals take into account these personal needs of AVID Tutors and understand that they should also be viewed as

learners who are figuring out both AVID Tutoring and how to work within a professional educational organization.

Finally, tutors identified a struggle they had in reaching students from a more general perspective—to help them develop college readiness behaviors and attitudes. The student abilities and attitudes expressed by tutors related both to student academic and non-cognitive skills. The academic behaviors tutors struggled to support ranged from very specific skills such as identifying key vocabulary to more holistic skills such as "developing personal strengths," as one tutor, Jesse, stated. Many tutors expressed a yearning for strategies to help students develop stronger study habits or abilities related to particular content areas such as mathematics. Tutors felt that more support in this area was necessary to their success as AVID Tutors.

Further, tutors expressed that lacking strategies to cope with students' lack of skills inhibited the success of AVID Tutorials. Tutors characterized some of the student lack of content area skills with phrases like, "Hopeless student in certain subjects," (Blanca) or "Not knowing how to exactly use resources" (Milos). Tutors also characterized some of the non-cognitive skills deficits in students as, "Afraid of speaking," (Kathy) or "Criticizing each other instead of helping" (Sue). What first became clear when analyzing this tutor perceived barrier was that tutors had little control over these factors, which was a source of frustration for them. In the online and face-to-face forums, tutors often asked for more support when they face situations where students just don't "get it." The basic strategy of teaching tutors to debrief these concerns with the AVID Elective teacher is a logical starting point. However, further coping strategies for this barrier should be considered in the next iteration of the tutor training intervention.

198

Additionally, other non-cognitive related barriers emerged as AVID Tutors expressed concern over how to deal with students who bring personal and home related issues into the AVID Tutorial process. Tutors reported barriers to success as students who struggled to be effective due to "family issues," being "sleepy," or being "hangry" (informal register for hunger-induced temper). Expressed barriers such as these indicate that tutors might need further support in understanding how to understand and support students at a social-emotional level. After all, students are "whole-people," who bring with them identities and related issues other than those related to being an AVID tutorial participant. Perhaps some additional resources for tutors to understand the common social-emotional needs of students and how to work with students at the social-emotional level would be beneficial.

Conclusion

This concludes the reporting of the results from each data collection instrument for all qualitative and quantitative measures. In the next chapter, further elaboration on the results and overall conclusions and implications will be discussed.

CHAPTER 5

DISCUSSION

The purpose of the Advancing AVID Tutor Training project was to examine how a blended-learning model, coupled with practice-based professional learning, affected AVID Tutor performance within a large suburban school district. This model served as an augmentation to the traditional tutor training model used by AVID. While keeping the intention of AVID's Tutor current training model in place, four theoretical frameworks served as guidance in developing further innovations to the training model: Sociocultural Theory (Vygotsky, 1972), Social Learning Theory (Bandura, 1971), Universal Design for Learning (Rose, 2001), and the Reflective Practitioner (Schön, 1983). Each of these frameworks led to strategically created components of the new model. In the previous chapters, the context, theoretical frameworks, method, and results of this study were discussed in great detail. In this chapter, overarching themes across qualitative and quantitative data sources are discussed. Following, implications for practice, limitations, additional lessons learned, and final conclusions are presented.

Integrations of Quantitative and Qualitative Data

This study employed mixed methods to allow for examination of the complementarity of both quantitative and qualitative data as they related to each research question. According to Greene (2007), complementarity can be described as the extent to which quantitative and qualitative results lead to the same conclusions. In this section, I will describe how the descriptive data collected from the qualitative tools (assignments and reflections, semi-structured interviews, observations, and perceived barriers),

complemented the quantitative measures (pre- and post-tests and observation ratings) to tell an overall story of the innovation. Taken together, this process should provide a broad *interpretive* discussion about the data (Greene, 2007).

Benefits of Blended-Learning. After reviewing the results in this study, a dominant theme that carried across multiple data points and sources was the benefit of using a blended-learning model to deliver AVID Tutor training. Traditionally, AVID Tutor training occurs in a face-to-face format *before* AVID Tutors work in AVID classrooms. Typically, the initial tutor training is designed to be a full day (eight hours) of training and then tutors are considered minimally ready to work in the AVID Elective as an AVID Tutor. The challenges of this model were discussed earlier in Chapter One—the main limitation being tutor availability in large districts due to the many competing schedules of AVID Tutors across campuses. The variability of the hiring cycle of tutors is also a contributing challenge for larger districts. In addition, the eight-hour initial training model front-loads a large portion of the AVID Tutorial knowledge *before* AVID Tutors have experienced AVID Tutoring. Therefore, much of the theory and practice is addressed before tutors have any practical experience in the classroom.

Much like a mixed-methods research study maximizes the strengths of both qualitative and quantitative data, a blended-learning course maximizes the strengths of online and face-to-face learning. Delivering AVID Tutor training through a blended-learning sequence turned out to be an important addition to AVID's current model for this reason. On numerous occasions, both participating tutors and teachers espoused the benefits of both online and face-to-face training components. The self-paced nature of

online learning allowed for tutors to begin training *when* they were ready rather than waiting until *all* tutors in the district had been hired. Further, the online modules provided an "anchor," or a point of reference, for the course. Because the online components were always present, tutors and teachers had a "home" they could revisit as they needed refreshers on particular strategies. In many cases AVID teachers even took it upon themselves to review the modules and extend the learning into the classroom with additional materials. There were clearly benefits to having a portion of the training available online—most importantly it's relative permanence. In a face-to-face only experience, tutor engagement lasts only as long as the training session itself. When online components are utilized, tutor engagement can extend throughout a tutor's first semester on the job and act more as a virtual guide along the way.

Of course, there were certain aspects of training AVID Tutors that were difficult to replicate in online spaces—particularly the collaborative activities such as mock tutorials or collaborative problem solving. This is why the face-to-face components of the blended-learning experience were also valuable for participants. One of the most beneficial consequences of the face-to-face training sessions was that tutors got to work with their peers who were experiencing many of the same obstacles. This led to new AVID Tutors feeling affirmed in their struggles. It was comforting for many that they weren't alone in their struggles. The face-to-face sessions also provided tutors with a safe and supportive environment to negotiate solutions, in a collaborative setting, for their tutoring-related concerns. As a result, teachers and tutors reported feeling more confident in their abilities to address their concerns once returning to their respective campuses.

Further, timing was an important aspect of the blended model. Both online and face-to-face training would not have been as enriching if they had occurred *before* tutors started their work as AVID Tutors. Because the training sequence occurred *while* tutors were on the job, they were able to make much more meaningful connections to the content because they were deeply embedded in the context of AVID Elective classrooms. For example, many of the obstacles tutors were able to work through during the face-to-face training, wouldn't have even come to light if the training session happened before tutors had experience tutoring. Also, the new AVID Tutorial knowledge likely had a deeper meaning to tutors because they could reconcile the theory better with their reality. Scaffolding the learning throughout a tutor's first semester, was critical to allow the time and space for these experiences to occur.

Finally, blended-learning provided benefits from an administrative perspective. Because tutors were individually engaged in the online modules, there was tangible evidence of their progression through the training. Each assignment submitted by tutors provided insights as of their understanding of the content. The online components also allowed for feedback when necessary and often functioned as a dialogue between the trainer and trainee. For example, many assignments asked tutors to pose questions about their learning. These were valuable instances where the trainer could provide very specific coaching advice to individual tutor concerns (a feature not possible in the traditional training format). This live feedback made it possible for tutor concerns to be addressed in a systematic and timely manner.

Overall, it can be asserted that moving the AVID Tutor Training model over to a blended-learning format, added much value to the overall experience of AVID Tutors, if not increased understanding and fidelity as well.

Social Modeling Paired with Reflection on Practice. Another standout concept from the results of this study relates to the "Practices of the Week" embedded into the training sequence. For each "Practice of the Week," tutors had to learn about a new concept, such as asking Socratic questions during tutorials, then observe a more experienced tutor and critique their utilization of the highlighted skill. Following, the AVID Tutors were then asked to "try" the new skill out in the context of tutoring and reflect on the experience.

The choice to add this component to AVID's already existing training sequence turned out to be another critically important choice. According to participating AVID Tutors, the social modeling aspect was one of the most valuable aspects of the training. This is not to say that AVID's traditional training sequence does not involve social modeling and reflection, but the way it is presented to tutors was different over the course of this intervention. In the traditional model, there exist some activities that require students to observe AVID Tutorials and reflect on how each group member fulfilled their role in the tutorial process. However, these observations often occur via videos of tutorials outside of the tutor's own, real, context. Also, these activities tend to focus more on the general aspects of tutorials, rather than on specific skills.

In the augmented model, tutors engaged in the observing of a real peer within their own tutoring setting. According to tutors, this was valuable because they could first

critique a peer, without the threat of being in the spotlight themselves. In turn, this gave tutors deeper insights into the variety of ways others utilized certain tutoring skills, resulting in the learning of additional skills and techniques. Many tutors also expressed feeling less threatened by implementing the new skill after seeing someone else implement it.

Further, the reflection "on action" that occurred after observing peers and putting the newly learned practice into action, led to many more valuable insights by tutors. Many of these insights related to goals that tutors set for their own performance. Notably, this was also the point in time when a significant jump in tutor performance occurred in the tutor observations. After tutors had completed the first face-to-face training and were working on the "Practice of the Week" activities, tutor observation scores improved.

Regular Reflection. Building on the previous observation, it also became apparent that the act of reflection was itself a critical component of the training model. Through regular (weekly) reflection while on-the-job, tutors were able to process their experiences in meaningful ways. For example, one positive result of the regular reflective practices was that tutors began to self-identify goals for their own improvement. Sometimes this was prompted by the reflection questions and at other times goal setting was spontaneous. However, what became another clear benefit of the on-going nature of the blended-learning model was that this regular reflection encouraged tutors to be more active *reflective practitioners* (Schön, 1983).

The reflections also provided the trainer insights into trends among AVID Tutors, therefore allowing for the adjustment of training topics in the second face-to-face

205

training. One example of such an adjustment came after many tutors expressed the need to improve student participation and motivation during AVID Tutorials. Because this was a common theme within the weekly reflections, the second face-to-face session could be modified to meet the specific expressed needs of AVID Tutors. Rather than assuming the areas of support tutors might need up-front, the blended-learning model allowed for a more customized, and therefore relevant, training experience.

Tutor Barriers. Another finding that might be of interest to those seeking to provide professional learning to AVID Tutors is the list of tutorial barriers expressed by AVID Tutors throughout the study. Most notable is that only two of the barriers (higher order thinking and student preparation) are addressed in the current AVID Tutor training model. The remaining barriers (student motivation, student academic and non-cognitive skills, and tutor efficacy) are not explicitly addressed in AVID's current model. Above all other obstacles, it became clear that AVID Tutors expressed a strong desire for student discipline and motivation skills. Since AVID Tutors are on the front line, working directly with AVID students, it is reasonable that they would need training in basic motivation and behavior management strategies, just like a new teacher would. Once tutors were taught basic discipline skills in the second face-to-face training, a palpable sigh of relief could be heard throughout the room. In reflections following this experience, some tutors even expressed how well tutorials were going, now that they had some skills for redirecting student behavior.

Further, providing tutors with the space to express and work through their barriers as part of the training sequence was a highly-valued experience by participants. In the

206

future design of AVID Tutor training, districts should consider structuring training in such ways that tutor barriers can first be diagnosed and then provide tutors with strategies for coping with the identified barriers.

Implications for Practice

An abundance of previous research on AVID (Guthrie & Guthrie, 2002; Hays, 2004; Huerta, Mendiola, & Alkan, 2008; Lipovski, 2004; Mendiola, Watt, & Huerta, 2010; Watt, Huerta, & Alkan, 2012; Watt, Johnston, Huerta & Watt, 2015) has focused on the experiences of AVID students and teachers while participating in the AVID Elective class.

The previously mentioned research provides a solid basis from independent and third-party evaluators on AVID's impact at the secondary level for AVID students. Guthrie and Guthrie (2002) found that AVID positively impacted students' class attendance, enrollment in advanced courses, and college matriculation—an excellent sign that AVID does what it proports to do on a behavioral level. This was in large part due to a finding from Watt, Huerta, and Alkan (2012) that AVID students attributed much of their success to the family environment AVID created for them. Similar studies (Mendiola, Watt, & Huerta, 2010; Watt, Johnston, Huerta & Watt, 2015) purported that "AVID as a family" related to the success of AVID students as they prepared for college. Hays (2004) built on Guthrie and Guthrie (2002) by examining the experiences of AVID graduates once they entered college. Hays (2004) found that AVID graduates attributed their high school AVID experiences as a major factor for college persistence. Lipovski (2004) furthered AVID research by examining the impact that AVID has had on

classroom teachers and found that AVID encouraged teachers to change the social systems in schools in an effort to increase student opportunities.

Although some of these studies mention the overall impact that AVID has on students and educators, very little research exists about the role that AVID tutors play in the success of AVID students. Even further, a search for studies related to the experience of tutors in AVID yields minimal results. It is the hope of the researcher that this study can serve to open the door to future inquiry and conversation about practical methods for improving the preparedness of AVID Tutors.

After all, AVID Tutors work directly with AVID students for 40% of the school week. That is certainly a significant amount of direct student contact and must also contribute to the overall experience of AVID students. AVID Tutors are also part of the "AVID Family" effect and deserve some attention in regards to the role they take on to support AVID students. Couple that with the fact that the AVID Tutor role is a highly transient job performed by pre-professional college student, making the need for efficient, quality training an essential for the efficacy of the AVID system at large. As a mature organization (38 years old), there is now space in the broader discourse to allow for more nuanced areas of interest, such as AVID Tutor preparation.

This research builds on the work done by previous studies by knocking on the door of another critical question that could and *should* be examined by AVID stakeholders, "How can improving the experience and preparation of AVID Tutors, further the positive impact that AVID has on its students?*"* The following sections suggest some areas that might benefit from further exploration on this issue.

Blended-Learning in Professional Development. First, the professional learning

model employed in this study might be of interest to those inquiring about blended-

learning as a method of professional development within large organizations. Although

the target group in this study was specifically AVID Tutors, other recent studies indicate

that the benefits of professional learning in an on-the-job, blended-learning format can

appeal to a broader audience. In one study investigating the value of a blended-learning

model for professionals within a large organization (Leake, 2014), blended-learning

participants also cited benefits to blended-learning over purely face-to-face. Participants

most often cited "convenience" and "flexibility" as reasons for their preference of

blended-learning over the traditional face-to-face format. Leake (2014) also cites that

many blended-learning participants even viewed the format as "more effective" and

"superior" (p. 76) and were equally or more satisfied with several aspects of the course as

compared to their face-to-face counterparts. Similarly, Rovai and Jordan (2004) reported

that professionals believed that the flexibility of blended environments led to their

successful completion of professional development that they could not have achieved in a

traditional face-to-face course.

Others might ask, "Why blended-learning over purely online?" On this topic,

Matzat (2013) explored whether or not blended-learning professional learning models

enhance professional development over purely virtual (online) formats. What Matzat

(2013) found was that *embeddedness* is critical to the satisfaction and success of

professional learning platforms. While purely online interactions provide the convenience

and flexibility expressed by Leake's (2014) participants, it is difficult to duplicate the

feeling of embeddedness provided by an in-person community, which is afforded when

meeting face-to-face. Matzat (2013) claims that the positive effects of face-to-face learning add value to the online components, and vice versa. Also notable in Matzat's work (2013) is the concept of scalability, which is more possible with a blended model than a purely face-to-face model for professional learning.

From a broader perspective, blended-learning is likely to continue to grow as a substantial component of the US education system, especially at the secondary level (Picciano, Seaman, Shea, & Swan, 2012; Shea & Bidjerano, 2010). As proliferation of 1:1 technology implementation grows in school districts, it stands to reason that methods for training professionals should in some way reflect how students are learning in the classroom. Such is the case with one school district where Garcia, Yslas, and Linoff (2017) utilized a blended-learning model to successfully deliver professional learning to over 3,700 educators over the course of one school year. Large scale professional learning experiences such as these are made possible by the flexibility that blended-learning models can potentially provide.

Social Emotional Tutor Support. One assumption made by the current AVID Tutor training model is that learning AVID knowledge and the AVID Tutorial process is enough to build a foundation of success for AVID Tutors. However, findings from this study indicate that AVID Tutors would benefit from additional support on a social-emotional level. The CASEL (Collaborative for Academic, Social, and Emotional Learning) organization defines social emotional learning as:

> The process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set

and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible choices" (2018).

Just as there are curriculum components for AVID students to assist them in developing on a social emotional level, AVID Tutors might benefit from support in this area as well. The self-identified tutorial barriers from this study indicate that tutors would particularly benefit from developing strengths in the following areas.

1. *Understanding and managing emotions.* In many cases, tutors expressed confusion or frustration over student behavior that they did not know how to deal with. Tutors also experience periods of high stress/frustration for family and school related reasons. Being able to first realize that they weren't alone in this struggle, and then learn about coping strategies, helped tutors feel better about performing their role as AVID Tutor.

2. *Feeling and showing empathy for others*. There were many cases where AVID Tutors felt empathy toward AVID students and their struggles at home. Tutors indicated that they wished they had some strategies for helping students deal with these issues.

3. *Establishing and maintaining positive relationships.* Many of the obstacles expressed by tutors might have been mitigated had they learned more skills to help them foster professional relationships with AVID students. Providing tutors with more *relational capacity* building strategies, such as teaching them how to employ conflict management, celebrations, and collaborative techniques, would also be beneficial.

In a more general sense, professionals who work with AVID Tutors must understand that for many tutors, this is their first experience working in a professional organization. For example, resumes indicate that 18 out of the 21 tutors in this study had previous work experience, but only two had worked in a professional setting prior to becoming an AVID Tutor. Part of supporting tutors on a social-emotional level is also supporting them in their transition into the professional setting where topics like dress code, professional communications, understanding payroll, and attendance policies are

important. These are a few examples of the many logistical matters that also need to be addressed in the fostering of AVID Tutors as professionals seek to support them in school environments.

Those who work with AVID Tutors must also consider the fact that they are college students first and foremost. With their situation, comes all the stressors and triggers provided by the college experience. Some tutors will get stressed and weary during final exam time. Some will feel overwhelmed at times and want to quit. Some will stay up too late the night before tutoring and come to work tired. Lest we remember the experiences of being an undergraduate—insert all of them into the realm of possibilities for AVID Tutors as well. Professionals training and working with tutors should be conscious of these factors and instead of passing judgement on tutors exhibiting these behaviors, seek ways to support them on a social emotional level by providing some leeway while still applying *warm demand* (Bondy et al., 2012; Irvine & Fraser, 1998; Ware, 2006). Ideally, tutors leaving the experience should come out of it with skills that will also help them in their future professional careers, making the overall experience mutually beneficial for the schools and tutors.

Reflection

I have been in the field of education for 15 years now, and in a position of change leadership for approximately five of those years. I have seen myself as an agent of change for many of those years, which was originally what attracted me to a doctoral program in *Leadership and Innovation.* However, as I now reflect back on my experiences prior to

212

this program, I am certain that I have gained a much better understanding of what it means to be a leader, an innovator, and a change agent.

Before I entered this program, I wasn't quite sure how much influence my work would actually have on my growth as a leader and a researcher. It turns out, after three years of engaging in action research and related literature studies, I have grown tremendously in both areas. As a leader, I have found that change is more likely and more effective when it is grounded in research and theory. There have been numerous occasions throughout these three years where I have taken a concept from the literature, tested it in my own setting, and have seen positive results. This encapsulates another important lesson I've learned, which is to turn to the literature to inform my work. Whenever a problem arises, I find myself scouring the literature, conducting mini-literature reviews to see what other researchers have to say about my area of concern. Often, I end up going down a deep "rabbit hole," but eventually ending up with helpful research-based ideas that I can then apply to my problem.

As a researcher, I have also grown. Although I will be the first to acknowledge I have much still to learn, I feel better prepared and more confident as a researcher than I did three years ago. I remember sitting in my first summer class reading dissertations like this one, thinking, "How am I ever going to do that?" I didn't even understand what half of the researchers were saying (especially in Chapter Four). Now, when I pick up a piece of scholarly research, I feel confident and literate in the language of scholarly writing.

Through the research process, I have learned that there is so much value to sustained inquiry and attention to a single problem. Studying problems within my own

workplace, in a systematic way, has provided me with methods to investigate future problems as well. Before this program, I relied heavily on my intuition and assumptions. I did little to investigate the problem and test solutions. For example, when I started this research project, I assumed that former AVID students would be *far more* equipped to tutor since they had spent multiple years in AVID as students. It turns out that they need training as much as tutors new to AVID. Without the research process, however, I would have continued operating under that assumption. Although that is one example, there were many more examples like this experience throughout this process. Nonetheless, I have not only learned the value, but the process of systematic inquiry and hope to continue to use this skill to explore other topics of interest.

Further, I now have the foundational skills to carry out future research. With an increased understanding of theory, methods, and data interpretation, the possibilities for future research seem endless, whether they are AVID-related or not. I hope to continue to build on these skills in my future endeavors and I am excited at the prospect of collaborating with others in the field as a colleague in further research.

Limitations

Since this study is a mixed methods action research study and therefore deeply embedded in a particular context, *generalization* of findings is generally not something to be expected. This would be an expectation in a more traditional study with a control group and a treatment group, which was not the design of this study. However, transferability of some aspects of this study might be possible in similar settings (Mertler, 2014). In terms of a mixed methods research study, transferability is in the hands of the

reader to determine which aspects of the results are sensible to apply to one's own context. Therefore, the reader should take from this study anything valuable that can be gleaned, with the caveat that it should be tested in its new context.

Further, there are certain technology limitations should others seek to implement a similar training model for AVID Tutors. The implementation of an intervention such as the one utilized in this study requires the right conditions in terms of access to online learning platforms. Canvas was the platform that housed the online components in this particular study. There are many similar online learning platforms out there, but it would be upon the reader to look into the viability of providing mass-scale online learning within one's own context. For large scale blended-learning, systems that provide access to online learning platforms are essential.

More so, as with any study, there are factors that likely influenced the results presented in this study which are not directly related to the intervention itself. This study was not conducted in a controlled environment, but instead in an actual work setting where many factors might have also had and influence on tutor performance, including how active the AVID Elective teachers were in providing additional support. As stated, in some cases AVID Elective teachers took it upon themselves to provide additional support (as is expected). Therefore all of the variability that comes with the setting of this study should be considered. As in most action research studies, the results help the researcher to understand the experience of participants at a deeper level, but do not necessarily imply that the intervention alone *caused* the results.

It would also be prudent for the instruments used to gather data both for the observations and pre- and post-test data should also undergo further review and revision if used in future studies. The data collection tools served as adequate means of data collection for this study, but should be adjusted based on the unique needs and purposes of others seeking to utilize them. Even over the course of the study, several ideas came to mind about how instrumentation could further be refined. Consider the current instruments as a starting point—an invitation for further piloting, critique, and refinement.

Finally, the length of the study itself was a limitation. As this study was part of doctoral dissertation, there were certain limitations on the length of the study due to the program of study. Further cycles of research within the action research process might produce varied results. It would be prudent to continue to follow the cycles of action research beyond this study to sharpen the tools and methods, then continue to study the results.

Conclusion

In the introduction of this paper, a resurgence of energy to better prepare students for college and career was discussed. The emergence of AVID is becoming a major part of that discussion on a national, and even international, scale. College graduation is becoming "a critical, if not the critical measure of both student and institutional success" (American Council on Education, 2010, p. 2). Across America's campuses, whether they are AVID or not, many seem to moving to more alignment AVID's mission, "To close

the achievement gap, by preparing all students for college readiness and success in a global society." This is an important mission and one that still raises many questions as to the best methods for *how* to accomplish it. It is wonderful that organizations such as AVID are always open to hearing new ideas for how to be better at what they do.

Locally, AVID is an incredibly valuable system for our district's schools. It is well-loved by students, teachers, administrators, and community members for its ability to positively transform our education system. When speaking with key stakeholders in AVID schools, the enthusiasm for AVID is clear. Despite quantitative results that suggest AVID is effective in bridging the achievement gap (Cuseo, 2015), AVID means much more to stakeholders than the numbers will ever show. When administrators and teachers, regularly claim that AVID has "made teaching fun again," or "rejuvenated" their love for teaching, it is easy to see that there is more to AVID than the numbers.

Although AVID Tutoring is but one part of the AVID College Readiness System, it is an important part. AVID students deserve the best chance they can get at achieving their college and career goals, and supplying them with the most equipped AVID Tutors will go a long way in supporting their efforts. The current state of AVID Tutor training is by no means *dire* or in need of a complete overhaul. That is not the point of this paper. However, as AVID espouses the benefits of having a growth mindset (Dweck, 2008), so shall I when it comes to tutoring. Just because something is going well, doesn't mean we shouldn't ask, "How can it be better?" In effort to continually work toward the most effective practices, further inquiry into the efficacy of tutor preparation practices would

217

go a long way to continue to improve the experiences of AVID students and AVID's effectiveness.

My hope is that the key stakeholders in my extended AVID family, who also have a vested interest in doing what is best for AVID students, continue to wonder with me—that they continue to ponder the next steps in this process. As tutors and students in my district have benefited from some of the additions to current practice, so might others out there. As we ponder how we can be better at what we do to prepare our AVID Tutors, so that they can better prepare our students, here lays the beginning of an important dialogue.

References

American Council on Education (2010). College graduation rates: Behind the numbers. Washington, DC: Author.

AVID Center. (2011). *AVID Tutorial Support Curriculum Resource Guide.* San Diego, CA: AVID Press.

AVID Center. (2013). *AVID professional learning practices (APLP).* San Diego, CA: AVID Press.

AVID Center. (2015a). AVID overview 2015.
    Retrieved from http://www.avid.org/_documents/Funding/

AVID Center. (2015b). Mesa Unified School District senior data for the graduating class of 2010. Retrieved from http://data.avidcenter.org.

AVID Center. (2015c). Mesa Unified School District senior data for the graduating class of 2004. Retrieved from http://data.avidcenter.org.

AVID Center. (2015d). Mesa Unified School District senior data for the graduating class of 2009. Retrieved from http://data.avidcenter.org.

AVID Center. (2015e). Mesa Unified School District senior data for the graduating class of 2015. Retrieved from http://data.avidcenter.org.

AVID Center. (2015f). WICOR: AVID's foundation for high engagement teacher and learning. Retrieved from http://avid.org/dl/hed/hed_reviewofliterature.pdf

AVID Center. (2016). *Certification self-study.* Retrieved from:
    https://my.avid.org/certification/default.aspx

AVID Center. (2016a). *Mission of AVID.* Retrieved from: www.avid.org.

AVID Center. (2016b). Mesa Unified School District certification data 2016. Retrieved from http://data.avidcenter.org.

AVID Center. (2016c). AVID home page. Retrieved from
    http://ww.w.avid.org/Independent-Evaluations.ashx

Bandura, A. (1971). *Social learning theory*. New York: General Learning Press.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press.

Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares (Ed.), *Self-efficacy beliefs of adolescents* (pp. 307-337). Greenwich, Conn.: IAP- Information Age Pub.

Barkley, E.F., Cross, K.P., & Major, C.H. (2005). *Collaborative learning techniques: A handbook for college faculty.* San Francisco: Jossey-Bass.

Berliner, D. C. (2002). Educational research: The hardest science of all. *Educational Researcher*, *31*(8), 18–20.

Biel, J.I. & Garica-Perez. (2011). Call me guru: User categories and large-scale behavior on YouTube. In C.H. Steven Hoi and J. Luu (Eds.) *Social media modeling and computing.* London: Springer.

Black, A.C., McCoach, D.B., Purcell, J.H., Siegle, D. (2008). Advancement Via Individual Determination: Methods selection in conclusions about program effectiveness. *Journal of Educational Research*, *102*(1), 111-123.

Bloom, B. S. (1956). *Taxonomy of educational objectives*. Boston: Allyn & Bacon.

Bondy, E., Ross, D. D., Gallingane, C., & Hambacher, E. (2007). Creating environments of success and resilience: Culturally responsive classroom management and more. *Urban Education*, 42, 326-348.

Bourdieu, P. (1982). From J.E. Richardson (ed.), *Handbook of theory of research for the sociology of education.* Westport, CT: Greenwood Press.

Brinkman, S. & Kvale, S. *Interviews: Learning the craft of qualitative research interviewing*, 3rd ed. Thousand Oaks, CA: Sage.

Bruffee, K. (1999). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*, 2nd ed. Baltimore: Johns Hopkins University Press.

Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review*, 31, 21-32.

Campbell, D.T., & Stanley, J.C. (1963). *Experimental and quasi-experimental designs for research.* Chicago: Rand McNally.

CASEL. (2018). What is SEL? Retrieved 9 February 2018, from https://casel.org/what-is-sel/

Clark-Ibáñez, M. (2004). Framing the social world with photo-elicitation interviews. *The American Behavioral Scientist, 47*, 1507-1527.

Cohen J. A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*(1), 37–46.

Conley, D. T. (2010). *College and career ready: Helping all students succeed beyond high school.* San Francisco: Jossey-Bass.

Cooper, J. (2003). What is cooperative learning? In J.L. Cooper, P. Robinson & D. Ball, Eds. *Small group instruction in higher education: Lessons from the past, visions of the future* (pp. 3-5). Stillwater, OK: New Forums Press.

Costa, A. (2001). *Developing minds: A resource book for teaching thinking* (3rd Edition). Alexandria, VA: American Society for Training and Development.

Creswell, J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Pearson.

Cuseo, J. (2002). *Igniting student involvement, peer interaction, and teamwork: A taxonomy of specific cooperative learning structures and collaborative learning strategies*. Stillwater, Oklahoma: New Forums.

Cuseo, J. (2003). *Cooperative learning: A pedagogy for diversity*. In J.L. Cooper, P. Robinson & D. Ball, Eds. Small group instruction in higher education: lessons form the past, visions of the future (pp. 75-89). Stillwater, OK: New Forums Press.

Cuseo, J. (2015). Closing the gaps: How AVID for higher education can promote student learning and college completion. *AVID:HED Closing the Gaps*, 1-21.

Deli'Olio, J.M. (1993). *Schon's cycle of reflection-in-action in the work of staff developers.* (Doctoral dissertation). Columbia University, New York.

DeMonbrun, M. R. M., & Finelli, C. J. Methods for establishing validity and reliability of observation protocols. *ASSE*, *26*(1), 1-10.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education.* Sioux Falls, SD: NuVision Publishers, LLC.

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the education process.* Boston, MA: Heath & Co.

Dweck, C.S. (2008). *Mindset: The new psychology of success.* New York: Ballantine Books.

Ekwunife-Orakwue & Kayode, C.V. (2014). The impact of transactional distance dialogic interactions on student learning outcomes in online and blended environments. *Computers and Education*, *78*, 414-427.

Emerson, R.M., Fretz, R.I., & Shaw, L.L. (2011). *Writing ethnographic fieldnotes* (2nd ed.) Chicago, IL: The University of Chicago Press.

Foundation for Critical Thinking. (2015). Retrieved from http://www.criticalthinking.org/pages/the-role-of-socratic-questioning-thinking-teaching-amp-le/522

Fraenkel, J.R. & Wallen, N.E. (2005). Validity and reliability, in J.R. Fraenkel and N.E. Wallen, *How to design and evaluate research in education with PowerWeb,* pp. 152-171, Hightstown, NJ: McGraw Hill Publishing Co.

Freeman, D. & Richards, J.C. (Eds.) *Teacher learning in language teaching.* New York: Cambridge University Press.

Fullan, M., Rincon-Gallardo, S., & Hargreaves, A. (2015). Professional capital as accountability. *Education Policy Analysis Archives, 23*(15), 1-17.

Garcia, M. (2016, August 3). *Tutorial video for tutors.* [Video file]. Retrieved from https://www.youtube.com/watch?v=PNGvYYZjS4g .

Garcia, M., Yslas, T. & Linoff, L. (2017, December). *Culturally relevant teaching: One district's story of how they are transforming their culture.* Conference presentation at the 2017 AVID National Conference, Orlando, FL.

Gardner, H. (1993). *The disciplined mind.* New York: Penguin Putnam Inc.

Given, L.M. (2008). Negative case analysis. *The SAGE encyclopedia of qualitative research methods.* Thousand Oaks, CA: SAGE Publications Ltd. DOI: 10.4135/9781412963909.

Green, S.B. & Salkind, N.J. (2014). *Using SPSS for Windows* (7th ed.). Upper Saddle River, NJ: Pearson.

Greene, J. C. (2007). Mixed methods in social inquiry. San Francisco, CA: Jossey-Bass.

Greenwood, D.J. (2014). Pragmatic action research. *International Journal of Action Research*, *3*(1), 131-148.

Guthrie, L. & Guthrie, G. (2002). *The magnificent eight: AVID best practices study.* Bulringame, CA: Center for Research, Evaluation, and Training in Education (CREATE).

Hall, G. E., & Hord, S. M. (2015). *Implementing change: Patterns, principles and potholes (4th ed.).* Upper Saddle River, NJ: Pearson.

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies, 17*(1), 13-26.

Harvard University. (2013) Analysis of Mesa Public Schools data as part of the public education
leadership project. Harvard University, Cambridge, Mass.

Hays, L. (2004). AVID program graduates: Negotiating the first year of college. *Dissertation Abstracts International, 65*(05A), 296-1691.

[Heyitsdanny]. (2016, Feb. 18). *Damn Daniel Back at It Again with the White Vans.* [Video File]. Retrieved from: https://www.youtube.com/watch?v=ZYfiTPwghFE

Higuita, B.H. (2012, Jul. 15). *Psy-Gangnam Style Video Original.* [Video File]. Retrieved from: https://www.youtube.com/watch?v=AUjmT76-6hw

Houston Independent School District. (2012). *Advancement via individual determination (AVID): Findings related to student performance.* Houston, TX: Houston Independent School District.

Irvine, J. J., & Fraser, J. W. (1998, May). Warm demanders: Do national certification standards leave room for the culturally responsive pedagogy of African American teachers? *Education Week*, pp. 41-42.

Ivankova, N.V. (2015) *Mixed methods applications in action research: From methods to community action.* Thousand Oaks, CA: Sage.

Jacobs-Cassuto, M. & Roberts, M. (2013). *AVID evaluation report.* Minneapolis, MN: Minneapolis Public Schools.

John-Steiner, V. & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, *31*(3/4), 191-206.

Johnson, D., Johnson, R., & Smith, K.A.. (1990). Cooperative learning: An active learning strategy. *FOCUS on Teaching and Learning, 5*(2), 1, 7-8.

Heath, C., & Heath, D. (2010). *Switch: How to change things when change is hard.* Toronto: Random House Canada.

HyperRESEARCH 3.5.2. Computer Software, ResearchWare, Inc., 2012. <http://www.researchware.com/>.

Innovation Configuration Maps. (2015, Oct. 23). *Learning Forwards.* Retrieved from: http://learningforward.org/standards/innovation-configurations#.VirHJn6rSM8

Jasper, M., Elliott, P., & Koubel, G. (2011). *Vital notes for nurses : Professional development, reflection and decision-making*. Hoboken, GB: Wiley-Blackwell. Retrieved from http://www.ebrary.com

Jones, Stefani. (2016). Recognizing college opportunity "champions of change." *White House Blog.* Retrieved from: https://www.whitehouse.gov/blog/2016/09/27/recognizing-college-opportunity-champions-change

Kagan, S. & M. Kagan. (1998). *Multiple intelligences: The complete MI book*. San Clemente, CA: Kagan Cooperative Learning.

Kays, E. & Sims, R. (2006). *Reinventing and reinvigorating instructional design: A theory for emergent learning.* Paper presented at the proceedings of the 23rd annual ascilite conference: Who's learning? Whose technology? Ascilite 2006 Conference, Sydney, Australia.

Ladson-Billings, G. (2013). Lack of achievement or loss of opportunity. *Closing the opportunity gap: What America must do to give every child an even chance*, *11*.

Lake, W.A. (2009). The impact of the Advancement Via Individual Determination (AVID) program on ninth grade reading, mathematics, and writing achievement. (Doctoral dissertation). Baker University, Kansas.

Lamb, T. (2005). The retrospective pre-test: An imperfect but useful tool. *The Educational Exchange, XI* (2). Retrieved May 2, 2013, from http://www.hfrp.org/evaluation/the-evaluation-exchange/issue-archive/evaluation-methodology/the-retrospective-pre-test-an-imperfect-but-useful-tool

Land , S. M., & Hannafin, M. J. (1996). Student-centered learning environments: Foundations, assumptions and implications. Paper presented at the National Convention of the Association for Education Communications and Technology, Indianapolis, IN

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. New York, NY: Cambridge University Press.

Leake, S. (2014). *A blended and face-to-face comparison of teacher professional development: What's the impact?* (Doctorall dissertation). Arizona State University.

Linsin, M. Why you should never, ever be friends with your students. *Smart Classroom Management*. Retrieved on January 28, 2018 from: https://www.smartclassroommanagement.com/.

Lipovski, L.C. (2004). *Teaching AVID: An investigation of pedagogy in a college prepatory program for traditionally underserved youth.* (Doctoral dissertation). University of Texas.

Liu, X. (2004). Socio-cultural context for online learning: A case study viewed from activity theory perspective. *Proceedings of the Association for Educational Communications and Technology*, *27*, 606-613.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 707-717.

Lozano, A., Watt, K.M., & Huerta, J. (2009) A comparison of 12th grade Hispanic students' college anticipations, aspirations, and college preparatory measures. *American Secondary Education*, *38*(1), 92-110.

Lunenburg, F.C. (2011). Self-efficacy in the workplace: Implications for motivation and performance. *International Journal of Management, Business, and Administration*, *14*(1), 1-6.

Martinez M. & Klopott, S. (2005). *The link between high school reform and college access and success for low-income and minority youth.* Washington, DC: American Youth Policy Forum and Pathways to College Network.

Marzano, R.J., Pickering, D.J, & Pollack, J.E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

Matzat, U. (2013). Do blended virtual learning communities enhance teachers' professional development more than purely virtual ones? A large scale empirical comparison. *Computers in Education*, *60* (1), 40-51.

Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Thousand Oaks, CA: Sage.

McCombs, B. L., & Miller, L. (2009). *The school leader's guide to learner-centered education: From complexity to simplicity.* Thousand Oaks, CA: Corwin Press.

McGinnis, R., Mettler, C., & Schiro, P. (2014). *AVID elective essentials (middle and high school)*. San Diego, CA: AVID Press.

Mendiola, I.D., Watt, K.M., & Huerta, J. (2010). The impact of Advancement Via Individual Determination (AVID) on Mexican American students enrolled in a four-year university. *Journal of Hispanics in Higher Education*, *9*(3), 209-220.

Mertler, C.A. (2014). *Action research: Improving schools and empowering educators.* Los Angeles, CA: Sage Publications.

Millis, B. (2010). *Cooperative learning in higher education: Across the disciplines, across the academy.* Sterling, Virginia: Stylus Publishing, LLC.

Mills, G.E. (2011). *Action research: A guide for the teacher researcher* (4th ed.) Boston: Pearson.

Mulhere, K. (2017, July). All the places in the U.S. where you can go to college for free. *Money*. Retrieved from: http://time.com/money/4830367/free-college-tuition-promise-programs/

[MyNiceTie]. (2008, Feb. 28). *How to tie a tie: The best video to tie a double Windsor know (slow=beginner).* [Video File]. Retrieved from: https://www.youtube.com/watch?v=p7X7SpkkEMY

Nagaoka, J., Roderick, M., & LaForce, M. (2010). Evaluating the impact of the Advancement Via Individual Determination program on ninth-grade students' learning and study skills [PowerPoint slides]. Retrieved from ies.ed.gov/director/conferences/10ies_conference/ppt/nagaoka.ppt

National Center for Education Statistics, U.S. Department of Education. (2013). Federal programs for education and related activities. In Digest of education statistics 2013. Retrieved September 16, 2015, from the National Center for Education Statistics Web site: https://nces.ed.gov/

National Center for Education Statistics, U.S. Department of Education. (2011). Federal programs for education and related activities. In Digest of education statistics 2011. Retrieved September 16, 2015, from the National Center for Education Statistics Web site: https://nces.ed.gov/

National Student Clearinghouse Research Center, U.S. Department of Education. (2010). Completing college: A national view of student attainment rates—fall 2010 cohort. . Retrieved January 28, 2018, from the National Center for Education Statistics Web site: https://nces.ed.gov/

National Student Clearinghouse Research Center, U.S. Department of Education. (2014). Student tracker for high schools aggregate report for Mesa Unified School District. Retrieved May 13, 2014 from the National Student Clearinghouse Web site: www.studentclearinghouse.org

National Student Clearinghouse Research Center, U.S. Department of Education. (2017). Current Term Enrollment Estimates-Fall 2016. In Current Term Enrollment Estimates, Reports. Retrieved February 7, 2017, from the National Student Clearinghouse Research Center website: https://nscresearchcenter.org/currenttermenrollmentestimate-fall2016/

National Center for Higher Education Management Systems. (2015). Graduation rates report: Six-year graduation rates of bachelor's students. Retrieved September 16, 2015 from National Center for Higher Education Management Systems Web site: www.higheredinfo.org

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.

Obama, Barack H. "Commencement Speech." Arizona State University Commencement. Sun Devil Stadium, Tempe, AZ. May 2009. Speech.

Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling in qualitative research: Making the sampling process more public. *The Qualitative Report, 12*, 238-254. Retrieved from http://www.nova.edu/ssss/QR/QR12-2/onwuegbuzie1.pdf

Overholser, J.C. (1993). Elements of the Socratic method: II. Inductive reasoning. *Psychotherapy*, *30*: 75-85.

Peak, D. (2010). A correlational study of the advancement via individual determination program with middle school students achievement in mathematics. (Doctoral dissertation, University of Denver, 2010. 3426057). Retrieved from http://search.proquest.com.libweb.ben.edu/pqdtft/docview/761134151/92494E5B08CC45B6PQ/6?accountid=40667

Piaget, J. (1985). *Equilibration of cognitive structures.* University of Chicago Press.

Picciano, A. G., Seaman, J., Shea, P., & Swan, K. (2012). Examining the extent and nature of online learning in American K-12 education: the research initiatives of the Alfred P. Sloan Foundation. *The Internet and Higher Education*, 15, 127–135.

Portland Public Schools. (2015). *Evaluation of AVID effectiveness.* Portland, OR: University of Portland.

Raelin, J.A. (2010). *The work self-efficacy inventory survey.* Menlo Park, CA: Mind Garden Inc.

Raelin, J., Bailey, M., Hamann, J., Pendleton, L., Raelin, J., Reisberg, R., Whitman, D. (2011) "The Effect of Cooperative Education on Change in Self-Efficacy among

Undergraduate Students: Introducing Work Self-Efficacy," *Journal of Cooperative Education and Internships*, 45 (2): 17-35.

Reed, D.S. (2009). Is there an expectations gap? Educational Federalism and the demographic distribution of proficiency cut scores. *American Educational Research Journal*, *46*(3), 718-742.

Reigeluth, C. (Ed.) (1999). *Instructional-design theories and models: A new paradigm of instructional design.* Mahwah, NJ: Erlbaum.

Remtulla, K.A. (2008). A social theory perspective on e-learning. *Learn Inq, 2,* 139-149.

Richards, J.C., Lockhart, C. (1994). *Reflective teaching in second language classrooms.* Cambridge: Cambridge University Press.

Richards, J.C. (1998). *Beyond training.* New York: Cambridge University Press.

Roderick, Coca, & Nagaoka. (2011). Potholes on the road to college: High school effects in shaping urban students' participation in college application, four-year college enrollment, and college match. *Sociology of Education*, *84*(3), 178-211.

Rodriguez, M.C. (2005) Meta-analysis of 80 years of research. *Educational Measurement Issues and Practice*, *24*(2), 3-13.

Rorie, L.B. (2007). An investigation of achievement in the AVID (Advancement Via Individual Determination) program at the high school level. *Dissertation Abstracts International, 68*(11A), 168-4657.

Rose, D. (2001). Universal design for learning: Deriving guiding principles from networks that learn. *Journal of Special Education Technology, 16*(2), 66-67.

Rose, D. & Gravel, J. (2012). *Technology and learning: Meeting special student's needs.* Wakefield, MA: National Center on UDL.

Rovai, A. P., & Jordan, H. M. (2004). Blended-learning and sense of community: A comparative analysis with traditional and fully online graduate courses. International Review of Research in Open and Distance Learning, 5(2), 1-13.

Runkel, P. (2016). What are t values and p values in statistics? *The Minitab Blog.* Retrieved on January 20, 2018 from http://blog.minitab.com/blog/statistics-and-quality-data-analysis/what-are-t-values-and-p-values-in-statistics.

Saldaña, J. (2016). *The coding manual for qualitative researchers.* Thousand Oaks, CA: Sage Publishing.

Schön, D.A. (1983). *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Schön, D.A. (Ed.) (1992). *The reflective turn: Case studies in and on educational practice.* New York: Teachers College Press.

Shea, P., & Bidjerano, T. (2010). Learning presence: towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended-learning environments. *Computers & Education*, 55, 1721–1731.

Shrum, J.L. & Glisan, E.W., (2000). *Teacher's handbook: Contextualized language instruction.* (2nd ed.). Boston, MA: Heinle.

Sims, R. & Stork, E. (2007). *Design for contextual learning: Web-based environments that engage diverse learners.* Paper presented at The Thirteenth Australasian World Wide Web Conference, Southern Cross University, Australia.

Smith, J. & Firth, J. (2011). Qualitative data analysis: The framework approach. *Nurse Researcher, 18*(2), 52-62.

Smith, M.L. & Glass, G.V. (1987). *Research and Evaluation in Education and the Social Sciences.* Needham Heights, MA: Allyn and Bacon.

Sparks, S.D. (2011). Chicago study finds mixed results for AVID program. *Education Week¸ 30*(15), 15.

Stake, R. E., & Trumbull, D. J. (1982). *Naturalistic Generalizations*. Center for Instructional Research and Curriculum Evaluation, University of Illinois at Urbana-Champaign. Retrieved from http://education.illinois.edu/circe/publications/Naturalistic.pdf

Stanley, C. (1998). A framework for teacher reflectivity. *TESOL Quarterly*, *32*, 584-591.

Stringer, E.T. (2007). *Action research.* (3rd ed.). Thousand Oaks, CA: Sage.

Strauss, A. C., & Corbin, J. M. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Newbury Park, CA: Sage.

Strauss, V. (2014). Maryland educator named 2014 National Teacher of the Year. *The Washington Post Online.* Retrieved from: https://www.washingtonpost.com/news/answer-sheet/wp/2014/04/30/maryland-educator-named-2014-national-teacher-of-the-year/.

Sutton, R. I., & Rao, H. (2014). *Scaling up excellence: Getting to more without settling for less*. New York: Crown Business.

Swanson, M. C., Marcus, M., & Elliot, J. (1993). The AVID classroom: A system of academic and social supports for low-achieving students. National Society of the Study of Education, 94(1) , 2-24.

Swartz, D. (1998). *Culture and power: The sociology of Pierre Bourdieu*. Chicago, IL: University of Chicago Press.

Tankari, M. (2012). Online learning satisfaction: Does culture matter? Doctoral dissertation. Northern Arizona University, Flagstaff , AZ.

[TVNorge]. (2013, Sep. 3). *Ylvis-The Fox (What Does the Fox Say?).* [Video File]. Retrieved from: https://www.youtube.com/watch?v=jofNR_WkoCE

US Department of Education. (2009). College affordability and completion: Ensuring a pathway to opportunity. Retrieved from http://www.ed.gov/college.

U.S. Department of Education, Office of Educational Technology. (2010). *National education technology plan executive summary.* Retrieved from http://tech.ed.gov/netp/

Vygotsky, L. (1978). *Mind and Society.* Cambridge, MA: Harvard University Press, pp. 79-91.

Vygotsky, L.S. (1981). The instrumental method in psychology. In J.V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 134-144). Armonk, NY: Sharpe.

Vygotsky, L.S. (1986). *Thought and language.* (A. Kozulin, Ed.). Cambridge, MA: MIT Press.

Ware, F. (2006). Warm demander pedagogy: Culturally responsive teaching that supports a culture of achievement for African American students. *Urban Education*, 41, 427-456.

Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *The Modern Language Journal*, *81*(4), 470-481.

Watt, K.M., Huerta, J., & Lozano, A. (2007). A comparison study of AVID and GEAR UP 10th-grade students in two high schools in the Rio Grande Valley of Texas. *Journal of Education for Students Placed at Risk*, *2*(2), 185-212.

Watt, K.M., Johnson, D., Huerta, J., Mendiola, I.D. & Alkan, E. (2008). Retention of first-generation college-going seniors in the college preparatory program AVID. *American Secondary Education*, *37*(1), 17-40.

Watt, K.M., Powell, C.A., & Mendiola, I.D. (2004). Implications of one comprehensive school reform model for secondary school students underrepresented in higher education. *Journal of Education for Students Placed at Risk,* 9 (3), 241-259.

Watt, K.M., Powell, C.A., & Mendiola, I.D., & Cossio, G. (2004). Schoolwide impact and AVID: How have selected Texas high schools addressed the new accountability measures? *Journal of Education for Students Placed at Risk*, *11*(1), 57-53.

Watt, K.M., Yanez, D., & Cossio, G. (2002) AVID: A comprehensive school reform model for Texas. *National Form of Educational Administration and Supervision Journal, 19*(3), 43-59.

Weber, R.J. (1992). *Forks, phonographs, and hot air balloons.* New York: Oxford University Press.

Weick, K.E. Small wins: Redefining the scale of social problems. *American Psychologist, 39*(1), 40-49.

Wells, G. (2000). Dialogic inquiry in education: Building on the legacy of Vygotsky. *In D. a. Lee, Vygotskian perspectives on literacy research (pp. 51-85).* New York: Cambridge University Press.

Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology*, 17(2), 89-100.

Yurdugul, H. (2008). Minimum sample size for Cronbach's coefficient alpha: A Monte Carlo study. *H.U. Journal of Education*, *33*, 397-405.

APPENDIX A

AVID CSS AND CCI SNAPSHOTS

AVID Essential No. 8	Examples of Evidence Sources and Resources	Rating for AVID Essential No. 8
A sufficient number of tutors must be available in the AVID Elective class(es) to facilitate student access to rigorous curriculum. Tutors* should be students enrolled in colleges and universities, who can mentor students and facilitate tutorials, and they must be trained to implement the methodologies used in AVID.	❑ Use of *Supporting Math in the AVID Elective* ❑ Use of most current *AVID Tutorial Guide*, videos, and materials ❑ Use of most current Tutorial Training Pacing Chart and Tutorial Analysis Grade Activity (TAG) ❑ Tutor recruitment, training and retention plan ❑ Tutor training documents (sign-in sheets, notes, reflections, handouts for all Tutorial Training units, portfolios, certificates upon completion, etc.) ❑ Student Tutorial Request Forms (TRF) ❑ Classroom observations and scripting to determine: student/tutor ratio (7:1) to support collaboration and mentoring; tutors and students using Costa's Levels of Thinking and questioning in inquiry process; teacher coaching tutors and students ❑ Student/tutor reflections of tutor mentoring experiences ❑ Student reflective debrief ❑ Other_____	Number of Indicators at each level: Level 0: _____ Level 1: _____ Level 2: _____ Level 3: _____ **Overall level for Essential 8:** _____

Rating Guide: Indicators for Levels of Use – Indicators are cumulative; Level 1 must be in place prior to progressing to Level 2

Not AVID (Level 0)	Meets Certification Standards (Level 1)	Routine Use (Level 2)	Institutionalization (Level 3)
1. ❑ Students do not have tutors, or tutors are not trained, or tutorials are tutor-centered, or are homework help centers rather than inquiry-based.	❑ Tutorials occur at least twice weekly and are tutor/student centered. Trained tutors* follow the basic tutorial process and ensure the use of appropriate resources (i.e., books, notes, handouts).	❑ Tutors promote student-centered discussions and check student presenters' understanding.	❑ Tutors support independent use of collaborative structures. Tutors challenge students to higher levels of thinking.
2. ❑ There is no evidence that AVID tutorial training has occurred using the most current *AVID Tutorial Guide*; no documentation of the required 16 hours of AVID tutorial training exists.	❑ There is a Tutor Training Plan to ensure that tutors have participated in at least 16 hours of tutorial training in AVID methodologies based on the most current *AVID Tutorial Guide*; tutors demonstrate the AVID methodologies and WICOR strategies in their work with students in the AVID Elective class.	❑ Trained site personnel provide ongoing coaching and debriefing to support tutors in the AVID tutorial process. Evidence exists that teachers coach the tutors in a collaborative inquiry-based process, as modeled in the most current *AVID Tutorial Guide*, videos, and materials.	❑ There is documentation that the site has established the infrastructure to support tutorial training in all units of the most current *AVID Tutorial Guide* and fully implement the site's Tutor Training Plan.
3. ❑ The student/tutor ratio in the AVID Elective class exceeds 7:1.	❑ The student/tutor ratio in the AVID Elective class is no higher than 7:1 to support collaboration and mentoring; hiring current college tutors is a priority and whenever possible current college students are hired as AVID tutors.	❑ The student/tutor ratio in the AVID Elective class is no higher than 7:1. At least one of the tutors for each section is a current college student to support collaboration and mentoring.	❑ The student/tutor ratio in the AVID Elective class is no higher than 7:1. At least two of the tutors for each section are current college students who can support and mentor students; 50% of the tutors have worked with AVID for at least two semesters, including the current one.

4. ☐ There is no evidence that tutors guide or monitor the AVID tutorial.	☐ There is evidence that tutors monitor completion of all aspects of the Tutorial Request Form (e.g., pre-work, including point of confusion, three-column notes, and reflections).	☐ Tutors guide AVID students in all aspects of the tutorial process, using tools such as Tutorial Request Forms, the Tutorial Analysis Grade Activity (TAG) and tutorial observation forms. Tutors make adjustments based on tutorial evaluation or feedback from AVID students.	☐ Using a variety of tools, tutors support students to raise the level of inquiry to deepen the quality of tutorials, and to increase the level of critical thinking, demonstrated by the students' ability to explain their understanding of what they have learned.
5. ☐ There is no evidence that a plan addressing tutor recruitment and retention exists.	☐ There is a plan for recruiting tutors and strategies for retaining tutors, especially for recruiting and retaining college students as tutors.	☐ Tutor recruitment and retention plan has been developed; recruitment and retention strategies have been implemented.	☐ Tutor recruitment and retention have become a responsibility of the site team; it has taken on ownership of the implementation of a tutor recruitment and retention plan.
6. ☐ No plan exists ensuring tutorial training for every AVID Elective class teacher using the most current *AVID Tutorial Guide*, videos, and materials.	☐ AVID Elective class teacher has been trained using the most current *AVID Tutorial Guide* during minimally a 16 hour SI strand or AVID Divisional training. There is a plan to ensure that all new AVID Elective class teachers are trained using the most current *AVID Tutorial Guide* prior to teaching the AVID Elective class year two.	☐ At least 75% of the AVID Elective class teachers have been trained using the most current *AVID Tutorial Guide* through AVID SI and/or AVID Divisional training, where each teacher receives a minimum of 16 hours face-to-face and e-learning Tutorology training.	☐ 100% of AVID Elective class teachers have been trained using the most current *AVID Tutorial Guide*. The site plan ensures new AVID Elective class teachers will be trained prior to teaching AVID.

*NOTE: AVID college tutors are defined as high school graduates, currently engaged in college/university work, who are trained in the AVID collaborative inquiry-based tutorial process, and who implement and model WICOR strategies and serve as mentors to AVID students. AVID cross-age tutors are older secondary students from a different grade level and a different classroom than those in the AVID Elective class, who implement and model WICOR strategies in the AVID collaborative, inquiry-based tutorial process. In specialized cases in schools in remote areas, adults who are trained in the AVID WICOR strategies and AVID collaborative tutorial process may serve as tutors. All persons serving as AVID tutors must be trained to model and implement the AVID WICOR and inquiry-based tutorial processes. Research shows that the most effective tutors are those who can also serve as mentors for their AVID students. AVID students enrolled in the same AVID class are not classified as tutors for their peers.

What are some of the particular strengths reflected in your evidence of AVID Essential 8 at your school?

_____

_____

_____

_____

What aspects of AVID Essential 8 have room for growth? How might you address these in your site plan?

_____

_____

_____

1. Management of the AVID Elective

Indicator	AVID Criteria	Tutors do *not*...	Tutors...	Trained tutors...
10	Trained Tutors	☐ follow guidelines established in the *AVID Tutorial Guide*, and do *not* promote student-centered discussions. (CSS, 8.1.0)	☐ follow guidelines established in the *AVID Tutorial Guide*, promote student-centered discussions, and check student presenters' understanding. (CSS, 8.1.1-8.1.2)	☐ ensure **AVID Elective students** use collaborative structures and develop effective critical thinking skills. (CSS, 8.1.2-8.1.3)
11	Tutor Training Plan	☐ participate in at least 16 hours of AVID tutorial training as documented in the tutor training plan, and no evidence exists that the AVID tutorial training uses the *AVID Tutorial Guide*. (CSS, 8.2.0)	☐ participate in at least 16 hours of tutorial training as documented in the tutor training plan, and demonstrate understanding of AVID methodologies and **WICOR** strategies in their work with **AVID Elective students.** (CSS, 8.2.1)	☐ receive ongoing coaching and support from teachers in the AVID tutorial process. Evidence exists that the site has a tutor training plan that meets AVID Elective standards and is followed effectively. (CSS, 8.2.2-8.2.3)
12	AVID Tutorial	☐ monitor completion of the Tutorial Request Form, and do *not* guide **AVID Elective students** in all aspects of the tutorial process. (CSS, 8.4.0)	☐ monitor completion of the Tutorial Request Form and guide **AVID Elective students** in all aspects of the tutorial process. (CSS, 8.4.1)	☐ raise **AVID Elective students'** levels of inquiry, deepen the quality of tutorials, and increase critical thinking skills. Trained tutors make adjustments based on feedback from AVID Elective students. (CSS, 8.4.2-8.4.3)

235

APPENDIX B

THE AVID TUTORIAL PROCESS

Steps in the Tutorial Process

Before the Tutorial

1 Students take Cornell notes in their academic classes.

2 Students complete the pre-work inquiry on the Tutorial Request Form (TRF) while reviewing Cornell notes, completing homework or studying for a quiz/test.

During the Tutorial

3 As students enter the room, the teacher/tutor checks the TRF pre-work and Cornell note resources.

4 Students are divided into tutorial groups to meet the 7:1 student/tutor ratio.

5 The student presenter begins the tutorial by giving a 30-Second Speech about his/her pre-work. Tutor and group members ask questions to guide the student presenter through the critical thinking process. All tutorial members take three-column notes.

6 The group members/tutors check for understanding as the student presenter reviews the work and articulates the steps/process used to clarify the point of confusion.

7 Steps 5 and 6 are repeated for as many group members as time allows.

After the Tutorial

8 Students complete a written reflection on the learning that occurred from clarifying the point of confusion.

9 Students turn in their TRFs to teacher/tutor for grading and feedback.

10 Teacher/tutors/students debrief the tutorial process. Students verify their learning in their academic classes.

AVID

237

APPENDIX C

TUTORIAL REQUEST FORM

Tutorial Request Form B (TRF)
Pre-work Inquiry (Before the Tutorial)

AVID Proven Achievement. Lifelong Advantage.

Subject:	Name:
Standard / Essential Question:	AVID Period:
	Date:

Pre-Work Inquiry ___ /20	Resources ___ /4	Collaborative Inquiry ___ /10	Note-Taking ___ /6	Reflection ___ /10	Total ___ /50

Initial/Original Question: Source, Page # and Problem #: _____

___/2

Key Academic Vocabulary/Definition Associated with Topic/Question:

1.

2.

(30)

/2

What I Know about My Question:

1.

2.

(30)

/2

Critical Thinking about Initial Question: (30)	Identify General Process and Steps (circle your POC): (30)
___/4	___/4

Question from Point of Confusion: (30)

/6

239

APPENDIX D

AVID TUTOR KNOWLDEGE PRE- AND POST-TEST

Dear AVID Tutors:

As your AVID District Director and a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University, I am interested in providing high quality professional development for AVID Tutors so AVID tutorials can be as effective as possible in your AVID classrooms. Therefore, I am conducting a research study to examine the effectiveness of a blended-learning AVID Tutor professional development pilot program, in partnership between MLFTC and the Mesa Unified School District.

I am asking that you take a brief test before and after the study to not exceed 15 minutes in length on each occurrence (30 minutes total for tests). In addition, a number of you will be selected to participate in interviews before and after the study not to exceed 30 minutes in length (60 minutes total for interviews). Thus, it will take no more than 90 minutes total for full participation in this study.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty whatsoever.

The benefit to participation is to inform the improvement of AVID Tutor professional development. Test results will also inform future iterations of the professional development program. Thus, there is potential to enhance the experiences that are provided to our AVID Elective Teachers, AVID Coordinators, and AVID Tutors to ultimately influence the greater effectiveness of AVID tutoring. There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. Results of this study may be used in reports, presentations, or publications but your name will remain unidentifiable. Quotations from interviews or tests may also be used, but your name will remain unidentifiable.

Please read the following consent statement and if you agree, please indicate so in by selecting "yes" below.

Consent Statement:

I agree to participate in the test being conducted. I understand the test will take approximately 15 minutes to complete on two occasions. I understand that my interview during this study may take 30 minutes or less to complete on two occasions. I understand that my relationship with Mesa Unified School District will not be affected by participation in this study or if I choose not to participate. I am at least 18 years of age.

If you have any questions concerning the research study, please contact the researcher—Mike Garcia at michael.garcia3@asu.edu or (480) 308-7557. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

Thank you,

Mike Garcia

AVID District Director

----

1. After reading the Informed Consent Letter above, do you consent to participate in this study by providing responses via this test?

___Yes (continue)

___No (you may leave the questionnaire now)

To keep your answers anonymous, I will not collect identifying information from you. However, I will ask you to create a "code-name" for research analysis purposes. To create your "code-name," please use the first two letters in your mother's first name followed by the last two digits of your phone number.

2. For example, my code name would be: AN55, for Angela and 602-555-5555

_____

General Information

3. If you are a current college student, what year are you in college?

       ___ Freshman

       ___ Sophomore

       ___ Junior

       ___ Senior

       ___ Continuing Senior or Graduate Student (5 years and beyond)

4. At any point in your K-12 education, were you an AVID student?

___ Yes

___ No

5. If you were an AVID student, did you graduate from AVID?

___ Yes

___ No

6. How long have you worked (for pay) as an AVID Tutor?

___ 0-6 months

___ 7-12 months

___ 12-18 months

___ 19-24 months

___ more than 24 months

7. Prior to being an AVID Tutor, did you have any previous tutoring experience?

___ Yes

___ No

8. If you answered "Yes" above, briefly describe your tutoring experience:

_____

AVID and AVID Tutorial Content Knowledge

This is a pre-test. It is ok not to know the answers to the questions. Remember that your answers will remain anonymous. Be honest. And, please don't use any outside sources.

9. What is AVID?

a. Achievement Via Individual Determination.

b. A class that helps struggling students go to college.

c. A schoolwide college and career readiness system.

10. What is the mission of AVID?

a. To close the achievement gap by preparing all students for college readiness and success in a global society.

b. To connect students to college success and opportunity. AVID is a not-for-profit membership organization committed to excellence and equity in education.

c. The mission of the AVID is to develop a highly educated and productive community, one student at a time.

11. What is WICOR and why is it important to the AVID system?

a. WICOR stands for Writing, Inquiry, Cooperation, Organization, and Rigor. WICOR is important to the AVID system because these are the five areas in which every AVID must excel to graduate from AVID.

b. WICOR stands for Writing, Inquiry, Collaboration, Organization, and Reading. WICOR comprises the five instructional areas that are designed to support students with their rigorous coursework.

c. WICOR stands for Wisdom, Intention, Cooperation, Optimism, and Respect. WICOR comprises the five pillars of the character of a successful college student.

12. How did AVID begin?

a. AVID began as a classroom level intervention to support students in their college-preparatory course work.

b. AVID began as component of the College Board's Advanced Placement initiative, so students could receive extra academic support outside of their AP classes.

c. AVID began with a grant from the state of California Department of Education to help increase college-going rates among minority students.

13. Who is the typical AVID student?

a. Academic middle-high range, low-mid income, average test scores, desire to go to a 4-year university, both parents have attended college.

b. Academic middle, low-mid income, average to high test scores, desire to go to a 2 or 4-year college, must be first in family to attend college.

c. Academic middle, low-mid income, average test scores, desire to go to a 4-year university, part of a historically underrepresented population in college.

14. Why are schools implementing AVID?

a. To transform schoolwide college and career readiness practices, in an effort to increase the numbers of students who are prepared to attend college after high school.

b. To support students who typically struggle the most in school, in an effort to increase the graduation rates of students at the school.

c. Under a college and career readiness grant, the state mandates that each district and each school implement specific interventions to support students in the academic middle.

15. Which option contains three of the ten steps in the AVID Tutorial process (not necessarily in order)?

a. Complete pre-work (TRF), Group members/tutors help the student presenter think about the steps or process used to clarify her point of confusion, debrief the tutorial.

b. Students take Cornell notes in their academic classes, Complete pre-work (TRF), Tutor instructs the student presenter and group member by showing them strategies to solve their points of confusion.

c. Debrief the tutorial, Group members/tutors compile a list of key vocabulary words, Group members take notes as the student presenter, presents his point of confusion.

16. Which is NOT a characteristic of an ideal AVID Tutor?

a. Act as a role model in behavior, wear appropriate attire at all times.

b. Be positive and professional at all times.

c. Take the lead in the tutorial learning process and implement AVID methodologies.

17. Which is NOT a characteristic of an ideal AVID student?

a. Comes prepared to participate in AVID Tutorials twice per week.

b. Takes Cornell notes in all academic classes.

c. Maintains at least a 1.5 GPA and satisfactory attendance in all classes.

18. What is the primary role of the tutor in the AVID Tutorial?

a. To be an expert in core-content areas and provide students with strategies to solve their points of confusion.

b. To be a facilitator of the collaborative-inquiry process.

c. To manage the behavior of the group and keep all students on task.

19. What is the primary role of the Student Presenter in the AVID Tutorial?

a. To present her point of confusion to the group and lead a group discussion about the problem so she can understand why she was confused about the problem.

b. To present her point of confusion to the group and let the tutor/group members guide her through the correct way to do her problem.

c. To present her point of confusion to the group and take notes on the advice given to her by the AVID Tutor.

20. What is the primary role of the Group Member in the AVID Tutorial?

a. To quietly pay attention to the student presenter as the he talks about how he solved his point of confusion.

b. To record the thinking of the student presenter by taking three-column notes.

c. To actively participate by asking probing questions of the student presenter as he works through his point of confusion.

21. What is the primary role of the Teacher in the AVID Tutorial?

a. To make sure students come prepared with their tutorial pre-work by collecting and sorting the Tutorial Request Forms before tutorials begin.

b. To roam the room as a monitor and coach for each tutorial group.

c. To take on a tutorial group as a tutor when there are not enough tutors for each group.

APPENDIX E

AVID TUTORIAL OBSTACLES IDENTIFIED BY AVID TUTORS

1. Students group members have trouble asking questions during the tutorial.

2. Students come to class without a legitimate or complete TRF.

3. Students don't have resources or have difficulty accessing resources.

4. Students are disruptive or have other discipline issues within the tutorial group.

5. Tutors don't have time to debrief with students or AVID Elective teachers.

6. Students already know their POC before coming to class.

7. Students refuse to go to the board to present their POC.

8. Students are engaging in side conversations during the tutorial.

9. Students are allowed to join groups without a completed TRF.

10. Students are disrespectful to the AVID tutor.

11. AVID teacher is too "nice" or lenient and allows students to be unprepared.

11. No one knows how to approach answering the POC.

12. Only one tutor and 35 students.

13. Student "vocabulary" definitions are very poor on the TRF.

14. Students argue over who gets to present.

15. Student group members are "telling" instead of asking probing questions.

16. A student refuses to participate because she is "not in that class!"

17. POC questions are definition based (e.g. "What is a square?")

18. Students go through "motions" with no apparent confusion.

19. Multiple students come with the same POC.

20. There is not enough time for reflections to be written.

APPENDIX F

TUTORIAL OBSERVATION FORM

(Version 1.0)

*To use this tool, identify the rating on the given scale as each type of participant is observed over the course of one tutorial session. A tutorial session can be defined as the full turn of **one** student presenter. Use a new form for each new **student presenter.***

School: _____ **Date:**

_____

Grade Level: _____
Teacher:_____

Tutor: _____ **# Students in Group Observed:** _____

Ratings

1= NOT observed   (None of the descriptors in the items have been met)

2= PARTIALLY observed (Only one item in the descriptor has been met)

3= MOSTLY observed   (More than one descriptor, but not all of the descriptors in the item have been met)

4= FULLY observed   (All descriptors in the item have been met)

To report results, you may go directly to the online form at: https://goo.gl/forms/ZLu5yRVew6epuPHC3 or you can print this "paper" copy and then enter your results in the online form later on.

		NOT observed	PARTIALLY observed	MOSTLY Observed	FULLY Observed
Teacher	Holds students accountable for coming to class with pre-work complete by utilizing a system for checking TRFs before tutorials	1	2	3	4
	Coaches tutors and students on TRF revisions before tutorials	1	2	3	4
	Coaches both students and tutors in the tutorial process	1	2	3	4
	Coaches both students and tutors to use higher level thinking	1	2	3	4
	Coaches both students and tutors to use resources to support tutorial questions	1	2	3	4
Tutor(s)	Facilitates, coaches, and works with one group the entire period	1	2	3	4
	Sits with tutorial group, away from the student presenter	1	2	3	4
	Encourages active participation from *all* tutorial members	1	2	3	4
	Uses Socratic method to push thinking of students to a higher level through the inquiry method	1	2	3	4
	Takes three-column notes for the student presenter and encourages all students to take three column notes	1	2	3	4
	Checks for student presenter's and entire group's understanding before tutorial ends	1	2	3	4
Student Presenter(s)	Follows 30 second speech protocol by introducing the original problem, steps tried so far, key vocabulary, and POC.	1	2	3	4
	Works collaboratively with group members and tutor by pro-actively engaging them	1	2	3	4
	Records own thinking, tutor-driven notes, and group member thinking on the white board	1	2	3	4
	Student presenter works together with group members to gather appropriate resources	1	2	3	4
Group Members	All group members contribute to the tutorial by actively asking questions of the student presenter	1	2	3	4
	The entire group takes responsibility for ensuring the pre-work and POC is quality, and if not, encouraging the presenter to refine it	1	2	3	4
	All members actively take three-column notes and work ahead to generate questions for the student presenter	1	2	3	4
	Group members stay on task/topic during the whole tutorial process	1	2	3	4
	All group members engage in discussion without prompting from the tutor	1	2	3	4
	All group members assist in checking for the student presenter's understanding and check for own understanding. If necessary, ask clarifying questions.	1	2	3	4

*To use this tool, identify the rating on the given scale as each type of participant is observed over the course of one tutorial session. A tutorial session can be defined as the full turn of **one** student presenter. Use a new form for each new **student presenter.***

School: _____   **Date:**

_____

Grade Level: _____
Teacher:_____

Tutor: _____   **# Students in Group Observed:**
_____

Ratings

1= NOT observed   (None of the behaviors were observed)

2= PARTIALLY observed (Some, but not *all,* of the behaviors were observed)

3= FULLY observed   (All of the behaviors were observed)

To report results, you may go directly to the online form at:
https://goo.gl/forms/ZLu5yRVew6epuPHC3 or you can print this "paper" copy and then enter your results in the online form later on.

		NOT observed	PARTIALLY observed	FULLY observed
Teacher	There is evidence that the teacher has held all group members accountable for coming to class with a completed TRF (e.g., TRFs are complete and accurate, there may be feedback on the TRFs)	1	2	3
	Coaches tutors and students on TRF revisions	1	2	3
	Coaches both students and tutors in the tutorial process	1	2	3
	Coaches both students and tutors to use higher level thinking	1	2	3
	Coaches both students and tutors to use resources to support tutorial questions	1	2	3
Tutor(s)	Facilitates one group the entire session	1	2	3
	Sits away from the student presenter	1	2	3
	Encourages active participation from *all* tutorial members	1	2	3
	Uses Socratic method to push thinking of students to a higher level through the inquiry method	1	2	3
	Takes three-column notes for the student presenter and encourages all students to take three column notes	1	2	3
	Checks for student presenter's and entire group's understanding before tutorial ends	1	2	3
Student Presenter(s)	Follows 30 second speech protocol by introducing the original problem, steps tried so far, key vocabulary, and POC	1	2	3
	Works collaboratively with group members and tutor by pro-actively engaging them	1	2	3
	Records own thinking, tutor-driven notes, and group member thinking on the white board	1	2	3
	Works together with group members to gather appropriate resources	1	2	3
Group Members	All group members contribute to the tutorial by actively asking questions of the student presenter	1	2	3
	All group members take responsibility for ensuring the pre-work and POC is quality, and if not, encouraging the presenter to refine it	1	2	3
	All members actively take three-column notes and work ahead to generate questions for the student presenter	1	2	3
	All group members stay on task/topic during the whole tutorial process	1	2	3
	All group members engage in discussion during the tutorial session	1	2	3
	All group members assist in checking for the student presenter's understanding and check for own understanding. If necessary, ask clarifying questions.	1	2	3

253

APPENDIX G

AVID TUTORIAL SCENARIOS PRE- AND POST-TEST

1. Please identify yourself by using the code-name you have previously provided: first two letters of your mother's first name and last two digits of your phone number _____ .

For each of the hypothetical tutorial scenarios below, select the choice that *best* describes what you should do as an AVID Tutor in each scenario.

2. Student group members have trouble asking questions during the tutorial.

a. Take points away from those who are not participating and warn them that they will continue to lose points if they don't start asking questions.
b. Pause and have students work in pairs to come up with two to three questions they can ask the student presenter.
c. Ask the teacher to come over and help the group get the conversation going.

3. Students come to class without a legitimate or complete TRF.

a. Score the student pre-work "0" for not coming prepared and then ask the student to complete the pre-work before joining the tutorial.
b. Score the student pre-work "0" for not coming prepared, remind them how important their TRF pre-work is, and allow the students to join the tutorial group "just this one time."
c. Spend the first part of the tutorial session asking the group members to help students revise their TRFs.

4. Students refuse to go to the board to present their POC.

a. Immediately call the teacher over to assist.
b. Remind students that everyone's participation as a student presenter is crucial for everyone's learning, score "participation points" a "0" and move on to the next student.
c. Have students play a quick game like "rock, paper, scissors" to determine who should go to the board next and present.

5. Students are disrespectful to the AVID tutor.
a. Immediately call the teacher over to assist.
b. Remind students of the behavior norms for AVID Tutorials, request an apology before moving forward, and be sure to notify the teacher during the debrief.
c. Remind students of the behavior norms for AVID Tutorials and request an apology before moving forward.

6. AVID teacher is too "nice" or lenient and allows students to be unprepared.

a. During the debrief, talk with the teacher about the issues unprepared students bring to your tutorial group and ask the teacher to help brainstorm solutions with you.
b. During the debrief, talk with students about strategies they can use to approach their teacher about this issue.
c. During the tutorial, have all of the student redo their pre-work, so it meets the standards set by AVID.

7. No one knows how to approach answering the POC.

a. Immediately call the teacher over to see if the teacher can help.
b. Stand at the board and show students how you would begin the problem if you were them.
c. Ask all of the students to go back to their resources to see if they have any resources that can potentially help.

8. Students argue over who gets to present.

a. Immediately call the teacher over to assist.
b. Remind students that everyone's participation as a student presenter is crucial for everyone's learning and quickly choose a student who hasn't presented in a while.
c. Remind students that everyone's participation as a student presenter is crucial for everyone's learning and have student who needs the least help go first, so you have more time later for the students who need the most help.

9. Student group members are "telling" instead of asking probing questions.

a. Mark the "collaborative inquiry" section on the TRF "0," then pause to remind students that they should rephrase their comments into questions.
b. Pause to remind students that they should rephrase their comments into questions and model an example question for them.
c. Allow students to continue until the end of the tutorial session, but make sure to remind students about asking questions when students are writing reflections.

10. A student refuses to participate because she is "not in that class!"

a. Point the student to the Socratic question stems resources and ask the student to find two or three questions she can still ask the student presenter.
b. Remind the student that her participation is still valuable, so she should try her best to still ask questions.

c. Ask the other students to write possible questions on a sticky note and give them to her.

11. The student Presenter goes through the "motions" with no apparent confusion.

      a. Make sure you mark the "Collaborative Inquiry" section of the TRF a "0" for the student.
      b. Coach the group members to help the student presenter refine his point of confusion until he arrives at an actual point of confusion.
      c. After the tutorial, make sure to remind students of the importance of coming with a legitimate point of confusion.

APPENDIX H

INTERVIEW QUESTIONS

This is Mike Garcia, researcher in the Mary Lou Fulton College of Education, Innovation and Leadership EdD program.

The purpose of this interview is to determine your thoughts AVID Tutoring. Your responses will further inform a study I am conducting about AVID Tutoring in our district.

This conversation will be recorded, however your remarks will remain confidential and secured in password protected location. The recording will be destroyed after transcription. If you consent to continue with this interview, respond "yes."

AVID Coordinator/Elective Teachers

"Please focus your responses particularly on the influence of the AVID Tutor training."

1. In your opinion, how did the AVID Tutor training contribute to AVID Tutoring practices? How has it helped?
2. What can you tell me about your experience as an AVID teacher while AVID Tutors engaged in the AVID Tutorial training process?
3. What else have you noticed?
4. Some of the tutors experienced difficulty with the modules in the blended-learning format, did you notice anything in this area from your perspective?

AVID Tutors

"Please focus your responses particularly on the influence of the AVID Tutor training."

1. In your opinion, how did the AVID Tutor training contribute to your learning about AVID and AVID Tutoring practices? How has it helped?
2. What can you tell me about your experience as an AVID Tutor as you engaged in the AVID Tutorial training process?
3. As a result of the training, how are you doing as far as performing AVID Tutoring with fidelity to the AVID Tutorial System?
4. How has the training influenced your overall understanding of AVID?
5. What else have you noticed about yourself as an AVID Tutor throughout this process?
6. Some of the tutors experienced difficulty with the modules. How was your experience in using the blended-learning format?

APPENDIX I

STUDY TIMELINE

This timeline reflects the dissertation Cycle 3 of research in this *action research* study

(Mertler, 2015).

Procedure	Sequence	Action
Preparation	June-August 2017	● Recruitment and consent letters made available
Course Launch and Pre-Intervention Data Collection	August 2017	● Tutors take pre-tests
AVID Tutor Online Coursework (Module One and Two)	September 2017	● Tutors complete assignments in Module One and Two, with reflections in AVID Tutor *Canvas* course concurrent with working as an AVID Tutor.
First Observation	September 2017	● AVID Tutors observed using observation protocol, pre-intervention. ● Artifacts collected
First Face-to-Face Session	September 2017	● AVID overview (further). The ideal tutor. Tutorial process is modeled and practiced.
AVID Tutor Online Coursework (Modules Three-Five)	September-October 2017	● Tutors complete assignments for Modules Two through Five and reflections in AVID Tutor *Canvas* course concurrent with working as an AVID Tutor.
Second Observation	October 2017 (during training)	● AVID Tutors observed using observation protocol (same tutors, mid-intervention) ● Artifacts collected
Second Face-to-Face Session	November 2017	● Tutors come together for the second face-to-face training. Socratic seminar. Tutorial scenario obstacles collected during tutor training. Feedback on training is given.
Final Written Reflection	November 2017	● Final course reflection completed
Post intervention data collection	November 2017	● Semi-structured interviews ● Tutors take post-tests
Third Observation (after training is complete)	December 2017	● AVID Tutors observed using observation protocol (same tutors, post-intervention) ● Artifacts collected
Data Analysis	December 2017-February 2018	● Analysis protocol for pre- and post-tests ● Analysis protocol for observations, assignments, reflections, and interviews
Reporting	March 2018	● Final report ready for review

AVID Tutor Training Cycle 3 Timeline and Protocol