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### The University of San Francisco

# THE INFLUENCE OF MULTIMEDIA PODCAST-AIDED VIDEO-ANALYSIS TO TRANSFER EVIDENCE-BASED PRACTICES AND ALTER NOVICE SPECIAL EDUCATION TEACHERS' SCHEMA DEVELOPMENT

A Dissertation Presented
To
The Faculty of the School of Education
Department of Learning & Instruction

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

By Jason Davis May 2018

#### ABSTRACT

The Federal mandates established under the Individuals with Disabilities Education Act (2004) requires special education teachers to use evidence-based practices to support diverse student needs. With this legislation came an increase in research to identify practices that are effective with this population. While this work has identified a number of evidence-based practices, there is little evidence showing these practices are transferred to the classroom.

Researchers and educators have long sought to understand how to reduce the gap between research findings and teacher practice. For special education, the federal mandate further emphasizes this need and puts closing the gap between research and practice at the forefront of special education research.

This study examined the use of a podcast-aided video-based reflection intervention in an effort to bridge the gap between research and practice. Grounded in Korthagen and Lagerwerf's Levels of Learning theory (1995), the intervention uses multimedia podcasts to deliver evidence-based practices and video-analysis to cement reflection of these practices in teachers' own experiences. Combining the success of video-analyses to improve self-reflection with the growing evidence for enhanced podcasts to deliver content, this study sought to impact novice special education teachers' schema development and implementation of evidence-based practices.

Using a mixed method approach, 12 special education intern teachers provided a concept map describing their understanding of classroom management before and after the intervention. After completion of a three-part cycle of inquiry based intervention, additional data was gathered using semi-structured interviews and collecting individual self-reflections. The results of this data support the use of video as a superior tool to memory for the purpose of self-reflection, the

use of enhanced podcast as a tool for in-field profession development, and the Levels of
Learning theory to describe novice teacher development. The participants in this study not only
demonstrated an increase in understanding of evidence-based practices and their implementation,
but also described many benefits to learning from video-analysis and multimedia podcasts.

#### SIGNATURE PAGE

This dissertation, written under direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

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#### CHAPTER 1

#### INTRODUCTION

#### **Statement of the problem**

For more than a century researchers and practitioners have grappled with finding effective methods of teaching and implementing them into the classroom (Korthagen, 2010b). While having nuanced differences, this gap has been referred to as the research-to-practice gap, research-based instruction, and evidence-based practices (Test, Kemp-Inman, Diegelmann, Hitt, & Bethune, 2015). The passage of the Individuals with Disabilities Education Act 2004 (IDEA) and its mandate to use scientifically based research in classroom practices has inspired a resurgence in investigating our understanding of the current causes of the gap, obstacles to closing the gap, and methods to more readily disseminate consumable practices in special education.

Researchers in the field of special education have developed many evidence-based practices to meet the challenges of a variety of disabilities and concerns (Cook & Schirmer, 2003; McLesky & Billingsley, 2008). In the area of learning disabilities alone, research has concluded the efficacy of scaffolding for task difficulty, the use of grouping, direct instruction, progress monitoring, and others (Vaughn & Linan-Thompson, 2003). These advances in research and the development of evidence-based practices have not, however, transferred to the classroom.

Research suggests that special education teachers are not implementing these strategies (Cook & Schirmer, 2003; McLesky & Billingsley, 2008; Vaughn & Linan-Thompson, 2003). This divide between what is known to be best practice and the work performed by teachers in the field continues to be an area of great concern.

A number of causes for the gap have been put forth. According to Korthagen (2010a),

obstacles present themselves in many ways. Teachers, even those interested in implementing evidence-based practices, are often socialized into their school setting causing them to assimilate to the teaching beliefs and approaches used in that environment. The complexity inherent in teaching, the prior knowledge, stage of development of the teacher, and disconnect between the research and practitioner communities, have all been stated as obstacles (Korthagen, 2010a; Robinson, 1998). Perhaps the most powerful explanation for this reluctance of individuals to use research in their practice, however, is the perceived lack of usefulness or relevance of the research (Carnine, 1997; Korthagen, 2010a). Teachers' limited time and need for specific and concrete solutions (Eraut, 1995) stands at odds to the abstract approach taken by teacher educators (Tom, 1997) and the traditional methods of research dissemination (Cook, Cook, & Lundrum, 2013).

Closing the gap in special education is made increasingly difficult by the unique work environment for new special education teachers (Mclesky & Billingsley, 2008). Teachers working with special education students find difficulty with their roles as both case manager and teacher (Morvant, Gersten, Gillman, Keating, & Blake, 1995), struggle collaborating with others, and supervising paraprofessionals (Mclesky & Billingsley, 2008; Weiss & Lloyd, 2002). Across districts and states, new special education teachers report struggling with paperwork, the evaluation process, finding appropriate material, as well as the traditional teacher concerns of curriculum and behavioral issues (Billingsley, Israel, & Smith, 2011). As many evidence-based practices rarely are designed to match the variety of settings, student needs, and unique conditions typical of special education teachers (Mclesky & Billingsley, 2008; Baker & Zigmond, 1995) it is not surprising that these teachers fail to seek out and learn from research.

The difficulty of implementing new teaching practices is especially difficult for intern

teachers. The enduring shortage of special education teachers has proliferated the development of alternative certification programs (Karge & Mccabe, 2014). These programs are often designed to allow individuals to work on their teaching credential while simultaneously serving as a teacher in a high-needs classroom on an emergency license (Chin & Young, 2007; Gimbert & Stevens, 2006; McCabe, Mortorff, Karge, & Lasky, 1993; Rosenberg, Boyer, Sindelar, & Misra, 2007). Referred to as intern teachers, these individuals participate in often-brief boot camp approaches to education foundations. In addition to the common struggles of new special education teachers, intern teachers must also struggle to learn on-the-job as they typically become the teacher of record after receiving little coursework. With a lack of a solid foundation in evidence-based practices they often learn ineffective strategies from their peers or online searches (Jones, 2009; Test et al., 2015).

To meet the need for high quality special education teachers, intern-based teacher education programs are tasked with finding strategies and tools that not only provide the knowledge of evidence-based practices, but also effectively engage interns in transferring these strategies into practice. Traditional approaches, such as journal articles and professional conferences, have demonstrated an inability to disseminate research-based interventions to practitioners (Cook, Cook & Landrum, 2013). These efforts, described as passive dissemination of work (Dearing & Kreuter, 2010), fail due to the reliance on the practitioners to find and use the strategies identified by researchers. Advances in modern technology may offer improved opportunities to embed research into practice and overcome obstacles traditional methods have failed to hurdle. Having created new avenues for the dissemination of current research and tools to improve the analysis of one's own practice, new technology has the potential to not only increase the accessibility and usefulness of recent findings, but also enable practitioners to better situate this

information into real-world concrete examples.

The internet provides multiple platforms to share research findings. Whether designed to provide access to organized databases of current findings or tutorials that synthesize research, online resources have become a common tool in teacher preparation and professional development. As such, recent research has begun to focus on how to best utilize this technology, whether it is effective, and the quality of the research presented (Test et al., 2015; Reagan & Michaud, 2011). While this research is new and limited by the number of studies, the results of Test et al. (2015) provide reason for concern. In examining online sites claiming to disseminate research-based or evidence-based practices, Test et al. found that 43% of the sites claiming to share high quality strategies lacked any explicit or implicit evidence of quality, suggesting that these sites are not to be trusted by practitioners.

Online tools, designed as tutorials using a multimedia approach, are showing results and great promise. By synthesizing the research into user-friendly tutorials, these tools may support the use of evidence-based practices by making them more easily accessible. One such project, being developed at the University of Virginia, combines the need for accessible delivery of evidence-based practices with recognized methods of instructional impact. Content Acquisition Podcasts are a collection of over 320 online modules based on "Mayer's (2008, 2009) cognitive theory of multimedia learning and validated instructional design principles" (Kennedy, 2014, p. 73). Developed by Michael Kennedy, Content Acquisition Podcasts are available in a number of content areas supporting multiple evidence-based practices in special education and hold potential to fill the need for accessible high-quality tools that deliver usable practices. With many new teachers using online resources as their primary source for finding instructional strategies (Jones, 2009; Test et al., 2015), tools such as podcasts may hold the key to providing accessible

and trustworthy methods of delivery.

Improving accessibility and avenues for dissemination is an important first step in addressing this issue. Transferring the knowledge of research into practice, however, requires an understanding of the cognitive processes involved in pre-service teachers learning from experience (Calandra et al., 2014). Advances in video technology have demonstrated the potential to successfully bridge the gap between knowledge gained at the university and its application in practice (Blomberg, Renkl, Sherin, Borko, and Seidel, 2013; Calandra et al., 2014). With the ability to capture concrete examples of one's own teaching, video might be used to deepen an individual's understandings and reflections, disseminate and provide examples of evidence-based practices, and create a cognitive link needed to inspire change.

Video has become a common tool for aiding in teacher reflection and has shown to impact teachers' ability to learn from their experience (Calandra et al., 2014; Kolb 1984; Putnam & Borko, 2000; Sparks-Langer & Colton, 1991). According to Wubbles, Korthagen, and Broekman (1991) this impact is due to the manner in which reflection impacts mental structures and suggests that "effective reflection is a process where participants reflect on their lived experience, and then interpret and generalize this experience using existing mental structures to either form new mental structures or add to the existing ones" (Calandra et al., 2014, p.104). In this way, using video to identify specific, concrete experiences, an individual can reevaluate an event and create a new schema. This is similar to what Mayer (1997) referred to as the generative theory of multimedia. "Meaningful learning occurs when learners select relevant information from what is presented, organize the pieces of information into a coherent mental representation, and integrate the newly constructed representation with others" (p. 4).

Tools based on multimedia theory, such as Kennedy's Content Acquisition Podcasts, have

shown to be effective at teaching content to pre-service teachers. Video-analysis, reviewing a recording of one's own teaching, has demonstrated the ability to enhance reflection on practice and impact the mental structures needed for change. The purpose of this study, therefore, is to evaluate the potential for combining these processes in an effort to use evidence-based practices to influence the development of new teacher schema.

#### **Purpose of the Study**

While the research provides descriptions of what is needed to close the gap and the potential for technology to aid in this goal, there is little research on the dissemination, practical application, and implementation of these strategies and their impact on teacher cognitive development. Therefore, this study examines the use of multimedia podcasts to deliver evidence-based practices, video-analysis to cement reflection of these practices in teachers' own experiences, and to determine any impact on novice special education teachers' schema development.

Special education teachers enrolled in an intern-based alternative certification program participated in a fieldwork study that incorporates the reflective power of video-analysis with the instructional strength of Content Acquisition Podcasts in a cycle of inquiry designed to alter their schematic understanding of classroom management. As first year first semester intern teachers, the most relevant evidence-based practice at this stage of development must focus on the need for behavior management and classroom instruction to be useful for this population. It is for this reason that the three-part Content Acquisition Podcast on these topics was selected for this study.

Evaluating the data from the written responses to reflection questions, self-reported views of classroom management from interview data, and quantitative results from concept mapping, this study aims at better understanding effective methods of disseminating research findings, what

role video-based reflection may play, and how these practices might change or influence novice teacher schema development and implementation of evidence-based practices.

#### **Significance of the Study**

There are a number of reasons this study is significant. This study is important as it examines and describes an intervention designed to establish a method for intern special education teachers to learn and implement evidence-based practices. Much of the previous research has focused on methods to increase access to research by examining strategies of dissemination or developing partnerships between the research and practitioner communities (Korthagen, 2007). These efforts to make evidence-based practices more easily consumable by practitioners make the assumption that through better access and understanding the practices will be implemented. This is not often the case.

Using technology to deliver content as well as support the reflection process, this study addresses the concerns for teacher preparation programs to bridge the theory to practice gap, adds to our knowledge of how to effectively use video-analysis to impact practice, and extends the research on Content Acquisition Podcasts into ongoing professional development.

The current pressures placed on higher education and teacher education programs demand improvement in the implementation of evidence-based practices. Practical examples of efforts to transfer university gained knowledge into classroom practices are much needed models to aid in meeting this demand.

#### **Theoretical Framework**

This study investigates the use of multimedia tools and video-analysis reflections in an effort to alter intern teachers' schema on classroom management and develop increased knowledge and use of evidence-based practices. The conceptual framework supporting this project stems from

the schema-based three-level model of teacher learning developed by Korthagen and Lagerwerf (1995). This theory argues that for teachers to learn or change their practice they must reflect on specific examples, understand their prior knowledge or instinctive reactions, apply new knowledge, and after additional reflection develop a new theory or create an alternative schematic response.

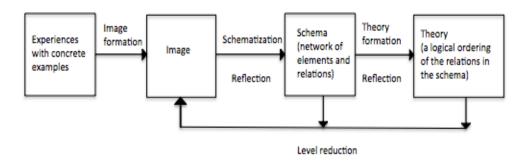


Figure 1. The three-level model of teacher learning and the accompanying learning processes

The first level in the Levels of Learning model consists of image formation "People form an image of a concept or rule on the basis of their own experiences in the everyday world" (Korthagen & Lagerwerf, 1995, p. 1014). After exposed to concrete situations or images, an individual will form a distinct isolated mental image (Calandra et al., 2014). This image is formed in response to a need or concern an individual has recognized and is environmentally and emotionally connected (Korthagen & Lagerwerf, 1995). For example, Korthagen and Lagerwerf (1995) use the image a child creates of their mother to explain further. This image is more than the way the mother figure looks; it includes her smell, her warmth, and the feelings the child receives when the mother is near. The uniqueness of this image can be demonstrated by comparison to the father's image of the mother figure. As his wife, the image of the mother figure is quite different because his experiences with the mother figure have been very different.

Given the base emotional and situational characteristics of the image level, most individuals struggle to clearly express the content of this image in words (Korthagen & Lagerwerf, 1995).

For beginning teachers struggling to find their footing, the early images formed of students, teaching, and the classroom environment can be inaccurate and inspire poor habits. When faced with a dilemma such as a student not following directions, a first-year teacher may use an inappropriate strategy that forces compliance. If the strategy is effective, even if damaging to the student, the teacher may form an image of how to deal with these types of situations. For example, the teacher may raise their voice and threaten the student. By forming the image that threats are an effective strategy, the teacher is more likely to respond to similar situations with this approach.

After exposure to a reoccurrence of the original image or situation, an individual will begin to form related images that become more abstract. Korthagen and Lagerwerf (1995) refer to this process of evolving images from concrete to abstract as schematization. At this second level of the model, a shift in focus occurs. Upon reflecting on the original image, particular aspects of the image are joined with additional details and images. The concrete image is influenced by new experiences and ideas that enable the individual to think beyond the single event and move to a more global view (Korthagen & Lagerwerf, 1995). Using their example, the child may begin to see that the mother figure is more than just a source of their own food and comfort and begin to see that they also possess the roles of wife and independent individual. To effectively influence this schema formation, it is important for the learner to be able to reflect on the images in their own words, however, it is valuable at this stage to provide the learner with the appropriate terminology for their particular field (Korthagen & Lagerwerf, 1995). After reaching level two and having an abstract schema of a concept, the individual must develop a rich schema before

moving to the theory level.

The beginning teacher may find that the strategy of raising their voice and threatening students is not always effective. If the teacher is able to recognize this and reflect on the events and outcomes of their threatening, they may become more susceptible to alternative ideas. If provided appropriate strategies, the beginning teacher may alter their understanding of student behavior and teacher impact causing a change in schema and potentially the creation of a new image.

Once a schema has developed to the point that it becomes so well known that it is used intuitively or almost without thought, according to Van Hiele (1986) it levels down and becomes the new image and makes way for reflection on other needs and concerns. The child has now assimilated this new knowledge of the mother figure and no longer holds the original image, replacing it with the broader understanding of the mother figure. Likewise, the beginning teacher now possesses an alternative method for addressing non-compliance. If, however, this rich schema has a need for logical order or the individual feels the need for an explanatory model, they move into level three, theory building (Korthagen, 2001).

Theory building stems from the need to organize the schema into some type of structure. With the goal being to explain the phenomenon, the learner gathers more information and experience with the schema. The relationships and concepts are reevaluated and definitions and essential elements are developed (Korthagen & Lagerwerf, 1995). Using their example, should the child feel the need to redefine what it is to be a mother, perhaps due to a non-traditional family situation inspiring a rethinking of who is the mother figure and how they fit into their new world view, they may create a new theory on the concept of mother. This transition from schema to theory is the "step between knowing the characteristics of certain situations and providing a

logical explanation for those characteristics, as well as the connections between them..." (Korthagen, 2001, p. 184).

Beginning teachers may move to the theory level when they begin to re-evaluate the role of the teacher. If the experiences and training to better interact with and address behavioral issues, as with the example, inspires the beginning teacher to study further and reinvent their classroom environment and approach, they could potentially develop a new theory of the teacher-student relationship.

As Korthagen (2001) emphasizes, for most situations and learners there is little need for the theory level of development. Most circumstances are addressed by our image level or schema response. For the purpose of this study and to address the concerns of engaging novice special education teachers in the implementation of evidence-based practices, we are most concerned with their ability to transition from level one (image formation) to level two (schematization) with the ideas, strategies, and terminology provided through the Content Acquisition Podcasts. After many more years of experience, reaching the theory building level is a goal for master teachers.

#### **Background and Need**

As early as 1904, John Dewey noted the problem of a divide between research and practice in education (Dewey, 1904). Throughout the 20th century efforts to close this gap have had little success, leaving the relationship between theory and practice a fundamental problem of teacher education (Lanier & Little, 1986; Korthagen 2010a).

As research in teaching and learning developed and our knowledge of pedagogy grew, efforts to share this new knowledge to practitioners took the form of pre-service and in-service teacher training (Korthagen, 2010a). It was at this point that teacher education programs began

teaching specific theories with the assumption that informing teachers of these theories would automatically transfer into practice. Teacher education programs became a place where experts in their field shared their knowledge of what they deemed important, resulting in theories being taught with no connection to practice (Barone, Berliner, Blanchard, Casanova, & McGowan, 1996; Korthagen, 2010a).

The assumption that through better training and understanding of education theory teachers would implement research-based practices was insufficient to bridge the gap. By the 1980's literature began to describe pre-service teachers' inability to transfer this new knowledge into the field (Zeichner & Tabachick, 1981). Veenman (1984) referred to this phenomenon as 'transition shock' and observed that once teachers start their first year of teaching they begin to adjust to the practices and methods used in their school and neglect the theories and knowledge gained in their teacher preparation program (Veenman, 1984; Korthagen, 2010a).

The cause of the gap is, therefore, not merely one of a lack of information. In addition to the tendency for teachers to become socialized into their school's culture and practices, teaching is a complex (Hoban, 2005), ambiguous, and value laden (Schon, 1983) process. Even before entering the field, pre-service teachers bring prior knowledge that may present obstacles. Our preconceived notions strongly resist change (Joram & Gabriele, 1998). Once in the field, teachers need to make decisions quickly and need concrete answers to difficult situations (Eraut, 1995). With so much change and challenge surrounding the transition from pre-service to inservice, it is not surprising that evidence-based practices are failing to be implemented.

Some argue that the gap exists due to the inability of researchers to make their results trustworthy, accessible, and useful for practitioners (Carnine, 1997). Research to understand and develop strategies to improve teacher access to high quality usable evidence-based practices has

included the creation of professional development schools (Bullough & Kauchak, 1997; Darling-Hammond, 1994) increasing the collaboration between school and the university. This, however, is not without obstacles, as it requires relationship building and joint commitments that can break down (Castle, 1997).

Additional approaches have included the use of the teacher as researcher (Cochran-Smith & Lytle, 1993; Stenhouse, 1975). By having teachers do the research themselves, the transfer of research-to-practice is immediate (Korthagen, 2007). This focus on researchers and teacher educators has provided some clues as to how to close this gap, however, without an understanding of how to change the individual and meet their needs, there is little chance that long term implementation will occur.

Beginning teachers face many challenges during their early years and require supports that meet their individual and practical needs. Research and professional development often neglects this vital concern. To overcome the transition shock and encourage the use of evidence-based practices, strategies must be developed with an emphasis on ease of dissemination and flexibility for relevant personalization.

To accomplish the dissemination of individually relevant research, it is necessary to consider both the delivery method as well as the connection to teacher needs. One such strategy demonstrating the ability to focus pre-service teachers on practice and successfully bridge the knowledge application gap is the use of video-analysis (Blomberg, Renkl, Sherin, Borko, & Seidel, 2013). By reflecting on one's own practice, a teacher can clearly understand their own needs and the needs of their students. Once identified, teachers require an easy way to access new strategies to address these needs. This might be accomplished through the use of online podcasts. Content Acquisition Podcasts have shown to be a quick and easy way to deliver

content knowledge. Using these podcasts to aid video-analysis may serve to be a powerful method to engage teachers in implementing evidence-based practices.

#### **Video Analysis**

Beginning with Dewey in the 1930's, reflection has been understood as an important part of professional practice and growth (Dewey, 1933; Schön, 1983; Zeichner & Liston, 1987, 1996). He argued that it is this ability to self-reflect that drives teachers to continually work to improve their practice (Dewey, 1933). Adding to Dewey, Schon (1987) suggested that reflection could be thought of in two ways: Reflection-in-action, or thinking on your feet, and reflection-on-action, thinking back on previous events. Killion and Todnem (1991) further argued that a third reflective practice was necessary, reflection-for-action, or the need to reflect with future change in mind. In this way, reflection can be thought of as being in the past, present, and future (Calandra, Gurvitch, & Lund, 2008).

Implementing evidence-based practices require teachers to be willing to examine their work and identify areas of need and change. Teachers who do not engage in reflection rarely change their practice or evaluate their own effectiveness. Understanding this, educators have made reflective practices an important tenet of teacher education (Pena & Leon, 2011). Defined as "deliberate thinking about action with a view to its improvement" (Hatton & Smith, 1995, p. 52), reflection takes many forms in the university classroom. Journal writing, conferencing, online discussion, and peer feedback are just a few methods researchers and educators have used to promote critical reflective practice (Calandra et al., 2008). While these methods promote reflection, their reliance on an individual's memory and the inability to accurately review experiences presents a limitation. With this consideration and advances in technology, research in the use of video to influence reflection has re-emerged in the field.

Video has been described as "a powerful technological tool for focusing pre-service teacher education on practice" (Blomberg, Renkl, Sherin, Borko, & Seidel, 2013, p. 106). The ability to reflect on an individual's practice after viewing a recording, or perhaps multiple viewings, provides an accurate understanding of the events that occurred. This power of video to provide concrete examples, enable teachers to clearly analyze their work and identify their strengths and needs. Relying on memory alone may create uncertainty and limit the individual's ability to accurately access and target their needs.

In addition to teachers no longer having to rely on memory (Robinson & Kelley, 2007), recent research has found that video can change the type of novice teacher reflections creating more specific student focused thinking (Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra, 2008; Yerrick et al., 2005) as well as encourage a willingness to observe, investigate, and reevaluate what occurred (Rosaen et al., 2008). In their 2008 study, Rosaen et al. examined the difference between reflections relying on memory and those aided by video. They found that video-based reflection increased teacher's focus on instruction and shifted their attention toward students. In their study, participants utilizing video spent 29% of their reflection on instructional issues; where as participants relying on memory focused only 21% of their reflection on instruction. Interestingly, the researchers also noted that reflections based on video resulted in 53.7% of responses focusing on students, with memory-based reflections focusing 34.6% on students. Studies such as this provide strong support for the use of video as a superior tool for increasing novice teachers' focus on their instructional techniques and its impact on students.

The use of video to support teacher reflection has gone by many names since the early work on microteaching by Allen and Eve in 1968. Sometimes called video-analysis (Nagro & Cornelius, 2013), video clubs (van Es & Sherin, 2006), or video self-reflection (Hawkins &

Hefflin, 2011), these efforts commonly involve the use of video to record a lesson, review and analysis of the video by one or more individuals, and followed by teacher self-reflection on the lesson or process. Using video to enhance reflection follows the definition provided by Nagro and Cornelius (2013). Using the term video-analysis, they defined this process as a teacher being videotaped while teaching, the teacher watching the video with the purpose of analyzing what occurred, and the teacher making changes to promote student growth.

The literature provides a strong foundation to suggest that video is superior to memory, has great potential for enhancing reflection, and may aid in creating the need and urgency required to inspire the implementation of research in the classroom. In addition, viewing one's own classroom provides teachers with the concrete examples needed to alter image formation and develop new schema.

Research in the field of video-analysis is on-going and attempting to further develop our understanding of how to best use this technology, where to situate it, and what supports are needed to optimize the experience remain questions for research. While this study may add to our understanding of video-analysis, it is the power to examine one's own classroom, reflect upon it, and compare it to the content delivered in the podcast that makes video-analysis critical to this project.

#### **Content Acquisition Podcasts**

In order to close the gap between research and practice and increase the use of evidence-based practices by special education teachers, they must develop pedagogical and instructional skills that are based on empirical findings (Kennedy, Newton, Haines, Walther-Thomas, & Kellums, 2012). Developments in technology have added multiple methods to disseminate and instruct practitioners in the latest evidence-based practices.

Content Acquisition Podcasts provide not only a variety of multimedia tutorials on evidence-based practices but are grounded in empirical research (Kennedy & Thomas, 2012). Based on Mayer's instructional design principles (Mayer, 2008) and Cognitive Theory of Multimedia Learning (Mayer, 2009), Content Acquisition Podcasts are short vignettes ranging in lengths with most being 5-6 minutes long. Designed for multiple purposes, they cover a wide array of topics (Driver, Pullen, Kennedy, Williams, & Ely, 2014) and combine images and audio narration to support both auditory and visual channels of memory. From its beginning in 2011, Content Acquisition Podcasts have demonstrated through multiple empirical studies to be an effective and efficient method of increasing learner knowledge (Kennedy, Hirsch, Dillon, Rabideaux, Alves, & Driver, 2016).

Providing teachers with brief, effective, and research supported instructional podcasts that can be tailored to the specific needs of the individual or classroom is a novel approach to addressing the gap between research and practice. This study aims at building a foundation for the use of this type of tool as on-going teacher development, therefore it is limited in its ability to allow individual choice. Based on teacher feedback and researcher experience, it was determined that the most relevant topic for investigation for this project is classroom management. With a better understanding of the influence of podcast-aided video-analysis, future studies can determine the appropriate techniques and impact of allowing for individual choice.

Using the podcast to aid video-analysis in on-going teacher development requires the use of inquiry cycles. As is common in video-analysis research (Calandra, Gurvitch, & Lund, 2008; Calandra, Sun, & Puvirajah, 2014; Nagro, deBettencourt, Rosenberg, Carran, & Weiss, 2016) a three-part cycle is used. By having beginning teachers analyze the video of their teaching and comparing it to the strategies and models in the podcast, they begin to alter their practice.

Repeating this process in two more cycles will help teachers to better understand their teaching, deepen their knowledge of the evidence-based content, and alter their schema.

#### **Podcast-Aided Video-Analysis**

The current research demonstrates a need for additional research to aid in our understanding of how to engage novice teachers in the implementation of evidence-based practices. The knowledge acquired to date provides promising clues for future study. Video-analysis has shown to be an effective tool for providing accurate concrete examples from which teachers may reflect. This enhanced reflective capability, however, has not been investigated as a means to encourage schema development. While Content Acquisition Podcasts have shown to be successful at delivering content, this tool has not been researched as an on-going strategy for professional development.

Research is needed to identify tools and processes that will aid teachers in altering their knowledge as well as their practices. This study focuses on the problem of research-to-practice gap through the use of current technology and Korthagen and Lagerwerf's (1995) theory of schema development. While adding to the literature on implementing evidence-based practices, this study may also inform the field of video-analysis and extend the research on Content Acquisition Podcasts beyond the university setting. Figure 2 provides a visual representation of how this study aims to combine the Levels of Learning theory and current trends in technology to support adult learners and promote schema development.

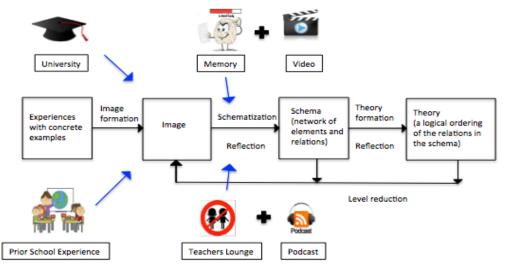


Figure 2. Podcast-aided video-analysis and the Levels of Learning theory

#### **Research Questions**

In order to address the lack of evidence-based practices being implemented in special education classes and to meet the needs of intern special education teachers, this study asked the following questions in an effort to better understand and add to the research on teacher's development of mental structure through reflective practices.

- 1. To what extent do participants report change in their implementation of evidence-based classroom management practices?
- 2. To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

#### **Definition of Terms**

Accessibility. The ease at which research can be found and relevant information can be gleaned (Carnine, 1997).

Content Acquisition Podcasts. An enhanced podcast consisting of images, text, and synchronized narration designed to deliver evidence-based practices and research (Kennedy, Newton, Haines, Walther-Thomas, & Kellems, 2012).

- Dissemination. A systematic method of making research innovations and programs more available (Owen, Glanz, Sallis, & Kelder, 2006).
- Evidence-based practice. Practices having been based on high quality research and demonstrating meaningful impact on student outcomes(Cook & Odom, 2013).
- *Rich schema*. A simple system of ideas develops into a more complex structure of ideas (Calandra et al., 2014).
- Schema. The combination or alteration of an image to describe a situation or aspect of reality with greater depth and detail (Korthagen & Lagerwerf, 1995).
- *Schematization*. When the images we create gradually evolve, broaden, and no longer closely relate to reality (Korthagen & Lagerwerf, 1995).
- *Trustworthiness*. The extent to which research uses quality methods providing practitioners confidence in the findings (Carnine, 1997).
- *Usability*. Research findings that are written clearly and on an important topic to teachers making it more likely to be used (Carnine, 1997).
- *Video-analysis.* A teacher records themselves teaching, watches the video, reflects on what they see, and make changes to their teaching practice (Nagro & Cornelius, 2013).

#### **CHAPTER 2**

#### OVERVIEW OF THE LITERATURE

The use of evidence-based practices has become a focal point in special education. With the passing of the Individuals with Disabilities Education Act reauthorization of 2004, teachers working with special education students are required to use practices that are based in scientific research.

Odom, Brantlinger, Gersten, Horner, Thompson, and Harris (2005) used the term evidence-based practice to describe these required instructional practices suggesting that to be evidence-based a practice must demonstrate effectiveness and be based on quality research. Since then, research in the development of these effective practices has failed to address the issue of implementation or dissemination of the findings. Thus, creating a gap between what researchers know to be evidence-based practice and what teachers are using in the field.

Efforts to close the gap between research and practice have been a challenge in many fields. Inspiring special education teachers to use these evidence-based practices is no exception. While there has been great progress in the research and development of evidence-based practices, there remains little empirical research demonstrating its successful implementation. This review of the research-to-practice gap reveals cause for optimism as well as concern.

This review begins with an examination of the literature addressing the research-to-practice gap. This initial section is divided into two parts to provide both commentary claims as well as empirical studies focusing on this issue. The findings from the literature in this initial section provide support for the use of Video-analysis and Content Acquisition Podcasts in future studies. Therefore, the next two sections provide the current literature on Content Acquisition Podcasts and Video-analysis. This review concludes with a summary and explanation of the need for

additional empirical research.

#### **Research-to-Practice Literature**

In order to gain an understanding of the gap between research and practice influencing special education teachers' limited use of evidence-based practices and to identify efforts made by researchers to close this gap, the following criteria were used in the selection process:

- 1. Studies had to address the issue of the research-to-practice gap (also referred to as teacher use of evidence-based practices).
- 2. Studies having a focus specifically on either special education teachers or students identified with special needs were included.
- 3. Articles were peer reviewed.
- 4. Empirical studies including qualitative, quantitative, or mixed methods were selected. The literature review includes research from 1996-2017. The 2004 reauthorization of Individuals with Disabilities Education Act (IDEA) was the logical starting point. It was this document that emphasized the need for special education teachers to use evidence-based practices. From this initial search using the 2004 date, pivotal work by Carnine (1997) and Fuchs and Fuchs (1996) were found. At this point the literature search was expanded to include work beginning in 1996.

The initial search using the criteria listed above identified 55 peer-reviewed articles. The key terms *Special Education, Research-to-practice Gap, Evidence-Based Practices* were used to limit the research. The articles were reviewed to determine their content and fit for this review. After examination, the list of articles was reduced to 10. Articles were rejected for a number of reasons. A small number of articles did not meet the criteria due to content that was not specific to the topic. The empirical study criterion was the most challenging. Articles described as position papers, reports, or commentary claims dominate current work in the area of

understanding and bridging the gap between research and practice. This is consistent with previous authors stating the predominance of commentary claims and position papers in the field of research-to-practice (Grima-Farrell, Bain, & McDonagh, 2011). Given this limit of empirical research, this review briefly discusses the most prominent commentary claims prior to the results and discussion of empirical studies.

#### **Commentary Claims**

Commentary claims dominate the discussion of bridging the gap between research and practice. These articles focus primarily on identifying the causes of the gaps, barriers to closing the gap, and suggestions for how this issue can be resolved.

Creating a gap. In recent years, research in the field of special education has focused and identified numerous practices that support academic growth for students identified with disabilities (Cook, Cook, & Landrum, 2013; Grima-Farrell et al., 2011; Korthagen, 2007). While the research community has succeeded in developing many strategies and interventions, these evidence-based practices have not become common place in special education classrooms (Cook & Odom, 2013; Grima-Farrell et al., 2011; Guckert, Mastropieri, & Scruggs, 2016; Test et al., 2015). These defining characteristics of the research-to-practice gap have inspired research and discussion to better understand its causes.

Carnine's (1997) influential commentary on the causes of this gap remains a consistent concern. Practitioners refrain from using research, according to Carnine, in part because the nature of research is often not intended to make a practical difference. Research tends to address obscure topics and fails to tackle real world issues (Carnine, 1997). This apparent separation between the research community and the practitioner creates an obstacle to progress (Greenwood & Abbott, 2001). There exists little opportunity for practitioners and researchers to collect

feedback from one another or collaborate on professional development. This leads to research failing to produce ideas that are viewed as usable in the real classroom (Greenwood & Abbott, 2001).

The disconnect between the research community and the classroom teacher may stem from a failure to identify appropriate methods of disseminating research findings (Cook et al., 2013). Without a method of transfer that encourages teachers to take ownership of new practices, sustaining evidence-based practices is not likely (Klingner, Boardman, & McMaster, 2013). Unfortunately, this disconnect creates an environment where teachers who wish to include evidence-based practices are left to examine research on their own. This leads to inconsistent implementation and varying levels of success (Regan & Michaud, 2011). Recent advances in technology have attempted to bring together research and practice by creating easy access and user-friendly systems for teachers to find and implement research findings. Identifying improved methods of dissemination, however, is a continuing obstacle to closing the gap.

**Barriers to closing the gap.** Perhaps the greatest obstacle for addressing the research-to-practice gap and encouraging teachers to use evidence-based practices are the teachers themselves. Teachers lack trust in research, feel there is insufficient time to learn and implement, don't feel supported, and struggle with other work related issues (Cook & Odom, 2013; Klingner et al., 2013; Mcleskey & Billingsley, 2008).

With research failing to emphasize the practicality of their findings and researchers neglecting to seek projects that are relevant to practitioners, teachers struggle to see value in evidence-based approaches (Cook & Odom, 2013). When they do attempt to use research, teachers find little support, coaching, or training. This leaves many feeling unskilled and ill prepared to use these tools (Cook & Odom, 2013).

Systematic efforts have seen some success, however, they often run into a funding obstacle and the practice quickly devolves (Klingner et al., 2013). Transferring research into practice can occur when teachers are provided supports that include a school-wide initiative, researcher collaboration, and funding. Research findings, however, demonstrate that once these supports are removed (research project ends, grant funding is removed) the new practices are not sustainable (Klingner et al., 2013). This may be due to the loss of resources needed to maintain trained personnel or materials. Klingner et al., 2013 also suggest that a challenge to sustainability is the observation that evidence-based practices often require a nuanced approach that takes into consideration the student and classroom needs.

For special education teachers, however, systematic school wide initiatives seldom address issues specific to their students and content. For many teachers, and particularly special education teachers, the research community's inability to address their unique needs and contexts not only prevents the transfer of evidence-based strategies but may add to the mistrust of research and the views that researchers are out of touch with the real classroom (Greenwood & Abbott, 2001; Klingner et al., 2013).

An area seldom linked to the research-to-practice gap and the sustainability of evidence-based practices is the issue of teacher retention. If channels of dissemination are created and systems of sustainability succeed, the loss of trained high quality teachers may still have a devastating impact on the research-to-practice gap (Mcleskey & Billingsley, 2008). In addition, the national struggle to hire and train special education teachers suggests instability in the field. Coupled with high turn-over and poor working conditions, it is imperative that efforts to close the research-to-practice gap include the stabilization of the work force (Mcleskey & Billingsley, 2008).

As researchers begin to understand the causes and barriers involved in the gap between research and practice, articles best described as commentary pieces also provided suggestions for bridging this divide.

**Bridging the Gap**. Featured prominently in the research-to-practice literature are the concepts developed by Doug Carnine (1997). He suggested that for research to cross the divide it must be trustworthy, usable, and accessible (Carnine, 1997). Other authors have expanded on these ideas by suggesting the importance of contextualized field-based relevance. Still others have looked at more unique approaches.

If research findings can establish an evidence-based practice that teachers can trust to work, practical and easy to use, and can be accessed in a timely manner, they are more likely to be implemented in practice (Carnine, 1997). Carnine defined trustworthiness as the confidence individuals have with the findings of the research and the methods used to design studies. Studies that use weak methods, are on trivial topics, use excess jargon, or trend toward fads are troubling and lead to continued mistrust of research (Carnine, 1997). Usability refers to the research to be clearly written and on a topic that is important to practitioners. Accessibility denotes the ease with which a teacher can find and consume the literature (Carnine, 1997). Carnine argues that making it trustworthy, usable, and accessible to practitioners can strengthen the contribution of scientific research.

Examining the usability of research, Cook and Odom (2013) add the need for research to determine what works in the classroom. They argue for "relatively neat, orderly, and relatively well funded, endeavors of conducting and synthesizing applied research to determine what works in real-world settings" (p.140). They suggest that there has been too little attention given to implementation perhaps believing that practitioners would be hungry for these ideas and eagerly

seek them out (Cook & Odom, 2013). In the absence of this eagerness, researchers will need to consider how their findings will be useful. Greenwood and Abbott (2001) also found real-world relevance to be key. They argue for the importance of practitioners learning in context and field-based experiences.

One unique approach to closing the gap suggested by Cook, Cook, and Landrum (2013) involves the use of Heath and Heath's (2008) SUCCES model for making new information stick. Cook et al. (2013) suggest that researchers can bridge the research-to-practice gap by ensuring that the information and delivery is simple, unexpected, concrete, credible, emotional, and involves stories. By keeping things simple or easy to digest, cemented in real world experience, and using trustworthy or credible methods, the SUCCES model follows closely to Carnine's suggestions. The SUCCES model, however, adds the elements of emotions and stories. These last two components suggest that ideas stick when they connect to people emotionally. This might be achieved through stories of student or teacher accomplishments using the research strategies. To date, however, the use of Heath and Heath's model is simply theoretical and research is needed to investigate further.

Commentary claims, such as these, provide guidance and suggestions for where research might look to solve this growing issue. According to most, being able to successfully incorporate evidence-based practices in special education classes will require methods for disseminating research findings and ensuring that research supported interventions are trustworthy, usable, and easily accessible to practitioners.

### **Intervention Literature**

Table 1 provides an overview of the 10 studies focusing on interventions attempting to address the research-to-practice gap in special education. The limited number of empirical

studies can be divided into three categories: studies that examine the perceptions teachers have of the usability of evidence-based practices (Foegen, Espin, Allinder, & Markell, 2001), strategies that encourage accessibility through engaging teachers to become researchers (Christie et al., 2007; Fuchs & Fuchs, 2001; Grima-Farrell, Long, Bentley-Williams, & Laws, 2014; Little & King, 2008), and teachers' false beliefs about how to find and implement trustworthy evidence-based practices (Burns & Ysseldyke, 2009; Guckert et al., 2016; Jones, 2009; Test et al., 2015).

**Usability.** Foegen, Espin, Allinder, and Markell (2011) state that what teachers believe plays an important role in the implementation of evidence-based practices. Little research, however, has focused on the beliefs and attitudes of teachers. To address the question of teacher beliefs, Foegen et al. (2011) used the evidence-based practice of curriculum-based measures to understand whether teacher beliefs varied on the utility and validity of curriculum-based measures as well as whether a difference in presentation might alter these beliefs.

Working with 45 preservice teachers, the authors attempted to evaluate their beliefs about evidence-based practices. The participants were divided into two groups. Both groups received instruction on the curriculum-based measures. The material was developed into two parallel-structured video presentations. The first group's presentation included a statistical explanation for the use and validity of the curriculum-based measure strategy. Group two's presentation included a first-person account of the tool from a teacher claiming to have used it.

A 15-item teacher belief survey was used to assess participants' beliefs about their video presentation. Participants used a Likert style scale of 1 equaling *not at all* and 4 equivalent to *very much* to rate each question. Using a repeated measure of analysis of variance, data were examined and found no significant difference between groups. While this study was unable to identify significant differences, it was noted that the participants believed strongly in the

Table 1

Overview of Research-to-Practice in Special Education

Author	Purpose	Sample	Type	Findings/ Claims
Burns & Ysseldyke (2009)	Examined the frequency with which evidence-based practices are engaged in the education of pupils with disabilities	174 special education teachers 333 school psychologists	Quantitative survey	Direct instruction was recorded as being used at least once a week by 90% of the participating teachers. Modality instruction, formative assessment, and social skills training each were used at least once a week by 70% of the respondents. Only 70% reported using applied behavior analysis at least once a week.  Teachers reported using less effective strategies more than they should and psychologists reports confirmed this over use of ineffective techniques
Christie, Cassidy, SkinnerWilson (2007)	Examine three different communities of enquiry to understand if practitioners can become knowledge creators as apposed to knowledge receivers	3 communities of enquiry programs	Qualitative 3 Case Studies	<ol> <li>1.A community of enquiry must possess a shared purpose and focus on the task</li> <li>2. Communities of enquiry require time to establish and may benefit from researchers and practitioners building on already established relationships.</li> </ol>
Foegen, Espin, Allinder, & Markell (2001)	Understand how teacher beliefs impact their desire to use evidence-based practices	45 pre-service teachers	Quantitative	This study adds to our understanding of teacher beliefs and it impact on transfer. Although inconclusive, this study suggests that belief in the utility of a strategy may be easier and more important than its validity
Fuchs & Fuchs (2001)	Detail the lessons learned from the implementation of a researcher/practitioner collaboration project		Qualitative Descriptive study	The Importance of a Key Individual Control of Resources Sustaining Accountability for Student Outcomes Participation in Development Improving Implementation with Practice Recognition of Accomplishments Teachers
Fuchs, Fuchs, Harris, & Roberts (1996)	Address the need for research based pre-referral intervention		Qualitative project description	After three years, researchers were able to step back successfully bridging the gap between research and practice. Within a year the practice was no longer used.
Grima-Farrell, Long, Bentley-	"The aim of the study was to develop a greater understanding	10 undergraduate	Qualitative Multi-site	Identified three factors: The effectiveness of teacher education; Support and

Williams, & Law (2014)	of the factors that impacted upon the success of an undergraduate, yearlong, collaborative school and university inclusive education experience.	pre-service teachers	Case study	communication amongst peers, school and university stakeholders; and Responsibility and positive relationships.
Guckert, Mastropieri, & Scruggs (2016)	Examine special education teachers' views of their use of evidence-based practices.	10 practicing K-12 special education teachers	Qualitative semi- structured interviews	The researchers identified three distinct levels of awareness: aware, partially aware, and unaware
Jones (2009)	Understand novice teacher's perceptions and use of evidence-based practices.	10 novice special educators	Qualitative case study Structured interview	Novice teachers who demonstrated a strong belief in the importance and value of research were identified as Definitive Supporters. Some individuals were not as confident and labeled Cautious Consumers. Those lacking confidence in the value and usefulness of research to impact the classroom were labeled Critics.  No matter which level of support, however, observations reported very few strategies being used in practice.
Little & King (2008)	Determine the impact of online learning resources on implementation of evidence-based practices.	23 part-time graduate students/ full time special education teachers	Mixed Methods	Teachers find research difficult to access and often having little relevance to their classroom practice
Test, Kemp-Inman, Diegelmann, Hitt, & Bethune (2015)	Examine the trustworthiness of websites claiming to provide evidence-based practices in special education	47 websites	Qualitative	16 websites were identified as trustworthy (34%), 11 sites met the criteria for Trust with Caution, and 20 sites (42.5%) received a Do Not Trust rating

evidence-based practice.

Perhaps the limited results were impacted by the many limitations of this study. Identifying and quantifying beliefs is a daunting task. The self-reported nature and the lack of interview or member check further limit these results. As the author states, understanding belief may not actually correspond to practice. They also acknowledge the limitation of the short video presentations. Perhaps more troubling, the authors state that a final limitation is the fact that the participants had not actually used the curriculum-based measure strategy and may not have fully understood the information provided.

Accessibility. Several studies have sought to understand methods for making research finding more accessible to practitioners (Christie et al., 2007; Fuchs & Fuchs, 2001; Grima-Farrell et al., 2014; Little & King, 2008). Using a variety of techniques such as collaborative partnerships and action research, researchers are examining ways to make research more accessible.

Grima-Farrell, Long, Bentley-Williams, & Law (2014) examined factors that influence university and school collaboration efforts to close the research-to-practice gap. Focusing specifically on the inclusion of students with disabilities in the general education classroom, this study utilized an Australian pilot program entitled the Special Education Immersion Pilot Project.

Ten pre-service teachers were selected to participate in this multisite case study. Sample selection was competitive. Interested individuals applied for the program and were interviewed by university and school personnel. Each participant was required to work in schools for two hours a day for four days a week throughout the school year. In addition, participants had to attend professional development on strategies for inclusion, a two-day induction program, and

Spiritual Formation Days.

Qualitative data was collected using a mid-year survey, end of year structured interviews, and reflection journaling throughout the year. Each member of the research team independently coded the data. The data were then triangulated and inter-rater reliability was used in identifying themes.

Three themes emerged from the data. Important factors for collaboration efforts for bridging the research-to-practice gap expressed by the participants include: effective teacher education, support and communication among all stakeholders, and responsibility and positive relationships. All of the participants stated that teacher education was most helpful when it provided clear, consistent, and practical methods to meet their own needs. The experience was enhanced by the degree to which the school-based personnel and the university partners work together. The participants also consistently reported the need for mutual accountability, responsibility, and a good attitude.

The interesting findings of this study express the need for good working relationships and instruction that is grounded in teachers' areas of need; however, it is not without limitations. The competitive nature of the selection process hinders the generalizability. It may be problematic for schools to select only a subset of teachers to work in these types of groups. In addition, the self-reported nature and the lack of data from the other collaborators limits the perspective. The authors did, however, use multisite cases and inter-rater reliability to increase the validity of their findings.

Little and King (2008) argue that there exists an overabundance of evidence-based practices, however, teachers struggle to access it or find it irrelevant to their classroom practice. The authors suggest that to bridge this gap requires methods to aid teachers in contextualizing the

research. They argue for supporting teachers in completing action research projects on their classrooms.

Little and King define action research, used in thier study, as the application of research in the classroom by teachers interested in studying a classroom issue with the intent to alter it (Little & King, 2008). Action research requires the teacher-researcher to engage in understanding and implementing an evidence-based practice while at the same time collecting data on the impact the practice is having on the students.

The authors sampled 23 kindergarten-12<sup>th</sup> grade special education teachers who were also enrolled as part-time graduate students. The participants underwent a needs assessment during the first session of class. This assessment enabled the evidence-based strategies taught in the course to be tailored to the participants' needs. Using classroom observations and video recorded lessons submitted to the university, each participant was able to implement the strategy. During this 3-month observation and video recording period, the participants completed online modules on action research. This 6-week action research phase included weekly activities, readings, and discussions. Each participant was also required at this point to implement their evidence-based strategy, collect data, revise their implementation, and discuss the results and impact on the students. At the end of the course, participants presented their research.

The data were gathered from a satisfaction survey, Action Research Survey, the online module activities, and the action research projects. Additionally, a selected group of six participants were asked to contribute to focus group questions and individual interviews. In addition, this smaller group completed implementation checklists, were observed in their class, and their action research project was reviewed for quality.

The data analysis, consisting of descriptive statistics, a dependent t test, and qualitative

coding, resulted in statistically significant findings. The mean difference between the pretest posttest was statistically significant in both the area of perception and the questions pertaining to knowledge. The end of course satisfaction survey revealed positive response to this process. The participants felt that this was an important part of their teaching. Seventy-eight percent reported that they believed they were learning to be more effective. In the focus groups and interviews teachers commented on learning about themselves, their students, as well as their teaching through the action research project. Another theme reported related to the feeling of empowerment and the ownership that the participants gained.

This study suggests that action research may be a positive approach to putting research into the hands of teacher and instilling a transfer of ownership. These results, however, must be tempered with the limitation stated by the researchers. Generalization is limited by the use of graduate students who by the nature of their work are already consumers of research.

Creating collaborations between the research community and schools has also been investigated as a potential strategy to bridge the gap. Fuchs, Fuchs, Harris, & Roberts (1996) conducted a 4-year project involving the use of pre-referral teams to aid in addressing the needs of difficult students. The researchers worked together with school district personnel to create teams of professionals who would provide supports to teachers. In the fourth year, the district hired consultants to be trained and fill the role of the support personnel. By having the project now completely run by school staff, the success of the 4<sup>th</sup> year suggested that the project had bridged the gap between research and practice. Unfortunately, once the grant funding ended and the researchers completely removed the program was no longer implemented in the schools.

In another attempt, Fuchs and Fuchs (2001) argue that meaningful collaboration between researchers and practitioners can bridge the gap and support effective classroom practices. Their

model, Project Promise (Practitioners and Researchers Orchestrating Model Innovations to Strengthen Education) engages university researchers and schoolteachers in developing innovations, using random treatments to test the innovations, refining the strategy, and establishing methods to scale up the innovations.

In their 2001 article, *One blueprint for bridging the gap*, Fuchs and Fuchs describes how this model was used in a kindergarten setting. Based on their prior empirical study using peer-assisted learning strategies Fuchs, Fuchs, & Karns (2001), this article describes in detail efforts to collaborate with teachers in order to refine the practices for use with kindergarten age students. The Promise model was used in kindergarten classrooms to address a teacher reported interest in using PALs (Peer-Assisted Learning strategies) with kindergarten age students. Following the three phases of this model, teachers and researchers were able to develop, implement, refine, and scale up the K-PALs (Kindergarten Peer-Assisted Learning strategies).

In the first phase, four kindergarten teachers worked alongside university staff to create the K-PALs program. At this point alterations were made to the original PALs program to be more appropriate for younger participants. The second phase tested the intervention by randomly assigning 33 kindergarten teachers into the K-PALs group, the teacher led phonics instruction, and the control group. During the three-month intervention period more than 400 students participated.

The students assigned to the two treatment groups scored significantly higher than the students assigned to the control group. The K-PALs group scored higher in phonemic awareness than the other two groups. Based on these findings, the third phase was begun. The collaborators developed a manual for implementing K-PALs and began wide spread dissemination.

The lessons learned from this project, as reported by the authors, include the importance of

key individuals, controlling resources, accountability for student outcomes, participating in professional development, and the length of time to implement practices. There are often a select few or a single individual who can influence the group or make a strong impact. This is often an administrator or other influential people in the building who may have access or control of resources. They also learned that holding teachers and schools accountable is an effective strategy to engage participation. Perhaps most significant, implementing this strategy takes time and teachers who are not involved in the development will need time to learn the techniques.

Also looking at collaboration as a strategy for transferring research into practice, Christie, Cassidy, Skinner, Coutts, Sinclair, Rimpilainen and Wilson (2007) explored factors aiding in successful communities of enquiry. They define a community of enquiry as a group of individuals, with a shared purpose, working together to investigate an issue or answer a question in the hopes of gaining new insight.

Their project involved three case studies of preexisting communities of enquiry. The school-based community of enquiry included the students, the teachers, and the researchers. The second group included teachers from over 100 schools in Scotland, policy advisors, and the researchers. The third group involved the authors of this article. The participants used a Virtual Research Environment to share information and research tools. This web-based platform provided rich data from archived communication records. Additional data derived from the participant interviews.

Based on this data, two key issues emerged. It is vital that the group have a shared purpose and a strong focus on the task. Secondly, time and effort are needed to build the kind of relationships conducive to collaboration.

**Trustworthiness.** For research to transfer to the classroom it must be considered by teachers

to be trustworthy. Compounding this issue is teachers' inability to evaluate a practice as being evidence-based. Unfortunately, teachers often find strategies that they believe to be evidence-based that have little foundation in research. The issue of ensuring the transfer of high-quality practices and aiding teachers in understanding how to find and implement the research is a key component to closing the gap.

Burns & Ysseldyke (2009) examined the beliefs and practices of teachers in an effort to understand whether teachers believed they were using evidence-based practices and which practices they were actually using. They argue that understanding the beliefs and behaviors of teachers is the first step to addressing the research-to-practice gap.

Using two different surveys, 174 special education teachers and 333 school psychologists were asked about their use of eight evidence-based practices ranging in effectiveness. The teachers' survey was designed in a five-point Likert fashion while the psychologists record the frequency with which they saw a practice with 1 referring to most often and 8 equaling least often.

The results of the special education teacher survey provided both positive and concerning results. Direct instruction is a well-established an effective strategy. It was recorded as being used at least once a week by 90% of the participating teachers. Another effective strategy, applied behavior analysis, was reported to be used once a week by 70% of the participants. The weaker strategies of modality instruction, formative assessment, and social skills training each were also used at least once a week by 70% of the respondents. These findings suggest that a disconnect exists and teachers are continuing to use strategies that have not demonstrated successful impact on students.

The results of the school psychologist survey were analyzed to identify mean scores. With 1

being most often and 8 be least often, direct instruction was observed most often with a mean score of 1.59 (SD=1.34). Modality instruction was the least frequently seen strategy with a 4.9 (SD = 1.84) on the psychologists' survey. This suggests that the psychologist witnessed a large number of teachers using the successful strategy of direct instruction and a small number of teachers using the unsuccessful strategy of modality instruction. Unfortunately, the results of the psychologist survey found teachers still regularly using one of the least successful strategies in the study, social skills strategies.

Other issues that may be troubling is the use of strategies that are shown to be ineffective. Modality instruction and social skills received higher scores than would be hoped given their limited effect, however, this may be in part due to a lack of understanding of the strategies.

As the survey represents self-reported information, and the current push to use evidence-based practice is well established, there exists a potential for individuals to inflate their frequencies or claim to use a strategy that they do not. In addition, some participants may have had preexisting knowledge of certain terms and concepts that did not match the definition provided by the researchers.

In an effort to understand what teachers believe about evidence-based practices, where the look for them, and how they are used, Guckert, Mastropieri, & Scruggs (2016) engaged in interviews and examined lesson plans and other classroom artifacts. They too suggest that it is valuable to understand the research-to-practice gap from the view of the practitioner.

To understand the variety of techniques and practices, the authors opted to create homogeneous sample of highly qualified special education teachers. A sample of ten K-12 special education teachers were selected and data collection began.

Participants engaged in semi-structured interviews, artifacts from the lessons were collected,

and researcher memos used to better understand the practices of highly qualified teachers. The resulting interview transcripts were coded to allow themes to emerge and the lesson artifacts examine for supporting evidence. This data revealed teachers limited understanding of evidence-base practices.

The researchers found that while all teachers believed they were using evidence-based practices, they varied in the level of awareness. This finding is valuable as it supports the concern that teachers' awareness of what is, and is not, an evidence-based practice is a hindrance to closing the gap. The researchers identified three distinct levels of awareness: aware, partially aware, and unaware. They also found that the level of awareness affected the way in which teachers personalized the strategy. How aware a teacher is impacts the fidelity of implementation, how they discuss the practice, and their reliance on research.

These findings indicate the importance of finding methods of transferring trustworthy practices and what occurs when teachers are left to find their own strategies. This valuable insight, however, is limited by the context of this study. The authors acknowledge that selecting only highly qualified teachers limits the generalization, as does the self-reported nature of interviews. In addition, classroom practices were inferred from artifacts that did not include classroom observations. A member check and classroom observations may have strengthened these findings.

Jones, 2009 also explored the use of evidence-based practices and teachers awareness of valid practices. To better understand the practices, methods, and teaching styles of novice special education teachers, a qualitative investigation was developed. Participants had less than three years of full time teaching experience and worked with high-incidence disabilities.

The ten identified participants were observed in the classrom three times over the course of

the fall semester. Once the observations were completed, a survey was administered using a likert scale. The survey was designed to understand the participants percieved knowledge of practice, the degree to which they use specified practices, the implementation difficulty, how well the strategy was taught in preservice, and how much practice the teachers had with the strategies. The follow-up interviews aided in the development of themes.

The data divided participants into three groups. Teachers who demonstrated a strong belief in the importance and value of research were identified as Definitive Supporters. Some individuals were not as confident and labeled Cautious Consumers. Those lacking confidence in the value and usefulness of research to impact the classroom were labeled Critics.

Again, being identified as Definite Supporters did not necessarily indicate that the teacher was using trustworthy evidence-based practices. Some of the participants who claimed to believe strongly in the importance and rely heavily on research did not demonstrate these practices in their classroom observations. In general, few of the specified evidence-based practices were seen in the classroom observation. This dissonance between the reported beliefs and the observed practices is representative of the limitations with self-reported data. Additionally, the teachers taught a variety of content in diverse settings also limiting the results.

Teachers limited knowledge of what constitutes an evidence-based practice coupled with the knowledge that most teachers rely on the internet for finding new strategies requires the examination of available online sources. Test, Kemp-Inman, Diegelmann, Hitt, & Bethune (2015) reviewed websites claiming to provide evidence-based practices. To be included, websites had to specify a list of either evidence-based or research-based practices, focus on students with and without disabilities, and target birth-12<sup>th</sup> grade education.

The initial 60 websites found were further limited to 47 after applying the search criteria.

The sample was evaluated for quality and a scale of Trust, Trust with Caution, or Do Not Trust was created. To be considered trustworthy a site had to provide explicit evidence. If the evidence was provided only implicitly, the site received a Trust with Caution rating. Do Not Trust was given to sites with no indication of criteria for the quality of evidence.

After analyzing and coding the data collected, 16 websites were identified as trustworthy (34%), 11 sites net the criteria for trust with caution, and 20 sites (42.5%) received a Do Not Trust rating. As internet websites are a major source for teachers in finding new strategies, the review by Test et al. (2015) provides an explanation for why many teachers believe they are using evidence-based practices when in reality their classrooms show little evidence of this being true.

One limitation in this study may help to explain the lack of research supporting these sites. Any website requiring a membership or fee was not included. While this is useful as many teachers will use this same criteria, it greatly reduces the number of potential high quality sites. In addition, information on a website may have been hard to find or identify leading to missing data or faulse identifications.

## **Summary of Research-to-Practice Literature**

While the literature on the research-to-practice gap in special education is limited, recent research and commentary claims do provide direction and have begun to uncover some important areas for additional research. Common among the literature is the model presented by Carnine (1997) in which he argues that research must be trustworthy, accessible, and usable in order to bridge the divide.

Teachers play a vital role in closing this gap. However, even the most dedicated teacher finds obstacles. Many teachers find that research has little value in their everyday practice. Some

teachers will make efforts but are met with a lack of support. Other teachers passionately engage in what they believe to be evidence-based practices that prove to not meet this criterion.

If research is going to transfer to practice with fidelity, the research that is beginning to amass suggests that teachers need access to practices that are trustworthy, but just as important, these practices must meet very real needs for teachers.

## **Promising Future Directions**

The review of the literature on closing the research-to-practice gap resulted in the need to understand how researchers might disseminate trustworthy research in a manner that is grounded in the concrete experiences of classroom teachers. Using suggestions from the literature review, two tools emerged as having a strong possibility to engage teachers in evidence-based practices that can be directly related to the real classroom context. To transfer trustworthy knowledge in the limited time available to teachers, Content Acquisition Podcasts have been successful. To ground the practice in experiential context, video-analysis has demonstrated improved teacher reflection and contemplation on their own work.

## **Content Acquisition Podcasts**

An exciting use of modern technology incorporates multimedia learning in an effort to improve novice teachers' comprehension and retention of specific content. Kennedy, Newton, Haines, Walther-Thomas, and Kellems (2012) created enhanced podcasts entitled Content Acquisition Podcasts. According to Kennedy et al. (2012), enhanced podcasts "include still pictures, on-screen text, and audio recording combined to form a synchronized instructional package" (p.255). Developed by Kennedy, Hart, and Kellems, (2011) Content Acquisition Podcasts are designed using Mayer's Cognitive Theory of Multimedia Learning (Mayer, 2009), which includes 13 instructional principles. Grounded in cognitive load theory, Cognitive Theory

of Multimedia Learning relies on the dual processing principle (Paivio, 1986) and the model of working memory developed by Baddeley (1986).

Table 2 provides a brief overview of seven articles focusing on the use of Content Acquisition Podcasts. This table stipulates the purpose, sample, type of study, and findings of each article. From the table, research using Content Acquisition Podcasts have focused on their effectiveness at increasing knowledge, their impact on cognitive load, and how they compare to other strategies of content delivery.

Although limited, research has shown the use of Content Acquisition Podcasts to improve preservice teachers knowledge and retention of presented content (Driver, Pullen, Kennedy, Williams, & Ely, 2014; Kennedy, Kellems, Thomas, & Newton, 2015; Kennedy et al., 2016; Kennedy et al., 2012). As an instructional tool, these podcasts provide a great deal of flexibility and have shown to be effective prior to instruction (pre-CAP) or following classroom instruction (re-CAP) (Kennedy et al., 2012). In addition, Content Acquisition Podcasts can serve as an independent at home activity as well (Kennedy et al., 2016).

To establish a practice as effective, it is valuable to determine whether the intervention is better than what is typically done. Kennedy, Thomas, Meyer, Alves, & Loyd (2014) investigated the potential for Content Acquisition Podcasts to improve outcomes for students over what they referred to as business as usual. Their study examined both students with disabilities and students without. The participants were randomly assigned to alternating treatments. Curriculum-based measures were given weekly based on the unit studied. The researchers found that both students with disabilities and those without scored higher on the posttests when provided instruction using Content Acquisition Podcasts. In addition, students with disabilities learned vocabulary at a

Table 2

Content Acquisition Podcast Research

Author	Purpose	Sample	Type	Findings/ Claims
Carlisle, Thomas, & McCathren (2016)	Examine the effects of Content Acquisition Podcast (CAP) on teaching phonics.	50 undergraduate preservice special education teachers	Experimental study	Using CAPs produces greater knowledge gains at a faster rate.
Driver, Pullen, Kennedy, Williams, & Ely (2014)	Investigate an CAPs impact on teacher knowledge gain.	103 undergraduates	Experimental, two-group pre- test–posttest-maintenance design	Using CAPs to increase preservice teacher knowledge is superior to practitioner-friendly article.
Kennedy, Hart & Kellems (2011)	Compare the impact of enhanced podcast and audio only podcasts	79 undergraduate teacher education candidates	Experimental, quantitative, two-group posttest design	Enhanced podcasts produce higher recall and transfer than audio only podcasts.
Kennedy, Hirsch, Dillon, Rabideaux, Alves, & Driver (2016)	Compare the impact of CAP to live lecture	56 students enrolled in an introductory special education course	Pretest–posttest quantitative design	CAPs produce greater knowledge gains with less cognitive load than do live lectures.
Kennedy, Newton, Haines, Walther- Thomas, & Kellems (2012)	Examine the use of CAPs as instructional delivery method, with personalized case studies, and feedback.	11 students enrolled in Teaching Exceptional Children in the General Education Classroom	Qualitative design research methodology	CAPs are effective as advanced organizers and summary reviews. Coupled with case studies promoted application of knowledge
Kennedy, Thomas, Meyer, Alves, & Loyd (2014)	Evaluate the impact of CAP vs. Business as usual for students with and without disabilities	141 urban high school students 32 students with disabilities and 109 without	Pretest and posttest Quantitative	Students with and without disabilities scored significantly higher on posttests when taught using CAPs.
Kennedy, Wagner, Stegall, Lembke, Miciak, Alves,Hirsch (2016)	Determine the impact of a CAPs vs a text-only approach.	270 preservice teachers	Experimental, two- group, pretest- posttest- maintenance design	Caps are superior to text-only approaches in transferring knowledge as well as participant motivation.

faster rate when using the podcast approach. The novelty of technology and the use of "business as usual" may have created a limitation, as something is usually better than nothing. To evaluate this technique further it needs to be compared to additional strategies.

In an effort to understanding the impact Content Acquisition Podcasts have on knowledge development, a number of researchers compared the use of these podcasts with a text-only approach (Carlisle, Thomas, & McCathren, 2016; Driver, Pullen, Kennedy, Williams, & Ely, 2014; Kennedy, Wagner, Stegall, Lembke, Miciak, Alves, Brown, Driver, Hirsch, 2016). Driver, Pullen, Kennedy, Williams, & Ely (2014) examined the use of Content Acquisition Podcasts as a tool to engage preservice teachers in understanding phonological awareness. In what could be described as a replication effort, Carlisle, Thomas, & McCathren (2016) also found benefits to using Content Acquisition Podcasts when teaching phonological awareness.

Driver et al. (2014) utilized a pretest posttest approach to identifying any differences between groups using the Content Acquisition Podcast tool to reinforce content knowledge of phonological awareness as opposed to those using a practitioner-friendly article. In addition, a follow-up assessment was completed to determine any difference with regard to maintenance of this knowledge transfer. They found that participants in the Content Acquisition Podcast condition scored significantly better than those in the text-only approach. In the area of knowledge transfer, the Content Acquisition Podcast group achieved a posttest mean of 26.50 (SD= 3.52) while the text-only group mean was 23.40 (SD=4.63). On the maintenance assessment, the podcast group mean was 26.70 (SD=3.63) with the text-only group mean equaling 22.30 (SD=5.21).

Carlisle et al. (2016) found similar results when working with undergraduates majoring in special education. In their study, participants were randomly assigned to either a Content

Acquisition Podcast group or a text-only group. Participants received instruction in the area of phonological awareness and completed pre and post assessments. This tool was designed to assess the knowledge gained as well as whether participants could apply their knowledge of phonological awareness.

Like Driver et al. (2014), their study found the mean posttest for the Content Acquisition Podcast group to be significantly higher than the text-only group with mean scores of 15.15 (SD=3.34) as compared to 10.67 (SD=3.32). In addition, Carlisle et al. designed the assessment to provide application data. In this category, the podcast group also outperformed the text-only group with mean scores of 9.08 (SD=2.48) and 5.79 (SD = 2.69). Compared to text-only approaches, Content Acquisition Podcasts have demonstrated great potential for being a superior method of classroom support.

Kennedy et al. (2016) found that the Content Acquisition Podcast is not only more successful than text-only at content delivery, but also may impact motivation. In an experimental pretest posttest study with maintenance assessment, the researchers used the two treatments (podcast group and text-only group) to assess knowledge transfer of curriculum-based measures. In addition, they used a measure of motivation and found that participants using the podcast approach had significantly higher levels of positive motivation and lower levels of negative motivation than participants in the other group.

In addition to text-only approaches, studies have examined the effectiveness of Content Acquisition Podcasts when compared to a live lecture (Kennedy, Hirsch, Dillon, Rabideaux, Alves, & Driver, 2016) as well as an audio-only podcast (Kennedy, Hart, & Kellems, 2011). In both cases the using Content Acquisition Podcasts demonstrated superior ability to transfer knowledge.

Kennedy, Hirsch, Dillon, Rabideaux, Alves, & Driver (2016) explored the idea that Content Acquisition Podcast might be superior to live lecture. Using a quantitative pretest posttest design, participants were randomly assigned to one of two groups. One group received instruction via Content Acquisition Podcasts while the other group received lecture containing the same content as the podcast. In addition to adding to our understanding of this strategies ability to improve knowledge gains, this study also examined the difference in reported cognitive load from participants in the two groups by administering the NASA-Task Load Index. In this index, participants answer six questions rating themselves on a performance scale. The computer-based index provides a score between 0-100 with zero being no workload and 100 representing a heavy workload.

Kennedy et al. (2016) found that individuals in the podcast group had a higher mean score on the posttest (M=17.90, SD=2.10) than participants in the live lecture group (M=15.00, SD=4.70). They found that the lecture group mean workload score of 40.30 (SD=19.20) was significantly higher than the podcast group mean of 23.90 (SD=12.70). These results suggest that Content Acquisition Podcasts not only provide a powerful method of content delivery, but also can do so at a lower level of cognitive load.

Kennedy, Hart, & Kellems (2011) asked whether the enhanced podcast had greater impact than an audio-only presentation. In this study, the undergraduate students were randomly assigned to listen to either an audio podcast or a Content Acquisition Podcast. Both treatments contained the same audio track. The Content Acquisition podcast included images as well as audio. The researchers ran two trials using different subject matter. In trial one, the participant learned about the No Child Left Behind legislation. The second trial focused on the characteristics of individuals with traumatic brain injuries. In both trials, participants were

assessed on their ability to recall information as well as its application.

In both trials, the enhanced podcast (using images and audio) outperformed the audio only group in both recall and application. Trial one audio-only recall mean was 8.56 (SD=2.78) with the enhanced podcast participant mean was 10.13 (SD=2.00). The application in trial one had an audio-only mean of 6.62 (SD=1.91) and an enhanced group mean of 7.15 (SD=1.12). Trial two found a recall for audio-only mean of 8.41 (SD=2.57) and an enhanced mean of 10.80 (SD=3.24). The application results in trial two found that audio-only mean was 2.92 (SD=1.24) and enhanced mean equaled 3.83 (SD=1.72). By using two treatments with very clear distinctions, this study provides strong support for the use of both audio and visual podcasts.

Showing positive evidence as an instructional tool, Kennedy, Newton, Haines, Walther-Thomas, & Kellems (2012) examined Content Acquisition Podcasts as both as preparation for class and as a review after class. Identified as pre-Caps and re-Caps, this qualitative study explored participants' preference and perception of when and how to use Content Acquisition Podcasts. In addition, this study combined the use of personalized case studies in an effort to promote application of the knowledge gains. They found that 9 out of 11 of the participants successfully used the pre-CAP approach as an advanced organizer for class. Three individuals reported using the podcast as a re-CAP to review the previously taught material. In either case, participants reported increases in their metacognition. Participants also found that the activities involving the use of personalized case studies of their next semester students created a safe space to discuss, reflect, and make connection between the class content and future students.

Given the emerging evidence of its ability to transfer content knowledge in brief multimedia format and flexibility to employ this tool in multiple ways, Content Acquisition Podcast could potentially provide the trustworthy practices that are both accessible and usable for the real world

classroom teachers with limited time and resources.

# **Video-Analysis Literature**

Once a method of delivering high quality research in an easy to consume format is established, another considerable obstacle is a tool that connects the research to an area of need and relevant to teachers. Video-analysis rises from the literature as a tool that encourages reflection on practice, shifts teacher focus, and is superior to memory-based reflection (Blomberg, Renkl, Gamoran Sherin, Borko, & Seidel, 2013; Robinson & Kelley, 2007; Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra, 2008; Tripp & Rich, 2012; Yerrick, Thompson, MacDonald, & McLaughlin, 2011).

Table 3 provides brief descriptions of six research articles focusing on the use of videoanalysis to enhance reflective skill, improve upon memory-based reflection, and influence change.

Having gone by many names, video-analysis involves a teacher being recorded while they teach, watching the video, analyzing what they saw, and making changes that promote student growth (Nagro & Cornelius, 2013). Through this process, teachers are able to see their practice and recall prior videos for refection and comparison (Tripp & Rich, 2012)

In addition, Blomberg, Renkl, Sherin, Borko, & Seidel (2013) found that video was a powerful tool that focused pre-service teacher education on classroom practice. Rosaen et al., (2008) and Yerrick et al. (2005) found that video-analysis shifted teacher's focus away from themselves and increased the focus on students. Through this process of video-based reflection and analysis, teachers observe the complexity of their students and teaching and recognize the challenges of content, student perspective, and pedagogical approaches (Hiebert, Gallimore, & Stigler, 2002).

While using video is not a new strategy for teacher development, the increased access to low cost high quality recording devices has inspired new research in using video of one's own practice to aid in reflection and teacher growth. Recent studies have focused on the impact of video-analysis on knowledge (Seidel, Stürmer, Blomberg, Kobarg, & Schwindt, 2011), its impact on shifting teacher focus (Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra, 2008; Tripp & Rich, 2012), the level of guidance needed (Calandra, Gurvitch, & Lund, 2008; Nagro, DeBettencourt, Rosenberg, Carran, & Weiss, 2017), and potential for video-analysis to create change in teacher schematic understandings (Calandra, Sun, & Puvirajah, 2014).

There may be many reasons a teacher might wish to record and view themselves teaching a lesson. Seidel, Stürmer, Blomberg, Kobarg, & Schwindt in a 2011 study examined whether it was necessary for teachers to watch a video of their own teaching or if watching others teach would have similar results. Randomly assigning teachers to two experimental groups, participants watched either their own or another teacher's recorded lesson. Additionally, participants were separated by their experience with video analysis creating three groups; experienced own video group, experienced other's video, and inexperienced other's video. This study found that those experienced with video-analysis who watched their own video had higher rates of immersion, a sense of being "in the lesson", than other participants. This group also had higher levels of resonance, defined as the ability to make connections to their own work (Seidel, Stürmer, Blomberg, Kobarg, & Schwindt, 2011). Seidel et al., (2011), in a maintenance assessment, also found that these factors created a more motivating environment.

To impact the classroom, however, video-analysis must be able to not only motivate and engage teachers in the reflection of their practice, but also shift their focus to areas of need.

Table 3

Video-analysis Literature

Author	Purpose	Sample	Type	Findings/ Claims
Calandra, Gurvitch, &	Examine teacher	7 teacher candidates in a	Mixed-methods	Without guidance, teacher
Lund (2008)	candidates' perspectives	physical education	Exploratory multi-	candidates' remained in the
	through video vignettes.	program	case study	lower level technical stage of
				reflection
Calandra, Sun, &	Using the Levels in	2 novice teachers	Qualitative case	Teacher reflections can be used
Puvirajah (2014)	Learning framework to		study	to identify an individual's
	examine video-aided			placement on the Levels in
	reflective ability			Learning Framework.
Nagro, DeBettencourt,	Examine how guided	36 teacher candidates	Quasi- experimental	Video-analysis increases
Rosenberg, Carran, &	video-analysis compares		study	perceived professional ability,
Weiss (2017)	to traditional video-			however, guided video-analysis
	analysis			provide superior reflective
				ability and increased
			0 11 1	instructional skill.
Rosaen, Lundeberg,	Evaluate the use of video	3 intern teachers	Qualitative	Video-based reflection enables
Cooper, Fritzen, &	to improve reflection as			more specific reflection, shift
Terpstra (2008)	compared to memory-			the content to instructional
	based reflection			issues, and focus more of
0:11.00	X.1 1			students than memory alone.
Seidel, Stürmer,	Video-analysis of one's	67 teachers	Quantitative	Teachers who analyzed their
Blomberg, Kobarg, &	own teaching verses the			own teaching experienced
Schwindt (2011)	viewing of others'			higher knowledge gain due to
	teaching			increased attention and
T.: & D:-1 (2012)	Cain and daugh	7.4	01:4-4:	motivation.
Tripp & Rich (2012)	Gain an in-depth	7 teachers	Qualitative	Video encouraged change in
	understanding of how video influences the			focus, perspective, trust in
				feedback, accountability,
	process of teacher change			implementation, and ability to
				see their progress

Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra (2008), in a qualitative study, investigated the use of video-analysis as opposed to memory-based reflection. Three participants were asked to record themselves teaching a lesson. They were then interviewed to understand their experience and what they gained from this process. They then recorded two more classroom discussions and produced written reflections prior to watching the videos. The teachers then viewed the video and edited excerpts and written commentary. This process found that, when using video to aid reflection, the participants had more specific comments, shifted their comments toward instructional issues, and had increased focus on students.

Tripp & Rich (2012) also found that video-analysis can impact what a teacher focuses on. In their study, participants recorded themselves teaching, watched the video, tagged and commented on the video using commentary software, and then presented their work to the rest of the group. Through observations, interviews, and artifacts, the researchers identified common themes. The teachers in this study reported that the video-analysis process changed what they focused on, shifted their perspective on their teaching, increased their level of trust in feedback, held them more accountable for their own growth and implementation of quality practices, and enabled them to see their progress.

As the benefits of video-analysis continue to be researched, how to best support teachers in this process must also be considered. Calandra, Gurvitch, & Lund, (2008) and Nagro, deBettencourt, Rosenberg, Carran, & Weiss (2017) both identified improved outcomes when teachers are provided some type of guidance. Calandra et al., (2008) asked teachers to record themselves teaching, view their video, and reflect on what they saw. Without instructions or guidance, teachers remained in a low level technical frame of response. Calandra et al., (2008) suggest that to achieve higher levels of reflective thought requires some form of scaffolded

guidance. Nagro et al. (2017) examined the impact of video-analysis with and without guided supports. Using a cycle of inquiry where individuals record themselves, watch their video, and create written responses, Nagro et al. had one group receive guidance in the form of feedback on their reflection documents while the other group received only confirmation that their documents were received. Both groups in their study reported improvements in their teaching ability. The group receiving guiding feedback, however, had significant growth in reflective ability. To assess reflective skill, Nagro et al. (2017) used a Reflection Checklist providing a score of 0-100. The treatment group grew from a pretest mean of 37.99 (SD=14.80) to a posttest mean of 57.60 (SD=21.61). The unguided group scored a mean of 43.42 (SD=16.16) on the pretest reflection checklist and a posttest score of 36.84 (SD=17.69). In addition, guided reflection demonstrated a greater increase in instructional skill. Based on an instructional skills rubric, the guided reflection group's score went from a 35.04 out of 100 to 47.78 whereas the comparison group grew from 37.14 to 40.17. The work of both Calandra et al. (2008) and Nagro et al. (2017) support the argument that to benefit from the use of self-recorded video, teachers need some form of guidance.

Another interesting direction in the field of video-analysis examines whether the knowledge gained and benefits of this process create lasting change. It is suggested that for change to affect the implementation of practices and create new habits there must be a change in a person's cognitive understanding or schema. Based on the work of Korthagen and Lagerwerf (1995), Calandra, Sun, & Puvirajah (2014) examined two case studies to determine if they could be mapped to the Levels in Learning theoretical framework (Korthagen & Lagerwerf, 1995). Two participants enrolled in a teacher education methods course were asked to record themselves, watch their video, and utilize a reflection-guiding tool. Their findings support the ideas put forth

by Korthagen and Lagerwerf who suggest that prior knowledge plays a key role in a teacher's ability to reflect and move to higher levels. In their study, Calandra et al. (2014) found that the student with limited background knowledge remained at the base level of image formation whereas the participant with prior teaching experience was able to move to the next level of schema formation.

Although still emerging, literature on video-analysis supports the power of video to engage teachers in self-reflection. Significant to this study, video also enables teachers to view accurate and concrete examples of their practice.

#### **Future Research**

There exists a great need for empirical research to evaluate strategies that bring together research and practice. With many of the current studies in special education focusing on the collaboration between researchers and teacher or other strategies that involve a lengthy commitment, scarce resource, or interventions that lack targeted specificity, more research is needed that enables evidence-based practices to connect directly to teacher in a real-world context.

Special education researchers have looked at teacher perceptions, university partnerships, teachers as researchers, and methods of delivering trustworthy strategies. To understand why teachers are still reluctant, research must investigate the issues of practitioners learning in context. It is critical to maximize the contextual fit between the practice and the needs of the school.

## Summary

The overarching goal of this review was to identify efforts to close the gap between research and practice. Examining both commentary claims and intervention research as well as the current

research using enhanced podcasts and video analysis to support teacher development, a number of key factors emerge as critical components of any effort to close this gap: (1) Research should be disseminated in a manner that is easy to access. (2) Practices should be presented in a manner that can be consumed in a manageable timeframe. (3) It is vital that research be grounded in real world concrete examples. (4) Practices need to meet the unique needs of the individual.

#### CHAPTER 3

### **METHODOLOGY**

### **Restatement of Purpose**

The purpose of this study is to evaluate the use of enhanced podcasts to disseminate evidence-based practices, video-analysis to provide concrete examples for reflection, and to understand their impact on novice teachers' development of cognitive schema. Using practices demonstrated to be effective in facilitating classroom management, this study provides evidence to support the use of technology to transfer high quality evidence-based practices, influence teachers' implementation of these practices, and alter an individual's organization and understanding of content knowledge. To accomplish this, an eight-step procedure was followed to gather both qualitative and quantitative data in this pretest posttest mixed method design.

### **Research Questions**

Based on the hypothesis that schema can be altered through the use of concrete personal experiences, access to trustworthy information, and reflection; this study asks the following questions:

- 1. To what extent do participants report change in their implementation of evidencebased classroom management practices?
- **2.** To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

## Research Design

Using a mixed method approach, this study uses qualitative data to gain insight into teacher reflective thought and to better understand the extent of knowledge gained by participants.

Quantitative methods are used to evaluate change in the depth and breadth of individual

participant's schema as well as identifying any changes in teacher practice. Using both qualitative and quantitative methods allows for a deep and thorough examination of the data (Johnson & Onwuegbuzie, 2004).

Qualitative research seeks to understand the lived experiences, behaviors, and feelings of participants as well as provide rich description of phenomenon (Strauss & Corbin, 1998). For this reason, qualitative analysis can aid in the interpretation of the written reflections and provide an understanding of the thoughts, feelings, and experiences that novice teachers have. In addition, this method helps to recognize any thematic change over time and inform the researcher of deeper or alternative meanings within the quantitative analysis as well as support any potential change in content knowledge.

Quantitative research, with its focus on explanations and predictions, uses numbers and measures to describe phenomenon (Krathwohl, 2009). In this way, the concept maps in this design can be analyzed by looking at the number of levels and nodes to evaluate any change in the organization and knowledge of participants.

With the limitation of a projected sample of 13, a mixed methods approach can provide both the rich description of the individual experience with quantitative evidence to support possible findings.

# **Pilot Study**

Seventeen novice special education teachers participated in a pilot study conducted in partnership with the course instructor during the fall of 2016. The purpose of the pilot was to investigate the use of video capturing technology, an online platform for response gathering, tools developed for reflection, and to obtain feedback on the relevance and understanding of the content being discussed.

Participants were asked to video record themselves teaching and respond to the Video-aided Critical Reflection Prompt based on the Critical Incident Reflection Form designed by Calandra, Brantley-Dias, & Dias (2006). The reflection prompt was presented and completed using a platform that enabled participants to respond online. This prompt relied on teachers understanding of Differentiated Instruction, Universal Design for Learning, and Culturally Relevant Pedagogy. The process was completed three times with each of the three cycles following the same procedures and using the same tools. Following the final Video-aided Critical Reflection, the teachers were asked to complete a survey and participate in focus group discussions.

While content delivery was not a focus of the pilot, the results of the study demonstrated the need to make adjustments to the content as well as the tools. Early in the study, teachers provided feedback on the online platform and requested the prompt be provided in hard copy as well as online. Additional concerns about the online process included the excessive amount of time to complete the questionnaire and the inability to save and return to the online prompt at a later date. Another important finding from the pilot was the struggle with the evidence-based strategies used.

The results of the focus groups as well as the reflection documents indicated the participants lacked an understanding of the three content areas in question. The participants stated that the Video-aided Critical Reflection Prompt was redundant as they felt they were responding to the same question over and over again. This finding, however, was not an issue with the tool but the teachers' inability to distinguish between Differentiation, Universal Design for Learning, and Culturally Relevant Pedagogy. This lack of content knowledge created confusion that inspired many to provide the same or similar answers to the three questions pertaining to the different

strategies. With these findings, needed changes in the design became evident.

Based on the teacher reflections and focus group discussions, some noteworthy alterations were made. The participants asked that each cycle build on the previous rather than the repetitious nature of the pilot. They also suggested that the evidence-based practice be limited to one area that is clearly understood. Using the participants' reflections and examining what they focused on and issues they struggled with, it was evident that classroom management was a consistent concern and might be the single relevant practice to focus the study around.

Additional changes were made to the online platform. The prompts were altered to reflect the shift in content as well as to make them less time consuming to complete. They were also broken into two separate reflections. This not only better serves the research design, but also eases the frustration with having to sit for long sessions to complete this step.

The pilot study not only taught us how to manage the capturing of classroom videos and refining of our tools, it also highlighted a critical flaw in the design. Our assumption of content knowledge on the part of the participants and the misconception that novice teachers were prepared to engage in such critical reflection, were limitations that caused confusion. From these results came the understanding that the selection of the evidence-based practice, its relevance to teachers, the method of dissemination, along with the process for grounding them in the teachers own practice were vital keys to engaging teachers in implementing evidence-based practices.

# Sample

To understand how this current project impacts novice special education teachers, 12 intern graduate students seeking special education teacher credentials at the University of San Francisco were selected. Together, the course instructor and I incorporated and facilitated this six-week treatment into the 2017 fall Curriculum and Instruction class. The convenience sample

of students enrolled in this course participated in a two-week summer special education foundations course where classroom management was introduced.

The USF program is unique in the Bay Area as it was established to meet the shortage of available special education teachers. It is designed to allow individuals to complete a special education teaching credential while working as the teacher of record. Therefore, the participants in this study have limited experience and knowledge in the field of education and come from a diverse background. In addition, the participants vary in age (20-over 40) and classroom teaching assignments (8 elementary, 2 middle school, and 2 high school). To address this diversity and potential limitation, a Background Survey was developed.

To protect the individuals participating in this study, an application to the University of San Francisco Internal Review Board for the Protection of Human Subjects was submitted detailing the steps taken to maintain the security of information and the ethical standards of USF. This study does not foresee any potential physical or emotional harm to participants. To ensure voluntary participation, a consent form (Appendix A) was used that explained the individual's right to refuse to have their data used as part of the study. As the steps of this project are embedded in the required coursework and assigned grades, it was further emphasized that the individuals were all required to complete the tasks for course completion. In addition, it was made clear that names and descriptive information would not be used in any publication; however, the researcher and course instructor had access to this information.

#### Intervention

### **Timeline**

This intervention took place over the length of the fall course and required both in and out of class commitments. The instructional workshop along with the background questionnaire (Steps

1-3) took place in class on September 20 and required approximately an hour of class time. Participants were instructed to complete the first inquiry cycle (Step 4) by October 4th with inquiry cycles requiring 1.5 hours each. Shown in figure 3, each inquiry cycle involves the recording of one's own teaching, reflecting on the strengths and needs, watching one of the three parts of the classroom management podcast series, and responding to reflection questions. The second inquiry cycle (Step 5) took 1.5 hours to complete and was required by October 18th. The final inquiry cycle (Step 6) was required by November 1st and involved no more that 1.5 hours to complete. Finally, the participants (in class) completed a follow up concept map (Step 7) and semi-structured interviews (Step 8) took place both in class and via phone or video conferencing throughout November. Further description is provided in the Data Collection Procedures section of this chapter.

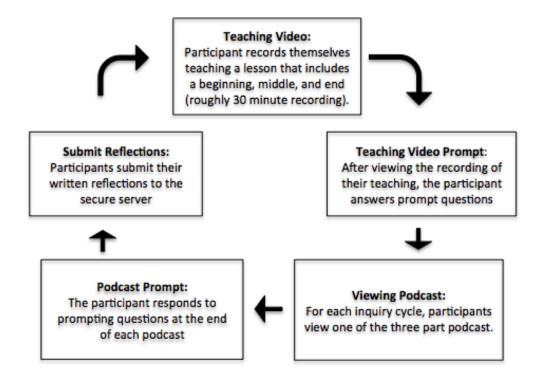


Figure 3. Inquiry Cycle

### **Research Process**

The intervention for this study was divided into three parts, referred to as inquiry cycles. Each of these cycles required participants to follow specific steps to engage in the reflection of their own classroom practices. Using a video recording of themselves teaching a lesson, the participants reflected on the strengths and weaknesses of the lesson. In this way they used concrete examples and did not relying on memory to create an accurate image of their experience. They then compared this experience with the content in one of the Content Acquisition Podcasts. By viewing the podcast and reflecting on its content as it relates to their practice, the individual begins to alter their initial image. This process was completed three times using a three-part podcast series on classroom management shown in Table 4. Additional treatment details are provided in the Treatment Description section below.

Three-Part Podcast Series

Table 4

	Podcast	Practices	Length
First Inquiry Cycle	Part 1: Antecedent Practices	1. Environment	5:23
		2. Explicitly teach expectations	
		3. Routines	
		4. Prompting desirable behaviors	
Second Inquiry Cycle	Part 2: Teaching Behaviors	5. Active supervision	12:02
		6. Opportunities to respond	
		7. Explicit instruction	
Third Inquiry Cycle	Part 3: Consequence-Based Strategies	8. Behavior specific praise	14:45
	Ç	9. Reinforcement systems	
		10. Decreasing unwanted	
		behavior	
		11. Performance	
		feedback	

Table 5

Podcast-aided Video-analysis Research Process

	Purpose	Procedures	Location	Timeline	Materials
Step 1	Provide explanation of the research	-Training in classroom recording	USF class	9/20/17	-Research
Training	project, review of classroom video	-Instructions on accessing online tools.	time		procedures
Workshop	techniques, and obtain written consent	-Provide written procedures		1.5 hours	document
Step 2	Baseline measure of individual schema of	-Provide 20 minutes to complete the	USF class	9/20/17	Concept map
Concept Map	classroom management	concept map pretest activity.	time		
Step 3	Provide information on prior knowledge	Provide 10 minutes to complete a	USF class	9/20/17	Questionnaire
Questionnaire	and experience in classroom management practices	questionnaire	time		
Step 4	The inquiry cycle will produce both an	-Participants use the personal	Individual	Requires 1.5 hours	-Teaching Video
First Inquiry	initial reflection on participant's own	recordings of themselves teaching a	Fieldwork		-Prompt
Cycle 1	teaching as well as reflections after	lesson (Teaching Video).	location	Completed 9/21-	-First Podcasts
	receiving instruction that compares their	-They respond to the prompt		10/4	
	video with examples of antecedent	-Participants watch the first podcasts		D 40/4/45	
	practices.	entitled Antecedent Practices and		Due 10/4/17	
G4 - 5	D (1 .:	answer the questions	T 1: :1 1	D : 1.51	T 1: 17:1
Step 5	Reflection on participant's own teaching	-Watch their Teaching Video.	Individual	Requires 1.5 hours	-Teaching Vide
Inquiry Cycle	as well as reflections after receiving	-Respond to the prompt (provided	Fieldwork	C1-4-1	-Prompt
2	second instructional podcast that	online).	Location	Completed	-Second
	compares their video with examples of teaching.	-Participants watch the second podcast entitled <i>Teaching Behaviors</i> and answer		10/5-10/18	Podcasts
	teaching.	the question provided.		Due 10/18/17	
Step 6	Reflection on own teaching as well as	- Watch their Teaching Video	Individual	1.5 hours	-Teaching Vide
Inquiry Cycle	reflections after receiving third	-They respond to the prompt	Fieldwork	1.5 110415	-Prompt
3	instructional podcast.	-Participants watch the third podcast	Location	Completed	-Third Podcasts
J	instructional podeast.	entitled Consequence-based Strategies	Location	between 10/19-	- I iii u i oucasis
		and answer the questions provided.		11/1	
		and answer the questions provided.		11/1	
				Due	
				11/1/17	
Step 7	The follow-up concept map is to provide	Following the same procedures in step	USF class	11/8/17	Concept map
Post Concept	data to identify change in schema	2, participants will produce a new	time		
Map		concept map.			
Step 8	To gather individual reflection and	10-15 minute semi-structured	USF class	11/8/17-12/6/17	Interview
Interviews	thoughts on the process and impact of the	interviews	time or via		Protocol
	intervention.		phone call		

A step-by-step description of the research process is provided in Table 5. The eight steps are used to explain the chronology of the project and to provide organization. Each step has either an instructional or data gathering purpose provided in the second column. In an effort to further clarify the activities involved in each step, procedures are given as to what the researcher and/or participant accomplished in each step. As these activities take place in either the USF classroom or in the fieldwork placement site, a fourth column explains where the activity was completed. An estimated timeline is provided to demonstrate the length of time needed to complete the project as well as to clarify the demands that were put upon the participants. Participants were allotted two weeks to complete each cycle of inquiry. A materials section is added to provide further clarification.

#### **Instruments**

The research design, procedures, and tools were developed in collaboration with the course instructor. The pilot study allowed for evaluation of the tools and adjustments were made to the instruments and procedures based on this feedback. The instruments are available in Appendix B, C, D, E, & F.

# First Instrument: Concept Map

To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

Concept maps are visual depictions of an individual's content knowledge and organization of an issue or topic (Nietfeld, 2002). This technique has shown to be an effective assessment tool that can be used to demonstrate an individual's understanding of a concept (Francis, 2006). By asking individuals to create a pictorial representation, we can see the primary, secondary and tertiary ideas a participant holds about a topic (Davies, 2011). Referred to as a relational device

(Davies, 2011), this map is constructed through the use of nodes representing concepts and links represent cognitive connection between them (McGowen & Tall, 1999). A schema is defined as "systemic patterns of thoughts and behaviors" used "to organize prior knowledge and provide a framework for future understanding" (Zhao & Zhu, 2012, p.112). Concept maps serve to articulate the schematic understanding of an individual and can be used to assess their schema development.

Concept maps are typically constructed using circles (called nodes) and lines (links) to create a visual representation of knowledge. The participants are presented with a document consisting of only a center circle, a word or phrase that represents the overarching concept or idea, and nothing else on the page. There is no other information provided on the document. All instructions for completing the map using nodes and links are provided orally.

For this study, the center node was provided to the participants with the term "Classroom Management". The participants used their prior knowledge to create a pattern or structure of their understanding. Using nodes and links to represent the relationships between ideas, the participant creates levels of understanding shown in Figure 4. Participants were provided as many sheets of paper as requested and instructed to submit all attempts. They also had the option to start over but were instructed not to erase any of their work. Concept maps were administered as both a pretest and posttests for the purposes of quantitative analysis. The leveled nature within the concept map procedures allow for the results to be evaluated. A participant's pre and post maps can be compared in order to identify the depth and breadth of an individual's understanding.

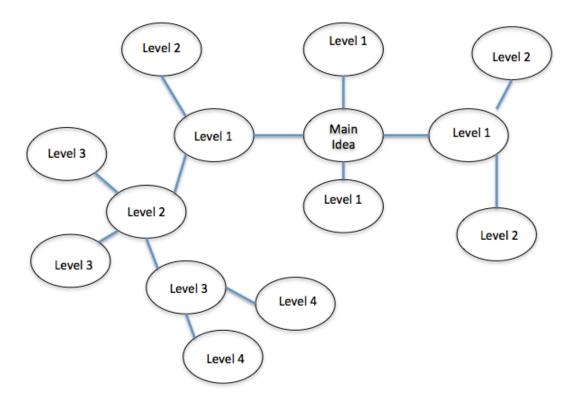


Figure 4. Concept map levels

Concept maps that include concepts at levels 3 and 4 are considered to have more depth than maps including only levels 1 and 2 (Francis, 2008). In addition, results can identify changes in breadth by calculating the nodes at each level (Francis, 2008). In this way, the concept map serves to inform the researcher on the organization and understanding of the participants. The resulting participants pre and post maps will be analyzed using a scoring methodology proposed by Bradford Allen (Allen, 2006).

Allen (2006) states that "students with a better understanding of a particular domain tend to draw maps with a greater number of branches and a greater average branch length than do students with a poorer understanding in the domain" p.5. Allen suggests that maps with large numbers of nodes and links can be evaluated using the average number of branches, however, the limited prior knowledge of the sample in this study suggests that the initial pretest concept

maps may consist of very few branches. As this does not constitute a large number of nodes and lines, this study used the number of branches and the average length of branches to identify the breadth and depth of knowledge. Figure 5 provides a visual representation of this scoring technique.

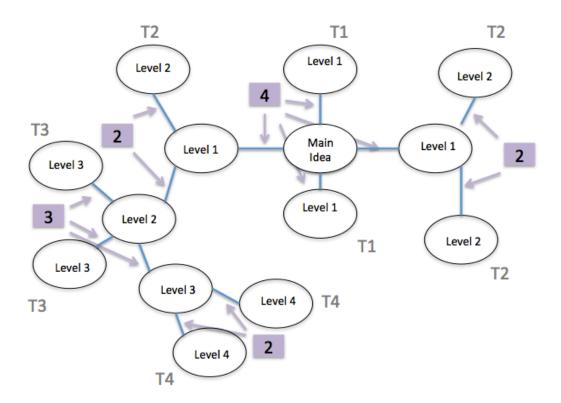


Figure 5. Concept map scoring

Using the example in figure 5 to calculate the number of branches, we start at the center node. There are four branches coming off the center node indicated by the four lines leading to four nodes. Two of these nodes have additional branches stemming from them. Two of the nodes have no additional branches and therefore are considered terminal. Working out from the center node and counting the branches from each non-terminal node we can calculate the above example as: 4+2+2+3+2=13. There are 13 branches stemming from 5 non-terminal nodes.

To calculate the average length of branches, we must look at each of the terminal nodes and

count the number of branches required to reach them. In the example above, we have 9 terminal nodes. Each terminal node is identified with the letter T followed by the number of branches used to reach this node. Using this strategy with the model above gives us the equation: T1+T1+T2+T2+T3+T3+T4+T4=22. Taking the number 22, the total length of all the branches, and divide by 9, we get an average branch length of 2.44.

This scoring method allowed for easy quantitative analysis of individual pre and posttest data. After calculating the pre and posttest maps, the results can be used to identify any changes in understanding. This data helps answer the question of whether a change in schema is observed.

In scoring the concept maps in this way, the content was not evaluated for accuracy or connection to any evidence-based practice. This step is designed to identify if a change in schema occurred. To assess whether a change in schema can be attributed to the intervention, qualitative analysis of the content within the concept maps is performed.

By coding the content of the maps, the researcher is able to identify the major themes throughout the initial assessment and compare that with the themes discovered in the final map assessment. To accomplish the coding of the maps, the podcast series was viewed several times and codes developed to represent the content. Two additional raters viewed the podcast and agreed with the coding categories. The codes were organized in the chronological order presented in the podcast and used to create the Evidence-based Podcast Content Guide (appendix F).

To provide reliability, four of the pre-intervention maps and their corresponding four post intervention maps were given to the three raters for scoring. The two additional raters were not associated with this project and in both cases held high levels of education and experience in the

Field of special education. They were asked to watch the podcast, review the Evidence-based Podcast Content Guide, and score each of the concept maps provided. Names were edited out and raters had no knowledge as to which were pre or post maps, nor were they aware that they were given pre and post maps from the same individuals. The raters were also provided a brief video explanation of the maps and how they were to be scored using a sample map. Both raters were provided the same eight maps and discussions were held to clarify any disagreements.

The result from the first rater showed very few differences from the researchers scoring results, however, the results from the second rater were scored much higher. To address these differences, discussions were held to evaluate any disagreements and to come to a consensus. In addition, out of these discussions came clear definitions for rating and interpreting the maps.

- Score would be given to any term or idea that made specific reference or synonym to
  terms or ideas used in the podcast. The concept of "appropriate synonym" was further
  defined as one which is recognized by the field of special education as having the same
  meaning.
- 2. No credit is given to terms or idea not used correctly. In two cases, participants used the correct term, however, it was used in a manner that did not reflect the content of the podcast or was inaccurately used.
- 3. When multiple nodes refer to the same practice or idea, the content is scored as 1.
- 4. When an appropriate term is used with no additional detail or attached nodes, benefit is given to the participant and the map received the point. If an appropriate term is used, however, the attached details or nodes provide evidence of a lack of understanding, the map is not given the point.

- 5. If an unclear term or idea is used with nodes or details clarifying the intent, a point is given. If an unclear term or idea is used with no clarifying details, no point is given.
- 6. Rater could only use the data from the map to make any inference as to meaning.

Using the above rules, additional maps were scored until a 96% rater agreement was established.

By evaluating all the concept maps using the described codes and guideline, the data provides an understanding of the participants schema as it relates to each map and the content provided by the Content Acquisition Podcasts.

Using both qualitative and quantitative analysis of the concept maps provide the data necessary to answer these research questions.

# **Second Instrument: Background Questionnaire**

To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

The sample for this study includes individuals with a wide variety of background knowledge and experience. In an effort to identify variations and impact on schema development, each participant was asked to complete a background questionnaire (Appendix B). The data from this questionnaire aided in establishing a baseline understanding of classroom management.

The Background questionnaire provided information in the areas of personal experience and current placement. Participants were asked three questions related to their prior experience; personal education experience, age, and past experience working with students. This was collected to understand any impact life experience may have on management technique and what prior knowledge participants bring to the project. As teaching assignments vary greatly, interns were asked to provide their current job description including grade level and special education classifications.

# **Third Instrument: Written Reflection Prompts**

To what extent do participants report change in their implementation of evidence-based classroom management practices?

Novice teachers were prompted to write two written reflections per inquiry cycle. The first prompt occurred after the teacher viewed himself or herself teaching on their Teaching Video. This first prompt, Teaching Video Prompt (Appendix C), asked the participant to reflect on the strengths and challenges of their teaching and address any changes they might make in the future. This prompt was completed online and participants had as much time as necessary. A recommendation of at least one paragraph to answer each of the questions was suggested during the workshop presentation. During the pilot, most participants wrote at least a 5-6 sentence response. The second prompt (Appendix D) asked the participant to compare what they have learned or seen in the podcast with their own Teaching Video. Each described in further detail in the Treatment Description.

Participants accessed both prompts online. To aid in use, as recommended from the pilot study feedback, both prompting tools were available as Word documents in hard copy as well as the online platform.

#### **Fourth Instrument: Individual Interviews**

Upon completion of the three inquiry cycles, interns were asked to participate in individual interviews to provide feedback on the podcast-aided video-analysis process and its impact on their teaching practice. Each interview was conducted either face-to-face or via telephone and took between 10-15 minutes. Using a semi-structured interview technique with guiding questions to focus on predetermined themes while leaving the conversation open enough to changes (Kvale, 1996), discussions focused on four basic questions each with possible follow-ups

(Appendix E).

Following a pattern from broad to narrow focused questions, interns were asked to describe their teaching practice as it relates to classroom management. Follow-up questions aided in focusing on changes over the course of the semester. To understand the participants personal experience with the technology and process, questions two and three asked for feedback on the use of the Teaching Videos and Podcasts to influence their practice as well as the benefits and obstacles using these processes. Finally, teachers were asked if they would continue using the strategies of video-analysis or podcast delivered content in the future. Steering the semi-structured interviews in this way provided data to better understand the impact the intervention had on teacher change in order to address the research questions. In addition, this data may inform future changes and improvements to the podcast-aided video-analysis process.

# **Treatment Description**

In order to guide novice teachers' reflections and provide evidence-based practical supports, the researcher developed an intervention using Kennedy's Content Acquisition Podcasts to facilitate content delivery and support three cycles of inquiry. Combining with the enhanced podcasts the advantages of video-analysis to capture concrete teaching examples, novice teachers were exposed to a novel approach to the classroom reflection process.

After completing the initial introductory workshop, the participants held the necessary knowledge and tools needed to complete the three inquiry cycles that make up the treatment in this study. As part of their university fieldwork, participants were provided a fisheye lens and tripod stand to aid in the capturing of their classroom video. The workshop provided guidance in production methods for recording a classroom video, suggestions for introducing the video recording to students, and a tutorial on accessing the Content Acquisition Podcast.

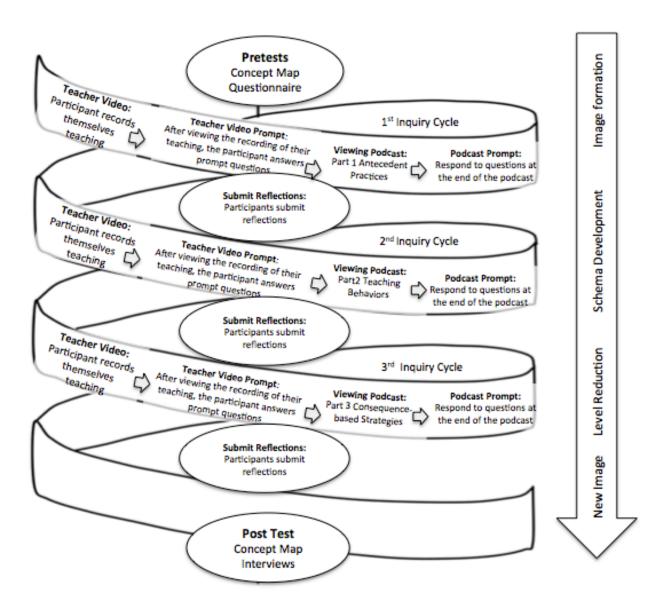


Figure 6. Research design.

Illustrated in figure 6, the inquiry cycle began with the teacher recording and viewing the recording of themselves teaching a lesson. The lessons varied in length and were defined as the introduction, middle, and conclusion of teaching a concept or leading an activity. The participants were asked to attempt to record at least 30 minutes of teaching. The video lengths in the pilot study ranged from 25-40 minutes. After viewing their Teaching Video, the participant answered the Teaching Video Prompt (Appendix C). This initial prompt asked the participant to

describe the strength and challenges they saw in the video with regard to classroom management.

The Teaching Video Prompt concluded with the question; what, if anything, might you do differently in the future?

After completing the Teaching Video Prompt, the participants watched the first of three Content Acquisition Podcasts. The first podcast provided introductory information on the three-part classroom management program, basic classroom environment considerations, teaching expectations and routines, and prompting desirable behaviors. Following the first six-minute podcast, the participants responded to the Podcast Prompt (Appendix D). This tool guided participants in comparing their Teaching Video with what they saw and learned from the first Content Acquisition Podcast. Concluding the first inquiry cycle, participants submitted their responses to the two prompting tools via a secure website.

The second and third inquiry cycle followed the same procedures using part two and three of the Content Acquisition Podcasts respectively. The second cycle used part two of the CAPs series and asked participants to reflect on how actively they supervise the class, the number of opportunities they give students to respond, and techniques for explicit instruction. In the last reflection, participants again responded to the Teaching Video Prompt and compare their Teaching Video to part three of the podcast series. In this podcast, the topics of praise, systems of reinforcement, and additional strategies to decrease unwanted behaviors are discussed.

### **Data Collection Procedures**

The data needed to address the research questions was collected from the pre and post concept maps, background survey, individual interviews, and the six personal reflections from the inquiry cycles.

During the initial workshop at the beginning of the fall semester participants were

administered the first of the two concept map activities as well as the online background survey. Following an explanation of the concept map procedures, the participants were given the document consisting of one center node with the words "Classroom Management" and provided 20 minutes to complete the activity. Once the concept map was complete, the participants were allotted 10 minutes to complete the online survey in class. The data from both these sources was gathered, stored in a secure location, and used for comparisons.

As part of the intervention, the participants provided two written reflection for each of the inquiry cycles. These documents were submitted to the secure website. As there are three cycles in this process, each participant created six reflection documents over the course of the semester. These documents were sorted and stored for later analysis.

The concept map was given again at the end of the semester in the final wrap-up session. A new document containing the node and words "Classroom management" was given to the participants with a twenty-minute completion deadline, following the same procedures from the pretest session.

Individual semi-structured interview recordings were transcribed and reviewed using a content analysis process of multiple reading to identify common themes. This data was used to support evidence of change and implementation as well as provided thematic understanding of the individual experience with the podcast-aided video-analysis process.

# **Data Analysis**

The data was evaluated to answer the research questions and better understand the use of technology to address teacher needs. Qualitative data collected from the concept maps, individual reflections, and interviews helped to answer the question: *To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom* 

management practices? The second question: To what extent do participants report change in their implementation of evidence-based classroom management practices? was evidenced by changes found between the thematic coding of the initial individual reflections and the reflections on the third cycle of inquiry. In addition, interview data also indicated a shift in teacher implementation. To understand the individual's change in concept, knowledge of classroom management, and to answer the question: To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices, the concept maps were quantitatively evaluated.

# Summary

This chapter provided detailed description of the mixed method research design, the procedures that were used, and the data collection and analysis. The intervention described was designed to encourage a change in novice teachers' content knowledge, organization, thinking, and practical implementation of evidence-based practices. All tools and instruments are presented in the appendix and described in detail above.

#### CHAPTER 4

#### RESULTS

The purpose of this study was to determine the effectiveness of the podcast-aided video reflection intervention on novice special education teachers' schema development and implementation of evidence-based classroom management strategies. The research questions were:

- 1. To what extent do participants report change in their implementation of evidence-based classroom management practices?
- 2. To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

To answer the first research question, the participant responses to reflection prompts were examined. Each participant was asked to describe their classroom management strategies after watching themselves teach on their Teaching Videos. A total of three videos were captured over the course of the six-week intervention. Additional information and clarity was gained by having participants share their experience during one-to-one semi-structured interviews. Together, these two tools provide data to understand changes in participants implementation of evidence-based practices.

To answer the second question, a concept map was used as a pre and post assessment. Prior to beginning any intervention, participants were asked to construct a concept map based on their understanding of classroom management. After all of the individuals completed the intervention and required reflections, they were asked to complete a post intervention concept map. Comparing these two pre and post tools, a better understanding of any change in schema can be identified.

Given the diversity of the sample, with individuals assigned to various teaching positions and coming from a variety of backgrounds and experience, the participants were asked to provide background information via an online survey. This data was then used to establish the background knowledge individuals may have brought to the project and to evaluate its impact on the results.

## **Background Context**

Using an online survey tool, participants were asked to submit background knowledge to provide context for the responses provided in this study. This background information established a base level for prior knowledge and experience as well as aided in understanding variations in the data.

## Age

Participants were asked to select one of four possible choices. Ranges were selected to represent individuals who recently graduated college (20-25), those returning to the university after some life experience (26-30), participants who may be career switchers (31-40), and those who were over 40. Of the twelve participants, three selected 20-25, four chose 26-30, one 31-40, and four individuals were over 40.

## **Education**

Participants were asked the question, "Describe your educational background. Beginning with the city and state of your high school, provide any degrees you have earned and the subjects you have studied." Individuals provided information designed to aid in understanding differences between the participants and to identify any prior training in the field of education. All participants held degrees in a variety of unrelated fields except one individual holding a bachelor's degree in special education.

# **Experience**

As this study uses an instructional strategy to shift the schema held by individuals, it was necessary to understand participant's experience working with school age children. Participants were asked to list all of their past experience working with school age children. This information was then used to establish the number of years of classroom experience. Working with school age students as either a teacher, substitute teacher, or paraprofessional was included in calculating years of classroom experience.

The responses to the background survey were used to establish a three-level coding system representing participants background knowledge. Due to the inconsistencies within the degrees earned and the ages of the participants, experience as either a teacher, paraprofessional (teacher's aid), or substitute teacher (or any combination of the three) was used as the primary method for making this determination. Those with less than three years of experience were assigned to level 1. Individuals with experience between three and five years fell into level 2. Level 3 included interns with more than five years of experience.

# **Current placement**

Another variation between participants was the nature of their teaching position. The sample was taken from a K-12 special education credentialing university cohort. This program supports novice teachers from kindergarten through twelfth grade in both resource specialist and special day programs.

In addition to the difference in grade level taught, the level of student support needs also varied. Students identified with special needs are provided classroom supports based

Table 6

Participant Background Information

Background	Degree	Age	Years of	Participant
Level		Range	Classroom	#
			Experience	
3	B.A. Education	Over 40	24	8
	M.A. Administration			
	M.A. Reading			
3	B.A. Liberal Arts	Over 40	23	10
	M.A. Multicultural			
	Education			
3	M.A. Organizational	Over 40	12	9
	Management			
3	B.A. Child	26-30	5.5	1
	Development			
2	B.A. Business	26-30	4	4
2	B.A. Special	20-25	3	11
	Education			
	<b>Elementary Education</b>			
2	B.A. History	26-30	3	2
2	B.S. Psychology	26-30	3	3
2	B.A.	31-40	2.5	5
1	B.A. Political Science	20-25	2	12
1	B.A. History	20-25	1.5	7
1	B.A. Sociology	Over 40	1	6

on their level of need. Students with mild conditions who spend a majority of their school day in the general education classroom may receive support from a resource specialist. This individual provides study skill assistance and often pulls a small number of students for additional instruction. Students receiving this level of service are said to be in a Resource Specialist Program. Students with more substantial support needs will be placed in a classroom with other students with disabilities for a large part of their school day. These programs are referred to as Special Day Programs. Seven of the participants reported working as a resource specialist, four stated that they worked in a special day program, and one individuals reported that they worked in both settings.

The teacher placement was reviewed to determine if any results or findings may be impacted by the current teaching environment. Table 7 presents the findings from the background questionnaire with regard to each participant's teaching placement. As the purpose of this study was to better understand the professional development of novice special education teachers and their ability to implement evidence-based practices, the current placement data was gathered to address any variations in responses as well as to determine whether placement influences the effectiveness of the intervention.

Table 7

Current Work Placement by Background Level

Current 11 Orr	i i ideemeni by i	ourigiounia Bei		
Background	Participant #	Grade level	Disability	Class Designation
Level			Categories	
3	8	K-5 <sup>th</sup>	*	Resource Specialist
3	10	K-5 <sup>th</sup>	ED, SLD	Resource Specialist
3	9	K-5 <sup>th</sup>	SLI, ASD, ID	Resource Specialist
3	1	$4^{th}$ - $5^{th}$	ASD, ID, OI, LD,	Special Day Class
			SLI	
2	4	7 <sup>th</sup> , 8 <sup>th</sup>	SLD, OHI, ED	Resource Specialist
2	11	K-2 <sup>nd</sup>	ASD, OI, SLI	Special Day Class
2	2	K-2 <sup>nd</sup>	SLD, OHI, ASD	Resource Specialist
2	3	12 <sup>th</sup>	SLD, OHI	Resource Specialist
2	5	$10^{th}$ - $11^{th}$	*	Both
1	12	$3^{\text{rd}}$ - $5^{\text{th}}$	ED	Special Day Class
1	7	$6^{\text{th}}$ - $8^{\text{th}}$	OHI, SLD	Special Day Class
1	6	$2^{\text{nd}}$ - $6^{\text{th}}$	*	Resource Specialist

<sup>\*</sup>Participant did not provide this information

ASD	Autism Spectrum Disorder
ED	Emotionally Disturbed
ID	Intellectual Disability
OI	Orthopedically Impaired
OHI	Other Health Impaired
SLD	Specific Learning Disability
SLI	Speech and Language Impairment

The results of the background survey and current teacher placement were used to sort and evaluate the remaining research data. After multiple reviews and resorting, the background data collected for this project identified no clear impact on the findings of the intervention data. Discussed further in chapter 5, teachers background and experience with diverse communities may impact these findings and are an important next step in this research.

# **Research Question 1: Implementation**

To answer the question "To what extent do participants report change in their implementation of evidence-based classroom management practices?" quantitative and qualitative data were gathered from both the Teaching Video Reflection Prompts and the responses to the interview questions.

# **Reflection prompt**

To address this research question, the Teaching Video Reflection Prompt asked participants to "Describe the classroom management strategies used in this lesson." This description, prior to the podcast intervention, provides the base level of classroom management being implemented by each participant. Using this same question from the final Teaching Video Reflection Prompt, any change in evidence-based strategies can be detected.

The list of evidence-based strategies and their subtopics provided in the podcast, represented in Table 8, were used to code the participant reflections. At the time of the third video-based reflection, it was unclear as to the number of participants who had viewed all three of the podcasts. By design, the participants had been instructed to view the enhanced podcast after their third video-based reflection was complete. This would suggest that the participants should have only been exposed to the first two podcasts prior to the final Teaching Video reflection, a design limitation that may be examined for

future studies. Based on the data from the reflections and confirmation from the

Fuidence-hased Podcast Content Guide

Table 8

<u>Evidence-based Podcast Content Gu</u> Podcast		Evidence-based Practices
Part 1: Antecedent Practices	1.	Environment
		a) Class is easy to navigate
		b) Students are visible
	2.	Explicitly teach expectations
		a) Teach
		b) Post
	3.	Routines
		a) Teach
		b) Post
	4.	Prompting desirable behaviors
		a) Use simple language
		b) Be direct
Part 2: Teaching Behaviors	5.	Active supervision
C		a) Regularly scan the room
		b) Teacher moves about the space
		c) Teacher interacts with students
	6.	Opportunities to respond
	٠.	a) Peer tutoring
		b) Probing questions
		c) Written responses
		d) Response card
		e) Variety of question depth
	7.	
	٠.	a) Advanced organizers
		b) Using an agenda
		c) Modeling
		d) Think-a-loud
		e) Guided practice
		f) Post organizers
Part 3: Consequence-Based Strategies	Ω	
art 3. Consequence-Dased Strategies	8. 9.	* *
	٦.	Reinforcement systems
		a) Acknowledge appropriate behavior
		b) Positive Behavior Support
		c) Reinforcement for meeting expectations
		d) Token economy
	10	e) Reteach expectations
	10	. Decreasing unwanted behavior
		a) Proximity
		b) Planned ignoring
		c) Praising others
	11	. Performance feedback
		a) Set clear class-wide goal
		b) Social reinforcement

interviews, some of the participants watched all of the podcasts at one sitting. This research design limitation suggests that the final reflections will vary with some representing knowledge of the first two podcasts and others having exposure to all three. Due to this, the content from the first and third reflection prompt were coded using the Evidence-based Podcast Content Guide in Table 8 that reflects all three podcasts.

The Evidence-based Podcast Content Guide was developed from the specific content from the enhanced podcast series. Each of the three podcasts were viewed and reviewed to establish clear coding descriptors. In addition to the researcher, two colleagues knowledgeable in the field of special education viewed the podcasts and the Evidence-based Podcast Content Guide to provide support and clarity for the coding structure. As seen in Table 8, eleven main strategies with supporting details were identified and used to code the participants responses.

The responses to the reflection prompt were written in paragraph form. Each reflection was analyzed using the coding structure to highlight terms and concepts. Table 9 provides the results of this analysis. During the first reflection, the range of participant reference to each practice spanned from 0-3. In the third reflection prompt, this range shifted slightly to 0-4.

Reported Evidence-based Practices Implemented

Table 9

	First Reflection (Range)	Third Reflection (Range)	Difference
Means	1.08 (0-3)	2.00 (0-4)	0.91
Standard Deviation	0.99	1.28	1.38

The quantitative analysis of the written reflections demonstrates a mean difference between the initial reflection and the final Teaching Video Reflection. The first reflection mean being 1.08 (SD 0.99) and the final reflection mean equaling 2.00 (SD 1.28) results

in a difference of 0.91 (SD 1.38). This suggests an increase in novice teacher reported implementation of the evidence-based practices presented in the enhanced podcast intervention.

#### Interview

Table 10

To better understand the experiences of novice special education teachers and their attempts to implement evidence-base practices, all participants were asked a series of questions in semi-structured interviews. These interviews were recorded and the recordings transcribed for analysis.

Content analysis was conducted to identify themes in the teacher responses. The transcripts went through numerous readings until common ideas emerged. In addition to the identified common themes, outliers that provided contradictory evidence or suggestions for future changes were also included in the data set.

Number of Participants Reporting Using Each Practice

**Evidence-based Practice Implemented** Behavior specific praise 6 Explicitly teach expectations 3 Reinforcement systems 3 2 Decreasing unwanted behavior **Explicit** instruction 2 2 Routines Active supervision 1 Environment 0 Opportunities to respond 0 Performance feedback 0 Prompting desirable behaviors 0

In each case, participants could identify at least one example of an evidence-based practice learned from the podcast that they then implemented in their classroom. The most commonly referred to strategy, described as both helpful and implemented, was the

use of behavior specific praise. Table 10 shows each of the strategies provided by the podcast and the number of participants stating that they attempted to implement the strategy. In this table, the eleven strategies are organized by the most to least reported as implemented by the participants.

Many participants commented that the strategy of providing behavior specific praise was "the most useful." Six out of the twelve participants found that going beyond the simple statements of "nice job" or "good work" associated with general praise and making one's comment specific to the behavior being exhibited was a most memorable strategy. One participant described the podcast on specific praise with, "That was one of the Aha moments." After implementing this strategy, another participant stated "(My) comments become more relevant. There's less of them but they mean more, hopefully."

Interns also reported success in implementing proximity, a decreasing unwanted behavior practice, and moving around the classroom, an active supervision practice. Establishing an environment where the teacher is able to visibly monitor students as well as move about easily was described in the first part of the podcast series. Upon implementing this technique, one participant stated, "travelling around the room and just making sure the students know that I'm here, I'm watching them. I'm with them making sure they're on task. I thought it was pretty helpful." Using a similar practice from the final podcast, another participant said, "just being close. It really became a big thing that I was like I should be doing this it makes sense."

Two participants attempted to implement a new token economy. Using tickets as a reward that can then be used to purchase items from a school store or as raffle tickets for larger items is the foundation for a token economy. A number of teachers in this study

started the school year off with such a reward system. One of the participants who made a comment during the interview stated that she was working on a plan to change her token economy based on the content learned from the intervention. The second teacher implementing the new token economy stated, "That is one thing that I am implementing and it's pretty good because they (her students) are bought into having the points."

A number of Evidence-based practices were not reported as implemented during the final interview. Described further in chapter 5, the practice of setting the environment, opportunities to respond, performance feedback, and prompting desirable behavior were not mentioned by participants. This may be due to the timing of the interviews. These four practices were discussed in the first half of the podcast series and may not have been fresh on the minds of participants.

Whether the practice improves the level of praise and reward or increases a teacher's supervision of students, participants attempted to implement the ideas gained from the podcast and at times reported seeing benefits. After watching himself on his final video, one teacher stated, "It feels good to often see the strategies that we're using and we're implementing and were working as well."

While every participant stated finding content that was useful, one participant thought the podcast was not well designed for his context. A participant working at the high school level commented, "Most was aimed for a younger audience." This same teacher went on to suggest that the content did not take into consideration the diversity of students,

"A lot of my kids are immigrants, or kids of immigrants, or don't have both parents at home and they're just less conditioned to respond to those like, "Way to go, Chuck, you get a star." Those are pretty summer-campy. I think they would work for kids who have grown up in those environments, but throwing stars at 16-

year olds who've never gotten a star is not going to do -- It could work but I think it just feels corny to them, and they know it's corny... I do embrace corny stuff but in general the material was for a younger audience. Not only that, a whiter audience."

The comments made by this participant reflect the need to address the intersection between students with special needs and those from diverse cultures. This intersection was not a focus of this research, however, is highly regarded as an important element when designing classroom management procedures.

The podcasts presented practices that are proven effective for all grade levels. The examples they used and the general nature of the content, however, could be seen as not relevant to some grade levels, cultures, or contexts. In each podcast, the vignettes and images used were of classrooms and students at the elementary level. This participant's comment suggests that future projects may need to be more focused on specific grade levels and perhaps school contexts. Additional research is also needed and alternative podcasts created that view context from multiple lenses to address the needs of the diverse communities being served.

#### **Research Ouestion 2: Schema Development**

To address the second research question, "To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?" participants completed a concept map prior to the intervention and a second map at the final post intervention session. These maps were completed during their regular class time where they were given twenty minutes to complete the visual organizer representing their understanding of classroom management. Concept maps provide quantitative data as they can be scored based on the number of branches, the average length of each branch, and the frequency of words used to represent concepts.

The data was first scored using the technique described in chapter 3. Each map was given a score based on the number of branches stemming from each node. This score provides an understanding of the breadth of knowledge the individual has on the selected topic. Next, the concept maps were scored by calculating the average length of each branch. This score provides the depth of a person's knowledge. By comparing the resulting scores of each map, a clearer picture of any change in schema can be revealed.

Using participant number 6, Figure 7 provides an example of the scoring procedure. For each circle (or node) the number of branches stemming from that node were counted. Note that from the center node labeled Classroom Management there are five branches leading to additional nodes. The Classroom Management node is therefore scored with the number 5, a box was placed around the number 5 above the node for visual clarity. Continuing with the remaining nodes that are not terminal, nodes without continuing branches, how wide an individual's understanding can be calculated. Adding the numbers in boxes, 5+2+4+3=14, gives participant number 6 a pretest breadth score of 14 that can be used to compare to their post test results.

To identify the depth of understand the individual has on the content, the average length of each branch is calculated. By starting at each terminal node and counting the number of branches required to reach that node, the length is determined. Represented with a T followed by a number, Figure 7 also provides an example of the scoring for depth. Note that the node with the term "Practice" is scored with a T2 because there are two branches between it and the center node. The term "Most Important" is labeled with a T1 as it is only one branch from the center. By adding the T numbers together and dividing by the number of scores, the average branch length can be established to

determine the depth of understanding. For participant 6, there were nine labeled T2 and two labeled T1. This can then be scored as: (9x2) + (2x1) = 20/11 = 1.82 or an average branch length of 1.82.

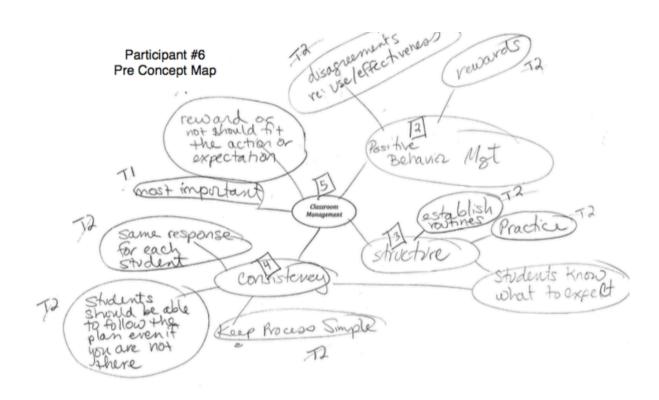


Figure 7. Concept map breadth scoring procedure

Looking first at the comparison between the number of branches (breadth of knowledge) in each map, the raw data was converted to provide the mean and standard deviation for both the pre and post assessment and presented in table 10. The pretest concept map number of branches ranged from 14 to 29 with a mean of 23.5 and a standard deviation of 7.21. The posttest had a range of 13 to 32, a mean of 19.58, and a standard deviation of 5.48. Mean difference between assessments was also calculated with a mean of -3.75 (SD 4.27).

Table 11

Number of Branches

	Pretest	Post Test	Difference
Mean	23.5	19.58	-3.75
Standard Deviation	7.21	5.48	4.27

The maps were next scored to determine the average branch length (depth of knowledge), shown in table 11. This score provides an understanding of the depths of understanding an individual has of a particular concept.

Table 12

Average Branch length

	Pretest	Post Test	Difference
Mean	2.24	2.16	-0.08
Standard Deviation	0.35	0.23	0.18

With a range from 1.75 to 2.82, the results of the average branch length for the pretest were a mean of 2.24 (SD 0.35) and the posttest, with a range from 1.70 to 2.55, had a mean of 2.16 (SD 0.23). The mean difference was -0.08 (SD 0.18).

Identifying the depth and breadth of understanding does not, however, provide information on the content of that understanding. To identify any growth or shift in the content knowledge, the maps were next analyzed to examine the words and ideas expressed. Using the Evidence-based Podcast Content Guide from Table 8 above, the concept maps were re-evaluated by the researcher and two colleagues, both with content knowledge and experience in the field of using evidence-based practices in special education.

After viewing the podcasts and the Evidence-based Podcast Content Guide, each scorer circled the number of times a map referenced one of the eleven strategies. Figure 8

provides a pre and post map illustration of this scoring process.

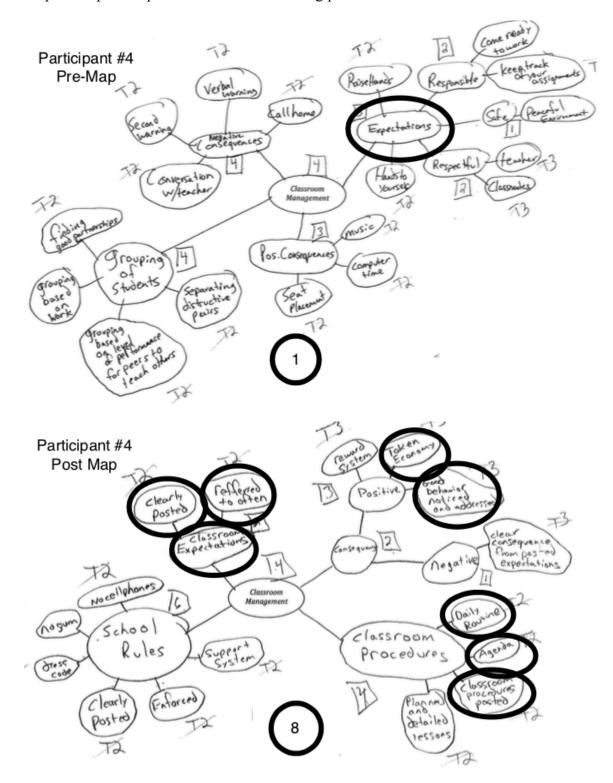


Figure 8. Sample scored pre and post map

After completing the evaluation of each map and conferring over differences, the

results identified by the three scorers were used to establish a table of frequency. Table 13 provides the frequency with which individuals reference each of the eleven strategies presented in the three podcasts. The table is organized by the order in which the strategies were presented to participants.

The initial concept maps referenced the evidence-based practices taught in the intervention, 34 times. The follow-up concept map produced after the intervention had a frequency of 61 references to the intervention concepts. These results suggest that while there was little change in the depth and breadth of the maps, the content change dramatically with a doubling of the references from the intervention content.

Frequency of References to Evidence-based Practice

Table 13

Intervention Content	Concept map 1	Concept map 2
	Pretest	Posttest
Environment	1	1
Routines	14	13
Explicitly teach expectations	9	15
Prompting desirable behaviors	0	0
Active supervision	0	0
Opportunities to respond	0	1
Explicit instruction	0	2
Behavior specific praise	0	5
Reinforcement systems	9	17
Decreasing unwanted behavior	0	2
Performance feedback	1	5
Total	34	61

Finally, the concept maps were sorted using the three-level background code and assessed for mean differences to understand any differences that may be associated with prior experience. The results of the background level sort, presented in Table 13, suggest that no matter what the prior background experience, the intervention has a similar impact as all participants increased their occurrence of evidence-based practices

referenced by a mean of 2.43. An interesting result, discussed further in chapter 5, is evident in Table 14. Individuals with the least amount of background knowledge, level 1, scored higher on the initial pretest than those with more experience.

Mean references to Evidence-Based Practices by Background Level

Background Level Initial Concept Map Follow-up Concept Map

1 3.33 (0.58) 6.33 (1.53) 3.00 (1.73)

2 3.00 (1.58) 4.80 (2.59) 1.80 (3.90) 3 2.25(0.96) 4.50 (1.00) 2.50 (1.00)

The concept maps provided data suggesting that the podcast-aided vide-analysis intervention altered the schema of each of the participants.

# **Additional Findings**

Through the course of the semi-structured interviews and analysis of the concept map data a number of additional results emerged. These findings support the theoretical framework and encourage continued use and research with video-based reflections and enhanced podcasts.

# Watching your own classroom

Table 14

Participants reflected on the benefits and challenges of viewing one's own classroom teaching. For many individuals, this was a very positive aspect of the study.

"I can get behind videoing all day long. As a learner, I see the leverage with it. So quickly you can notice something about yourself and you can just fix it up or adjust it, or completely change it. Because there's no escaping what you see."

Others found the experience to be a moment of realization and inspired change.

"I didn't expect it, I was like, "Okay I know how I teach." But then watching I was like, "Okay I was doing somethings that I liked, somethings like okay I could do that a little bit better still."

The use of video provided concrete examples of a teachers practice. According to one participant, "I'm getting a very genuine, "oh" when I watch the video... "oh this is who I am,"

Still others identified specific issues with their techniques.

"I noticed I need to slow down when I talked. I have kids with major processing issues. I didn't realize how fast I really talked. I need to use more visuals when I'm giving directions."

In addition to finding areas for change, some participants found watching their Teaching Video to be reassuring and to provide confirmation that they are being successful.

I remember the moments I was fumbling and how it looks, like "Oh, actually wasn't that bad," or like "Oh yes, that was a weird part."

Two participants reported challenges in watching their recorded lessons.

"I'm really not at a point yet in my life where I'm capable of watching myself on video. I really have a hard time moving past this just the whole, "Why did I wear that shirt?" I can't stand the sound of my own voice, it was very difficult."

"I feel that's just human nature for me. You know when you hear your voice and you're like, "Oh my god, I sound awful." I feel the same thing when you're seeing yourself and you're like, "Oh my god, I look horrible."

With its challenges and benefits, watching one's own teaching puts an individual in a position to see what is actually happening and provides the necessary concrete examples to shift a person's perspective.

I think it's most useful of all (see yourself on video) ... to be your own student and receive the way you talk and the speed at which you talk and how you bounce around or don't bounce around or how you follow the agenda or don't follow the agenda. So, improving a lesson plan, what could be done better with the lesson, progress for sure, equally important is what's it like to be my student?

## Framework Supports

This study is grounded in the idea that by providing an individual with concrete examples from their classroom they will be able to relate their own experiences with the concepts introduced via the enhanced podcasts. By making these connections, the teacher will connect with the content knowledge gained from the university rather than simply using their prior experience as a student or teacher.

A recurring comment during the interview process was the podcast inspiring the participant to think back to content learned in the summer course or previous university classwork. Two individuals specifically mentioned a connection to the work completed during their summer course.

"I remembered sort of one of some topics that we had learned about in our classes during the summer, just some of those classroom management strategies worked for me."

"We talked about this summer as well but it was a good reminder to myself"

One individual made reference to their undergraduate training saying, "It brought me
back to what I was taught in my undergrad."

In addition to the ability to connect to prior university instruction, four teachers reported benefit from the relationship between the Teaching Video and the podcast.

"I didn't only reflect on the podcast but also on my video at the same time so there was a link between the two of them. It was relevant to my situation."

"I looked at what I had done and then I looked at what the lady had done on the podcast. Then I said, "I probably could have done that strategy here, or probably could have done it here in the different areas of teaching". At the time, you never thought of it until you watch the podcast, and you're like, "Okay, yes. That's what good teachers do, but I forgot to do that." I think you absolutely needed to watch a video about yourself before you're work in a podcast because I don't think it would've brought to light some of the things that you were doing while you were teaching. I think that it ended up having you focused on how you were delivering the instructions because you had—then you're focusing on how she was delivering her instructions and her priorities with the math or whatever it was or the behavior."

These comments support the design of this study and the combination of these two technology driven strategies to support teacher development.

## Summary

Overall, the twelve special education intern teachers were able to implement evidence-based practices learned from the podcast and demonstrated a shift in their schema of classroom management. Although one participant commented that the podcast seemed to be designed for teachers of younger students, the placement factors of grade levels taught and type of classroom setting did not appear to influence these results.

Analyzing the reflection prompts and the final interviews provided evidence to demonstrate the implementation of evidence-based practices by each participant. The mean increase of reference to evidence-based practices from 1.08 on the initial reflections to 2.00 on the final reflection supports this finding. Further, interview responses provided greater detail as to the implementation and success of strategies attempted.

The pre and post concept maps were a vital tool in evaluating the changes in participant schema of classroom management. The size of the concept maps decreased from a mean of 23.50 for the pre-assessment to a mean of 19.58 for the follow-up map. The average length of the branches changed little from a mean of 2.24 to a mean of 2.16. These minor changes suggest that the depth and breadth of the schemas expressed in maps 1 and 2 are similar. While the data suggests maps of similar depth, important in this study is the change in content from 44 mentions of evidence-based strategies to 88 references. The results suggest that the size of the participant's schema was not altered, but the content of the schema was changed to reflect the content provided by the intervention.

#### CHAPTER 5

## SUMMARY, LIMITATIONS, DISCUSSION, AND IMPLICATIONS

This study investigated how a multimedia podcast, combined with video-based reflection, can influence teachers' implementation and schema development of classroom management practices. Understanding that video can encourage a willingness to observe, investigate, and reevaluate what occurred (Rosaen et al., 2008). This study supports the current research in the field of video-based reflection and attempts to expand upon this process by adding evidence-based content. Reflecting on the concrete examples of one's own classroom through video, teachers identify areas of need and become open to feedback and input. This study attempts to capitalize on this opportunity by providing an online podcast tool, at the moment of input, to influence teacher practice and schema development.

The enhanced podcasts developed by Kennedy (2012) were selected for this project as multiple studies have found them to be an effective method of delivering content, superior to traditional approaches. The findings from this study support their use to deliver evidence-based content and adds to the research on Content Acquired Podcasts by using them in a unique way. Having not been used as an in-the-field reflection tool, the findings from this study suggests that these podcasts are not only valuable as preservice teacher instructional tools but also may provide on-going professional development once teachers are in the field.

Combining these two technologies, this study sought to influence the implementation and understanding of evidence-based practices. In doing so, this work also adds to our knowledge of the research-to-practice gap and provides possible tools and support for

using technology to aid novice teacher development.

Chapter 5 provides a summary of the podcast-aided video-analysis study, examines the limitations of this study, discusses the findings, and offers some possible implications for both practitioners and the research community.

## **Summary of the Study**

Driven in part by the federal mandate to use evidence-based practices established by the 2004 reauthorization of the Individuals with Disabilities Education Act, researchers in the field of special education have identified a number of practices to meet the needs of this diverse population (Cook & Schirmer, 2003; McLesky & Billingsley, 2008).

Although advances have been made, evidence-based practices have not transferred to the classroom. Teachers are not incorporating these strategies into their practice (Cook & Schirmer, 2003; McLesky & Billingsley, 2008; Vaughn & Linan-Thompson, 2003). This divide between what researchers know to be evidence-based practices and their implementation in the field is commonly referred to as the research-to-practice gap. The current study examines some of the causes of this gap and provides a novel approach to closing the gap between research and practice based on Korthagen and Lagerwerf's (1995) Level of Learning theory.

The Levels of Learning theory, described by Korthagen and Lagerwerf (1995), argues that for teachers to learn or change their practice they must reflect on specific examples, understand their prior knowledge or instinctive reactions, apply new knowledge, and after additional reflection develop a new theory or create an alternative schematic response. Using this theory, this study takes advantage of teacher made videos to provide concrete examples, enhanced podcasts to activate prior knowledge and new

content, and an online survey tool to provide a platform for reflection.

Efforts to ensure evidence-based practices are used in the classroom are met with a number of obstacles. A common and difficult hurdle is the tendency for teachers to become socialized into their school setting causing them to assimilate to the teaching beliefs and approaches used in that environment. Additionally, Korthagen (2010a) and Robinson (1998) acknowledge that prior knowledge, a teacher's stage of development, and the inherit complexity involved in teaching all create obstacles to implementing effective practices. Perhaps the most powerful explanation for the reluctance of individuals to use research in their practice, however, is teachers perceived lack of usefulness or relevance of the research (Carnine, 1997; Korthagen, 2010a).

Teachers have limited time to seek out new ideas or investigate evidence-based practices to meet their needs. This limitation creates an environment where teachers seek timely, specific, and concrete solutions to current issues within their classroom (Eraut, 1995). This stands at odds to the abstract approach to content delivery taken by many teacher education programs (Tom, 1997) and the traditional methods of research dissemination (Cook, Cook, & Lundrum, 2013).

With an understanding of these common obstacles, this study focuses on the problem of the research-to-practice gap through the use of current technology. Given the limited time and need for high quality evidence-based practices that are relevant to the teachers' classroom experience, a three-part podcast-aided video reflection intervention was developed based on the learning theory proposed by Korthagen and Lagerwerf (1995).

The intervention for this study is divided into three inquiry reflection cycles designed to address the elements described in the Levels of Learning theory. Each of the cycles

required participants to follow specific steps to engage in the reflection of their own classroom practices. Novice teachers video recorded themselves teaching a lesson, viewed their video and answered an online reflection prompt. Using a video recording of themselves teaching a lesson, the participants reflected on the strengths and weaknesses of the lesson. In this way, they are using concrete examples, not relying on memory, to create an accurate image of their experience.

They then watched the assigned podcast, based on Mayer's (2008, 2009) cognitive theory of multimedia learning, that delivered 11 evidence-based practices. The Podcast Reflection Prompt asked them to make connections to the video of their own teaching. The online podcast was intended to activate the prior knowledge gained in university coursework and aid in the application of new knowledge. Next, a second online reflection prompt was submitted after viewing the podcast. These steps were repeated two more times, each with a new part of the podcast series, to create the three cycles of inquiry based on the three-part podcast. By viewing the podcast and reflecting on its content as it relates to their practice, the individual begins to alter their initial image and develop new schema.

A total of 12 intern special education teachers (female n=10, male n=2) enrolled in a master's level course in curriculum and instruction participated in this mixed-method study. These individuals provided background information, completed pre and post intervention concept maps, submitted six required reflections, and engaged in a semi-structured one-to-one interview. This information was gathered for the purpose of better understanding effective methods for disseminating research findings, what role video-based reflection may play, and how these practices might change or influence novice

teacher schema development and implementation of evidence-based practices.

The results of this study support the use of video as a powerful tool for reflection and the Levels of Learning theory for schema development. The results also suggest that enhanced podcasts may be a useful tool to remind in-service teachers of prior university coursework by tapping into this prior content knowledge. In addition, these findings provide valuable implications for both practitioners and researchers as it attempted to answer two research questions:

- 1. To what extent do participants report change in their implementation of evidence-based classroom management practices?
- 2. To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

## **Summary of the Findings**

Overall, the twelve special education intern teachers who participated in this study were able to implement evidence-based practices learned from the podcast and demonstrated a shift in their schema of classroom management.

Using the content from the podcast a rater's guide was developed to aid in coding content from individual reflection. To address the research questions and better understand the levels of implementation of the evidence-based intervention strategies, the participant's reflections were analyzed and coded. The results of this process found a mean increase of reference to evidence-based practices from 1.08 on the initial reflections to 2.00 on the final reflection. Further, interview responses provided greater detail as to the implementation and success of strategies attempted.

During the follow-up interviews, participants were asked to describe any of the

evidence-based strategies from the podcast that they were able to implement. The strategy of providing behavior specific praise was mention most frequently with six interns reporting to have implemented this strategy. Teachers also reported attempting to implement reinforcement systems, explicitly teach expectations, decreasing unwanted behavior, explicit instruction, routines, and active supervision.

The pre and post concept maps were an important tool in evaluating the changes in participant schema of classroom management. Concept maps provided an opportunity for participants to not only share their content knowledge but also how they organize this information. In this way, concept maps can be seen as a tool that describes not only the content knowledge but also the depth and breadth of that knowledge. The analysis of the pre and post concept maps found a decrease in the number of branches from a mean of 23.50 for the pre-assessment to a mean of 19.58 for the follow-up map. This suggests a slight decrease in the breadth of knowledge on the subject.

The maps were also evaluated for the average length of each branch to identify the depth at which the participant understands the concept. The average length of the branches changed little from a mean of 2.24 to a mean of 2.16. This suggests that the depth of understand did not change.

These minor changes suggest that the depth and breadth of the schemas expressed in maps 1 and 2 are similar. While this data suggests that there was little change in the depth or breadth of the maps, to better understand the schema development the maps were evaluated for specific content. Coding the content maps using the rater guide, three scorers found a large shift in the content of the concept maps. In the initial maps participants reported the intervention's evidence-based practices 34 times. In the final

map, the participants made references to the content from the three podcasts 61 times. This data suggests that participants schema on the subject, rather than growing in depth or breadth, was replaced with new content understanding.

#### Limitations

The intervention had a number of limitations. The composition and size of the convenient sampling limits the ability of this study to generalize to other populations. Asking teachers to view themselves on video created another limitation in both comfort with technology as well as seeing oneself on film. While results were coded by participant number and efforts were made to maintain confidentiality, the format of this study required the participants to identify themselves. This too creates a limitation in this study. Finally, the enhanced podcasts used in this study focused on evidenced-based practices without regard for diverse teachers or student populations.

The sample used for this study was drawn from a small cohort of teachers working on an intern teaching license (sometimes referred to as an emergency teacher's license). This is a unique situation in which the teachers had various levels of prior experience and knowledge in the field of education. To address this limitation, background information and experience was gathered and used to sort the results. With this data, the variation in background was not seen to impact the results. In addition, the small size of twelve limits the ability to generalize to other teacher populations, prevents data sufficiently robust for statistical analysis, and is too small for the central limit theorem to apply. Qualitative methods were used to address this limitation. As the intent of the intervention was to evaluate the use of modern technology tools for the purpose of teacher professional development, the data gathered from the convenience sample can be used to support the

findings and inspire future study redesign.

In addition to the small size of the sample, the individual's level of comfort with technology, and specifically the viewing of oneself on video, may create additional limitations. This study relies on participant self-report and reflections. A number of participants commented on the discomfort they felt with watching themselves on screen. It is important to note the impact these feelings may have on the results and the possible limitation on this study. To address this limitation, future studies may look at frequency of self-recordings or using audio only to alleviate this stress.

Researcher bias is a limitation inherent in many social science investigations. This study required the researcher to read and evaluate the writings of participants. To address this issue, two additional raters were brought on to the project to review scoring mechanisms and provide for reliability.

An additional limitation is the lack of anonymity within the research design. As this study was conducted as part of the fall semester curriculum and instruction course and the participant's submissions were course requirements, it was necessary for the researcher to know the identity of the participants. During coding of the reflections, all efforts were made to conceal the names of the individuals using nominal codes to represent participants. Even with these efforts, it cannot be ruled out that the researcher's knowledge of the individuals could create a bias that may have influenced these results.

The podcasts used in this study were created in a fashion that may not have been representative of all classrooms or the diversity of teachers. The podcasts used short video vignettes to model the strategies being taught. In these clips, the teacher and the student population represented a white middle-class elementary school setting. This may

have created a limitation in participants ability to relate to the content or implement the ideas in a setting requiring a culturally relevant lens.

Despite these limitations, the results of this study provide additional data and support for the continued use of, and research on, video-based reflection and multimedia podcasts as a tool for addressing the gap between research and practice.

#### **Discussion and Conclusions**

The literature suggests that teachers do not use practices learned at the university or resist the incorporation of new research on evidence-based practices because they perceived a lack of usefulness or relevance of the research (Carnine, 1997; Korthagen, 2010a). Teachers seek easy to consume strategies that meet specific classroom issues (Eraut, 1995). In many cases, this leads teachers to ask peers or search the internet for new ideas. Neither strategy offers much hope in finding the quality of practice expected by the mandate to use evidence-based practices. This study examined the use of enhanced podcasts to fill this need and provide teachers with an avenue for evidence-based practices that can be received in a quick, useful, and relevant manner.

This study relied on research in the area of video-analysis, enhanced podcasts, and Korthagen and Lagerwerf's Levels of Learning theory. The results suggest that, when provided a multimedia podcast to support their video-based reflection, teachers can recall and implement evidence-based practices as well as develop new schema around a given topic. These results support the use of video for self-reflection, build on the Levels of Learning theory, and extends the use of Content Acquisition Podcasts.

# **Using Video to Support Reflection**

The research literature has established the value of having teachers reflect on their

practice (Blomberg, Renkl, Sherin, Borko, & Seidel, 2013; Calandra et al., 2014; Dewey, 1933; Pena & Leon, 2011). Not only does teacher self-reflection drive teachers to continually work to improve their practice (Dewey, 1933), but teachers who do not engage in such reflection rarely change their practices or evaluate their effectiveness (Pena & Leon, 2011).

Recent efforts to improve the practice of reflection has focused research on the use of video-analysis, using video to reflect and critique teacher practice. This literature suggests that video-based reflection is superior to relying on memory and is a powerful tool for focusing pre-service teachers on their practice (Blomberg, Renkl, Sherin, Borko, & Seidel, 2013). In addition, research suggests that video can change the type of novice teacher reflections creating more specific student focused thinking (Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra, 2008; Yerrick et al., 2005) as well as encourage a willingness to observe, investigate, and reevaluate what occurred (Rosaen et al., 2008).

The findings from this study support the use of video as an influential tool for shifting teacher perspective. Qualitative data from the individual interviews provided support for the claim that video is superior to teachers' relying on their memory of classroom events. This data also supports the research suggesting video aids teachers' in noticing needed change. The following excerpts from two participants exemplify these findings.

"I remember the moments I was fumbling and how it looks, like "Oh, actually wasn't that bad," or like "Oh yes, that was a weird part."

"I can get behind videoing all day long. As a learner, I see the leverage with it. So quickly you can notice something about yourself and you can just fix it up or adjust it, or completely change it. Because there's no escaping what you see."

Work remains to improve the ease of self-recording and the best methods for capturing

and reflecting upon teacher videos. The results of the interviews, however, supports the literature for including video as a powerful tool to improve reflection.

### **Content Acquisition Podcasts**

Some have argued that the gap between research and practice exists due to the inability of researchers to make their results trustworthy, accessible, and useful for practitioners (Carnine, 1997). To address this obstacle, research has focused on how to utilize technology, its effectiveness, and the quality of the research being presented through online tools (Test et al., 2015; Reagan & Michaud, 2011).

With many new teachers using online resources as their primary source for finding instructional strategies (Jones, 2009; Test et al., 2015), examining these sites to understand their quality is essential. While the internet may provide a source for easy dissemination, it is only as good as the information teachers can find. Examining nearly 50 online sources, Test et al. (2015) found that many online sites claiming to disseminate research-based or evidence-based practices are not to be trusted by practitioners.

Disseminating high quality evidence-based content on an easy to access online platform shows promise for aiding in closing the research-to-practice gap. Content Acquisition Podcasts are one such recent tool building a strong case for these short, multimedia, online presentations. From its beginning in 2011, Content Acquisition Podcasts have demonstrated through multiple empirical studies to be an effective and efficient method of increasing learner knowledge (Carlisle et al., 2016; Driver et al., 2014; Kennedy et al., 2011; Kennedy et al., 2014; Kennedy et al., 2016). These studies, however, have focused on using this tool as a review or preview of university coursework. Their findings suggest that viewing a multimedia podcast before or after

classroom instruction is superior to other strategies, such as outlines or additional readings.

The current study builds on the use of Content Acquisition Podcasts by using them as in-field professional development. Rather than making a direct and timely connection to university coursework, this intervention set the viewing of the first of the three podcasts two months after university coursework on the topic was completed. The results of this study support the claims that Content Acquisition Podcasts disseminate evidence-based content evidenced by both the concept map analysis having a shift in content to represent the podcast delivered practices (from 34 references in the pre-intervention assessment to 61 in the post assessment) and extends their use as in-field teacher professional development since these results were obtain long after coursework. In addition, many participants commented on their ability to use the podcast as a recall device to previous university learning.

"I remembered sort of one of some topics that we had learned about in our classes during the summer, just some of those classroom management strategies worked for me."

"We talked about this summer as well but it was a good reminder to myself"

"It brought me back to what I was taught in my undergrad."

The current study provides further support for multimedia podcasts to disseminate information in an efficient and accessible manner. In addition, this study provides evidence to support new uses for multimedia podcasts to close the gap between research and practice.

## **Levels of Learning Theory**

Finally, this study provides support for the Levels of Learning theory as a way of

understanding teacher learning and schema development. This theory argues that for teachers to learn or change their practice they must reflect on specific examples, understand their prior knowledge or instinctive reactions, apply new knowledge, and after additional reflection develop a new theory or create an alternative schematic response. The current study adds evidence suggesting this process may be a valuable guide to closing the gap and ensuring teacher schema development includes high quality evidence-based practices.

The Levels of Learning theory suggests that teachers, when faced with a new experience, either add the new knowledge to an existing schema or begin to create a new schema. Upon reflecting on this new experience, teachers open themselves up to input. The input the teacher receives, whether it is from repeated exposure, support from colleagues, or an online search, informs the development of a new schema (Korthagen and Lagerwerf, 1995). The results of the current study provide evidence suggesting the point of input described by Korthagen and Lagerwerf may create an opportunity to infuse research into practice. By capitalizing on this moment when teachers are seeking answers, university faculty or school personnel can provide evidence-based practices through tools such as multimedia podcasts to encourage the use of high quality research-based instruction.

Using teachers' own classrooms to identify concrete examples, adding video to ensure quality reflection, and an easily consumable method of disseminating content, this study serves as an example of how the Levels of Learning theory can be applied to encourage the schema development of novice teachers.

#### **Implications**

The finding from this study may have implications to teacher practice as well as the research community. As seen in this study, early service teachers benefit from reviewing previously learned content via a podcast format. Combining the power of video-reflection with this multimedia tool opens a path to many alternative approaches to aiding teacher practice. These efforts are also an encouraging start to a better understanding of how teachers learn and why some practices are implemented and others forgotten. The results from this study provide exciting implications for future research.

## **Implications for Practice**

Finding ways to help teachers develop their skills and meet the needs of their students is the foundation from which this study arose. It is the practical applications of any study that most impacts teaching and learning. The findings from this study not only inform classroom teacher practice but have implications for school-wide professional development and university programs. As this study examined content delivery methods, reflective practices, and teacher schema development, the results suggest teachers in the field may find many benefits from viewing themselves teaching as well as utilizing short podcasts relevant to their class.

Using video in the classroom is not a new concept. With modern technology, however, it is increasingly easy to record a lesson and view oneself. Even with the obstacles and discomforts reported by participants, the use of video to create a concrete example for the purpose of reflection resonated with participating teachers. This study suggests and encourages using video as a regular tool for teacher reflection. As technologies continue to improve and become more affordable, schools can implement

numerous new and powerful practices.

Teachers often report a lack of support or feedback from their building administrators. Using technologies such as those used in this project, principals can watch weekly video observations. Rather than performing the occasional walk-thru, administrators can install video throughout the building and do periodic scans. Many schools require teachers to submit lessons plans. With new applications and video technology, teachers can link their lesson plan to a digital recording of the prior lesson to show how they connect or load it to a platform that allows others to annotate their video and provide suggestions. Once teacher become comfortable with the technology and viewing of themselves, this elevated form of reflection can serve a large role in teacher development.

Teachers also seek out feedback and ideas from colleagues and internet searches. These inquiries often look for quick answers to specific problems. In doing so, teachers often find solutions that meet the limited time frame, but not solutions that provide high quality practices. The results of this study suggest that teachers may benefit from exploring enhanced podcasts as a source for evidence-based practices to meet this demand.

Currently, these resources are limited to the enhanced podcasts designed at the University of Virginia. Developing a library of content that includes diversity in subject matter, varying levels of classrooms, and are relevant to the cultural and linguistic diversity of communities could prove to be an ideal source for teachers. In this way they gain access to high quality practices that address real world issues and create authentic opportunities for professional development.

Schoolwide professional development often takes a one-size-fits-all approach. Staff often gather to listen to a speaker or participate in a training session to learn a new instructional strategy. While such approaches may have benefits, this study suggests that teacher growth can be impacted by taking a targeted approach that uses concrete examples from the teacher's own classroom. Schools may take from this study the potential for developing a library of podcasts or supporting their faculty in video-based reflection.

From this study, we see that professional growth stems from identifying an issue or concern that is grounded in real world current problems and seeking out solutions. This is not the approach often used for school-wide professional development. A global approach to professional development, often taken by districts, fails because it often meets the needs of only a select few. At the school level, professional development can focus on the issues of the school community and find or create enhanced podcasts that support the individual needs of their staff. A library approach can again be applied here. By finding or producing their own content, schools can ensure that the podcast tools address the problems and concerns of the school's teachers and the community they serve.

University programs can incorporate the findings from this study into fieldwork. To date, enhanced podcasts have been used at the university level as classroom instructional tools. Either as a preview of content or a review, these tools have not made their way into the field. While further research is needed, this study suggests that connecting the concrete example of a video-based reflection with enhanced podcasts can impact teacher development in the field. With preservice teachers participating in student teaching

programs, the tools and strategies presented in this study can inform the way universities support teachers in the field. These preservice teachers might also record themselves teaching and find benefit from the quick, easy, yet high quality of the content from enhanced podcasts.

The implications for practice are only limited by our ability to think creatively and our willingness to reflect on practice. The results of the current study suggest that reflection is a key element to creating change in practice and that creative uses of technology can enhance our reflections and improve our practices.

## **Implications for Research**

In bringing together the research on video-based reflection and Content Acquisition Podcast, this study takes a unique approach to closing the gap between research and practice. The results of this study not only support previous research using video-based reflection, but also suggests potential for enhanced podcasts such as Kennedy's Content Acquisition Podcasts to be used in the field as tools for input after reflection.

Additional study is needed to understand this vital opportunity for teacher development that arises when teachers reflect on their own practice. This study supports the theory presented by Korthagen and Lagerwerf. Their theory states that once an individual reflects on a concrete example they are open to input and often reach out for feedback. This study sought to utilize this opportunity for feedback using podcasts. In this way, the findings of this study support the theory that an opportunity for input not only exists but can be impacted by a multimedia enhance podcast. Future study is needed to understand this input opportunity and to find tools to maximize its impact.

Given the limited sample and the self-reported nature of this study, the next step in

podcast-aided video-based reflection is to utilize a larger sample in order to obtain a level of generalization. Future studies, using a larger sample, could replicate the existing study or create a control group.

Additionally, an element of the Levels of Learning theory that this study was unable to address was the nature of choice. Allowing the participant to select the issue or issues they identify as areas of struggle, according to Korthagen and Lagerwerf (1995), creates a greater buy in and sense of need. With the small sample size, the topic of classroom management was selected for the participants to reflect on as well as the evidence-based practices provided in the podcasts. Future studies should ask participants to view themselves in a Teaching Video and identify areas of need. Once the teacher has selected a topic or issue within their classroom, they can then select a podcast series that best meets their unique needs. By setting up the study in this way, the literature suggests that participants will have greater buy in and thus more likely to implement the strategies (Korthagen & Lagerwerf, 1995).

Altering the podcast series to meet the unique needs of special education teachers' setting and context is another area for investigation. As suggested by one of the participants, having podcasts that represent students and teachers working at the same grade level as the participant may have some impact. In addition to a library consisting of multiple topics for participants to select from, having podcasts that enable this library to be divided by grade level and student need may also prove valuable. Future study is needed to understand to what extent the grade level examples presented impact the effectiveness of the podcast tool. Additionally, future studies may focus the podcast intervention on the difference between a self-contained special education classroom, a

small group where all the students have special needs, versus an inclusion model, where a small group of special needs students are incorporated into the general education classroom. While the current study took a broad look at the impact of a multimedia tool, research is needed focusing on the differences between grade levels and the levels of student need.

America's classrooms are becoming more diverse than ever. In addition to the continuing divide between socioeconomic status, we are also seeing a growth in culturally and linguistically diverse communities. The current study, with its global focus, did not examine these issues. Future study is needed to better understand how to address these issues from a lens of cultural responsiveness. As the interventions described in this study suggest a need for authentic solutions to real world problems, the diversity of American cities suggests further evidence for the creation of podcast libraries specific to each school or district. A global approach was used for the current study to understand the impact of enhanced podcasts on teacher video-based reflection. Moving forward, if technologies such as these are to have maximum impact, a tailored approach may be optimal.

In addition to implication for content, how to utilize these tools is another area for future investigation. Data from the concept maps suggests that the participants may have been drawn to certain practices due to familiarity. Having received a boot camp style summer course that included the content in the podcast intervention, participants may have experienced the podcast primarily as a recall. Research is needed to better understand whether the brevity of the enhanced podcast better serves as a recall tool as opposed to the introduction of new content.

The intent of the enhanced podcast is to provide evidence-based practices in an easy to digest manner. In doing so, the podcasts are intentionally made in short segments providing only key aspects. This brevity may inhibit its ability as a delivery method for unfamiliar content. The current study suggests that rather than being a tool for delivering new content, the podcasts may serve better as a tool to aid in recall. In this way, the multimedia podcast can be used as a memory jogger. While the current study utilized intern teachers, this memory jogger could be vital in aiding traditional students in crossing the obstacles from university student to classroom teacher. Knowing that this is where the gap between research and practice largely takes place, preservice teachers could be given (or produce their own) enhanced podcasts of the practices they are learning at the university. They then store these multimedia presentations on a web-based platform for later use. Once they are in the field as either a student teacher or the teacher of record, they could pull up their podcast and have access to high quality evidence-based practices.

When to use these tools is only one consideration in the implications for research. It is also necessary to better understand the impact of prior knowledge and experience and their influence on how to best use these tools. When sorted by background experience level, participants with the least amount of experience scored highest on the initial concept map. Those with the most experience had the lowest scores on the initial maps. As these results are contrary to expectation, it is possible that individuals with low prior knowledge were able to assimilate the summer content into their practice more easily than those who came to the project with already held beliefs and ideas. This potential explanation is supported by the Levels of Learning theory (1995). Participants with more

experience may have a preexisting rich schema. Based on this theory, a rich schema will require multiple reflections and opportunities to challenge this strongly held understanding. Participants with less experience may have weaker connections and not fully formed schemas making the addition of the summer content more easily absorbed. Further study is needed to better understand the role prior experience and knowledge play in this process.

This study supports the theoretical framework and the use of video to create a concrete example for reflection. In its unique approach, this study suggests that multimedia enhanced podcasts can be used as a tool to provide timely input to influence teacher practice. The findings from this project hold great potential and need further investigation as a method for closing the research-to-practice gap and supporting teacher development.

#### **Summary**

Closing the gap between research and practice is a long existing challenge. For special education teachers, it is one that must be overcome. The federal legislature, under IDEA, mandates that teachers use evidence-based practices to support students with special needs. To accomplish this, research is needed to understand how to close this gap and aid teachers in learning and implementing these techniques.

To address this pressing issue, this study examined the use of teacher video-based reflection with the aid of a multimedia podcast to assist teachers in overcoming the transition shock common to early career teachers and provide a tool to recall and engage in evidence-based practices. Grounded in the Levels of Learning theory (Korthagen and Lagerwerf, 1995), participants were exposed to an intervention designed around video-

based reflection and Content Acquired Podcasts.

The three-part cycle of inquiry provided participants opportunities to reflect on their own practice and engage with evidence-based practices. This intervention was evaluated using the teachers' responses to the online prompts, pre and post concept maps, and one-to-one interviews. The results of this study support the use of video as a tool for reflection and adds to the research on Content Acquired Podcasts by using this multimedia presentation as an in-the-field professional development.

The results suggest that the combination of these two technologies supports teachers in implementing evidence-based practices as well as altering their content schema.

Further study is needed to better understand and improve this method of closing the research-to-practice gap.

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# APPENDIX A Informed Consent Form



#### CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Below is a description of the research procedures and an explanation of your rights as a research participant. You should read this information carefully. If you agree to participate, you will sign in the space provided to indicate that you have read and understand the information on this consent form. You are entitled to and will receive a copy of this form.

You have been asked to participate in a research study conducted by Jason Davis a graduate student in the Department of L&I Special Education at the University of San Francisco. The faculty supervisor for this study is Mathew Mitchell, a professor in the Department of Learning and Instruction at the University of San Francisco.

#### WHAT THE STUDY IS ABOUT:

The purpose of this research study is to examine teachers' development of content knowledge through the use of podcast-aided video-analysis.

#### WHAT WE WILL ASK YOU TO DO:

During this study, participants will complete a workshop where they participate in a concept map activity and survey. Following the workshop, participants will complete three cycles of reflection. These cycles include recording your classroom, watching yourself teach and writing a reflection, watching a brief enhanced podcast and comparing your Teaching Video to the content on the podcast. The Project will end with a final session where you will once again complete a concept map and final survey.

### **DURATION AND LOCATION OF THE STUDY:**

Your participation in this study will involve an hour and a half workshop session, three one and a half hour inquiry cycles, and a follow-up one and a half hour wrap up session. This project will run through the end of the fall semester 2017. The two sessions will take place during your regularly scheduled USF class time. The inquiry cycles will take place at your assigned school.

#### POTENTIAL RISKS AND DISCOMFORTS:

We do not anticipate any risks or discomforts to you from participating in this research. If you wish, you may choose to withdraw your consent and discontinue your participation at any time during the study without penalty.

#### **BENEFITS:**

Participants will have the opportunity to practice the strategy of video-analysis as well as receive support in developing their system of classroom management.

#### PRIVACY/CONFIDENTIALITY:

Any data you provide in this study will be kept confidential unless disclosure is required by law. In any report we publish, we will not include information that will make it possible to identify you or any individual participant. Specifically, we will maintain all documents on secure sites and remove names and other identifiers within one year of completing the project. Video recordings will not be submitted nor viewed by the researcher.

#### COMPENSATION/PAYMENT FOR PARTICIPATION:

There is no payment or other form of compensation for your participation in this study.

#### **VOLUNTARY NATURE OF THE STUDY:**

Your participation is voluntary and you may refuse to participate without penalty or loss of benefits. Furthermore, you may skip any questions or tasks that make you uncomfortable and may discontinue your participation at any time without penalty or loss of benefits. In addition, the researcher has the right to withdraw you from participation in the study at any time. Withdrawal or refusal to participate will not impact course grades in any way.

#### **OFFER TO ANSWER QUESTIONS:**

Please ask any questions you have now. If you have questions later, you should contact the principal investigator: Jason Davis at 650-714-8871 or <a href="mailto:jasonpdavis.ca@gmail.com">jasonpdavis.ca@gmail.com</a> If you have questions or concerns about your rights as a participant in this study, you may contact the University of San Francisco Institutional Review Board at <a href="mailto:iRBPHS@usfca.edu">iRBPHS@usfca.edu</a>.

I HAVE READ THE ABOVE INFORMATION. ANY QUESTIONS I HAVE ASKED HAVE BEEN ANSWERED. I AGREE TO PARTICIPATE IN THIS RESEARCH PROJECT AND I WILL RECEIVE A COPY OF THIS CONSENT FORM.

NAME	PARTICIPANT'S SIGNATURE	DATE

#### APPENDIX B

## **Background**

This activity is designed to help us better understand your experiences working with students. Please consider each question and provide as detailed a description as possible.

- 1. Email address \*
- 2. Describe your educational background. Beginning with the city and state of your high school, provide any degrees you have earned and the subjects you have studied. \*
- 3. **Age?** \* *Mark only one oval.*

20-25 26-30 30-40 over 40

- 4. Describe any and all teaching experience you have had. This includes any work with students and is not limited to k-12 public school experience. \*
- 5. Describe your current teacher placement. Include the grade level, disability categories, LRE, and any relevant information to describe your classroom. \*

#### APPENDIX C

## **Teaching Video Reflection Prompt**

https://goo.gl/forms/FspyrdSp8NyJAank1

The Teaching Video Reflection Prompt will be submitted three times over the course of this project. For each of the three inquiry cycles, you will complete this prompt after recording your Teaching Video and prior to watching the podcast for the cycle with which you are on. You may review your lesson as many times as you like prior to answering. It is expected that you give each question time and consideration. The average response time for this prompt is 45-50 minutes with the average paragraph length being 7-8 sentence.

1. Email address \*

e ·	in your lesson? Provide examples from toos that went especially well.
3. Identify any areas you feel you r Provide examples from your Teacl	may need support or areas of growth. hing Video.
4. Having watched your Teaching done differently and/or will do diff	Video, what if anything would you have ferently in the future?

#### APPENDIX D

### Content Acquisition Podcast Reflection prompt

https://goo.gl/forms/zvUXFp4r3Ql6BlF62

### **Part 1: Antecedent Practices**

At the end of each of the three Content Acquisition Podcasts, you will be asked a series of reflection questions. Feel free to review your teaching video. Lengths of responses will vary by question and individual. Please set aside 45 to an hour so that you may give thought to your responses.

2. Have you posted and taught cla often do you refer to them in your	ssroom expectations? Approximately, how teaching video?
•	ne routines of your classroom? To what wed routines? What evidence from your wer?
4. What changes might you make part of the podcast series?	to your teaching practice after viewing this

## **Part 2: Teaching Behaviors**

https://goo.gl/forms/I4TLpQ0STD4qukcZ2

* Required
1. Email address *
2. Looking back at your Teaching Video, do you move about the classroom?  How often do you remain in one place? *
3. Do you provide your students with multiple opportunities to respond? What examples do you recall from your Teaching Video? *
4. Which explicit strategies provided in the podcast is evident in your Teaching Video? *
5. What changes might you make to your teaching practice after viewing this part of the podcast series? *

## Part 3: Consequence-Based Strategies

\* Required

https://goo.gl/forms/76mTzkAtidCpauZn2

At the end of each of the three Content Acquisition Podcasts, you will be asked a series of reflection questions. Feel free to review your teaching video

cific and describes the behavior done ur Teaching Video. *
vstem you use in your classroom or
ning Video, of strategies for decreasing ntify? * s for the classroom? Are their g class wide goals? *
ur teaching practice after viewing this

#### APPENDIX E

#### Semi-Structured Interview

- 1. To what extent do participants report change in their implementation of evidence-based classroom management practices?
- 2. To what extent does the intervention impact novice special education teachers' schema of evidence-based classroom management practices?

The semi-structured interview is 15-20 minutes in length and attempts to support the research questions with the following four guiding questions:

#### **Question 1: Changes in practice**

Tell me about your teaching practice as it relates to classroom management. (Possible follow-up questions)

• Did the podcast project help in anyway?

#### **Ouestion 2: Personal experience**

Tell me about your experiences with the video- analysis and podcast project.

(Possible follow-up questions)

- What benefits did you find?
- What issues or problems arose?
- To what extent were you able to compare the Teaching Video with the Podcast?
- To what extent did the topics on the podcast address issues you were having in your class? How?
- If the podcast did not address current issues, to what extent does it address issues you can see having in the future?

#### **Question 3: Technology**

Tell me about your experience with the technology.

(Possible follow-up questions)

- What were the obstacles to overcome?
- How was your experience with the podcasts?
- Is their something that would have made it easier?

#### **Ouestion 4: Future Use**

Going forward, can you see yourself using video self-reflection and podcasts in your practice?

(Possible follow-up questions)

- Why?
- How?

### APPENDIX F

#### Evidence-based Podcast Content Guide

Podcast	Evidence-based Practices
Part 1: Antecedent Practices	3. Environment
	c) Class is easy to navigate
	d) Students are visible
	4. Explicitly teach expectations
	c) Teach
	d) Post
	5. Routines
	c) Teach
	d) Post
	6. Prompting desirable behaviors
	c) Use simple language
	d) Be direct
Part 2: Teaching Behaviors	7. Active supervision
	d) Regularly scan the room
	e) Teacher moves about the space
	f) Teacher interacts with students
	8. Opportunities to respond
	f) Peer tutoring
	g) Probing questions
	h) Written responses
	i) Response card
	j) Variety of question depth
	9. Explicit instruction
	g) Advanced organizers
	h) Using an agenda
	i) Modeling
	j) Think-a-loud
	k) Guided practice
D-+ 2. C	l) Post organizers
Part 3: Consequence-Based Strategies	10. Behavior specific praise
	11. Reinforcement systems
	f) Acknowledge appropriate behavior
	g) Positive Behavior Support
	h) Reinforcement for meeting expectations
	<ul><li>i) Token economy</li><li>j) Reteach expectations</li></ul>
	3/
	<ul><li>12. Decreasing unwanted behavior</li><li>d) Proximity</li></ul>
	e) Planned ignoring
	f) Praising others
	1) Fraising others 13. Performance feedback
	<ul><li>c) Set clear class-wide goal</li><li>d) Social reinforcement</li></ul>

#### APPENDIX G

Teaching-Video Reflection Responses

**Teaching-Video1: Sort by question** 

mrallen4
agcompaore
vrpersky
gmgalvarro
sseang
jschavez
jhulsker
sbosworth
mrslattery
vlorenzo
dmarty
dlnoury

What strengths did you observe in your lesson? What aspects of the lesson went well? Provide examples from your video.

I think I incorporated other areas of knowledge into the lesson spontaneously that were not in my plan but gave the lesson more depth because it was not constantly about math. Each student had a chance to guess which cities the NFL teams were in based on abbreviations (KC = Kansas City, MIA = Miami). I also took the opportunity to have the students get up and move around. The first to demonstrate how the draft works by snaking, the second to go into the hallway and understand how far 10 and 25 yards was by walking off those distances. I wrote the statistics to which they had to apply the formula based on how quickly they were understanding the material. I did this on purpose as I knew I could come up with the specifics very quickly and have the difficulty be properly adjusted. I also introduced vocabulary that I hope will be useful for them in the future--to project, formula, and factor, interception. I think being able to show videos kept their attention and conveyed that there is math everywhere in everything. I think I did a good job constantly moving around. Lastly I think bringing in on a whim the security guard who was walking by brought some levity and introduced some students to another member of our school's community.

I had a good plan and the hook at the beginning was engaging since I used a song video that teaches subtraction. I had my student's attention for a while until an other class joined us and then, I had to improvise. I did not panic and handle the stressful situation pretty well. In the video, I set up the purpose of the video being presented to my student, before he watched it. Afterwards, he was able to state the main strategy during the debrief.

#### submitted in the first one

Some strengths in my lesson were: Including opportunities to activate prerequisite knowledge, my words and actions promoted belief in Josie's ability and high expectations

for her effort, and offered opportunity for Josie to initiate and produce high quality work by holding her to a high standard or performance through guided questioning and setting clear expectations. Fostering a culture of learning and classroom management went well. In the beginning, we reviewed expectations with visual aids and learned a new thinking strategy--pondering. Much thought went in to varied modalities to ensure student centered learning for Josie while I facilitated side-by-side in her support and assistance of learning new concepts and learning behaviors.

The relationships and connections are good. Everyone is respectful in how they talk to each other. The boys get back on track when redirected.

In everything that I expected the students to do, I modeled it first using my own name. I made an envelope with my own name on it and went through it step by step. I also made sure that the material itself was scaffolded to support the students. Their name puzzle was cut in zig-zags so they can visually see if the piece would match. Also, their names are written on envelopes that allowed them to see their names and allow their teammates from seeing their names from the other side so they can see as they read along the letters. The students are fascinated with anything to do with them so teaching them the letters using the letters of their names caught their interest.

I asked a variety of types of questions to prepare students for reading the new book. By asking different types of questions, I differentiated the lesson to engage both students. For example, J.Z. is often successful at answering higher order questions. He demonstrated that he had an understanding of the author's message from the book we read and that he could build on this concept with a new book. A.V. is most successful when asked questions that have concrete answers so I included these types of whquestions as well. During discussion, I took responses from both students and helped them build on each other's ideas. At some points during the lesson, using direct and specific language with A.V. was successful at getting him to follow directions such as not touching his aid.

I thought the students were engaged during the lesson plan. I liked how students were eager to read and find the answers to their questions about the text they read. Modeling my expectations for them helped them know what I was looking for when I turned the lesson over to the "you do" part of the activity. My students did well at the end sharing what their questions were and the answers the found. I was happy with the students who were able to respectfully do further research without distracting their classmates or themselves.

Opening procedure went well. Students know to get their folder and begin re-reading a book from their folder. Reading with each student works well so I can monitor their growth and identify skills they need to work on.

I was teaching the students math, and I felt like they were engaged and willing to participate as well as listen to my explanations if they didn't understand. They were involved the entire lesson by asking questions and giving answers. The students really gave maximum effort and accepted the help I gave them. I did not encounter any behavior issues in this lesson, because the students were focused on completing their work. The students were respectful to me and to each other, they did not distract each other from learning, but helped each other when someone did not understand.

I was prepare with materials to start off lesson. I felt I choose a great video to connect my lesson. To what my students want to do when they grow up. I had a simple worksheet

that they could understand. I want to give my students time to work on their homework so the lesson was 20 minutes. I feel that this was a good amount of time because some of my students need to finish test and I did not want them to stress about it. Overall, most of my students participated by sharing their opinions of the video.

The strengths I observed in the video involved the transitions and keeping the students engaged. I was able to smoothly transition from the opening "Good Morning" video to the read aloud book, to the calendar, and to the ending video without too much wait time or distractions. Since my students are Kindergarteners, this is super important. The slightest delay could derail a lesson. I was also able to keep the students engaged by evenly calling on the students and using their school pictures. I think the students enjoyed seeing their pictures and names when we completed the attendance and "Question of the Day" during calendar.

I think the area of my teaching I am most proud of is my relationship with the students. We get along well and I feel like there is mutual respect. My students feel comfortable in my room and they like to be here. They get things done but we also joke and make silly faces at each other. I really like the environment I have created. I am also quite happy that I have developed enough trust with with my students that they will let me help them and look over their work. This would not be apparent from the video to an outsider, but several of my students were very resistant to letting me look at anything they were doing when the year began, and they certainly would never have let me offer any input on their work. Now they openly ask for my help all the time. I also see them prioritizing their assignments. They make a point to bring out homework they need help with in Academic Success and save work they can do independently for home.

Some of the strengths I observed in the video is 1. Patience. Mlk do not officially have a food policy and students are encouraged to eat during class as long as it doesn't interfer with instruction. This is not my norm and it is taking a little geting use to because most of the time students are eating things that I dont consider healthy. Overall, the lesson went wel considering I'm not comfortable teaching guaded reeading groups they way the SPED department would like. The department would rather just teach to the book without much deviation. Also, I believe taking the time to get feedback to ensure students felt comfortable with the materials and reinforcing the school policy of carrying a book to read during down time in classes. Another thing I think went well was asking students what needs they needed met or areas they would like to address.

Identify any areas you feel you may need support or areas of growth. Provide examples from your Teaching Video.

There are always details that you don't realize you need to plan on until you've done the lesson. I could have prepared the rulers and not have to go into the file cabinet to get them. I could have prepared string to more accurately demonstrate distance. I could have

prepared better definitions of technical terms (the student that inspired this lesson who is on the football team wasn't present for this lesson and I was counting on him to provide colorful definitions and examples). Something I'm aware of with this group but did not to well in this class is elicit more student responses. I regularly check for understanding but know that they're just nodding and agreeing because they never ask me to stop, or go over something again, or provide a second example. They are fully content to sit quietly and let me talk. Strategies for getting students involved who are accustomed to rarely being involved would be helpful.

I think that my situation makes it imperative for me to have back up plan. I was told that if necessary, students from the upper grade ED class will join me. I think that from now on, when planning, I should think of work that they could do in the eventuality that they come to my class. This time, I had to abandon completely the lesson and do something else. I went from Math to Socio-emotional learning. submitted

Designing an assessment to ensure mastery could be a grow. In the video you will see the assessment (sentence level production on standard to demonstrate skill level) is interactive which does not determine mastery.

I could use support in the area of keeping things moving and having to do less redirecting.

I would like to improve my teacher and student talk ratio. Although this activity is meant to be repeated frequently, and this was our first time, I still felt that I heard my voice 95% of the time. I would like to have students do more of the leading. In addition, I realize that I did not have a quick assessment on the learning for today.

I need support with behavior management strategies to best support A.V. I want to work on helping him become independent at getting tools such as a fidget and asking for a break when he needs one during a lesson. I would also like to learn more about using effective language to help keep him focused and following directions. I observed in previous lessons and in the video that open ended questions are difficult for A.V. I would like to help him access these questions. I am thinking too about J.Z. and how to keep him engaged and involved while also supporting A.V. I don't want J.Z. to feel bored or become disengaged because he has to wait at times.

Watching the video made me more aware of the words I choose and the tone of my voice. I made a comment at one point about a student who often disrupts class to share his thoughts and opinions. I said infant of the class "I know, you always want to talk" which came out a lot ruder than I had imagined in my head. Also, when it

Need more strategies for crazy behavior from Shayauni. She likes to show off and be a goof. She likes to test boundaries and fight her position. She gives silly responses and I have to constantly redirect her using prompts. She likes to fiddle and gives inappropriate responses. I try to twist it into something serious and loving. I try to focus on the good because I feel she hears too much negative.

After watching this week's podcast, I noticed that I had not introduced my classroom expectations at the beginning of the class, nor referred to them throughout the lesson. I feel like I could remind the students of the classroom expectations every time we have class in order to create a level of consistency and clarity. I also noticed that I was focusing more time supporting one student than another. I will develop a more systematic approach to ensure that each student is receiving the appropriate amount of support.

One area where I need help is developing better strategies to engage the students in the topic right from the start. For example, some of my students had seen a video I showed. They had a whole 2 minute discussion about how they had seen it in two classes before. I was not able to come up with a concrete answer for them to why we were watching the video again in my class. Also, since some of my students were taking tests, I failed in providing them with a quieter setting. Finally, I catch in my video were I am talking in front of my class about another student in my caseload, which is not good!

An area of support I need to address is when one particular student who regularly does not want to answer a question in front of the whole class. I know she can do it since she will do it one-on-one and in other group settings, but for sure reason during calendar she usually refuses. I cannot tell if it is because she is embarrassed in front of the group or she is just refusing. I usually have to wait quite a long time for her to respond and most of the time she does not say what I have prompted her to say. I have tried motivating her, but nothing has worked so far.

One area I am really struggling with is knowing how to best support my student, Connor. He is very low performing and never wants to get work done. He lies all the time about what he is doing or has completed. He sometimes gets an attitude but generally only when he is trying to save face in front of other students. I have done my best not to hold this against him. I don't dislike him and every day I try to start fresh. I give him very positive and specific praise when he is on task or accomplishes something. However, I must admit I get frustrated and I can sense that in my voice in the video. He is very difficult to work with and frankly needs more support than I think can be provided in a Resource environment. Still, getting an irritated tone is not productive. Overall I am lucky that so many of my students are respectful. I also know I have gotten better at working with my students and knowing not to take things personally. My stress is high these days though and I feel like he is an easy target when my patience is starting to run thin.

More preparation in material. I now for a fact that having my videos prepared in advance would benefit. As a result I will suggest that we as a team (sped teachers create videos.

Describe the classroom management strategies used in this lesson.

This class does not have much behavior issues. The challenges are in getting the students to venture into areas they do not feel confident or competent. Giving each student their own problem I think was effective as they knew they weren't competing. I use their names constantly; I ask for input to get more buy-in. This lesson was made because one of the students referred to fantasy football and I thought it was be a good way to review some things we've done (moving decimals) and introduce good math vocab and see if they could implement a formula.

In the lesson, I used token economy to motivate the students. I gave them a lot of bonus points for following instruction, hitting their ignore button and I did a high interest activity because it was an unexpected situation. When it escalated, I evacuated the students that were still under instructional control and stayed with an other staff member to deescalate the others and protect their integrity. submited

My classroom management strategies were: being prepared for teaching, providing a safe and comfortable learning environment and being creative with the lesson so that it was fun for Josie.

There is a regular routine so the boys know what to do. Redirecting to get back on track. Multiple ways to do the work (like when Miles gets to use a chair as his "desk"), calm requests and responses from the teacher

We were seated in a circle that allowed me easy access to everyone so I can provide individual support when needed. I also used positive examples set by other students to clearly identify the behavior or actions I expect. For example, I said "I like the way Bailey used the marker to read her name from left to right." I also redirected very briefly without judgment. For example, when a student was distracted by what was outside, I said, "Paola, eyes over here." I didn't make it a big deal. She turned her attention to the appropriate place and other students made sure they did also.

One management strategy is how this time is structured. This lesson was part of my reading group rotations. I broke my class up into two groups by reading level. I read with each group at least four times a week during this time. By breaking up my class into two homogeneous groups for reading, I am able to teach each group at their instuctional levels. Also, it is easier to manage a smaller number of students. My classroom aid is working with the other 5 students in my class at this time. They are rereading a previous text and responding to comprehension questions or ally and in writing. I am using engagement strategies during this lesson such as activating prior knowledge about a previous book we read that the students enjoyed. Students are interacting with the new text as well, touching words, reading sentences, etc. I also tried to use positive and specific language during the lesson. For example, saying "Good job. That is a reasonable prediction because you might get wobbly on a bike." To support individual behavior needs, I tried to address what questions A.V. has that are off topic by answering his question and giving him a specific time when we will do what he is asking about. I asked questions that have a specific answer to help keep him engaged in the lesson. If I asked A.V. an open attended question and he did not respond on topic, I tried to rephrase the question to make him successful. Then, I would give him two choices to respond if needed. A.V. also had a specific reward he was working towards that his aid and I reminded him about.

I use a system where students can earn 3 stars a day. When a student earns all of their stars for the week, the can use them for free time for the last 15 minutes of class on Friday. My students earned all of their stars this day.

Prompts, redirection, tickets given to Cameron because he stays focused and participates appropriately. I try to value everyone by sharing their opinions. I give positive attention to those that deserve it and dismiss negative behavior. I reward wanted behavior and praise wanted behavior. I redirect wanted responses and dismiss crazy responses.

One classroom management technique I used in this lesson was checking in with students regularly throughout the period. I went over to their desks and monitored their work for understanding as well as assess any mistakes they might be making. Also, I had the students working in pairs by related work. This enabled the students to help each other, learn new concepts together, and rely on each other. The students kept each other focused and worked diligently. Next, I arranged the classroom in a way that allowed the students to they could easily access the information as well as meet any needs they require. I also

took turns calling on different students to give everyone a chance to reply. They walked the class through problems and lead them to the answers.

I have established the routine of students getting a stamp on their planners daily right at the beginning of class. Also, I had my students tell me what they were going to work on after we were done with the lesson. After they were done with the worksheet, they could go back to work on their homework. So they did not have to wait for the other classmates to finish with the worksheet. The classroom management strategies I used in this lesson is checking individual with each student since my class is very small. All of my students are willing to participate.

Most of my classroom management strategies are individually based, but the group works on a level system. If the student does a great job in a group or one-on-one setting, they can move up a level where they get more privileges. If a student has a difficult time, they move down and consequently have less privileges. Certain students like certain privileges. For example, one student works for a Spiderman action figure, while another student works for time on the classroom trampoline.

I have a reward system in place for my students. Almost all of the students in my 4th period class have ADHD. I know candy is frowned upon but I have found that sucky candies like jawbreakers really does help them focus and fidget less. I give them one for getting started and one for completing an assignment. I know it's a crutch but it really works wonders. I also use positive reinforcement, and give specific praise when students are doing well. I also have a routine in place and they know what they need to do at the beginning of class as well as what needs to be done before they will be excused. All of these points are seen in my video.

The objective is to lead a student center classroom, to be flexible and address the needs of the student. To collaborate with stude nts and teachers to support larning outcomes.

Having watched your Teaching Video, what if anything would you have done differently and/or will do differently in the future?

Overall I think the lesson went well. The two students who are present are very reluctant to open up and share. Next time I would try and find a way to have them participate more at each part of the lesson. When I'm more comfortable I would also bring them to the football field and we would actually measure and demonstrate some of the terms we discussed. There is also an opportunity to have them watch the videos the night before and come in with more clarity and excitement at being able to study football during class. That should be novel and exciting, but it still felt like I was selling them something they didn't want to buy.

Something that I would do differently is to go other the expections in the classroom first before starting the lesson with the other students.

I am writing this again because I submitted the first one by mistake without finishing. Thank you Something I will do differently is to go over my classroom expectation every time that a student join us. Front load the expectations for when we are together before it even happens. Write the specific tasks and the time frame that they will have to complete them before a fun break. State the possible bonus points that they can earn at the end of the bloc or our time together if they are on task. I will start brainstorming the verbiage

and the best way to introduce that not only to the students, but also to the adults. Yes, I've watch my teaching video. I would do less talking and more listening and ask higher level DOK questions.

I will simplify the lesson. I tried to do too much and there were too many things to look at and focus on.

I would like to make sure that lessons in the future elicit more active participation and talking from students. I also would like to make sure that at the end of every lesson, I have an exit ticket to assess the learning. I took the time to write every single letter, both capital and lowercase, to signal what letter they should put back in their envelopes because I was thinking that I wanted them to see over and over how I form the written letters. In reality, it was very time consuming and most of the time they were too busy looking for the letters and not paying attention to the way I write the letters. It would have been better for the pacing if I used alphabet cards.

In the future, I will prompt A.V. about the reading group expectations before beginning this part of the day. Then, I will prompt the entire group once we sit down together. I would have planned my lesson better so that the screen wouldn't have been covering the board. I had important instructions and models on the board that students couldn't see because the screen got in the way. I think it may have impeded some students in understanding what was expected of them.

Pull Shayauni out or meet with her after to discuss unwanted behavior. Need to determine if she was showing off because of video or if usual behavior. Gave warnings about no reward tickets for disrupting other groups. She is manic and glazes over lesson then has a stone face when asked for clarification or makes a joke when she is uncomfortable. Having watched this video, I realized that I did not address the classroom expectations. I will definitely address them in the beginning of class and refer to them throughout the lesson next time. I will also structure my time to ensure a balanced level of support throughout the classroom. I was really pleased with the effort my students put forth. Another objective for the future is to try to maintain and possibly increase the level of engagement from my students.

Have more visuals and examples ready to show. For example, I could had include visuals with personal traits, so then the students could had a better picture of what traits are. I feel that I should started right at the beginning of class, but since I had to check in with a student first. This made the lesson feel awkward and out place in my opinion. There many interruptions were I had to talk to the speech pathologist and then the visual impairment teacher.

After watching my video, I realized I say, "Awesome!" quite a few times in a short amount of time. I think I will try and use a wider range of verbal praises in the future. It is hard for me to watch this video objectively. I have very low self esteem and watching myself on tape is extremely uncomfortable. I have received enough praise from my colleagues and student to know I am doing okay but on tape I feel like I sound silly. I would like to have my classroom be better structured. I can definitely see as well that I need to have backup activities for when students do not have any homework or upcoming tests. I want them to make the best use of the time but respect that they are not going to create more work for themselves independently when their required work is completed. I would like to be better about bringing math worksheets for them to be better prepared for upcoming exams. One student in particular today did not have work and I was scrambling

to give him something to do and he was not remotely engaged by what I came up with. I also think I may need to practice with my students on how to handle it when a guest comes in the room. I share a class and many special ed students that are not on my caseload will come in my room to test when their own case manager is not available. I find that everytime someone comes into my room it creates all this excitement and distraction and then it takes us awhile to transition back into work mode. I think I need to address that issue in order to diminish the time I could see being wasted on the recording. As stated above all more lesson need more preparation. As it stands now, I struggle with just teaching guided reading by the book, because its not strong enough. I also, believe that students require more individualize support which conflicts with the amount of housrs indicated in their IEPs. Next, semester I will have lessons plans in place at the beginning of the new semester, now that I know the demographics of my students.

#### **Teaching-Video 2: Sort by question**

gmgalvarro agcompaore dlnoury jschavez mrallen4 dmarty seangs sbosworth vlorenzo jhulsker vrpersky mrslattery

What strengths did you observe in your lesson? What aspects of the lesson went well? Provide examples from your video.

Strengths I observed include an ability to stay calm and go with flow. Even when I could not find flashcards I quickly solved the problem and wrote the vowel sounds on the board, having students help remember which ones we had already done. I speak respectfully to the students and use a calm voice. Both boys get a chance to interact and participate throughout the lesson. The work on breaking down syllables went well. The boys focused and I was able to give words based on their individual goals. The entire experience was positive and engaging.

The lesson's objective was clearly stated and the student knew what to expect because he was provided with a checklist of the tasks. When my student was not following instructions, I pointed out a visual reminder of our classroom expectations and that helped him refocus. Providing him with breaks when he needed them was helpful as it allowed him to calm down and do his tasks. Another positive think was that when I saw that my student was having a hard time starting the writing, I added the amount of bonus points that he could earn, which motivated him to start. At the end, when I wanted to assess what he learned he told me that he learned that he could read and write by himself and that he does not have to be afraid. I thought that was a magic moment even though it was not the answer that I was expecting. Afterwards with some prompts, he was able to state that he learned how to describe a character.

This video was not of a standard lesson, but definitely a typical day in my classroom. Since I teach Academic Success, my main focus is helping students in whatever subjects they are struggling, making sure they are aware of past due assignments, and helping them stay organized. For this class period, I was primarily helping one student prepare for an upcoming Geometry test. I feel really good about the way our lesson went. I started by giving him examples and modeling the correct way to solve the problem. I then did guided practice where we worked out problems together. I would first write the problem myself having him help in me fill parts in and figure out the next step, and then I would have him do the problem with my support. Eventually I had him do the problems independently, checking in with me afterwards on how they went. This particular student

has a lot of pride when it comes to admitting he needs help, so I felt like this was a big step forward for us. His understanding of the material also improved. I think my ability to listen to my students and be patient with them is an area of strength. I also feel like the time I spent with him today was vital because I now know that his being an English language learner is having a major impact on his success in math. He actually understands how to solve equations fairly well. The bigger issue is his ability to comprehend what is being asked of him.

A strength that I observed during my lesson was that I had materials and visuals prepared. The visual example of my poem allowed students to see my version and to practice editing with my example first. I am also happy that I decided to use the checklist that has visuals with it. Students accessed it easily with the examples next to each item. A second strength is the levels of participation. Students were engaged during the mini lesson. They responded to my questions using their thumb and were excited to critique my work. I think I'm doing a better job of having the students contribute more. I had Justus read the questions after I caught him not paying attention. Then I had Maston explain the warm up. I opened it up for a quick brainstorm on why we study geometry and got a good variety of answers. Jaoquin and Kylie explained their answers for the polygon problem and we discussed quickly how their two answers were the same but used different types of reasoning. I try and not sit during class unless I'm using the doc cam and I think I did a good job circulating and checking in with as many people as possible. Also the timing of the lesson felt about right as I watched Ms. Su conduct the lesson the previous period and we both needed 50 minutes to get to the point of distributing homework so I was happy my version aligned with hers.

During this lesson, all of my students were engaged in the task. I had three stations set up. The first had sensory toys, the second had puzzles, and the third had a math activity. This was one of the first times we tried stations so I tried to make the activities engaging and not too difficult, since most of my students have a hard time with transitions. I also made sure that the math activities were differentiated to each students' level. For example, I had numeral matching activities for one group, numeral to quantity for another, and simple addition for the third group.

There were multiple ways for students to practice the same skill to access different modalities. Students manipulated words with circles that represented sounds, they listened to words and demonstrated that they can distinguish between the different vowel sounds by picking up the correct cards, and they segmented words with fingers and writing the sounds in segmentation boxes. Students also had many practice opportunities after watching teacher and trying together.

Good speed, checked for understanding, not worried about covering curriculum just enjoying where each child was performing

I feel that the lesson went okay. This particular period is more used to getting their work done during class. For example, in the video you can see that they are used to working individually on their homework.

During my 5th period class, I have four students ranging fro 7th to 8th grade. I wanted to focus on maximizing class time (about 43 minutes) so that I have time to check in with each student (I have no IA this period) as well as work on IEP goals with at least one student. I have found that up until now, I had been focusing too much on one or two students in this class who require a lot of support, and the other three have fallen through

the cracks a bit. To make sure I got to every student and knew what they were working on, I wrote each student's name on the white board and either a) what they needed help on that day (homework, upcoming test, project, etc), b)an activity related to an IEP goal. It was established within about the first 5 minutes of class what each student would work on. For two students, I knew from speaking with their teachers what they needed extra help on, so I told them that we would focus on those things this period. It was extremely helpful having the goals up on the board not only for myself to keep track of, but when a student seemed to zone out, I would redirect them to the board where their activity was written. Even though I felt like I was running around the classroom a lot more than usual, spending about 5 minutes at a time with each student, rotating amongst them, I felt like I was actually helping all of my students. I also saw that while I was helping one student, if another needed help, their table mate would help them until I could walk over. This was great because before, when I would sit with one student for a whole class period and another student needed help, they would usually just have to hang out until I could get to them. I used some advice from Professor Howland about giving direction and walking away to allow the student the opportunity to learn how to get started on their own. Before, I would give a prompt, then sit and wait 3-5 minutes for the student to get started, find all of their materials, etc. Now, I am using that time to check in and prompt other students.

Strengths in my lesson were: established standards based learning objectives based on assessment and cognitively engaging learning experience for the student. All aspects of the lesson went well. I created a variety of objectives that aligned to differentiate literacy activity to meet the students individual needs and I provided many opportunities for student choice. My assessment measured mastery of the learning objectives through multiple methods -- my observation, student artifact of sentence level comprehension and writing and exit ticket reflection sheet.

During this video I noticed some aspects that went well. I felt that I actively monitored the students by moving around the room, and praising good behavior. This enabled the students to feel proud of their accomplishments while others were staying focused because I was watching. My students were a little amped up because it was the end of the day, but they were able to settle in by responding to the question of the day. The students were engaged and asking questions throughout the lesson.

Some strengths in the class room are the student willingness to enter the room that have worked with me in the past. Student's want to learn and are willing to help each other learn as well. Not sure why, but showing video on the math instructions of multiplying fraction total engaged all students.

Identify any areas you feel you may need support or areas of growth. Provide examples from your Teaching Video.13 responses

I could use to have more open ended questions and give more time for students to respond. There is too much random calling out. I need to keep it on tas I need to talk less. There is too much student calling out and I could use to figure out how .

I need to work on my timing. I planned the lesson for 15 minutes, but it lasted for about 40 minutes. I know that my student's attention span is 15 minutes, but during lessons, he takes time to answers questions even when he is engaged. Also, he ask for breaks and I have to honors that in order for him to be ready for learning and not escalate. When prompted to do something, he needs more motivation moves and encouragement, which

takes time. I am having trouble balancing all that when planning and still have a 15 minutes lesson. In addition, I need to work on creating more engaging lesson, using student's high interest subject (football). There was an improvement of his engagement during the lesson but we can do better. An other thing that impacted the lesson is my relationship with the student. I am trying to make it stronger but it is hard since he is the only student and I have to make him do work that he is not always comfortable with. As I mentioned in the other half of the reflection cycle response, I really need to get better about scanning the room. I am usually more active and moving around the room checking in on students. This was a rare occasion where one student had the majority of my attention the entire period. I definitely should have been better about checking in on my other students needs. On this day in particular I really need to be more aware because my aide was absent so there was no one else to provide support. In general though, even on a regular day, I tend to only focus on the student I'm working with when I'm helping them with a question. I also can see that I am not allowing enough time for responses and that maybe my student could have come to the answer on his own if i had not rushed things.

An area for growth I noticed is that students were saying they used the check-list to edit their work, but they missed errors. For example, Jose told me he was ready for a conference, but when we looked at his work together there were punctuation marks missing. I am now reflecting on ways I can get him to interact with his text in a concrete way while editing. Reading his work and using the checklist is not enough support. I'm aware that becoming more familiar with the curriculum would be very beneficial. I'd like to do a better job previewing future lessons so I know what information I can sneak in and front load. At one point I explained that one of the reasons we study geometry is it is a way to train our brains in logic. Geometry provides accessible ways to sharpen our reasoning. I mentioned that being persuasive and convincing are skills that require heavy reasoning. I was kind of reaching for a good middle ground example that was real world, but also something the students would relate to. I gave a complex example of a real world situation (investment in MUNI and how that would reduce cars on the road and pollution), but I just made it up and I dont think it resonated. So more familiarity with the curriculum would hopefully allow me to provide relevant examples, maybe some that they would encounter in future lessons.

I think I need to sit down with both of my aides and talk about using a universal and direct language. The students need short, direct commands. For instance, instead of saying, "Okay, now I need you to listen to me. You need to sit down in your seat over there please," we need to say, "Sit down, please," and point to the chair. I think by having a talk with both of them, I can resolve the situation.

I feel that I do a lot of the talking. I really want to work on getting the students to do more of the talking. Also, the two girls were not very engaged at the beginning.

I need support in having my data drive my instruction. Fill the learning gaps as they are discovered

Even though this class is early in the morning at 7:50am and I am supposed to have 11 students. There were only four students at the beginning of class. I had to wait for them and this took way longer to start the lesson. I think it took me a couple of minutes to get them settle down and for them to start concentrating. Most of my students are so comfortable with each other that it took way to long for them to do the warm up. Students

walking late did not help at all.

I did find that it was pretty exhausting running around the class. I found myself wishing I had an aid that period, even though I only have four students. By the end of the class period, I still felt like I wish I had been able to do more. I think this is something that will come as I get more experience and confidence. As I continue to solidify my classroom systems, I think the "exhaustion" will lessen. It has been super helpful being able to share my experiences with my cohort members. We all have similar experiences of feeling like we are never doing enough, that everything is so new, and that we are constantly having to change and adapt to each situation.

Creating a learning environment that is more of a design thinking approach would be ideal. I would enjoy infusing "brain breaks", as necessary, with tinkering options if there was more space for learning how to learn and self-regulate offerings to explore. I feel like I could grow in maintaining focus from all students. There are certain situations, when I am the only teacher in the room, where I have to give individual instruction to a certain student. During that time it is common for another student to start to misbehave or get distracted. It seems like certain students need to have that constant surveillance in order to stay focused. This misbehavior can have a spiraling effect on the classroom. Once one student starts goofing off, the others find it funny, and work stops. In this particular video, I notice that several students entered the room with no clear instruction were to go. Two of the students in the video spent to much time trying to figure out why they were there. Student attend math support to help build math skills and sometimes they are resentful attending. However, while watching the video it's noted that they all appeared to be waiting on me as I asked what skills they need more support. For example, some students require more practice with fractions, etc. Other, students just need a place to go to get their home work done. I need to spend time reflecting on how to better organize this time so that students look forward to coming. It would also, be great if I could build more time into my schedule to push in to math classrooms.

Describe the classroom management strategies used in this lesson.13 responses I acknowledged and worked with Student who was ready to work, then worked also with the student who was off-task once he got back on task. I stated the behavior I liked seeing and ignored what I did not want. I also redirected an off-task student. I kept calm and stated what I expected. I also gave opportunities for both students to actively participate throughout the lesson. Activities kept moving so as to keep them engaged.

During this lesson, I kept referring back to the classroom rules and expectations that are posted on the wall. It help my student remember what the consequences could and what he can do to have a fun and safe day. Also, I used the bonus points for the student store as a positive reinforcement tool, that motivated him to start or complete a tasks. For instance, his last task was to write on a graphic organizer and writing is triggering for him, so when I noticed sign of escalations, I told him that instead of 50 bonus points that I initially posted for this task, it will be 100 bonus if he completes it and he did. When asked appropriately, he was provided with breaks to help him regulate. I used countdowns with him to give him processing time when he is asked to do something that he has a hard time doing.

Fortunately my class was very on task today. They were all working and not being disruptive. It took a little while to get them started in the beginning, but by going around one by one and prompting them to take out their work, they got going fairly quickly. I

think the main behavior management tool I used was positive reinforcement. When I did look around the room, I praised students for being on task. I also personally complimented several students on improved grades and finishing assignments. I also like that everyone used the signal I made to go to the bathroom, and students cleaned up their areas at the end of the period without me having to tell them to. These were not classroom management strategies that were taught in this particular lesson, but I still think it reflects an effective use of behavior management strategies over time.

During the lesson I used 1-2-3 Magic, our classroom behavior system, to redirect students. I used thumbs up/thumbs down to CFU during the whole-class mini lesson. After the mini lesson, we broke into two groups for language arts rotations instead of continuing together as a group. One center was word work and the other center was writing. The goal was for students to edit their work using the checklist, conference with me, and then begin their final draft of Google Classroom. I thought working with a smaller group would allow me to support individual needs better.

I co-opted those that weren't fully engaged into reading and contributing to the class. I requested that people raise their hands and not just shout out answers. I circulated and checked in with almost all the students. I think I called out 8-9 names throughout the lesson which I try and do every lesson to communicate that you might be called on--not only for misbehaving and to answer a question but to keep students' attentions. I tried to use some real world examples to make the lesson more relevant. I complimented groups to Ms. Su aloud so students knew their work was being recognized by both teachers. I used our level system and moved a couple of students who were participating up a level, and one student who was not participating down a level. I also used our individualized schedule in order for the students to transition from individual work time to group work time.

-Reviewing characteristics of good scholars and being respectful -Awarding Super Me to students who earned it through demonstration of expectation.

Creating a chart of what does small group look like, sound like, you feel? I feel that I was able to settle them down and engage some students. Some routines I have establish in class is for students to come in and take out their planner and get a stamp. After the lesson, students know that they are supposed to work on homework. They already know this ro

During this lesson, I had each student's name on the board along with their activity to focus on for that class period. This particular class is very small and has students who are very respectful and responsible. Luckily, because of this, much of my classroom management comes from the relationships I have built with these students. I hold my students accountable for their actions, and when I saw students getting off track, a simple reminder to focus on their activities worked. I had two students sitting on their own at separate tables because they have a lot of trouble focusing and are chatty. I have found that having them sit at their own tables has been very beneficial for them.

I fostered a culture of learning by facilitating student responsibility for their own learning. I offer opportunities for the student to take initiative for producing high quality work with high expectations and clear behavior communication. I did not need to redirect for negative behavior during the lesson. Most importantly my interactions with the student demonstrate respect and support for the learner and their process.

In this lesson, I frequently checked in with all students by walking around the room,

observing their work, and prompting them for questions. Also, providing information in multiple formats, including games where they can get up and walk around, gives the students an outlet for their energy and is a nice change of pace. The more activities you have planned, the less downtime the students have. Students seem to get distracted if they have nothing to do.

Classroom management in small math supports: Students understand their expectations that are consistent across all classrooms. For example, they understand that if they require a break, bathroom or water they need to wait at least 10 minutes into class and cannot leave 10 minutes before class ends.

Having watched your Teaching Video, what if anything would you have done differently and/or will do differently in the future?13 responses

I need to work through the sounds (flash cards) more quickly. I will have students read their words/flashcards to each other instead of just to themselves. I will add reading connected text after practicing word parts, even if it is just a few sentences.

After watching this video, something I would have done differently is the hook of my lesson. Even though I told him the day before that we will be describing the character for this lesson, I should not have started my lesson by saying that we will write about the character. Writing is triggering for him so I should find a more creative way to introduce that to him.

I definitely still have a long way to go, but I can see a slow improvement in my work. As I stated earlier, I really need to slow down when working with my students and especially when I'm waiting for responses. Unfortunately, talking and moving fast is a big part of my personality so it will be a hard habit to break. I do think though that the more self aware I am the more potential I will have to control the way I speak to my kids. I also think it may have been better for me to have sit with the student I was working with in a more central location rather than off to the side. That way it would have been easier for other students to come up to me, and also quicker for me to get to them if they needed me.

In the future I will include a very concrete way for students to interact with the text while editing instead of just using the checklist and making corrections. I will also include more time for a we do portion that doesn't use student's own text, but is a sample of a text. As mentioned above I would have prepared more relevant, real world examples of why geometry is worthwhile. I also need to find more strategies for prompting groups that are stuck or struggling. Many times some groups are doing great and it's easier to work with them on moving on and next steps. It is difficult to provide a well calibrated prompt to groups that are stuck on the content, or stuck on working with each other, that gets them out of their rut and making progress. The content is not super difficult as we are introducing definitions and concepts, so I need to find a way to keep groups moving. I think I want to add an auditory cue for when groups are finished. I have a few students

I think I want to add an auditory cue for when groups are finished. I have a few students who are very drawn to music and I think this could help make the transition easier. I want to find a short song or nursery rhyme that the students can sing as they move from one group to the other.

I would not give students access to materials that they don't need. There notebook became a distraction.

Make sure my sticks are available when I need them. Create a video landscape instead of vertical.

After watching the video I will definitely start the lesson with the few students I had at the beginning. I should talk to my paraeducator for her to understand the lesson better and for her to be able to help me out, so I could walk around the room.

I think I will continue to use this system of keeping track of each student's activities for the day. It seemed really helpful. In the future, I think I need to give myself a little more of a break in terms of feeling like I'm not being helpful. Being able to watch and reflect on the video definitely gave me a different perspective then how things can seem in my mind. I saw myself working really hard, being helpful, and still being able to laugh and be silly with my students. I think that by being more realistic about how helpful I have been and feeling OK with how I am doing, it will allow me to focus more on the other areas I still need to develop (such as organizing papers/files, staying on top of deadlines, etc.).

It was a successful lesson because the child had fun and met the objectives. I would appreciate the ability for the student to move around more freely during the learning experience.

After watching this video, I feel that I can work on posting my agenda for the class on the board. This will give the students an opportunity to see what is coming next, so that there are no surprises. I think this will encourage some students to accomplish each task with more focus in order to get through the agenda, because they can see the finish line. For next semester, I will make signs to indicate the area students check-in at. Such as recording attendance. I will restructure my filing system so that materials are available for additional practice. I will make a basic agenda for the class, collaborate in advance (monthly) what teachers need more support (students outside the class room). By implementing a structures system and post protocols where they are visible for all student's. Most important is remaining aware that students come from diverse backgrounds and most of the time there is no one to support their learning outside the classroom.

#### **Teaching-Video 3: Sort by question**

vrpersky mrallen4 dlnoury jhulsker vlorenzo agcompaore gmgalvarro seangs sbosworth jschavez mrslattery

What strengths did you observe in your lesson? What aspects of the lesson went well? Provide examples from your video.14 responses

Questioning --my ability to pose questions that were scaffolded toward the cognitive levels of my students to challenge and provide mastery of the lesson was my strength. The students were deeply invested in our discussions and consistently used academic vocabulary, discussed the academic issues, and justified their reasoning. We were working on their story leads and dialogue in their narrative writing in person and via G comments collaboration. They loved it!

Circulated and gave individual attention to many students. I checked for understanding and prompted further answers without giving out answers. This lesson was heavy on definitions and theorems so the bulk of the lesson was direct instruction and students taking notes. Because I was not responsible for the lecturing I also took the opportunity to help some struggling students organize their binders and reference materials.

I think the main area of strength in this lesson was student interest. The executive functioning unit has not been particularly exciting for my freshmen boys, but today's lesson on learning styles actually got to them. I showed a short video which I think was a more attention grabbing introduction than just me talking at them the way I usually do. I also had them take a survey to figure out whether they were visual, auditory or kinesthetic learners. I only required them to do one, but several of them wanted to take the other surveys as well to see if they got different results. I then had them look through lists of strategies based on different styles of learning and two of them actually wanted to keep the list to take home, which has never been requested of any other handout. Just having their attention made everything else go more smoothly.

For my lesson plan, I filmed my math class on Friday. For this lesson plan, it was the final lesson in my unit on creating and using a shopping list. Previously, students had created their own shopping lists, figured out the prices of their items, found the totals of their items, and found out the exact change and estimated amount of change they would need to bring with them for the store. On Friday, we had our Market Place day where students got to use money manipulative to "shop" for their items (printed out images of items with their prices). I had introduced the money manipulatives to the students the day before part way through the lesson so that it was calm and so that they were able to familiarize themselves with the manipulative before the market place day. I felt that this

went well, so that on Market place day, we didn't have to spend too much time explaining how to use the money respectfully within the classroom as well as appropriately for the activity. While the money was slightly distracting for some students, I felt that they were having fun and applying their knowledge by being costumers and then switching to being cashiers. I also saw students pairing up in new ways on their own. It was nice to see in the video that students were all working together well and were patient with their partners.

I started by reviewing the classroom norms that we did the first week of school. I feel this helped remind the students what we agree on as a class. I introduced our new weekly points and I explained how; they will give themselves a score from 1-10 at the end of the class. Then my paraprofessional or I will give them a score as well. This will help them reflect and hold them accountable of working during class. After this they worked on their transition plans after high school.

This lesson was particularly very engaging as i set it up for him to use the Ipad and read QR codes. Then he will find the answers to the QR questions and paste them on a poster. It was very engaging, so my students were focused and I was able to manage their behaviors. The student knew exactly what to do and what to expect for the lesson because I gave him a checklist of the tasks. I allowed my student to take a break since he is the only one in the class and sometimes that gets to him. He came back right after, there was a lot of positive reinforcements and bonus points.

One strength I observed was the ability to keep going, even after disruptions. In the lesson, the principal and another teacher came in to ask questions. The student and I were able to get back on track and the disruption did not cause a complete breakdown of the lesson. Another strength I observed was getting the student back on track as he got distracted throughout. When he needed to talk about something off track, I wrote down the topic and told him to get back to the work at hand and that we would revisit the conversation at the end. We then talked about the topic at the end of class. Another strength was listening to, and connecting with the student.

-Students were engaged. They had their own YES/NO cards when they were asked to listen to pairs of words and distinguish whether they are exactly the same or they were slightly different in which b/p were changed.

I liked having the prediction poster to refer to. It was nice that I had been working with this group picture walk before. I like that I jigsaw the last 4 pages of the book to promote independent practice. The strategy: I do, we do, you do.

A strength I observed during the lesson was student engagement. Students were participating throughout the lesson. They raised their hands to answer my questions and shared their ideas during pair shares. The sort we did was challenging, but the students found it interesting. They noticed so many things about the words and were excited to share their thoughts with the group. I was really happy that I had the opportunity to go back and watch all of this happen as I didn't realize it in the moment.

In this lesson, my class was well behaved and had little distraction. I thought the lesson was full of activities, and there was not a lot of downtime for the students. I used multiple formats to deliver the curriculum such as videos, whiteboards, and a game and it helped the students stay engaged. The students also followed all of our classroom expectations: being safe, respectful, and responsible.

Student participation in the new content. Students used the pictures to predict what was

going to happen next. Students used evidence from the text to make predictions. The rocks allowed for equal participation. Students practiced independently to make sure they understood the skill. Students helped each other when needed.

In my lesson, I noticed that all the students were engaged and involved in either an academic or sensory activity. The lesson involved three stations including sand, puzzles, and iPads. My aides each took the sand and puzzle tables while I had the students working on iPads. Since all the students were fully engaged with the math games on the iPads, I was able to pull each student for targeted one-on-one instruction. My students definitely benefit from this type of setting versus a whole group, since even though they are all Kindergarteners, I have a wide range of abilities in my room.

Guided reading to me is so hard and new to which means at times I'm not sure I'm actually doing the right thing are making a difference. In this lesson, I timed the silent reading and noted approximately the time it took the students to complete assignment. Then after reading students were engaged in re-reading for understanding. For example, citing evidence and defining words from withing the text by looking for word clues. Identify any areas you feel you may need support or areas of growth. Provide examples from your Teaching Video.14 responses

The structure is something I'm growing. Typically these students are pulled out of their classrooms. Keeping them with their peers takes a lot of dancing and art on my part. The students actively participated with me and peers the entire lesson. I was able to follow their lead to ensure that the lesson was meaningful and useful for both students in their general education classroom. I was recalibrating based on their bit by bit outcomes for the entire 45 minute lesson and coaching.

During my rounds of helping students get organized (which I feel is as important as any of the content for many of the struggling students) I found myself wishing I had more strategies to promote organization. Checklists, or actual folders with multiple pockets, a location in the classroom they can use for extra materials etc. The problem wasn't something I could solve in the 2-4 minutes I had with the student. Identifying students who need help with this and setting up a better system at the beginning of the semester is clearly the way to go; it was difficult to first identify and then have a suitable solution at the ready. There are great procedures my co-teacher employs that work for 85% of the class--stamp sheets, warm up stamp sheets, table roles all work well.

There are many areas where I still need to improve, but for this particular lesson I think what stands out the most is my lack of technology. Resource does not get any of the fancy tech (nice laptops, projectors, Apple TVs) that the general education classrooms get so it makes it difficult to find fun ways to present to students that isn't just the usual lecturing from the white board. Still, since that is all that I have to work with, I am definitely going to need to learn more about the tech that I do have. I should have tested more things our ahead of time so my lesson ended up getting a bit broken up while I figured things out. There were a lot of things that could have been avoided if I had done a technical run through before class.

I wish that I had managed the time a little better on this day. I had my post-assessment to give to my students, but we ran out of time. I gave them the assessment just to start, since we had about 8 minutes left of class, but I wish I would have just waited until Monday since many of the students need 15 minutes or more for quizzes. I also saw that students were happy and excited from their activity, plus it was the last period of the day on

Friday. They had a hard time settling down for the post assessment, and I believe it may have affected their scores.

Once again I am having a hard time engaging my students. I feel some of the students did not take their plans seriously or they struggled with coming up with ideas of what they want to do after high school. I feel this topic is very important because when students do not have a goal to work for then they do not have the motivation to try in school. I need to find a better way to present this information.

Even thought this time was better, I am still struggling with the timing of my lesson because it very hard to think about all the breaks that the student will need. Sometimes, he gets stuck on an idea and make a big connection to his own experience that goes for minutes. I am working on helping him wrap up without major issues. For instance, on the video he was getting escalated and we went thought giving breaks, taking away responsibility points and giving bonus points to get him to come back and do the task. I was nervous about videoing my lesson and I jumped in quickly, forgetting to go over the Objective. Once I relooked at the agenda, I noticed that I had forgotten the objective. I then added it once we finished the short part of the lesson we were in. I need to follow the agenda.

I still feel that I am doing a lot of the talking. The teacher/student talk ratio is heavily teacher. I would like help in how I can structure my lessons to have my students talk more, especially the younger students.

I need to have a back-up plan for sticks or rocks. We have one student that steals stuff regularly so I have to have another plan in case they go missing.

I started to use Words Their Way when I moved to kindergarten. I wasn't trained in it, but have familiarized myself with the program by reading the books and trying it out. I would really like to go to a training. This would give me a solid understanding of the program and the opportunity to ask questions. Also, I would like to look more closely at how I paced the lesson. It was a 13 minute lesson, but it seemed longer to me while I was watching. I want to add some kinesthetic elements to get students moving and make it more interesting.

I had a couple students who I felt did not understand the significance of the lesson and therefore were not fully engaged. I aim to maintain the interest of all students in the classroom, so that is an area to work on. In my lesson I approached these students and gave a further explanation on how this lesson will be beneficial to them, and I believe it gave them some clarity as their participation increased soon after. I would like to implement a token economy in my classroom to reward the students that consistently work hard. I believe this will not only reinforce positive behaviors but inspire other students to follow the classroom expectations. It will also document each student's progress and allow them to see their growth.

I still need support finding leveled questions to enhance participation.

I would like to eventually change the puzzle station into a more academic task, but I am struggling with when to implement it. I do not think my students are ready for it yet since it would change the routine we just started to become comfortable with. However, they seem to be bored and done with the station before the timer goes off. I am thinking that after Thanksgiving break might be a great time to try and add word play games at that station.

I need to be better in planning. Sometimes I have to adjust my schedule to teach during

periods I originally had no students. Students appreciate the flexibility of group reading when it gives me the chance to push in to class.

Describe the classroom management strategies used in this lesson.14 responses I used proximity, nonverbal communication, think aloud, modeling, high expectations, positive rapport, and interesting instructional materials to manage a positive learning experience for these learners working a different levels.

The materials provided by the teacher work really well. While students work on the warm up we come around and check the warm up and the previous nights HW. When it comes to distributing materials, each table of four has a designated resource manager to hand out papers or fetch supplies. This particular lesson was all about filling in a color coded reference sheet with definitions and examples so everyone was on the same page. Primarily in this lesson I used specific feedback. I pointed out when students did something well and made it very clear what exactly it was that I liked. For one of my students (who I know does not mind me doing this) I actually looked over his work and then read off something he wrote down as an example for my other students to follow. I think that type of modeling worked well. Again, because interest in this lesson was high, I did not have to redirect as often as I usually do.

During this lesson, I told students that I would be the "store manager". I told them that if a costumer had a "complaint" (question about their change) or the cashiers needed my assistance, that they could call out for the manager. The class got a little noisy during the lesson, so it wasn't always easy for me to hear when I was being called, however my instructional assistant was also active in assisting and giving additional instruction as a "manager" as well. I thought it was a fun way to stay in control of the class while still having it tie into the lesson. The students thought it was fun as well, as we often hear the phrase "let me talk to your manager!"

First I introduced the classroom norms. I gave students time to ask questions if they had any. After the lesson, I gave students time to write their weekly goals. Some of them ask why they had to do it. I told them it was for them to be hold accountable and for me to keep track of their work. At the end of class, I gave students about 3 minutes to score themselves on how effectively they work the whole period.

We have a particular classroom management system from the SOAR program and I follow it during my lessons. I gave my student a lot of bonus points, redirections, positive reinforcement and follows their Behavior intervention plan. During the lesson, my student and I made a deal that if he comes and work for the whole block, he will have a 5 minutes break outside. Per his BIP, those kind of things work for him and it did. I used visual cues to remind student to raise hand or wait to talk. I referred to the Class Expectations. I also gave specific feedback, like when the student did exactly what I asked, I gave them a sticker for following instructions. I also commented when I saw him working hard to figure out a word, reminding him that that is one of the things great readers do. The student followed classroom procedures and began Brain Gym at the beginning of class without me having to say anything.

- Proximity: students were all seated in a circle where I can easily reach out to touch them or redirect them verbally. -Engagement: Students were given cards so they can all participate. -Praises: I praised students for their efforts consistently. -Structured review of expectations: Eyes are watching, ears are listening, etc.

The beginning is procedure. Then the students know we do an activity or two. I used the

same routine.

I taught this word work lesson in a small group. The groups were made by first assessing what level of speller they are on the Words Their Way spelling inventory. Then, I looked at behaviors and who works best together.

In this lesson I referred back to our classroom expectations throughout the lesson. Part of this lesson was about understanding how others learned, which lead to a conversation on how our actions affect others and being respectful. Repeating your classroom expectations frequently will force your students to be reminded of them and hopefully feel inclined to obey them. I also kept the students very busy in this lesson, through the many activities we accomplished. There was not a lot of free time, and when they had it they were anxious to complete their homework. Overall the students were well behaved. I used routines, positive reinforcement, and praise to support student learning.

I used my behavior chart where students have different privileges depending on what level they are on. I also used close proximity and verbal warnings.

One class room management strategy is using the timer to move from one element of group reading to another. For the most part the kids in reading group are more respectful and require less correction. However, placing an agenda on the board with the expected dismissal of class and a clock that is visible would help with instruction productivity Having watched your Teaching Video, what if anything would you have done differently and/or will do differently in the future?14 responses

I plan on continuing to follow the students lead. The advance organizer, movement breaks, think aloud, guided practice with corrective feedback and independent practice is helping to develop and boost their confidence.

I would like to do more as a co-teacher. Some lessons are more appropriate for me to get more involved and lead some portion of the class. I always want to, but regularly don't have the time, to meet and spend more prep time with my co-teacher. We meet briefly so I can preview the material and we can discuss block days and projects, but it has been hard to find a chunk of time to actually plan, and discuss how the lesson will unfold and what role I can play, especially because she's so experienced and knows exactly how each lesson should go.

I think I may to reevaluate my room setup if I am going to continue doing these types of lessons. My room has an excellent flow to it for a standard academic success class. It is spread out, everything and everyone is visible and there is both space for students to work independently and in small groups. However, when I give this kind of standard lesson, everything has to be rearranged to accommodate working with a group of that size, and having access to my whiteboard. It is hard to know the best choice because for the vast majority of the time, my room is just the way that I want it. When a lesson comes up though, it involves a lot of advanced planning. On the day of this lesson, my earlier classes were completely slammed and during brunch, when I ideally would start moving furniture, several things took up that valuable time. I ended up having to scramble and the seating arrangement was cramped and awkward.

I would like to continue to build on my time management, not only with students and lesson plans, but also with my paperwork and meetings. I can get focused on an activity or caught up on solving a problem, and sometimes I forget to take a break for a minute to check the time or check for other things I need to accomplish by the end of the day. I will give students a better lesson on how important goals are. Maybe I can find a better

way to introduce goals setting. I can have students write first a map of their high school trajectory and give them the freedom to decided what they want to include. I will show them various examples maybe Ms. Tovar's and mine. Then it will be easier for them to describe what they want to do after they graduate from high school.

If I could, I would have been less flexible with the student because I noticed that he takes advantage of that. He turns his behavior around very quickly that sometimes he gets away with a lot. In addition I would have offered the deal of 5 minutes outside to him way before than what I did on the video. It would have saved me some time and energy I would have looked at the Agenda more closely as I went along so I did not miss anything. I would also put the amount of time a section is meant to take on at least my copy of the Agenda.

I thought I had all the materials ready but the cards were not in order so little K students had to wait for me while I shuffle through the deck to find the two cards I needed to use. I was pressed for time and did not do an individualized assessment such as an exit ticket. I would have the back up stick or rock system ready. I would do a better job to check for understanding. I liked that Brooklyn asked for the directions again because I am sure the other kids needed a repeat too.

One thing I will do differently is I will create visuals to represent long and short vowels. Students were getting mixed up with the symbol above the vowel. I think a simple visual reminder will help them distinguish the two.

After watching this video, I would explain in further detail the reason behind my lesson, and why the students will find the information beneficial. I will do this in the beginning of the lesson so all of the students hear it first. Relating subject matter to their real life helps the students find relevance in the curriculum. I am going to introduce a token economy system that will reward positive behavior. This will increase the motivation of some students.

I will use high level question to enhance participation. I will allow for more skill practice with additional texts. I will support student learning with visual, verbal, and kinesthetic examples of the new skill. I will check for understanding more often.

The only thing I would do differently is trying to implement another academic station instead of the puzzle station.

As all the previous response, student expectations should be clearer and posted so the minute they come in. Books, paper, pencil, laptops and any materials they need should be on my side of the room. Completed work assignment. Routine should be posted where student's can see. An additional implementation would be when caseload students can drop in to discuss/or work on classwork.

#### APPENDIX H

#### **Podcast Reflection Prompt Responses**

#### Part 1 By Question

mrallen4 gmgalvarro vrpersky sseang agcompaore jschavez mrslattery sbosworth jhulsker vlorenzo dlnoury dmarty sbosworth

# How easy is it for you and your students to navigate your classroom? 15 responses

Very. There are only four students in the class, all of whom are seniors and are comfortable at school, but not in math clases.

I have a small room that is easy to navigate. Students know where to get their materials when asked.

Very easy because it's super small.

Students can easily navigate the classroom. It is small.

This was actually the first time I had this group together. Only one student of the six had been to my room before. However, when I gave them directions to put their belongings down and sit on the rug, they all did it with ease. I always stand at the door to greet each student but I think in this situation, I should have skipped that and walked with everyone inside. My room is naturally divided into sections and it is easy for students to get from one corner of the room to another without having to navigate around obstructing furniture or other groups. My room is specifically designed to have cozy but accessible corners just in case there are multiple groups that are with respective teachers. However, from the main kidney table, I can see the rug and the other independent work station. This ensures that I can provide individualized support while giving other students the autonomy and independence that I want them to develop.

My student can easily navigate my classroom as I do not have more furniture than what I need for 2 students. Everything is locked and can only be obtain by asking permission for it. There is a lot of space for students to deescalate without having things to throw around. In addition the teacher space is clearly marked by an orange tape just to have a visual reminder of the expectation. The calm down/quiet room is clearly limited in the classroom and students can be supervised from the teacher desk.

I think that our classroom is open. I try to have only furniture that is completely necessary in order to keep the room from feeling crowded. Each space in the classroom has a specific purpose. This makes it easier to navigate. One are for growth is having all of my needed supplies closer. I noticed in the video that I had to get up a couple times during my lesson to get needed materials.

My classroom is easily accessible for all students, and the students can navigate the space

without any problems. There is plenty of seating with various desks to accommodate any special needs. The aisles are kept clear and are wide enough to allow for wheelchairs and moving freely. The students know where to get supplies such as calculators, pencils, paper, etc. The students know where to sign in and turn in papers for me.

Very easy.

I believe my classroom set up can be improved. I have a designated area in the room for school supplies (pencils, paper, etc), but it is not clearly labeled. I do not yet have a routine for students to turn in work, which I would like to develop. I do have a clearly designated area for students to relax and take breaks, called the Chill Out Zone. Students know that this space is used only for breaks, not for work or for distracting other students. I generally put name tags out at seats in relation to what I want students to be working on that day. Students know to get out their planners, find their seats, and get started on their activities. I always have these steps written for them on the whiteboard as well.

I feel my room is very tricky to navigate during my fifth period class. I have the teacher for visually impairment meet with one of my students. Also in the my teaching video, I noticed how hard it was for some of my students to look at the board when I was lecturing and showing videos. It is not easy to navigate my classroom, but I feel I got used it and my students have too. At the beginning of the school year, I rearranged all of the tables, chairs, and desks in my classroom. The room was originally set up with four narrow rows of desks, each row three seats deep, facing my desk. There was also one small table shoved in the corner. I did not like the desks that way and ended up spreading them throughout the room. I like to be able to sit next to my students when they need one to one support and the rows seemed they would be inconvenient to navigate. I also saw no reason for all of the desks to be facing my work desk. I try not to be seated at my desk when class is in session and the white board, which I often use when giving examples, is on the other side of the room. I also like to be able to see students work from the back to make sure they are on task when using ChromeBooks. I moved two tables into the center of the room because I like to have students come there to work with me when multiple students have the same assignment. I have very good visibility and can easily scan the room while students are working independently. Although the tables and chairs need to be shifted back into place every couple of weeks, I also think I have done a good job of arranging the room so that there is an easy walkway for students to access the other half of the room that is used by my co-worker. We have a shared space divided by a set of white boards. Fortunately, we teach different periods so noise has not been an issue.

I think it is very easy for my students to navigate around the room. All of the desk face outward so they have their own station and the group tables are set up with plenty of space between them. I can stand anywhere in my room and easily scan to see the location and behavior of any student.

Fairly easy except for the bookcase that blocks part of the water fountain.

Its very easy for my students to navigate my classroom because I'm at the front of the entrance. My class room is shared by two teachers teaching small group instruction for math and reading support. The room is further divided by a collapsable wall that divides the room into two separate parts. This can somtimes be a problem because of the noise overlapping from both groups when instruction is going on at the same time. My student's are expected to come in a take a seat around the kidney shaped table and expected to maneuver around the room when additional supplies are needed. For example: pencils, paper, shaped pencils, etc.

Have you posted and taught classroom expectations? Approximately, how often do you refer to them in your teaching video? 15 responses

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	taagiit	pootoa	1010104 10 111 11400	01.101

1	у		у	
2	у	у	once	
3	у	n	n	Plan to do at the end of sem.
4	у	some	only when violated/ necesary	
5	у	n	n	rarely
6	у	n	n	can see how important
7	у	У	n	Mostly, I communicate my expectations in my other classes through the relationships and bonds I have created
8	у	у	once	
9	у	n	n	
10	n	n	n	Waiting for school wide poster
11	у	у	у	
12	у	у	у	

5-I have taught them. They are not posted. I rarely refer to them.

12- I posted classroom expectations up high where students cannot reach before school starts and taught them intensively for the first weeks of school. With students, we revisit them every day first thing in the morning what the school wide and classroom expectations are, and create one goal around the expectation that we want to focus on the day. Students have to be checked-in every 30 minutes around the 3 school wide expectations for behavioral data

<sup>6-</sup> I have taught classroom expectations and have not posted them. I can see it would be beneficial to post them and review.

<sup>8-</sup> Yes, I have posted and taught classroom expectations. I refer to them once in my teaching video--pondering/pausing to think.

<sup>6-</sup> I have not posted classroom expectations and I do not refer to them. I have taught classroom expectations.

<sup>10-</sup> No, I did not teach the classroom expecations. Although I think the lesson worked well enough and that the groups are small enough, I need to put up posters around classroom expectations that is part of our school-wide expectations: Be safe, Be respectful and Be responsible. I was going to wait until the school has our posters ready but I think I need to get started now with my own simplified version.

collection purposes, so during the block, I try to remind them of their daily goals and what they are working towards (generally it involves the classroom expectations). Moreover, when I am redirecting a student, I point to the expectation that will set him up for success. In my video I was constantly referring back to the expectation. I use it for positive reinforcement (I really like the way that you are FOLLOWING INSTRUCTION THE FIRST TIME) and also for redirections for when a student is raising his voice(I just want to point out our classroom expectation number 3 that says USE POSITIVE WORDS AND TONE OF VOICE).

- 1- Yes, we created classroom agreements together. I didn't specifically refer to the classroom agreements during my lesson.
- 4- During the first couple weeks of school, I discussed classroom expectations with each of my classes. Some of the expectations are posted around the classroom such as cell phone policy. In my video I notice that I do not refer to my expectations at all, because the students I had were very well behaved. I feel like I refer to expectations more often if students are violating them, but that is something I need to work on.
- 9- I need to post classroom expectations and review them with each lesson.
- 7- This depends on the class. For my 6th graders, we have written a list of Class Expectations (be Safe, be Responsible, be Respectful) and what they Sound Like, Feel Like, and Look Like. These expectations are posted on the back wall. I repeat every morning that I expect my students to follow the expectations that they came up with, repeating what they are and what they look like. I have set class expectations for all of my classes, but have not yet gone back to review them. Generally, my students in my other classes behave well enough that it is not an issue, but I believe it is still important to remind students regularly. I do not want to turn "Let's review the class expectations" into a punishment, such as "I think we need to review the class expectation". Mostly, I communicate my expectations in my other classes through the relationships and bonds I have created with my students in my other classes.
- 3- I did talk to my student about classroom expectations and we did write them together as a class. However, I do not have them posted on the classroom where my students can see them. I am planning to reviewed them at the end of the quarter, but I think I need to write them on poster paper and put them in my wall, so student can see them.
- 2- My classroom expectations are posted on the wall of the my room. I have a bathroom procedure, cellphone policy, and a basic expectations sheet that outlines creating a respectful and safe environment. The general expectations have not been an area of concern. I do not feel that any of my students have been truly disrespectful to me or their peers, and safety is not a problem either. The bathroom policy took awhile to kick in but most students now use the hand signal I created. There's a few that don't, and I'll be honest, I don't always make them do the signal. My biggest concern is that they ask for permission and take the pass with them. Only one student struggles with that and for him I make him go back through it until he gets it right each time. I can't see a time when I refer to these expectations in the video, except for reminding everyone to clean up their area before they are allowed to leave.
- 11- Yes, the classroom expectations have been posted and taught. I reviewed them at the beginning of the video to remind the students to sit quietly and raise their hands to talk and at the end to let them know they did a great job following our classroom expectations.
  9- In my video, I did not refer to them but since that time, I refer to them once a week.
  P.Moss- At the time of the videos the expectations is only posted at the opposite of the room. However, this will change once the updated exceptions (school wide stduent rights are updated.) Classroom expectation are agreeded upon during grade wide implementation at the beginning of the school year. These same expectation were taught for two weeks across for 7th and 8th grades and for the first 6 weeks of 6th grade instead of implementing electives. Therefore, I don not refer to them at this point.

Do your students understand the routines of your classroom? To what extent have you taught and reviewed routines? What evidence from your teaching video supports your answer? 15

#### responses

My hopes for the routines have been diminished primarily due to punctuality and attendance. I've never had every student arrive on time. Often students arrive 20-30 minutes late. This makes the Do Now difficult. After assigning homework the first week I received none of it back so that also eliminated my HW collection routine.

My students do understand the routines of the classroom. I think that there are a few more I would implement after watching this video. You can see that students know where to go when they come in. When I touch my collar bone with one hand and stomach with the other they know to do the same and that we are beginning our Brain Gym. After the Brain Gym they sit down in their seats.

Yes, my student understand the routines. I teach and review routines explicitly through positive questions and appreciations. You will hear and see me thanking and praising my student for demonstrating and meeting our agreed upon expectations.

The students do understand the routines. I should have gone over the change in routine so that Spencer knew we were not getting a book first, as that is usually what we look at in the beginning. You can see him going to get a book once we are done with the Brain Gym excercises. Boys know to sit or get to their chairs when I use hand signals.

This was my first time with this group. From the video, it seems that the only real expectation they understood was walking to and from different spaces. However, they now know that they all come in and greet me at the door, place their belongings on the table and walk to the rug calmly. They also know the procedure of putting away their materials, getting up to gather their belongings and waiting at the door to be escorted to their regular classroom. They start the process after I say go and are expected to be done by the time I get to one starting from 10. Another routine that I need to add is the informal assessment at the end of every block.

Yes my students understand the routines of the classroom. I have the schedule on the board and every time that there is a change I take time to explain it first and remind it until we get there. We go other everything during our morning meeting and before activities. We also use check list to the the exact amount of tasks that we have before our next break and what we will do during the the break so that we can look forward to it. We have a poster of expected and unexpected behavior, schedule change and staff change. Every time that there is an unexpected thing happens, we will check-in to discuss if that is a big deal or a little deal. We also come up with tools that can help us get through it. In my video the check list could be observed for the tasks and my student knew what to expect after them and what we had next on our schedule. My students understand the classroom routine. We have routines for the different rotations and stations we do. This shows in the video because I am able to work with my reading group uninterrupted by other students. They are working with my classroom aid on another activity that follows a similar structure daily. You can also see other examples such as when we check the number of syllables in a word. Students know that we do this by first clapping it out and then by touching our chin to our hand.

My students are aware of our routine in my class. Students know what a typical study hall period should look like each day, and they know what to do in case of an unusual circumstance, such as needing to leave the room or work with a partner. During the first few weeks of school, I discussed the typical routine and also explained that this class was more flexible than others as our routines might change according to needs. In my video the students come prepared to work and immediately get out their supplies. We have a routine where if they have had trouble on a certain type of problem, they make a note of it, and we figure out that problem first. These students had attempted the problems and had a list of questions. Overall, they knew what they needed and took the appropriate steps to get support and understand the material.

Yes. Each kids knows what to do and is rewarded for doing the procedure. I need to post and review expectations daily.

My 6th graders have a much more concrete routine than my other classes. I have focused mostly on them due to the fact that they are new to middle school and have had a tough time transitioning to the new expectations and routines. My 6th graders know to get their planners, find their seats, and begin the activity of the day. They will either have an activity waiting for

them at their seats (Goal binder, project from another class they are working on with me, etc), or I will have a whole class activity I prepare for them such as the Questioning Text lesson I did in my video. My 6th graders get stars for following the class routines and expectations. When I remind my students that they will earn stars by taking their seats, they are often quicker to follow my directions. For my other Resource classes, students know to get to work on something while I check in individually with my students. During our check ins, we look at their homework website and their class planners, review their grades, plan for upcoming homework assignments and projects, and decide what their focus will be for the day. For my Modified Math class, students come in and know there will be a warm up in the form of a Kahoot! or a google slideshow, followed by an activity, and ending with a brief overview of what we did that day. I feel that my students understand the routine of my study skill class. I reviewed my routines everyday by telling student to have their planner ready out to get a stamp and asking them what they are going to be working on the rest of the period. From my video I was able to see that after the lesson, most of my students were able to be go back to their work right away expect one. My students definitely know the expectation that they are to come to class, and immediately take out any homework they have to work on once the bell rings. They also all seem to be prepared for me to come around to each one and ask what they plan to work on for the day, which I do at the beginning of every period. This routine I outlined on the first day. I reinforce it each day by complementing those who are on task, and moving around the room checking on progress so students know I am coming. I can't say I have actually restated or practiced this routine but again, they seem to know what I expect them to do. I have a group of six freshmen boys in the same period so they will occasionally get off task. I don't see this as a major problem or disruption though. If it's been quiet for awhile I'll sometimes let them talk for a few minutes before redirecting them back to work. They are all very polite and responsive. You can see on the video that I have a good rapport with them. Of course, you can also tell how excited and distracted they were by the camera today so the first ten minutes or so are a bit shaky. I definitely intend to follow the advice of having the camera out all the time from this point forward. That way by my next observation they'll hopefully be a bit calmer. Yes, I think my students understand the routines. I have taught and reviewed the routines everyday multiple times a day. At the beginning of the video, we were transitioning from our

everyday multiple times a day. At the beginning of the video, we were transitioning from our groups to calendar and I told the students we were all done with groups and to check their schedules. Almost every student went to their schedule and then immediately to the carpet for calendar.

We practiced routines every week for 4 weeks. Now I refer to them once a week. As stated above student's understand classroom expectations. I did not implement different from school expectations. For Example, the school has no food policy and my student can be seen taking food from his backpack (chips, etc). Also, by using timers to assist in time management students know the expectations of expected tasks. MLK is a student centered school, therefor the students needs are at the center of all decisions. "for many chips is food and we have no right to "tell" students what they can eat".

# What changes might you make to your teaching practice after viewing this part of the podcast series? 15 responses

I need to implement more consistent, small pieces that can build more routines. I also need to find a motto that can prompt students to be active participants.

I will make displays of my routines and rules. I will also review them again.

Prompting desired behavior could be done with higher frequency. :)

I will post expectations. I will also teach the expectations.

I need to explicitly teach my students the classroom expectations as they relate to school-wide expectations. I am going to make a poster with the students about what our classroom looks and sounds like when we are being SAFE, RESPECTFUL and RESPONSIBLE. I would like to reference his as part of my opening and closing of each lesson to prompt the desired behavior and help them reflect on what is going well and what we need to focus on.

After watching this video and thinking about my student population, which is ED, I will review the

routines and procedures even more. I will not wait to use it to redirect students, but I will try to use them proactively, before the behavior occurs. Maybe that way, I will be able to avoid it. Also, I will get my students to do posters of the expectations themselves in order to engage their muscle memory. Hopefully that will help them regulate better their behaviors.

I am going to prompt specific reading group expectations before starting. I want to have these written out with visuals. Then, I can refer to them as needed during the lesson.

After watching this podcast video, I think I will work to refer back to my expectations more frequently. I will also look to make sure they are posted clearly so the class has the reminders. I also liked how they reminded the class of the positive behavior involved before doing the activity. I think having the expectations posted and referring to them periodically instead of just when violations occur will cement the rules into their routine, and possibly prevent violations from occurring.

I will post rules and set expectations. I will review them regularly.

I would like to make my expectations communicated more often for my older students and have more solid classroom routines. I would like for there to be more structure for my older students so that I can make sure I am able to collect as much data and give the best instruction to help the students accomplish their goals. At this point, I believe I have built strong, positive relationships with my students which make them feel more accountable for their actions in my classroom. Now, I need to start focusing more on how I can structure my class to benefit them the most. By having clearer routines, less time will be wasted and can be used to instruct students in their goals.

I will definitely reviewed my classroom expectations. In my teaching video I was able to see how two of my students constantly checked their phones for messages or were watching videos. I might rearrange the desk in my classroom or since this is a small class I might just ask student to move to a different desk for the lesson part.

I would definitely like to get better about delegating to my para. She is wonderful to work with and very on task. The only thing is that she tends to lean more towards clerical work than working one on one with the students. I have to prompt her to check in on students and ask her to help students complete specific tasks. Unfortunately, during the period I recorded, practically all of the students require math support which is not a subject my para feels comfortable supporting. I need to try to find a better system for my academic support classes. Getting the students to work is not the problem. Finding a way to help 8 different students who are all at different grades and levels, working on different subjects from different teachers, makes it difficult to create a structure to my support. As seen in the video, I spend a lot of time running around the room checking in on different students and many of them will just stop working when I am not available and they are confused about an assignment.

I am going to move my poster with the expectations so that it is more easily visible to the students and so I can physically point to them as I teach. Right now, they are high and above the sink which is hard to access.

I will review these expectation prior to beginning the task. I will use simple language and praise. There is always more room to improve my preparation. But because I'm not comfortable teacheing guided reading using the Fountas and Pinnell intervention I need to find a better way to deliver the content and assessing the students during readin group. Also, viewing the video, students need a better understanding what reading groups should look like and the only way I can help the students is to model what they should be doing during reading group. For example, are my students making notes to ask about things they don't understand when reading: words, concepts, etc. These are important tools for high school and college achievement.

## Part 2 By Question

agcompaore dinoury gmgalvarro jschavez mrallen4 dmarty seangs sbosworth vlorenzo jhulsker vrpersky mrslattery sbosworth

Looking back at your Teaching Video, do you move about the classroom? How often do you remain in one place?14 responses

Looking back at the video, I was moving a lot around the room. I was writing on the big white board or go on my desk to get papers or lesson materials. Most of the time, I will go to interact with the student in order to motivate, prize or redirect him. In the classroom, everything is locked away to avoid destruction during escalation, so when ever we need somethings that are in the cabinets, I go get it. The few times where I stayed in one place is when i am helping the student one on one.

I move around the classroom all of the time. If I can, I like to gather students who are doing similar types of work, Algebra for example, all in one place. I usually have a math table, although not in this particular reflection video. Having them grouped makes it easier to answer multiple questions without having to run back and forth. Unfortunately though, grouping is often not an option since my students are all different grade levels and mostly in different classes. As a result, I am bouncing from student to student all the time. If a student needs one to one support, I will sit with them for a period, but I will still pause to get up and check in on how the other students are doing. If I know one student in particular is going to need help all period, I prefer to have my aide sit with them which frees me up to work with more of my kids. I really try to avoid sitting at my desk when class is in session. Occasionally I will get stuck there for a few minutes because a student needs me to print something or I have to email a general education teacher about something ASAP. At the beginning of the year, it was harder for me to balance the two (teaching versus case manager responsibilities) but I feel I have become better at knowing what time is most needed for which task, and I have also been making a point to save case manager duties for my prep time.

I do move about the classroom, mostly to the board and back to my chair. I think it may be a bit distracting. I like how the teacher in the video was in one area, although I think some movement is good.

Looking back at my teaching video, I moved around the front of my classroom. I was staying close to the document camera and projector while using my writing sample that was projected. I remain in one place for each sentence. Then, move around when I talk about the sentence and seek student responses.

Yes I almost constantly move from group to group unless I'm sitting and listening to a

groups discussion or using the doc cam.

I move around the classroom quite a bit, especially when transitioning between groups. I am constantly walking around my own group as well to make sure each student is on task and understanding the concepts.

I was teaching a small group of 4 and had no other student in the classroom so I did not have to scan the room. However, I was positioning my body during independent practice to be able to work with different students.

Yes I move around the room. I stay in one place for small group instruction.

I noticed that I stayed in the same place throughout the whole lesson. However, when students started to work on their homework I was able to move around the room more freely and I checked with every single student.

During my classes, I am always trying to circulate the room. In this particular video, I moved about the classroom constantly. I would sit with each student for a couple of minutes to see if they were stuck on anything or just to check in. Even when I was helping a student, I still had an eye on the other students to make sure they were staying on task.

Some--it was a 1:1 guided reading learning experience.

In my video I was active and moving around the classroom. I check in with students while they attempt their work to determine their level of understanding. This creates a natural pattern around the room.

In a 25 minute period, I sit for 15 minutes and move around 10 minutes.

No, I do not unless I feel the students cannot see the board behind me. For this particular small group, students are working at different levels and each student's need is addressed individually. When they are placed in front of me I can see from body language and classwork what they are stuck on.

Do you provide your students with multiple opportunities to respond? What examples do you recall from your Teaching Video?14 responses

My student had multiple means of responses. He had the choice to read and answer by himself or I could read the questions and he will answer the questions. When we got to the writing part, he had the choice to tell me the answer so that i write on the board and he copies or write the answers himself and I help with spelling. At first he chose to copy, then he started writing himself and figured he could do it. He was very happy that he was able to read the questions and write his answers by himself.

In this particular video, I am mostly working one-to-one with a student who needed to prepare for a Geometry test. He has been failing and his next test performance was really going to make or break his semester grade so I considered this a priority for the period. I definitely gave him many opportunities to respond to questions. I will always have a student tell me what to plug in where when I'm modeling how to set up an math equation. I then like to have them do the calculations and try to have them figure out what the next step is. I think something I need to improve though is giving more time for responses. I feel like I am always in a hurry to get as much done as possible so I think that becomes an unintended part of my lessons. I ask a lot of questions and give the student many opportunities to figure out the next step, but the time aspect is a very important piece I am missing. Particularly with our population of students, processing time can be slow and I see that I am often only allowing maybe 5 seconds to respond when something like 10-20 would be more appropriate.

My students have opportunities to respond throughout the lesson. The students alternate saying the vowel sounds, and they read their sight words to themselves and I listen to a few for each student. They are able to tell me ideas when I ask about the text. It is an engaging and interactive lesson with many opportunities to participate.

I provide my students with the opportunity to respond with a physical gesture (thumbs up/down). They are also able to respond by volunteering during the lesson and by pair-sharing.

We did brainstorms, I had students come and use the doc cam. I commented that some students were using pictures and sketches and some using written explanations and that all forms were valid. I also reminded them that the process was more important than the answer, especially when many students used a doubling concept and arrived at the wrong answer for a decagon.

Yes, I provided my students manipulatives, a worksheet to write on, and verbal responses as options. I even have a couple of students who use iPads to communicate, so I had them use their devices during this lesson.

I provided multiple opportunities to respond: Students can raise their hand to share ideas at certain times; I provided a, i, o cards for students to hold up when I said words to indicate what vowel sounds they heard; they wrote the sounds they heard on their own segmentation mat; they also choral read some of the words before trying new words independently. I also asked a variety of questions in which students can provide yes/no answers, showing cards, fist-to-five, etc.

I would benefit from leveled questions & posting the agenda on the board I tried to give students opportunities to respond, but I still need to work on providing students with more options. I called on the students who were not paying attention, but this is not enough.

The class I filmed today was a resource class. Even though I wasn't teaching a lesson per se, I tried to vary my time with students between individual, explicit instruction and asking leading questions that give the student an opportunity to respond. One of my students was working on test corrections, so I wanted to make sure I asked him questions instead of too much explicit direction. For his first question wrong, I started out with a more broad question: "Do you have an idea of how to correct this question?" He responded that he wasn't sure, so then I asked him a slightly more direct question: "How did you find this answer?" He responded he wasn't sure again. I figured at this point that it was a concept that was still fuzzy for him (finding the area of a shape using variables), so I then began asking questions that broke down the problem into easier steps such as: "How will we find the area of this first shape (a square)?" This part he knew the answer to, so then I asked him how to find the area of the next part (a rectangle) which he knew the answer to. This went on until he found the final answer. Generally, I will give students a chance to respond to questions before I begin my explicit instruction as a way of giving a mini assessment.

Yes. This guided reading less was a dialogue rich approach to reading instruction. We worked side by side and frequently asked and answered questions for each other based on the easy and instructional level texts.

In this video, I asked the students questions throughout the lesson to assess their understanding as a group. Not all students responded, as I only called on ones that were willing to engage. The students all responded during an activity that we did as a class. I

want to improve this area and give the students more of an opportunity to respond in upcoming lessons.

I recently implemented rocks to pick on students to participate.

Yes, when working one to one checking their completed work or answering their questions. Students after completing their work like the one young man in the video was able to indicate what he wanted to practice next.

Which explicit strategies provided in the podcast is evident in your Teaching Video?14 responses

In my teaching video, I used direct instruction. My student knew what to expect as I had a checklist of the tasks for him. Also, I modeled using think aloud to answer the descriptive questions about the character so that he could do the same with the next question. We also practiced answering 2 others questions together before he start to do it independently.

This video really focused on guided and independent practice. I was working with a student on how to solve for the degree of angles using parallel lines and transversals. I started by doing a problem myself to show him how it was done. Then I did several problems with him, each time asking for more input on his part. Once I felt he could handle it, I had him do a few problems while I watched and guided him when necessary. Finally, I left him to try a few independently while I worked with other students. I came back afterwards to see how he did and correct his work. I find this to be a very effective method because so many of my students need that kind of one to one support. Also, particularly with math, a lot of my students work much better when they have a clear example to follow.

I use explicit instruction. I also give smiley stickers on a sticker chart to each student throughout the lesson. I ask for responses from students and give them a chance to practice the material. I give direct feedback about what they say (for example when I see a student think through an answer, then respond thoroughly and thoughtfully, I acknowledge that they thought through their answer).

I had students use physical gestures. We also used an editing checklist which could serve as an agenda. I did think-alouds when conferencing with students about the editing of their poems.

Active supervision is very evident in my lesson. While scanning the room I would remark that Tables 2 and 3 were doing a great job of cooperating to find a good answer. I also gave students different ways to respond, initially to demo something to the whole class, and later in small groups I would ask who cracked the code to find the number of diagonals. If someone was still not sure I would prompt someone in the group to explain their thinking to that member.

I used model, gradual decrease in support, and independent practice. I first modeled how to complete each activity and then gradually deceased my support until I thought that each student understood the activity. For some students, I was able to decrease my support a lot quicker than others. For example, my group working on addition moved to independent practice quite quickly, while my group working on numeral matching did not. I was able to decrease my physical prompts but not my verbal prompts in that particular group.

I started the lesson by letting them know what the objective is and what we will be doing. I introduced new concepts, model and provided multiple opportunities for students to

practice. In the end, I gave them opportunities to read unfamiliar words.

I give them opportunities to respond but need more deep thinking.

I feel that something good I do is that I check in with every single student. I tried to get students attention by calling on them. Maybe this was not the best strategy.

During this class, I had the students names and their activities written on the board. This acted as an an organized agenda, although it was individualized. I had a student doing his science text book work during this period. I asked him how he would normally get started on text book work, and he said he didn't know really. So I decided to model for him how to get started. We first looked at his workbook. I thought out loud, saying this such as, "I see in the workbook that it tells us what pages it corresponds to in the text book. I think to start out, I will get the textbook and open to those pages, so that I can reference the chapter." Together we got the textbook and he opened it the correct page. Then I said, "Ok, now we have the textbook. Now, I'm looking in the workbook and see that is has two essential questions at the very beginning, I'm going to read those....Now I see that the first page in the workbook has a brief summary of the chapter. Oh look! Some of the words are bolded, I bet those are going to be answers to some questions." We went to the first question in the workbook, and sure enough, the answer was one of the bolded parts of the text. I also used guided practice with this student for the next part of his workbook where he had to come up with questions on his own to answer, using the textbook. I guided him to think about how to come up with a question, especially one that could be answered from the text. I thought out loud about finding text in bold and thinking about how I could turn it into a question, possibly by adding a "What is" or "Who is" at the beginning of the sentence. The student found some bolded text (a sentence) and I asked him to ask me a question related to the text. He was able to by adding "what is" and altering the text slightly to make it a question that makes sense.

I used think aloud, modeled new mulitsensory decoding techniques for reading and spelling, provided guided practice with a gradual release element, and provided an agenda then had my student check steps of throughout the lesson components -- read aloud, easy read, vocabulary, instructional level strategy and new read, independent practice with coaching, writing and shared reflection.

In my lesson I was very active and frequently walked around the room. This helps the students stay focused because they feel obligated to participate if the teacher is right next to them. Also I a simple touch on the desk or a look can deter the student from trying to gain negative attention. It also gives the teacher a chance to help students as needed and monitor their progress.

#### Praise for wanted behavior.

In the video some elements of explicit instruction are: Focus instruction (teaching the concepts are vocabulary), teach skills in smaller instructional units (demonstrating how to reduce to the smallest fraction), provide an adequate range of examples and non examples (demonstrating on the board the improper way to multiply fractions and the correct way. Also, using the video to demonstrate of validate the steps, provide guided and support practice (encouraging students to trust their product even if incorrect, as seen at the end with student with classes), monitor student progress closely (working in small groups to address each students questions as they come up.

What changes might you make to your teaching practice after viewing this part of the podcast series?14 responses

I like the examples of verbal praising such as "great job being a thinker" that were used in the video. It does not really apply to me right now since I have one student, but scanning the room to keep an eye on the other student while working one on one or in small groups is something that I will try when the student from my buddy room come to join us. I also want to think about other opportunities to respond that I will present to student and expand their options.

One thing I really need to work on is scanning the room more. I am always moving and checking in with students, but when I am helping one student in particular, they tend to get all of my focus for that minute I am answering their question. During that time, I miss all sorts of things. I can see in the video students raising their hands, or in one case, signaling to go to the bathroom, and I completely missed it. The students had to try to get my attention again when I finally looked up. I definitely need to get better about that. Fortunately I am working with high school students so at least it's not a major safety concern like it would be with elementary students who can get into danger in 5 seconds flat. Still, with students under my care, I feel I need to be more attentive and watchful. I will give more opportunities for independent work at the end of lessons and I will have a short conversation to wrap up what we just did.

I want to have students provide written responses more often. Also, I want to remember to do more think-alouds. I think this would have helped my mini lesson be more effective. I jumped into asking students to find my mistakes in my poem and should have taken more time to think-aloud about how I would approach editing my writing piece. Look back, I think this would have helped Jose be more effective in editing his own work.

Active supervision, OTRs, and explicit instruction were all present. I would fine tune when to utilize each one and how to transition back and forth, but I'm happy that my lesson featured the three strategies mentioned in this video.

I would like to add more guided practice to my lessons. I think being able to do the activity together could be very beneficial to my students.

I had students use different materials to practice listening, identifying, writing and reading the letters/words that represented the short vowel sounds. However, I didn't really give them a lot of opportunities to work independently other than reading. I feel competent about my direct instruction and guided practice but I need to be better at the independent practice part so I can assess what the students can really do on their own.

Locate leveled questions & start posting the agenda regularly

I need to review the agenda on the board. I like the strategy of having students check off items on the agenda. I forgot to do this in my class, so my students did not have a sense of time.

After watching this part of the podcast series and reviewing my class video, I feel that I did well using the teaching practices shown in the video. I make sure to always let my students know that I appreciate the work they are doing, when I see them on task, and when they persevere through tough problems. I also always have one eye and ear on what is going on in my classroom, which luckily is not too difficult since I have such small classes. Perhaps if I had a larger class, more systematic uses of these teaching practices would be necessary. My 6th graders so have a reward system for when they follow the class expectations, and my older students have expressed interest in have a similar reward system, perhaps I could explore that a little more with them. I think I can also continue to

work on having a more organized agenda for my students and myself. It will help them to stay engaged which will also benefit classroom behavior. I know that when students are bored and unsure of what they are supposed to be doing, it can lead to distracted and unhappy students.

The podcast was excellent. I appreciated the review as it helps cement best practices. I'm always working to refine and improve. Watching a teaching video takes my learning deeper. Thank you. I will continue to be more thoughtful about pacing of my lessons and meeting the student where they are at to calibrate pacing based on student strengths/support needs.

After watching this episode of the podcast series, I would implement more activities that prompt student response. There are times where some students inevitably are going to hide in the shadows. I want to create a classroom environment where all students feel comfortable to respond and share their ideas. This involves creating more instances to do so in fun, no pressure situations. It is also important to model this behavior and have the students lean on their peers for support.

I need to find rote to advance response questions.

More organization and a better communication around feedback at the end of each session. For example, was the task hard, do you feel you need more practice in the area. Also, structuring questions around what we can do as a group to make it better and easier for all to access information in the class room, For example multiplication, charts, vocabulary practices.

## Part 3 By question

vrpersky dinoury jhulsker agcompaore mrallen4 gmgalvarro vlorenzo sseang jschavez mrslattery sbosworth dmarty

When you provide feedback, is it specific and describes the behavior done correctly? Provide an example from your Teaching Video.13 responses

We were "doing" something they loved to do, use technology, with an instructional level writing skill. Yes, I was teaching my students to use the comment option in G docs. As I was modeling and gradually releasing their process I explicitly modeled and provided verbal and nonverbal cues while using proximity to ensure they felt safe to keep trying the new skill.

I definitely feel that I am improving at this. I make sure to give very specific feedback to my students, especially when something is done well. I frequently tell my students that they did a really great job staying on task for the day, that they came well prepared for their exams. I also say "thank you for asking" each time one of them requests to go to the bathroom or use classroom supplies. In my video there is one point when I am moving around the room looking over my students as they are independently filling in a section of their note sheets. I compliment a student for their thoroughness and then ask if I can share what the student wrote with the group so they can see what I am looking for. I of course only did this with this particular student because I know they don't mind speaking in front of the group. Otherwise I would have kept the praise more private.

I always try to give specific feedback when students are displaying appropriate behavior. I know my students hear often during their day the ways they are messing up or being distracting, so I try to make sure I give lots of encouragement when I see students putting in effort. During my math class, I have one student who has a really hard time participating during class due to a lack of confidence in his academics. I knew that this class would be a bit overwhelming for him, so I made sure to check in often with him. In my video, I check in with him almost every 5 minutes to see what he is up to and to give him praise for his effort. While this student did not want to participate as either a cashier or costumer, he wanted to sit and watch near his friends. I told him I thought it was awesome that he was joining us (usually he wants to sit alone or run to the office/counselors) and that he could be my helper when I needed one. This student felt happy to hear this, as he really enjoys feeling part of the group being active during class. Yes when I provide feedback to students, it is very specific and it describe the desired behavior. In the wideo, when my student same healt to his seet after the shellowing.

Yes when I provide feedback to students, it is very specific and it describe the desired behavior. In the video, when my student came back to his seat after the challenging behavior, I said: I like you the way that you came quietly to your seat and are showing

me a good student body posture. I will give you 50 bonus points for that.

I'd say half of my praise is specific, 25% references the behavior I'm trying to acknowledge, and the last 25% is vague and filler. I give a lot of feedback as the coteacher as I circulate and help individual students. When I have the opportunity to lead the instruction I fall into healthy habits developed during years of coaching basketball and reward the behaviors we want to see. I always call people who raise their hand say "Thank you for raising your hand, what theorem did you use for number one?" I ignore people who are ooing and aaing to get called on. I also acknowledge the tables and groups that are demonstrating good team work. "Thank you group two for getting started quickly and meeting in the middle of the desks," for example. I give a lot of thank yous which is important to the class running smoothly. "Thank you for making sure your group has all the materials it needs...thank you for coming ready to work....thank you for clearing our desks so we can hand our the group puzzle."

Sometimes my feedback is specific and sometimes I say "good." I did work on stating specifically when I saw the student working hard or when they read a long word particularly well. I said "I notice that you used our lesson about prefixes to figure out this word. Can you tell me what it means?" When the student was looking through the story to answer my question, I said "I see you are really looking at the story to find the answer. Great job".

I currently do not provide specific feedback. I am planning to work on this.

When I give praises, most of the time I include what they are actually doing. "I appreciate how AJ is watching me with his eyes and his mouth is quiet while I am explaining. He is doing what scholars do to make sure they learn.

During the video, I noticed that when a student provided a correct response to a question or shared an idea I naturally provided general feedback by nodding my head and saying "good." I was more focused on each student answering questing and responding to my CFU questions then reinforcing positive behavior. There were also times when I would be specific, saying, "You're right. The ea in bread makes the short e sound." I did use positive reinforcement for students raised their hands. For example, I said "Thank you Jose for raising your hand."

When i provide feedback, I clearly state what they did and why it was positive or negative. Just saying good job is not sufficient if the student is to fully understand what they did that was good.

Yes. I complimented each reader for good reading strategies or skill that were being practiced when reading independently. Example: Thank you Isaiah for reading at a medium speed. By reading at a medium speed you did not have any errors and you were able to answer all of the comprehension question correctly. I want you to keep practicing these skills.

Yes, I try my best to use specific praise with my students. For example, in my video we were transitioning from one station to the next and one group did an excellent job moving from the iPad table to the sand table. I said, "Wow, I love how Aiden, Luc, and Adrian moved tables so quietly right when they heard the timer. That was great!" There was another point at the very end of the video where we are lining up for lunch. There were two students who were standing in line quietly and ready to go. I said, "Excellent job lining up Ana and Sergio! I just love how you're quietly waiting for your friends."

In my or video I provide feedback when the student was able to identify how the author

introduced evidence within the text about Big foot. I was able to take the students through the written text and then they were able to apply a comprehension strategy to identify evidence. They two student's did a great job, but my praise was to general and could have been more specific to support the student.

Briefly describe the reinforcement system you use in your classroom or wish to implement?13 responses

The reinforcement system I inherited was tickets for a store. I much prefer verbal reinforcement systems grounded by positive relationship. This is what I am fostering at both school sites. Clear and consistent expectations with frequent and positive feedback to build confidence for all learners is effective based on my time with kids.

Corrective feedback is the one I would like to get better about using. I am good about being specific. I will always tell a student what they need to put away and what they need to take out instead, but I could do it in a more positive and constructive way. It tends to happen when I am already tired and stressed out that I will just tell a kid to stop doing something and work on something else. I should be better about walking over to the student and redirecting them without making a negative statement about their current behavior. It's just a snap reaction I should be better about controlling. Again though, it kind of just depends on how the day is going overall.

In my 6th grade resource class, I give students an opportunity to earn three stars every day for coming to class on time and entering quietly and calmly, staying on task during class and following class expectations, and cleaning up and pushing in their chairs at the end of class. At the end of the week, if students get all of their stars, they can get 15 minutes of free time at the end of Friday. Students know what I expect during class because in the first week of school, we created classroom expectations together. We go over our classroom expectations about twice a month so students know and remember what they are. When I give students starts, I state aloud the reasons their are getting their stars and give them praise.

In my classroom I use token economy, student store and a leveled system. On the leveled system when students earn 80% or more of the daily possible points he could earn 30 minutes of computer time. With the bonus points for the token, he gets to use it daily. I try and tie all the reinforcement into overall success in the class and life. "Those groups that have figured out how to use the triangle sum theorem will have no problem with the quiz on Monday," or, "By using the three theorems in order correctly you're developing logical skills that will help you in whatever career you choose." I find the more practical the reminder, the stronger the response in behavior. There is also a elephant-in the room reality that I use very sparingly because it does have power, but shouldn't be ignored. If you don't pass this class, you have to do it again. Summer school or night school or next semester. Geometry and chemistry are the two classes students most often fail, and they end up holding many students back. I say it in a way that makes that point but insults me more than the student. "You don't want to see me here again next semester." I say it so only one or two people can hear it and that cuts through the jokes and usually gets people more serious. It's always coupled with something positive like, "I saw your homework, so i know you can do this type of problem, but you are lacking focus right now. You don't want to see me in here next semester, right?" It works because there are a few students who did fail last semester and they'll nod their head and affirm what I'm trying to convey. I have passion for the class, I enjoy teaching an ancient subject and I appreciate how it is

great training on how to think, but without acknowledging this fact which all students know and pretending that geometry is something really exciting that they should love would be delusional.

The reinforcements I use include specific praise for work or behavior, and stickers on a chart for reinforcing those behaviors.

The only reinforcement system I do is to give students points at the end of the class. I check in with them individually on what they are going to work on for the rest of the period.

In addition to the verbal praises, I connect what students do when they are with me with our school's system of SUPERME tickets that teachers give out to students for demonstrating behavior that show they are being: a scholar, compassionate, responsible and safe. We have a very short assembly every Friday morning in which the principal pulls one of these tickets for each grade level. These students get to wear a cape for the day and they also choose a prize from the principal's prize box. At the end of every lesson, I read the notes that I write on the SUPERMEs so that students know exactly they earned them.

I try to give a lot of positive reinforcement orally. When I notice a student doing something well, I try to comment on it. An extrinsic reward system that I use is Chavez Cash. Students get paid for tasks such as completing assignments, helping peers, raising their hand, following directions, transitioning from one activity to the next quickly and quietly, etc.

My token economy system will consist of earning snake points. The students will receive a snake point for each classroom expectation they follow during the period. The students can earn extra points by completing assignments, helping others, and studying effectively. At the end of the week the students can trade in their points for rewards like extra computer time, and basketball.

I use tickets for the token classroom economy. We participate in the student store once a month to keep students motivated and engaged.

I have a system in which depending on your behavior, you can have certain privileges. For example, if you're a level 4 that means your behavior has been excellent and you can play with any toy in the room, including iPads, during free time. Students have free time whenever they finish their work early. If you're a 3, you can play with everything but the iPads. If you're a 2, you can play with everything but iPads and sand. If you're a 1, you can play with books or blocks.

The school uses the "King Bling" strategy and encourage teaches to implement it in the classroom. Student's can collect king bling to purchase items from the king bling store on Friday's. I have not tried it in my class yet, I don't know why, but its hard for me reward student's for behaviors that are expected to achieve. This presents a problem long term because I'm allowing my feelings to dictate and not keeping the students at the center of my decisions. But, I working on it.

What evidence, from your Teaching Video, of strategies for decreasing unwanted behaviors can you identify?13 responses

Not responding to unwanted behaviors was successful and also long pauses before responding gave the students space to redirect and restate unwanted behaviors their own way. When I don't respond they noticed and it encouraged them to reflect. My body language provides much guidance as well.

I really think that the best way to decrease unwanted behavior is to praise wanted behavior. I want the students who are doing well to get attention for what they are doing right and then those students can be used as an example for those who are struggling. I also have been continuing to work on the ways I discipline students. I am trying to get better about getting students back on track in a more private way. I admit, when I am busy and moving around the room, it's easy and instinctive to just tell a student to get back on track or put their phone away from across the room. I recognize though that the goal is to build positive, trusting relationships with students, and publicly shaming them in front of the class is not a good means of doing this. I fortunately did not have to tell anyone to get back on task in the video. I have been trying to be more self aware though and go over to students' desks and ask them quietly to get their work done so there is not embarrassment involved.

In my video, I often circulate the room based on who I see doing what. I often used my proximity to decrease unwanted behaviors, such as playing with the money, getting too loud, or getting distracted. This strategy often worked. Also, when I got nearer to students who were off task, I wouldn't always approach them already accusing them of what I perceived them doing wrong. Instead, I approached students asking them if they knew what they were supposed to be doing at that point in the activity. Generally, students said no or that they were stuck. I would them remind them of the classroom expectation, which is to raise your hand and wait quietly until someone can come and help. If they do know what they are supposed to be doing, they generally get back on track after I ask. From my teaching video, there was a variety of strategies to redirect my students behavior. I used planned ignoring when he was moving his body like if he was slightly dancing, but was still engaged in the activity. I also used a corrective feedback with him when he was completely off task and playing on the iPad instead of using it to read QR codes. I told him that my expectation was for him to use the iPad responsibly and asked him if he was doing that. He said no and corrected his behavior.

I'm doing a better job of being specific in my praises. It really does take an entirely different mindset to do. It's relatively easy to circulate and and see people writing things and dish out compliments. Being specific requires making sense of their chicken scratch and following their thought process. One solution is to compliment people for helping their peers. That is easier to identify, is specific, and promotes more learning from tablemates rather than just from the teachers. I don't bribe or plea. Negative behaviors are not the subject of negotiations. The biggest behavior problem is cell phones because they are distracting and prevent students from sustaining high level thinking for extended periods of time. So we have explained why we are opposed to cell phones in the class, and maintain a strict system during class: in your bag or charging on the wall.

I have implemented a visual system with this student to help minimize calling out and talking about off task topics. When the student called out I would point to the picture or the Class Expectation stating "Listen while others are talking." Also, when the student wanted to talk about off task topics I took a note of the topic, told the student we would get back to it after, and asked them to return to the lesson.

One of the things I do best is to walk next to the students who are not on task. Something I want to improve will be to not call on students who are off task across the room. I noticed I do the a couple times.

When I saw Student A looking around the room rather than watching me, I praised the

student next to him for continuing to watch me with his eyes. As soon as Student A fixes his behavior, I praised him for watching me.

I chose to ignore a student who shouted out during the video. I also used classroom signlanguage to give him a visual warning.

In my video I had one student try to go to sleep and not participate in the activity. I responded to this behavior by having a conversation with her about why this lesson will be beneficial to her. She still was not super enthusiastic but she did not go to sleep and participated in the activity. Having conversations with students about their actions and the expectations in the classroom is vital to decreasing unwanted behaviors.

The rocks allow for spontaneous participation which keeps them engaged. The behavior matrix helps identify wanted behaviors. The token economy supports the wanted behaviors in the classroom.

I find that verbal warnings and being consistent are the best strategies with my students. If I give a verbal direction and they do not follow, I give a second reminder. If they do not comply after the second reminder, I will give them an "If, Then," statement, such as "If you do not sit down, I will turn your card." If after that they still do not comply, I will count down from three. If I reach 1 and they still did not comply, I turn their card. This is very upsetting to my students since they know this means they cannot play with there preferred toy. This can be seen in my video when a student refuses to move to the next activity. I gave two verbal warnings and then an "If, Then" statement. The student complied after I said I would turn his card.

In the video #3 a behavior of one of my student that I want to better manage is that eagerness of a student to read and lead everything without giving others a chance., In the video, the said student wanted to do all the reading and appear to be a little restless if everything isn't centered around him. He speaks out of term in the video not giving his classmate a chance to answer the questions and at time would prefer to lead the class. I want to decrease this tendency and in the future. First I will speak to him to help him curtail this behavior and substitute this with a behavior that gives him more responsibility, such as leading the group. This has worked in the past and he was able to wait while others in the group worked through the learning processing.

How do you establish long-term goals for the classroom? Are their reinforcements for accomplishing class wide goals?13 responses

I work with students 1:1. Long term goals are met by consistent daily effort on the learning activity or experience. We are meeting short and long term goals as there are few behavior difficulties ever if any.

I think long term goals are particularly important to establish at the beginning of the year. They should be intertwined with the classroom expectations and the guidelines should be simple and clear. I think any goals that are long term should be for the class overall so that it can be used a team building exercise for the kids. I would like to see more of my kids managing each other, which I have seen on occasion. It's wonderful to have one of your students tell their classmates to clean up after themselves rather than having to do it yourself. As we know, kids care way more about looking bad in front of their peers than they do in front of their teachers. I think one of the most important thing about long term goals is having a reward that is appealing to the majority of your students. You also need to have it clearly posted how much progress they've made and how much further they have to go if you want to keep them motivated.

At this time, I don't have any long-term goals explicitly stated for my classroom other than my 6th graders.

Everyday in the morning, after we go over our classroom and school wide expectation, we come up with daily personal goals. The goal should come from the weekly goal that we set on Monday and should challenge the student. At the end of the day, when students meet their goals, they get 1000 bonus points to use at the student store.

The long-term goal is to pass the class. For those students who have good study skills and are going to college there aren't any behavorial issues and they already understand the long term goals: get good grades, continue learning, and find a career. Geometry is interesting in that there isn't geometry 2, and future math classes aren't dependent on geometry the way algebra, algebra 2 and pre-calculus are. I often refer to the powers of logic and it's utility in all careers, but I can't solely rely on that to re-focus students. These kids are savvy and so I appeal to their rational and real side. "You only have to do geometry once in your life and this is it.

We have long term earning goals that each group gets to create. For example, this group has a goal of 10 days with 5 or more stickers to earn a lunchtime game day.

Currently I have not establish long-term goals for my classroom. The "unspoken" goal in my classroom is for my students to be working the whole period. My paraprofessional or I give them a score at the end of class, which hopefully encourages them to be on task. With this particular group, who are kindergarteners that I see 30 minutes a day, four times a week, I do not long-term goals. With my older groups, I have several systems going depending on the motivation and behavior of the groups. Two groups are earning stars for each day that they meet expected behavior and the number of stars will determine what we will have to accompany the movie of the book we are reading. A much broader goal for all of the other students is if they meet their reading goals. Originally, I had planned to take these students on a fun excursion at the end of the year but now I am thinking that I need to have trimester rewards to motivate them.

In the past, I have established long-term goals as needed. We don't currently have a long-term goal as a classroom. I feel there is a need though for one around spreading kindness. We started this discussion yesterday as a class. I want to have them come up with the goal and with ways that we can meet it.

Our school wide goal for all students is to attend college. Our slogan is "destination college." This message is clear and prevalent around the school campus and in our classroom. Each student meets with me twice a week to review their grades and progress. This allows the student to know exactly where they are and what it will take to be successful. If the class all achieves the accomplishment of receiving no Fs, then the class will be rewarded with a pizza party.

I started a goal tracking sheet for each student. I got it in class and it is a form where each student will track their progress toward their goals. This will allow for them to self-monitor their progress for immediate feedback.

I currently do not have any long-term goals for my classroom, but I would like to implement a class contingency. If they perform appropriately as a class for a certain amount of time, then we can have a movie day on a Friday. I am waiting to implement this kind of reward system, since I tried and my students, who are only Kindergarteners, could not wait that long for a reward. They need immediate consequences, good and bad. No, there are no reinforcements in place at the time. The class wide goals are not clear

except for that all students need to work on meeting their IEP goals. Where students have behavior goals such as staying on task, getting started when prompted, implementing positive reinforcements in the class room such "king bling" and positive calls home can be used to accomplish classroom goals.

What changes might you make to your teaching practice after viewing this part of the podcast series?13 responses

I'm offering and providing much of what we viewed in this part of the podcast. The only element that I'm not implementing is the physical reinforcers. There is a spark during the learning process with my students. We are having fun learning! We are partnering whenever possible and it's great fun, we are moving around as much as possible, we are incorporating drawing, debating, technology and presenting to meet rigorous learning goals, there is typically an opening, body and closing to foster student engagement and deepen their learning, choices are infused daily, and we are using self-reflection/assessments with mindfullness behaviors to support. Detailed interactive learning experiences are joyful and the children are "doing" their learning while I facilitate. Overall, teaching and learning is going well.

I think it is a bit late in the game to add it into my classroom structure this year, but I am definitely considering implementing a token/reward system in the future. I like to reward my students but I have not done a great job of doing it in a structured way. I also can't afford to give out granola bars and snacks on a daily basis so given tokens that could be used to buy snacks later could mean still giving rewards but just not as frequently. I think this would also make me better about having clear guidelines for what warrants good behavior rather than just giving out rewards on a whim when I notice a student doing well. I think this would also eliminate any students claiming favoritism when their better performing classmates get more praise and rewards.

I have a class where student behavior started out great, but without any clear reinforcement systems, there has been some behavior issues that have come up. I would like to implement a similar star strategy I use for my 6th graders with these students to help support their behavior.

After viewing this podcast, I will try to provide more specific feedbacks. Moreover performance feedbacks such as preloading students with the expectations before the tasks. I am already using most of the strategies that were mentioned in the podcast as I work directly with a behavior analyst.

I would consider using tickets for prizes. I'd like to find a way to fund prizes they actually like, or have the tickets lead to discounts for things they actually want to by. As a gym owner and basketball/baseball coach I don't like giving away candy. We actually can't give away free time minutes because we have to get through a ton of material. I think linking performance to discounts for school dances would be great, but you'd have to sync up with other teachers to ensure no one is distorting the market. I've used "lunch" as a motivating tool but can't afford to do that as often as I'd like. And again, as a co-teacher I'm often deferring to my co-teacher on procedures as she has 15 years of experience teaching geometry.

I will work toward simplifying my reinforcement system, perhaps moving toward tickets vs stickers for specific things. I like how the teacher gave a ticket and specific praise for each positive interaction. Maybe the students could have a bag in their container to hold tickets and then they can turn them in for different levels of prizes. Maybe I will have a

group point chart that I keep on the board.

I want to be able to provide more specific feedback. I am very vague in my positive feedback. On the same hand, I need to be able to have a reinforcement system for my whole class.

I still need to praise more frequently with younger children because they respond to that type of reinforcement and want to earn my approval.

This part of the podcast series was a good reminder of the strategy for students to work together towards a common goal. I am excited to try this next week. When I did it in kindergarten around kindness, students worked to fill a jar with pompoms. Each pompom represented something kind that students were caught doing. When the jar was full, the class got to pick something kind to do for a person or group at our school. They decided to have a party for our principal. They interviewed her and found out she liked puppies and oatmeal cookies. We have puppy themed party for her. Once the filled the jar again, the class got to spread kindness in our community. They decided to make crayons for a TK class for the school next-door. This was a great experience for the kids and highly effective in teaching how to be kind. Now I am reflecting on how to implement a version of this with my 4-5 class.

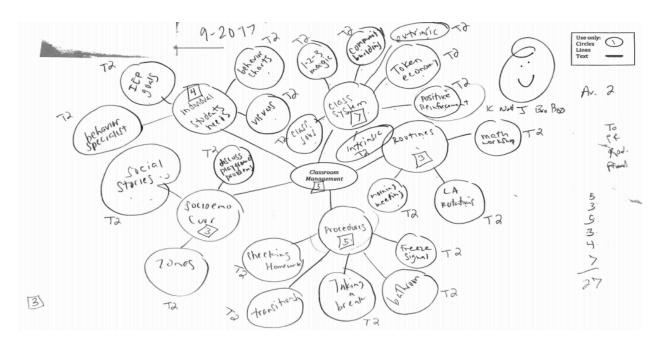
I am going to implement a token reward system. Having a clear document of students' positive behaviors will encourage other students to do the same. Also I it praises the students who have been taking care of their responsibilities and that is the most important. The students who constantly work hard should be rewarded for their effort. I will review these goal sheets more often to get a true reading of their progress. I am not sure how this can be incorporated into the current routines. I don't know if they will be able to self-monitor and to what extent this strategy will be successful.

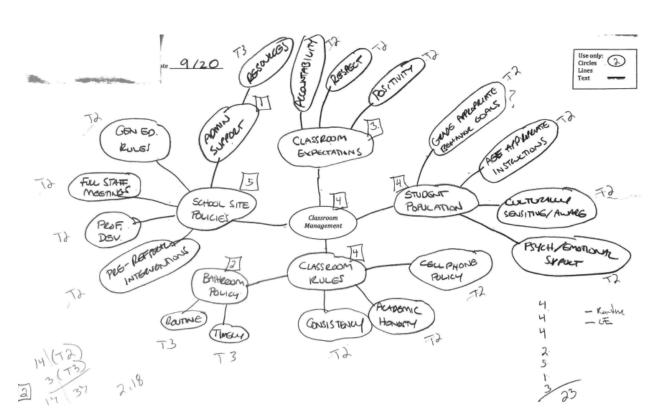
I would like to add a class contingency, I am just waiting until the students are fully comfortable with our current system and can wait that long for a reward.

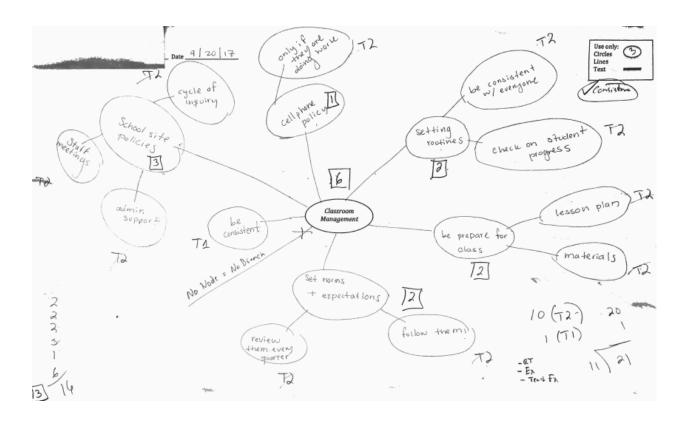
Treating the environment or small group like its a serious class, putting into place the same strategies used in a much larger community. Therefore students will will have more respect for the reading process and I will have a better approach if ask to teach reading groups in the future.

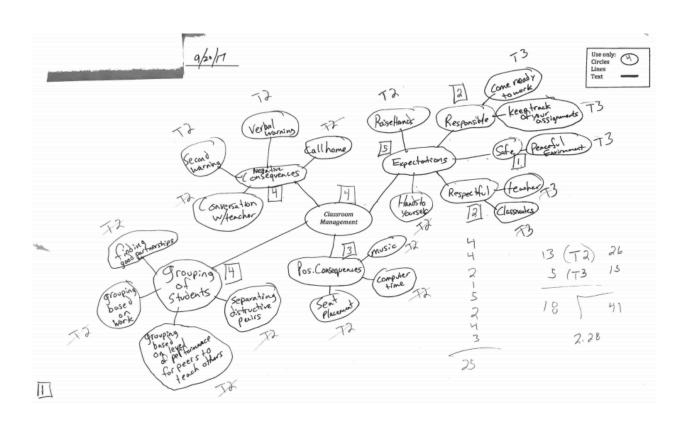
# APPENDIX I Pre and Post Concept Map Responses

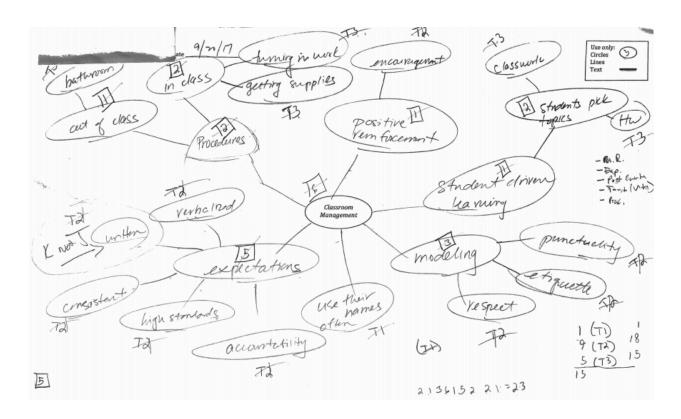
## **Pre-Assessment**

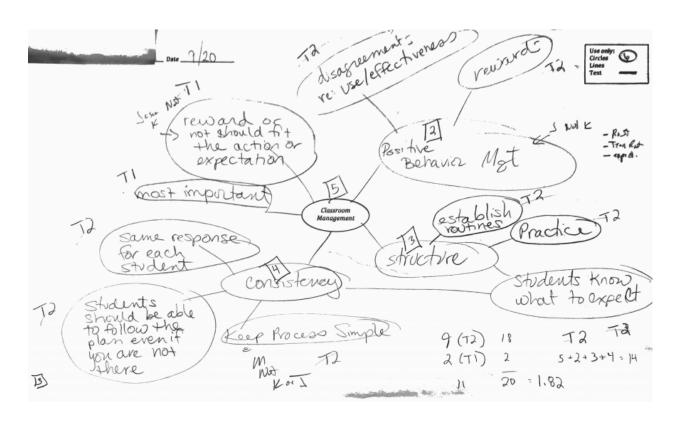


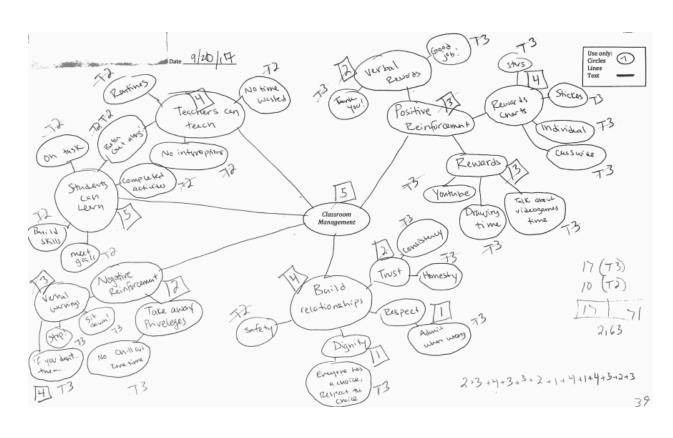


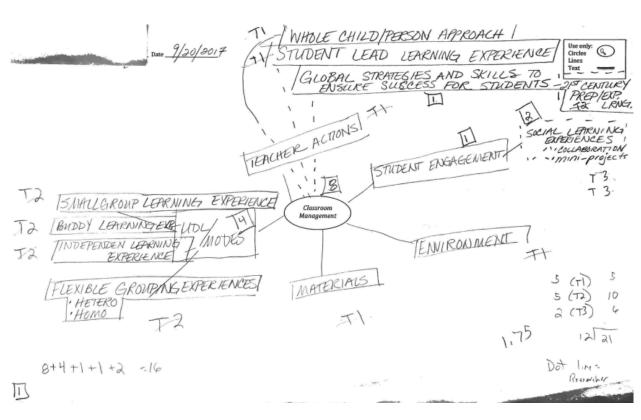


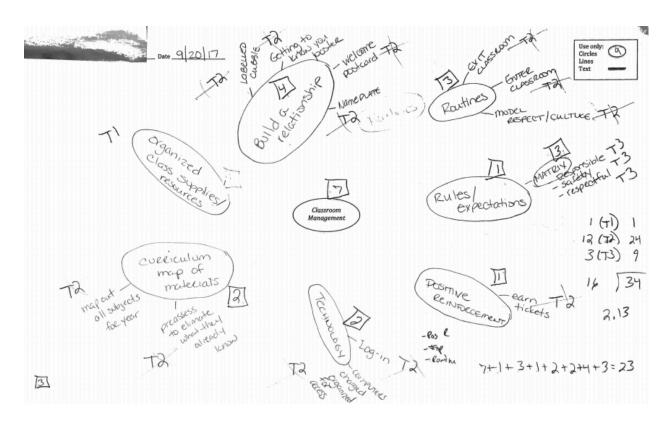


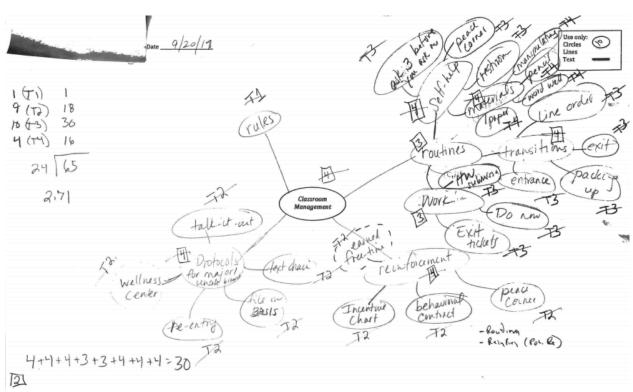


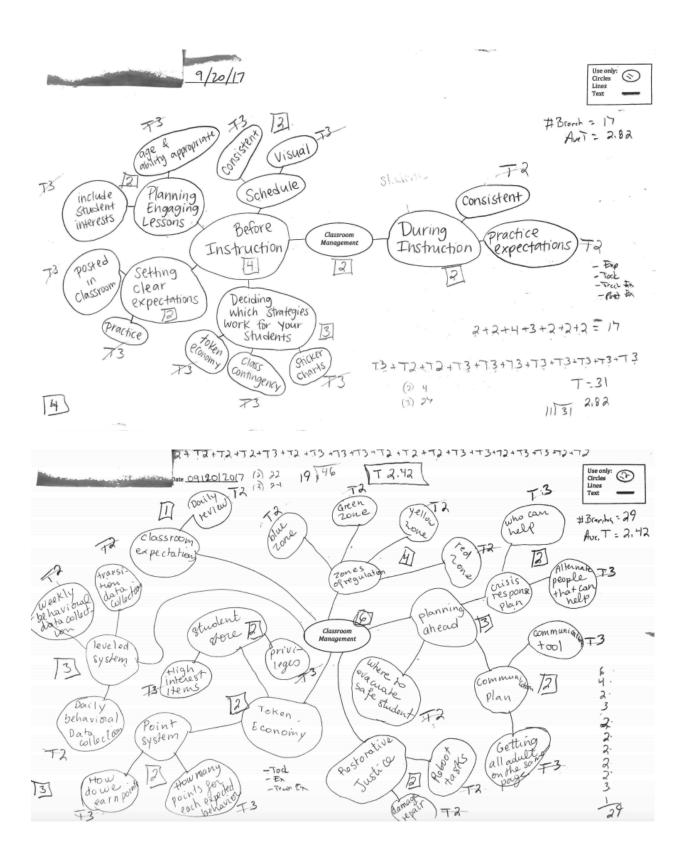












#### **Post Assessment**



