

DOES TECHNOLOGY ELICIT DESIRED BEHAVIORS IN EMOTIONALLY DISTURBED  
STUDENTS? : PERCEPTIONS OF ELEMENTARY EDUCATORS

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## **ABSTRACT**

The purpose of this mixed methods study was to identify the perceptions of educators regarding the potential impact of technology as a motivator to elicit desirable behaviors within students that have been identified with an educational diagnosis of emotional disturbance at the elementary school level. A review of the literature focused on key words such as (a) technology, (b) emotional disturbance, and (c) behavior management. The perceptions of educators were collected through the use of an on-line questionnaire, in addition to individual, face-to-face interviews.

The study intended to collect the perceptions of classroom teachers to determine whether or not educators who work closely with elementary-aged students with emotional disturbance are more likely to exhibit desirable behaviors at school when the student is aware that access to technology is an option as a reward or even if the technology is available for general use in the classroom. The implications of the study show that the majority of teachers who participated do perceive that technology plays a role in promoting desirable behaviors within their students. Future studies can look at the role specific types of technology play in behavior management. It can be stated that the implications from this study promote the use of technology in emotional support classrooms at the elementary level. Ensuring that teachers have access to technology is an important factor that school districts will want to examine.

## DEDICATION

I would like to dedicate not only this document but all of the hours of scholarly preparation that began in September, 1985 when I first entered the doors in a public school, through today. Throughout my entire life, I have been fortunate to receive support and encouragement from my family, my friends and the educators who bravely stood up each day to impart knowledge unto their students.

The completion of this dissertation does not mark the end of a journey; rather, it is an additional step in a lifelong sojourn dedicated to learning as much as I can, and sharing the knowledge, and love for learning, with as many people as I can. Rather than naming individuals, with the likelihood of inadvertently skipping a name, I know that, in my heart of hearts, each and every person with whom I hold a kinship knows just how much they mean to me and just how much their support in not hearing from me for a period of time, seeing less of me during busy semesters, or listening to me waffle on topics truly has contributed to my successes.

Education is not a solitary exercise. Thank you to my family, friends, teachers, faculty and students for imparting unto me that which is intangible – the love of learning.

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## TABLE OF CONTENTS

	Page
<b>ABSTRACT</b> .....	iii
<b>DEDICATION</b> .....	iv
<b>ACKNOWLEDGMENTS</b> .....	v
<b>LIST OF TABLES</b> .....	viii
<b>CHAPTER</b>	
<b>1. INTRODUCTION</b> .....	<b>1</b>
Statement of the Problem .....	2
Purpose of the Study .....	3
Research Questions .....	3
Definitions .....	5
Delimitations of the Study .....	8
Significance of the Study .....	9
Theoretical Bases.....	10
<b>2. REVIEW OF LITERATURE</b> .....	<b>13</b>
Introduction.....	13
Technology .....	13
Technology as an Educational Tool.....	14
Technology in Behavior Modification .....	15
Emotional Disturbance .....	16
Classroom Behaviors.....	17

Behavior Management .....	19
Self-Management .....	20
Summary.....	22
<b>3. METHODOLOGY AND PROCEDURE.....</b>	<b>24</b>
Assumptions and Rationale .....	24
Role of the Researcher.....	25
Population and Sample .....	26
Data Collection.....	26
Data Analysis.....	27
Methods of Verification .....	28
Instrument Validation .....	28
Ethical Issues .....	29
Relation to Theory and Literature.....	30
<b>4. RESULTS OF THE STUDY.....</b>	<b>31</b>
Quantitative Strand Results .....	31
Demographics.....	31
Technology.....	33
Behavior Modification .....	35
Qualitative Strand Results.....	42
Respondents .....	43
Question 1 .....	43
Question 2 .....	45

Question 3 .....	46
Question 4 .....	48
Question 5 .....	50
Question 6 .....	52
Question 7 .....	54
Question 8 .....	55
Question 9 .....	56
Summary .....	58
<b>5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>59</b>
Summary .....	59
Discussion .....	60
Conclusion .....	64
Limitations .....	67
Recommendations for Future Research .....	69
<b>REFLECTION .....</b>	<b>71</b>
<b>REFERENCES .....</b>	<b>73</b>
<b>APPENDICES</b>	
A. E-MAIL TO PROSPECTIVE RESPONDENTS .....	84
B. QUESTIONNAIRE PROTOCOL .....	86
C. INTERVIEW PROTOCOL .....	89
D. RESEARCH QUESTIONS MATRIX .....	91



## LIST OF TABLES

	Page
1. Table 4.1: Current Grade Levels Served.....	32
2. Table 4.2: Years of Service as an Educator.....	33
3. Table 4.3: Years of Service in Emotional Support.....	33
4. Table 4.4: Available Technology for Use.....	34
5. Table 4.5: Technology Most Sought After by Students.....	35
6. Table 4.6: Perception of Desirable Behaviors when Technology is Used in a Lesson .....	36
7. Table 4.7: Perception of Desirable Behaviors when Technology is Used in a Lesson by Students.....	37
8. Table 4.8: Perception of Desirable Behaviors when Technology is Earned by Students as a Reward.....	38
9. Table 4.9: Perception of Desirable Behaviors when Technology is Available in the Classroom.....	39
10. Table 4.10: Anecdotal Responses on the Impact of Technology on Behavior Modification.....	40

## **CHAPTER 1**

### **INTRODUCTION OF THE STUDY**

The purpose of this mixed methods study is to identify the perceptions of educators regarding the potential impact of technology as a motivator to elicit desirable behaviors within students that have been identified with an educational diagnosis of emotional disturbance at the elementary school level. In an attempt to provide a foundation for the purpose of this study, I will provide a review of extant literature that relates to keywords such as technology in elementary schools (Blackwell et al., 2013; Ertmer et al., 2012; Figg & Jamani, 2011; Hew & Brush, 2007) emotional disturbance (Evans et al., 2012; Hagan-Burke, et. al, 2015; IDEA, 2004; NCES, 2013; Siperstein, et. al, 2011), and self-management (Baker, et. al, 2009; Blord, et. al, 2011; Gulchak, 2008). Any gaps that may exist within the field of education relative to the topic of technology as a motivator for emotional support students may be identified and, subsequently, supported by this study.

This research is intended to serve as an important study in the areas of technology and special education as it could serve as a support and tool for the motivation of elementary school-aged students with emotional disturbance. There is an absence of literature that focuses specifically on technology used as a motivator in an emotional support classroom. While aforementioned studies speak to technology use, there are no contemporary studies that were found that specifically relate to the use of technology in an elementary emotional support classroom as a tool to motivate students to follow expectations and, in doing so, exhibit desirable behaviors.

### *Statement of the Problem*

McGrath (2005) speaks to an emotionally literate classroom environment. The work of the teachers in a classroom with students who have been diagnosed with emotional disturbance is to teach them the skills they need in order to cope with feelings and emotions, while, at the same time, breaking down the barriers which cause them difficulty to complete the desired tasks (academic work or behavioral expectations).

Many public school districts are finding themselves maintaining learning support programs within their schools or even bringing specialized programs back into their buildings (such as autistic support, life skills, emotional support) from outsourced institutions and programs or approved private schools. In doing so, they are spending less for outsourcing. Therefore, educators are faced with finding ways to individualize instruction to the best of their ability for each learner who may have very specific needs that have been identified through the individualized education plan process.

In many instances with students who have been identified as having an emotional disturbance, there are behaviors that impede their ability to find academic success. Thus, it is the role of the teacher to not only teach academics, but to, first, find a way to break down the barriers so that the student can meet success with his/her behaviors in order learn academics. To do so, teachers will need a variety of tools and strategies in order to implement learner-specific plans. It is possible that, considering the proliferation of and ease of access to various modes of technology, a teacher can use technology as a motivator to elicit desirable behaviors.

### *Purpose of the Study*

The purpose of this mixed methods study is to identify the perceptions of educators regarding the potential impact of technology as a motivator for desirable behaviors for students who have been identified with an educational diagnosis of emotional disturbance at the elementary school level. The study intends to look through a quantitative lens by way of a questionnaire to be completed by respondents, identified as elementary school teachers who teach within an emotional support program. The questionnaire with this study intends to survey teachers in classrooms with students who have been identified with emotional disturbance to garner their perceptions of the effectiveness of the introduction of technology as a reward/tool to enhance/encourage desired appropriate school behaviors.

The qualitative aspect of this mixed methods study will focus on the perceptions of educators insofar as how and if technology plays a role in behavior management plans and as a reward. If so, do teachers believe that their students present more age-appropriate behaviors when technology is used as a reward and/or part of their plans? Gathering data on their perceptions will be the focus of this study. In order to do so, following the questionnaire, face-to-face interviews will be conducted.

### *Research Questions*

With this study, I intend to answer the following questions, as they relate to best practices in a learning support environment:

Do teachers believe that their students with emotional disturbance behave more appropriately when technology is introduced as a tool for work and/or as a reward? If so, do they find that expected tasks are accomplished? If not, do they find that the use of technology does not have an impact on a student's focus and behavior modification to demonstrate desirable behaviors?

To answer this question, a questionnaire protocol that will be disseminated electronically to a sample of teachers who work specifically with students identified with emotional disturbance. From there, an additional protocol of questions that would best be answered through a face-to-face interview, either one-on-one or in a small group setting, will be used to gather additional data. The latter would be to further explore the perceptions based on the original data that are gathered. Once coded, a specific protocol for the interview component will be prepared.

Additionally, to support this essential question for the study, I intend to include the following questions:

1. What are the types of technology that are currently available in the emotional support classroom?
2. What are the options for use of technology that are currently provided to students?
3. Is the use of technology integrated into behavior support plans that are imbedded within the individualized education plan?

By answering these questions, I intend to provide a better understanding for the overall impact that technology plays in managing student behavior for students with

an emotional disturbance. These questions will provide detailed information as to specific types of technology, as well as availability for use within the classroom. Should a teacher not have technology available for use, this discrepant response could provide insightful data that may support the need for access to technology in the classroom.

### *Definitions*

For the purposes of this study, the following terms have been defined, as follows:

**Emotional and Behavioral Disturbance** – IDEA (2004) defines an educational diagnosis of *emotional disturbance*, one of the thirteen that can be used by school psychologists and special education teams when recommending appropriate placement for a student, as the following:

(4) (i) Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section.

**IDEA** – Individuals with Disabilities Education Act. Since 1975, the federal government and the Department of Education have been charged with providing guidance and regulations to local education agencies related to the provision of fair and equitable programming for students who are identified with a learning disability. This law ensures that all students, despite label, are provided with equal opportunities for access to education in the least restrictive environment (United States Department of Education, n.d.).

**Individualized Education Plan** – An IEP is a legally binding document that provides for individualized goals for a learner who has been identified with a disability as per a psycho-educational battery of tests with a school psychologist. The IEP creates an opportunity for teachers, parents, school administrators, related services personnel, and students (when appropriate) to work together to improve

educational results for children with disabilities. The IEP is the cornerstone of a quality education for each child with a disability (United States Department of Education, 2000).

**Locus of control** – As defined within Rotter’s social learning theory (1954), a locus of control is the perception of an individual as to who controls the reinforcements. Rotter posits that there are those individuals with an internal locus of control. These individuals believe that they have control over their behaviors and, ultimately, how they act and what they do will lead to access to the reinforcer. Therefore, one with an internal locus of control will find ways to control his/her actions and to complete tasks because they believe that they have control over whether or not what they do will garner the offered reinforcement. On the other hand, those individuals with an external locus of control believe that they do not have control over the reinforcement; rather, something or someone else determines whether or not they will have access to said reinforcement. For someone with an external locus of control, there is little value to changing one’s own behavior, as it is perceived as not having an impact on the decision of the person who, ultimately, will decide whether or not to provide the reinforcement.

**Motivation** – Maslow’s work (1949) has been a guiding theory for education for decades. Essentially, Maslow studied what needs humans have and, when met, what they strive for next. His pyramid schematic has been used in social foundations of education coursework to provide a basis for the understanding that every person is motivated by something and that it is important that educators seek to determine exactly those things that motivate each student, uniquely.



**Self-efficacy** – This concept is directly related to the body of work conducted by Bandura (1997) and his social cognitive theory. Essentially, self-efficacy can be described as a student’s confidence in his/her ability to achieve and, ultimately, how that confidence in oneself impacts the ability to achieve the task at hand.

**Self-management** – Students are taught how to control their actions and reactions so that how they respond to various situations will be appropriate. The concept is that, over time, the student will be able to manage his/her own behaviors without direct teacher intervention.

**Technology** – There are many forms of technology that are readily accessible within schools. For the purposes of this study, technology refers to devices that are available for use that contain an academic component.

#### *Delimitations of the Study*

The study does have specific delimitations. First, the study takes place in a specific geographic region of Pennsylvania, namely within Bucks County. While the perceptions of educators garnered will come from a specific geographic region, the findings may be representative of the larger field of education.

An additional delimitation is the perception of researcher bias. As an elementary school principal, I work closely with the emotional support population within the school where I serve as the leader. To that end, I maintain a vested interest in the programs and continued adaptations that are made in an effort to enhance supports for the students and, ultimately, their success in behavior management to limit the barriers that inhibit academic and social success.

Despite the potential delimitations addressed, the opportunity exists to transfer the findings to other school settings in counties and districts throughout Pennsylvania. Additionally, given my potential bias, more than one site will be used for the study. In fact, the program in place at the school for which I am an administrator will be used in a tertiary manner, only after data are collected from other sites within Bucks County. This will be done in an effort to demonstrate how researcher bias does not affect the findings.

### *Significance of the Study*

This study is important to K-12 education, specifically at the elementary level, because there is an ever-increasing expectation that technology should be utilized to enhance and provide instruction (Lim et al., 2013). In fact, components within the Pennsylvania Teacher Effectiveness Model (Danielson, 2011) include the supposition that technology is being utilized and at a moderate level. Research shows that there are many studies that discuss the use of technology in elementary classrooms and the engagement of the learner (Archer et al., 2014; Boles et al., 2011; Forgrave, 2012; Swan et al., 2005). Additionally, there is significant research on the role of the teacher in classrooms that work with students who have been identified as having an emotional disturbance (Daunic et al., 2006; Evans et al., 2012; Fitzpatrick et al., 2009; Wehby et al., 1998; Wehby et al., 2003). Therefore, this study will identify the perceptions of the educators who are working with this specific population of students to see if, in fact, technology that has been reported to enhance focus and interest in learning can also serve as an impetus for improved and appropriate school behaviors. The findings will contribute to the greater body

of research and may serve as information for schools when making decisions as to what and where they will provide additional funding. If teachers' perceptions are that behaviors have decreased with the use of technology, then districts may have data to support the purchase of new technology and materials. If teachers' perceptions are that behaviors are not impacted in positive way by technology, then districts may have data to not support the purchase of additional technologies when requested.

### *Theoretical Bases*

There are two theories that directly relate to research to be conducted with this study. Bandura's social cognitive theory and Deci and Ryan's self-determination theory relate to accessing desirable behaviors. These two theories speak to the motivation within a student in order to attain a positive result in action. Specifically, they relate to the idea that people, in this study they are students who have been identified with emotional disturbance, may change their disposition and behavior because they are motivated by something, whether intrinsic or extrinsic in nature. This particular study will be looking at the perception of educators relative to the value of utilizing technology as a tool to motivate students to engage in appropriate and desirable behaviors.

Bandura's social cognitive theory (1991; 1997; 2001) develops the concept that students learn through observation in a social setting (Linares et al., 2005; Pajares, 1996; Paris & Paris, 2001). Within a classroom, students will monitor the behaviors of their peers, the reactions to their actions, and, many times, will behave according to how they have observed others behave. In a classroom, if a student

does not raise his hand to speak, the teacher may not call on him. Therefore, other students will condition themselves to raise their hands so that they can be called upon to participate. They observe that by not raising a hand, the teacher will not acknowledge their behavior. Thus, for this study, I will incorporate questions that will gauge the teachers' perceptions of technology in their classrooms and not only if individual students behave in the desired manner, but if the use of technology plays a role in modifying the behaviors of the class, as a whole, who observe that when students display desirable behaviors, they earn access to technology as a reward.

The self-determination theory of Edward Deci and Richard Ryan (1985) is applicable to this topic because of its focus on the understanding of intrinsic and extrinsic motivators. How, if at all, does the introduction of technology as a reward motivate students with emotional disturbance to demonstrate appropriate and desirable behaviors? Is there a specific instrument of technology that motivates students to self-monitor their behaviors, thus resulting in the display of desired behaviors for a student?

According to Deci and Ryan, "intrinsic motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards" (2000, p. 56). Converse to intrinsic motivation is extrinsic motivation. As defined by Deci and Ryan,

extrinsic motivation is a construct that pertains whenever an activity is done in order to attain some separable outcome. Extrinsic

motivation thus contrasts with intrinsic motivation, which refers to doing an activity simply for the enjoyment of the activity itself, rather than its instrumental value. (2000, p. 59)

Deci and Ryan assert that both extrinsic and intrinsic motivation can stem from internal desire. However, intrinsic motivation is far more likely to continue whereas extrinsic motivation will stop once the stimulus has ended (Cameron & Pierce, 1994; Gottfried, 1985). Thus, if technology serves a purpose to incite desired behaviors, perhaps the students will eventually no longer require the reward of technology use to maintain their behaviors.

Self-determination theory will be used as a conceptual base to develop an understanding of whether the use of a technology as a choice within the emotional support classroom has an impact on the students' behaviors. This theory will influence the creation of a protocol to determine if respondents are motivated intrinsically or extrinsically.

## **CHAPTER 2**

### **REVIEW OF THE LITERATURE**

#### *Introduction*

The purpose of this mixed methods study is to identify the perceptions of educators regarding the potential impact of technology as a motivator for desirable behaviors for students who have been identified with an educational diagnosis of emotional disturbance at the elementary school level. In an attempt to provide a foundation for the purpose of this study, a review of extant literature that relates to keywords such as technology in elementary schools, emotional disturbance, and self-management is provided. This study may support any gaps that may exist within the field of education relative to the topic of technology as a motivator for emotional support students. This research is intended to serve as an important study in the area of technology and education as it could serve as a support and tool for the motivation of elementary school-aged students with emotional disturbance.

#### *Technology*

“Today’s students, often called digital natives or the Net Generation, grow up with technology. Most of them have never known life without the Internet” (An & Reigeluth, 2011, p. 54). It can be assumed that students are surrounded by technology in many environments in which they find themselves on a regular basis. According to the National Center for Education Statistics (2013), “in 2009, some 97 percent of teachers had one or more computers located in the classroom every day...”. The Center further reported that “Internet access was available for 93 percent of the computers located in the classroom every day.” It may be assumed

that since 2009, those percentages have increased, as further infrastructure expansions have taken place with fiber networks and connectivity options throughout the country.

In fact, many schools provide access to textbooks and programs through on-line resources, as well. In an article about K-12 textbook publishers, it is stated that “Florida, for one, has already adopted legislation requiring districts to spend half their instructional materials budgets on digital content by 2015-2016...” (Davis, 2013, para. 5). Further, in the same paragraph in her article, Davis shares that, “...other states are considering legislation promoting digital textbooks”, as well. There are a multitude of intervention and enrichment opportunities, as well as testing options that are technology based. Therefore, it can be assumed that contemporary students are familiar with technology as a component of their education.

*Technology as an educational tool.* Swan, van’t Hooft, and Kratcoski (2005, p. 110) found that the use of “technology and mobile computing devices will eventually become a critical factor of learning for improving student motivation and achievement” (as cited in Davidson, L., Richardson, M., & Jones, D., 2014, p. 3). Therefore, it comes as no surprise that teachers today are encouraged to teach students using technology and how to access technology with an academic purpose.

It is through the implementation of specific goals and objectives that the use of technology in the classroom becomes academic in nature (Archer, K., Savage, R., Sanghera-Sidhu, S., Ward, E., Gottardo, A., & Chen, V., 2014; Garcia-Barcena & Garcia-Crespo, 2006 ). Kingsley (2007) purports that “...teachers should focus on fully and

smoothly integrating them (digital tools) into each lesson, with the goal of ensuring that the technology is used to support the curriculum..." (p. 55).

There are studies that discuss the use of technology in elementary classrooms in contemporary society (Ciampa, K., & Gallagher, T. L., 2013; Ersoy, A., & Bozkurt, M., 2015; Lee, 2012; Vasinda, S., & McLeod, J., 2011). These studies share research on the use of wikis and blogs for student access, as well as student use of iPods and interactive whiteboards in the classroom. While extant literature does not indicate specific technology used in emotional support classrooms, the results of the questionnaire associated with this study, specifically questions six and seven, are expected to provide specific examples of technology that is utilized in these classrooms.

Additionally, academic technology can be used by teachers in elementary school classrooms as a way to engage learners in a style that is unique to more traditional teaching methods (Kemker, K., Barron, A., & Harmes, J., 2007). Kingsley (2007) further states that "digital tools can play an important role in planning for instructional approaches that can be adapted to the individual needs of students..." (p. 55). By simply making use of a whiteboard versus a chalkboard, students may find themselves more engaged in the learning process.

*Technology in behavior modification.* Often, the use of technology may be considered as assistive to promote student access to learning and success in the classroom (Forgrave, 2002). While much of the research (Archer et al., 2014; Boles et al., 2011; Hagan-Burke et al., 2015; Swan et al., 2005) speaks to the implementation of technology to assist with academic concerns, there is research



(Amato-Zech et al., 2006; Blood et al., 2011; Gulchak, 2008) that speaks to the use of technology in behavior modification for elementary students. The findings were that when technology was introduced into lessons, and coupled with topics that were of a particular interest to the students, engagement was increased. Therefore, it will be of interest to determine if teachers who are working with students with emotional disturbance find that their students are more engaged and, thus, displaying desirable behaviors when technology is used in the classroom.

The proliferation of technology throughout society and within schools provides an opportunity for classroom teachers to suggest external reinforcers that are technology-based. According to Sahakov (2015) in his on-line editorial about pros and cons of technology in education, benefits of education technology to teachers and students cannot be ignored. It is with the importance placed upon technology that having access to technology as a reinforcer within a token economy system may, in fact, contribute to behavior management in the classroom.

### *Emotional Disturbance*

According to the most recent Special Education Data Report, which was published for the 2012-2013 school year, there were approximately 2,149 students in the state of Pennsylvania who were identified as receiving services for their school-based diagnosis of emotional disturbance (Penndata). This is approximately 8.6% of the total population of students identified as receiving special education services. It is important that there is additional research conducted in order to provide best practices and recommendations (Mitchell, D., 2014; Gable, R., Lee Park, K., Scott, T., 2014; Wagner, M., Friend, M., Bursuck, W., Kutash, K., Duchnowski, A.,

Sumi, W, & Epstein, M., 2006; Wehby, J, Symons, F., Canale, J., & Go, F., 1998;) to support students with this identification.

While students are identified with the label of *emotional disturbance* after having undergone a series of observations and assessments in partnership with a psycho-educational evaluation with a school psychologist, there remains much discussion as to the qualifiers used when determining this disability. Cullinan, Evans, Epstein and Ryser (2003) share that there is ambiguity in the definition of the disability and that it is important for educators to really examine each individual student's needs in order to best determine the process by which to provide supports.

To that end, one component of identifying the individual needs for a student is to determine the appropriate classroom placement for instruction. IDEA (2001) mandates that students with disabilities are educated in the least restrictive environment possible within the education setting. "Since the least restrictive environment is not a specific placement, but varies according to a student's academic and behavioral needs..." (Rozalski, M., Miller, J., & Stewart, A, 2011), it is imperative that schools are providing professional development for all educators so that they can best meet the needs of all of their students. For the purposes of this research, however, the focus will be on the emotional support classroom, in which all students participating in the classroom have been identified with emotional disturbance.

*Classroom Behaviors.* As cited by Nelson, Babyak, Gonzalez and Benner (2003), "students with emotional or behavioral disorders (E/BD) are at risk for

school failure because they lack behavioral competence...” (Nelson, Martella, & Marchand-Martella, 2002). Therefore, it is imperative that educators seek ways to meet the needs of the students with whom they are working in order to break down the barriers of behavioral disturbances than can preclude a student’s ability to focus on the academic tasks at hand. Research (Kern, 2015) shows that targeted and sustained interventions within the classroom can facilitate access to desirable behaviors that will break down the barriers that exist for students identified with emotional disturbance.

Due to the poor adjustment in school and, subsequently, in adult life, both often the case for students with chronic aggression (Cullinan, D., 2007; Loeber, R., Farrington, D.R., Stouthamer-Loeber, M., Van Kammen, W.R., 1998; McMahon & Wells, 1998; Meadows, N., Neel, R., Scott, C., & Parker, G., 1994), and often related to students with emotional disturbance, in particular, it is important that teachers provide structures and systems in order to provide opportunities for their students to obtain success and to feel connected to the classroom environment, the culture, and the tasks, both academic and behavioral.

In order to assist with the preparation of strategies to address behavioral competence and potential poor adjustment, educators can employ a functional behavioral assessment. According to Dunlap, Kern, dePerczel, Clarke, Wilson, Childs, White and Falk (1993), a functional behavioral assessment is defined as “...a process of identifying functional relationships between environmental events and the occurrence and nonoccurrence of a target behavior” (p. 275). Further, they state that “...a functional assessment consists of the methods and procedures that are

used to identify associations between the behavior and variables in the environment” (p. 219). The student-specific data that are garnered from this assessment will allow for a teacher and/or an Individualized Education Plan Team to prepare a behavior modification plan that targets specific needs so as to improve a student’s classroom behaviors. With the reauthorization of IDEA, the use of a functional behavioral assessment is now required of educational teams when preparing behavior plans for students who have been identified with emotional disturbance.

### *Behavior Management*

The concept of behavior management (Evans, C., Weiss, S., & Cullinan, D., 2012; Evertson, C. & Neal, K., 2006; Hoagwood, K., Burns, B., Kiser, L., Ringeisen, H., & Schoenwald, S., 2015; Noell, G., Duhon, G., Gatti, S., & Connell, J., 2002) is much more specific than the practice of classroom management (Evertson, C., & Weinstein, C., 2006; Oliver, R. & Reschly, D., 2010). While sound classroom management will provide a structure for the classroom environment in general, behavior management plans are specific to the individual student for and with whom the plan is written. “All students, especially students with emotional disturbance and behavioral problems need to know what is expected of them” (Quinn, M., Osher, D., Warger, C., Hanley, T., Bader, B., Tate, R., & Hoffman, C., 2000). With sound classroom management techniques, a teacher can provide the structure so that students behave within those confines. However, when social and emotional barriers preclude a student to be able to do so, a behavior management plan may need to be put into place so that the individual student can access supports in order

to meet success within the classroom's expectations. Quinn et al. (2000) also share that "a sound classroom management system can provide exactly the structure students (especially those with emotional disturbance and behavioral problems) need for managing their own behaviors" (p. 22).

Research (Musser, E., Bray, M., Kehle, T., & Jenson, W., 2001; Perkins H.R. & McLaughlin, T.F., 2015) shows that the use of a token system in the classroom when working with students who have emotional disturbance can, in fact, have a positive impact on eliciting desirable behaviors. Perkins et al. further go on to share that the teacher determines, with student input, the value of the tokens and the secondary reinforcers. This is an example of a technique that can be employed when working with behavior management. Overall, behavior management techniques can work for all students, but should be altered with specific strategies that meet the individual needs of those students who are identified with having emotional disturbance.

*Self-Management.* As previously indicated, McGrath speaks to an emotionally literate classroom environment (2005). In a classroom that is emotionally literate, students are made to feel comfortable because of their making the appropriate choices, managing behaviors, and acting in a way that is expected of a student at a certain age. This can be a particular challenge for students who are diagnosed with a specific learning disability with emotional disturbance. One of the many reasons why a student may find him/herself in a classroom setting specific for emotional disturbance is because of a lack of ability to be successful in a general education classroom setting, even if that classroom is emotionally literate.

It is within the specific classroom setting that an emotional support teacher can provide immediate and specific supports for a student when barriers are prohibiting success in any given regard, whether it be academic, social or behavioral. High levels of teacher control exist over students with behavior needs (Cosden, Gannon & Haring, 1995). Nevertheless, the ability to make choices is important and can be used to encourage students to engage in appropriate behaviors. Providing reinforcers for positive behaviors and allowing students the choice to select what those reinforcers are permits a sense of control over one's environment. This concept of self-management is one that directly relates to Bandura's social cognitive learning theory (1986), and has been the subject of a variety of studies and reviews since 2000 (Lane, K. L., Menzies, H. M., Bruhn, A. L., & Crnabori, M., 2011; Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H., 2005).

An article by Dunlap et al. (2013) speaks to the impact that providing choices to students with emotional disturbance can have on their academic work. This study indicates that task completion and focus increased while undesirable behaviors decreased. This statement is previously corroborated by research conducted by Kern et al. (1994). Thus, it is possible that providing the use of technology as an option within a menu in order to complete work will have a positive impact on behaviors, as well. There is, perhaps, a correlation between the sense of success and pride with one's understanding of academic tasks and the demonstration of desired behaviors within a classroom/school setting. Studies from the 1990s and early 2000s (Crum, C., 2004; Dunlap, G., Clarke, S., Jackson, M., Wright,

S., Ramos, E., & Brinson, S., 1995; Kern, L., Dunlap, G., Childs, K., & Clarke, S., 1994; Levendoski, L. & Cartledge, G., 2000; Nelson, J., Smith, D., Young, R., & Dodd, J., 1991) indicate that self-management strategies do have a positive impact on academic and behavioral gains. Dunlap et al. (1995) report that results indicated that a SMP (self-management program) was highly effective in increasing task engagement while decreasing disruptive behavior. With the proliferation of technology in contemporary society, the question remains if using technology within a management plan has a positive impact on student behavior.

The Center for Effective Collaboration and Practice published in 2000 an article entitled, *Educational Strategies for Children with Emotional and Behavioral Problems*. In this article, the authors, Quinn, Osher, Warger, Hanley, Bader, Tate and Hoffman collaborated to provide insight and direction for educators who work with students with behavioral and/or emotional problems. It is important for educators to keep in the forefront of their practice that “...students with emotional disturbance and behavioral problems learn best in classrooms characterized by effective instruction and behavior-management routines” (2000, p. 15). This idea directly correlates to the aforementioned research relating to an emotionally literate classroom and behavior management.

### *Summary*

The intended purpose of this literature review is to provide background information about technology in elementary schools, emotional disturbance, and self-management. The objective of the research study is to synthesize the perceptions of educators as to whether they believe technology is a useful tool in

eliciting desirable behaviors for elementary-aged students who have been identified with emotional disturbance. The review of literature did not encounter extant studies of this exact topic, which provides the opportunity for this study to serve a purpose within the fields of education and technology. Therefore, exploring the perceptions of educators who work directly with students identified with emotional disturbance regarding the use of technology in their classrooms may facilitate a better understanding as to what interventions may work best in order to elicit desirable behaviors. Accumulating and analyzing feedback and data will help to form a specific opinion as to the effectiveness of technology as a tool for behavior management within and among students identified as emotionally disturbed at the elementary school level.



## CHAPTER 3

### METHODOLOGY AND PROCEDURE

#### *Assumptions and Rationale for a Mixed Methods Design*

This study is a phenomenological mixed methods study in design, as it sought to better understand the perceptions of educators who work with students with emotional disturbance as to whether or not they feel that using technology in the classroom as either a reward or an option, as part of a behavior plan, has a positive effect on eliciting desirable behaviors among their students. This specific focus lends itself to this design approach, as it is unique to the type of learner, teacher and type of technology that is available in the classroom.

In order to garner a better understanding of these perceptions, a questionnaire was distributed to render responses from stakeholders (elementary educators). It is through a mixed methods approach that their perceptions were validated. According to Maxwell (2005), “the strengths of a qualitative research derive primarily from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than numbers”(p. 22). This study made use of questionnaire data, including anecdotes, and, interviews, to focus on a specific population of learners, and to capture the perceptions of educators who work with them through their personal observations. Creswell (2009) defines this approach to a study as sequential mixed methods. “...the study may begin with a quantitative method in which a theory or concept is tested, followed by a qualitative method involving detailed exploration with a few cases or individuals” (p. 14). Therefore, both qualitative and quantitative elements were used to conduct this study.

The initial study captured perceptions of educators, through a combination of a questionnaire and, at minimum, personal interviews. The use of personal interviews, which is qualitative, and a questionnaire, which is quantitative, means that this study is considered a mixed methods study. The results of the study may provide opportunity for future studies that are of quantitative and/or mixed methods, as the use of control groups, data points and statistics may be valuable in determining such concepts as frequency of behavior modification, length of focus, etc. This study, however, did not focus on those topics.

#### *Role of the Researcher*

As a doctoral student in the Educational Administration program at Temple University, I am completing a study that will contribute to the body of research surrounding technology and emotional support in the elementary school setting. This is of particular interest to me as the researcher because, at the same time, I am an elementary school Principal. It is very much in my interest to conduct this study, both as a researcher and as an educational leader, so that I can better my craft and work with teachers, students and families.

I serve as the Principal of an elementary school in Bucks County in which an emotional support program is housed. While an assumption of bias exists with my role, it will be disclosed to any participants from the building in which I serve as Principal that my role in the study is that of a doctoral student and not as the building leader. The data collected will represent perceptions of educators throughout all of Bucks County; therefore, the building in which I serve as Principal will not be the sole representative data point. In fact, the questionnaire to be used is

designed to be anonymous without an identification of the District in which the respondent works.

### *Population and Sample*

The specific population chosen for this study was elementary school educators who represent the thirteen public school districts in Bucks County, PA who work with students who are identified with emotional disturbance. The survey was provided to those educators who work in public elementary schools within Bucks County, Pennsylvania. While this is a specific population, the responses rendered through the study serve as a sample for a wider range of educators, which would, potentially, have an impact on a greater population of students.

This is an atypical population in that it is very specific. Data that were collected may be useful to schools and districts that house emotional support programs throughout a larger geographic area.

### *Data Collection*

Data collection for this study came from a variety of sources. After preparing a protocol for a questionnaire (Appendix B), a sample of respondents representing elementary educators throughout Bucks County coming from schools in which an emotional support program is offered were selected. Given the very specific nature of the teaching position, each elementary educator who works within the emotional support program was contacted with an initial email (Appendix A), which included a link to the questionnaire (Appendix B). Collecting data from respondents from throughout the entire County contributed to diverse, rich data. It was important to

analyze data from a sample that represents the entire County, as there is an expanse of ethnic and socioeconomic differences throughout Bucks County.

A focus on a specific population (emotional disturbance in the elementary school) provided for a specific list of educators who work in those classrooms. Therefore, the solicitation to participate in the study was sent electronically to each of those educators. The list of these educators was created through accessing each district's website and identifying those educators who work as emotional support teachers at the elementary school level.

Additionally, respondents to the protocol had the opportunity to volunteer to share further their thoughts and perceptions of this topic through an individual interview. The final question in the protocol provided an opportunity for the respondent to indicate if he/she would be interested in participating in an interview to further discuss their perceptions. Given the qualitative focus of this research, the opportunity to interview a respondent and to garner further perspectives was added in an effort to collect rich data. An interview protocol (Appendix C), as well as a data-planning matrix (Appendix D), are provided with this study.

### *Data Analysis*

A mixed methods study is most effective when data are collected, promptly analyzed and further research continues. As data were collected, comparison to that which has previously been collected took place. This is an example of a constant comparative method for research and data collection. As responses were collected from the electronic questionnaire, they were recorded and each new response allowed for the researcher to find similarities and differences in the responses.

Additionally, the second set of data analyzed were the results of interviews. Not only were the data collected from the interviews compared with other interviews, so, too, were they compared to the data collected from the questionnaire responses.

### *Methods of Verification*

There were several principal methods of verification employed to make the most honest effort in assuring validity for this study and its findings. As described in the data analysis section of this proposal, employing the constant comparative method afforded me, the researcher, the opportunity to continuously review and refine the findings.

A method of verification is triangulation, an important strategy used in conducting research to better provide results with both validity and credibility (Maxwell, 2005; Merriam, 2009; Yin, 2009). “This strategy reduces the risk that your conclusions will reflect only the systematic biases or limitations of a specific source or method...”, says Maxwell (2005, p. 93). For purposes of this study, I provided a questionnaire for stakeholders (educators) to complete. As an option, those educators who responded were able to participate in an interview to further provide opportunity to garner specific perceptions. Collecting data from multiple sources from a variety of methods was a strategy employed in an effort to help to prevent bias.

### *Instrument Validation*

Maxwell (2005) shares a variety of strategies that can be used in order to validate data and, ultimately, the instruments that are being utilized to garner said data. Using two different methods of data collection, questionnaires and interviews,

allowed for comparison of the data collected. While conducting interviews, sharing back the responses given with the respondent to verify that the information transcribed was accurate is another method to verify not only the data, but that the questions asked are understandable and able to be answered without having to restructure or explain their intention.

### *Ethical Issues*

Survey and interview protocols were approved through the IRB of Temple University. However, working with human subjects, at any time, may be seen to present ethical issues or concerns. To combat this notion, the survey that was distributed to potential respondents did not track or identify who responded to the survey. While there was an identifier to provide the name of the District in which the respondent is employed as a teacher working with students in an emotional support program, no names were requested, unless the respondent wished to provide that information. Allowing for the survey to be completed with anonymity helped to reduce any potential ethical issues.

This study did not intend to place judgment on those schools and districts in which technology is not as prevalent as in others. It was possible that potential respondents could indicate that they are not afforded many technology options within their programs and classrooms. Again, it was not the intention of this survey to identify the specific schools or, for that matter, the districts from which each respondent comes. This study was not dependent upon identifying specific nomenclature (individual educators, school names or districts). This study is, however, representative of all of Bucks County.

### *Relation to Theory and Literature*

The intent of this study is to present the perceptions of educators at the elementary level who work with students who have been identified with a disability category of emotional disturbance. Within this study, Bandura's social cognitive theory, as well as Ryan and Deci's self-determination theory will be referenced. It is assumed that these two theories can further describe what exactly transpires during the course of this particular study.

Specifically, the literature that was reviewed deals with three keywords: emotional disturbance, technology, and self-motivation. It is through these strands within the research that a basis for this specific study exists. While this study does not intend to answer any questions relative to other identified populations within an elementary school, the findings of this study can contribute to the already existing literature regarding technology use in schools and self-management of students identified with emotional disturbance. Therefore, this study is unique to its limitations, but the findings may be applicable to the field of education, in general, especially in a society in which the proliferation of technology is robust.

## CHAPTER 4

### RESULTS OF THE STUDY

#### *Quantitative Strand Results*

*Demographics.* The questionnaire (Appendix B) was sent electronically to thirty-five elementary school teachers identified as working with students with emotional disturbance. These teachers all teach at an elementary school within Bucks County. Overall, ten of thirteen public school districts in Bucks County are represented in the study. Directors of Special Education from two districts responded to indicate that their district does not have an emotional support program. One district did not respond with contact information, only indicating that the district does not classify its students in this program.

Of the thirty-five elementary school teachers to whom the questionnaire was sent, twenty teachers completed the thirteen questions. Given the nature of the position, there is the opportunity for teachers to work with more than one grade level. All of the teachers who responded indicated that they work with multiple grade levels. This demographic information is demonstrated in Table 4.1. While the data shows that each grade level, K – 6, is serviced, there is a higher percentage of teachers who work with students in grades three and four.



**Table 4.1***Current Grade Levels Served*

Assignment	Number	Percentage
Kindergarten	7	11.3%
First Grade	7	11.3%
Second Grade	9	14.5%
Third Grade	11	17.7%
Fourth Grade	11	17.7%
Fifth Grade	10	16.1%
Sixth Grade	7	11.2%

Note. N = 20

Additional demographic data of the respondents were collected. The initial questionnaire was sent to twenty-four female teachers and to eleven male teachers. The gender of respondents was not collected. However, the total number of respondents is potentially overrepresented by females given the fact that there are proportionally more female teachers than male teachers working with elementary students with emotional disturbance. The questionnaire did require respondents to indicate their years of service as a teacher, as well as the number of years they have been employed as a teacher working with emotional support. Table 4.2 demonstrates the years of service of the respondents as educators and Table 4.3 shows the years that the teachers have worked in the emotional support program.

**Table 4.2***Years of Service as an Educator*

Years of Service	Number	Percentage
0 – 5 years	6	30.0%
6 – 10 years	5	25.0%
11 – 15 years	5	25.0%
16 – 20 years	3	15.0%
21 – 25 years	0	0.0%
26 – 30 years	0	0.0%
31 – 35 years	0	0.0%
35 + years	1	5.0%

Note. N = 20

**Table 4.3***Years of Service in Emotional Support*

Years of Service	Number	Percentage
0 – 5 years	10	50.0%
6 – 10 years	5	25.0%
11 – 15 years	1	5.0%
16 – 20 years	4	20.0%

Note. N = 20

**Technology.** The questionnaire also requested that respondents provide input as to the type(s) of technology that are available in the classroom. The options provided for response ranged from desktop/standing computers, to portable devices, and, even teacher-directed whiteboard projectors. The majority of respondents indicated that iPads and laptop computers are most available in their

classrooms. Respondents were afforded the opportunity to select more than one option, depending upon the availability to them. Table 4.4 demonstrates the responses to this question. More specifically, Table 4.5 shows the types of technology that teachers indicate are most sought after by their students. The greatest majority of respondents indicated that the iPad is the technology device most sought after by their students.

**Table 4.4**

*Available Technology for Use*

Technology	Number	Percentage
Desktop Computer	10	17.5%
Laptop Computer	17	29.8%
iPad	18	31.6%
Tablet	0	0.0%
Kindle	0	0.0%
Interactive Whiteboard	12	21.1%
Other	0	0.0%

Note. N = 20

**Table 4.5**

*Technology Most Sought After by Students*

Technology	Number	Percentage
iPad	15	75.0%
Laptop Computer	3	15.0%
Interactive Whiteboard	2	10.0%

Note. N = 20

*Behavior Modification.* Respondents were asked to indicate their perception of agreement in that their students display appropriate/desirable building/school expectations when technology is utilized in a lesson. The options were strongly agree, agree, neither agree nor disagree, disagree, strongly disagree and other. Two respondents indicated other, as an option to provide a comment was given. One respondent who indicated other wrote “this does not reinforce any of my students on a consistent basis.” The second respondent who indicated “other” wrote “much of the time, when expectations are laid out ahead of time.” Table 4.6 provides a summary of the Likert rating scale, which, with eight respondents for both agree and neither agree nor disagree, along with two respondents selecting that they strongly agree, the response to the posited question is favorable. Zero respondents indicated disagree or strongly disagree.

**Table 4.6**

*Perception of Desirable Behaviors when Technology is Used in a Lesson*

Likert Scale	Number	Percentage
Strongly agree	2	10.0%
Agree	8	40.0%
Neither agree nor disagree	8	40.0%
Disagree	0	0.0%
Strongly disagree	0	0.0%
Other	2	10.0%

Note. N = 20

The respondents were also asked to indicate their perception of agreement with the statement that their students display desirable building/school expectations when they have the opportunity to utilize technology during a lesson. The majority of respondents (twelve) indicated that they either strongly agree or agree with the statement. Six respondents selected that they neither agree nor disagree. There was one respondent who selected “disagree” and one who selected “other”. The respondent who selected other added the comment that the respondent “sometimes agrees.” Table 4.7 succinctly provides these data.

**Table 4.7***Perception of Desirable Behaviors when Technology is Used by Students in a Lesson*

Technology	Number	Percentage
Strongly agree	2	10.0%
Agree	10	50.0%
Neither agree nor disagree	6	30.0%
Disagree	1	5.0%
Strongly disagree	0	0.0%
Other	1	5.0%

Note. N = 20

An additional component to the question about the use of technology asked respondents to indicate their perception of whether or not students display appropriate/desirable building/school expectations when they have the ability to utilize technology if they earn the option to do so as part of a behavior plan or classroom reward. Using a Likert scale, respondents were asked to select either strongly agree, agree, neither agree nor disagree, disagree, strongly disagree or other. Fifteen respondents indicated that they either strongly agree or agree with the statement that when their students earn the use of technology as a reward that they display desirable behaviors. There were a total of nineteen respondents to this question, despite there being a total of twenty respondents for the questionnaire. The design of the questionnaire did not require a response to a question in order to move to the next question. There was the option to not respond to a question should a respondent wish to do so. Table 4.8 provides the results for the question.

**Table 4.8**

*Perception of Desirable Behaviors when Technology is Earned by Students as a Reward*

Technology	Number	Percentage
Strongly agree	6	31.6%
Agree	9	47.4%
Neither agree nor disagree	3	15.8%
Disagree	0	0.0%
Strongly disagree	0	0.0%
Other	1	5.2%

Note. N = 19\*

\*20 respondents, overall, completed the questionnaire. One respondent skipped this question.

Another aspect of technology in schools is its accessibility. Given that respondents were surveyed from ten of the thirteen public school districts throughout Bucks County, the potential for variance in access to technology existed. The questionnaire included a Likert scale for respondents to inquire if they believe that having technology accessible has contributed to students' ability to display appropriate/desirable building/school expectations. Table 4.9 tabulates the responses to this question, which indicates that more than half (65%) of respondents believe that having technology available for use in the classroom has a positive impact on their students' behaviors.

**Table 4.9***Perception of Desirable Behaviors when Technology is Available in the Classroom*

Technology	Number	Percentage
Strongly agree	6	30.0%
Agree	7	35.0%
Neither agree nor disagree	5	25.0%
Disagree	2	10.0%
Strongly disagree	0	0.0%
Other	0	0.0%

Note. N = 20

A final question asked of respondents inquired if they had additional comments to share regarding their perceptions on the impact of technology on behavior modification with their students. Of the twenty respondents, nineteen anecdotal responses to this question were collected. Sixteen of the responses were affirmative in that the thoughts shared indicated that technology has a positive impact on behavior modification. One of the responses was neutral. The remaining two responses were negative, indicating that the respondents did not feel that using technology had an impact on eliciting appropriate/desirable behaviors within their students. Table 4.10 provides a summary of those responses.



**Table 4.10**

*Anecdotal Responses on the Impact of Technology on Behavior Modification*

Respondent	Anecdote
Affirmative	Using technology as an anticipatory set or as a closing of a lesson really helps to gain/maintain their attention.
Affirmative	Technology seems to be a significantly meaningful means of reinforcement for desired behavior.
Affirmative	I like having several different options, with regard to technology, to offer to my students. If I were to only have a computer or only one iPad, it would only serve as a reinforcer for a short time. Students need to have a variety of options in all aspects of learning and engagement.
Affirmative	Technology is successful as a reward as long as there are programs/apps/games the students are interested in using. Many programs/apps/games cost money and require licenses. Another problem is setting time limits that students adhere to when their time is over.
Affirmative	"iPad time" is something students can decide to use as a break or earn at the end of the day. I believe the questions were harder to agree or disagree with because the answer can differ amongst students and situations. I do agree technology is a benefit to students in the program, as they are a highly preferred item when presented with the choice.
Affirmative	It is hard for me because the only available technology I do have is laptops but I do feel that technology is an integral part of keeping my students motivated throughout the school day.

Affirmative	My students participate in lessons more appropriately when they know they are working for an iPad break.
Affirmative	The children are used to having the interactive whiteboards in the classroom and would find it somewhat strange if it wasn't in the room.
Affirmative	It is sometimes a good motivator when everything is running well.
Affirmative	Having the iPads available as a reward is great. Students truly love to play games on the iPad and will be upset when they do not earn it. It is also a wonderful tool to help engage students in an academic topic.
Affirmative	I was able to write a grant last year for a Smartboard and this really allowed for those built-in movement breaks a lot of my students needed in order to stay focused, engaged and calm during a lesson. It allowed me to teach to all modalities.
Affirmative	I feel that the technology I use in the classroom prolongs the time on task for a specific lesson.
Affirmative	My students almost always choose technology (iPad) as a reward for positive behavior.
Affirmative	I am a support teacher without my own classroom. In the past when I had my own classroom I feel that technology was integral in keeping student interest. As a push in or pull out support it is much more limited as to what is done with technology.
Affirmative	... I have found that yes, technology is desirable and providing access to its use

	can most certainly reinforce expected behavior in students...
Affirmative	... I have found that the iPad has been much more successful in the short amount of time I have had it.
Neutral	I think students would benefit more from computers in that room that you could do research on and to complete create projects.
Negative	A few of my students have a negative reaction to computer use in the classroom when completing work on a site such as Study Island. They are easily frustrated due to technology in the building being outdated and not being able to use the laptop as say they would in the home setting where the internet service moves at a faster pace.
Negative	Today's students are so accustomed to technology that it does not phase them when being used in a lesson. It is not as impressive to them as it was say 7-8 years ago. Even using it as a reward can turn negative depending on their interest and what is allowed. Overall I don't believe technology plays any part in a student's behavior.

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Note. N = 19

### *Qualitative Strand Results*

Each of the questionnaire respondents had the option to provide his or her name and contact information (e-mail address) if they would be willing to participate in an interview. It was stated to the respondents that providing their personal and identifiable information was optional and not doing so would not have

an impact on their ability to participate in the questionnaire. Of the twenty respondents, sixteen provided their contact information. Each of the sixteen respondents received an email thanking them for their willingness to be contacted and asking for dates and times that would best fit their schedule in order to set up an interview. In total, seven respondents provided information to participate in an interview. One respondent was not able to participate due to a sudden family event. Ultimately, six respondents participated in an interview. Two participants were male and four were female. One participant indicated that he or she is currently teaching primary students (K – 2), four participants teach intermediate (3 – 6), and one participant indicated a caseload that spans K – 6. Within the cohort of interview participants, years of service as an emotional support teacher ranged from 1.5 – 20. Additionally, respondents represented school districts in both the central and southern regions of Bucks County.

*Respondents.* The interview protocol (Appendix C) was designed to gather more specific data regarding the perceptions of educators working with students identified with emotional disturbance and how technology plays a role, if at all, in behavior modification. Each respondent provided answers to the nine questions that were audio recorded and, later, transcribed. Common trends and themes emerged after reviewing each respondent's transcript and comparing to the other responses collected.

*Question 1: I'd like to learn a little bit about who you are, so how did you come to be a teacher working with students who are identified with emotional disturbance?*

Each respondent provided a brief history of their pathway to becoming a teacher

working with students identified with emotional disturbance. Of the six respondents, zero indicated that they intentionally became teachers for students with emotional disturbance. However, three of the respondents indicated that they prefer this position. Additionally, one of the respondents shared that he requested to return to the position after having had been moved to a general education classroom. A brief summary from each respondent is indicated below.

*R1.* Respondent One is a male intermediate teacher who has been teaching emotional support for six years of his career. He shared that “...even when I taught general education, I always gravitated towards the students that had, whether they were identified or not, had the emotional disturbances...”

*R2.* Respondent Two is a female elementary teacher who has been teaching emotional support for seven years of her career. She indicated that she works with students on in a K – 6 caseload. “...I think since I was in the third grade I’ve always wanted to grow up to be a teacher and I grew up with two siblings who were developmentally delayed, so that always kind of fostered my interest in (um) special education.”

*R3.* Respondent Three is a female primary teacher who has been teaching emotional support for three and a half years of her career. She shared that “...I worked with students from Christ’s Home for Children and I really wanted to help those kids and other kids like them...so I went back to school for my Master’s in Special Education.”

*R4.* Respondent Four is a male intermediate teacher who has been teaching emotional support for four years of his career. He shared that while not knowing he

specifically had an interest in emotional support, he “...found that (he) had an interest in the concept of human behavior, an interest in what motivates people, an interest in what drives people, and an interest in basically why people do what they do...”

R5. Respondent Five is a female intermediate teacher who has been teaching emotional support for all of her years as an educator. She shared that she began her career as a long term sub in an emotional support classroom and that when the other teacher “...resigned her position, I was brought on full time. Twenty years later, here I am teaching emotional support.”

R6. Respondent Six is a female intermediate teacher who has been teaching emotional support for one and a half years. She shared that she has been in the same district for fifteen years and has moved from general education to special education. “...I have really enjoyed working in the department (of special education)...I’ve now been in emotional support for the past year and a half.”

*Question 2: You provide instruction and case management for elementary-aged students identified with emotional disturbance. Do you find that your students behave more appropriately when they have a reward built in to their day? All six respondents indicated that they find that having a reward system contributes to improved behavior among their students.*

R1. Respondent One shared that every action has a consequence. “I’m trying to get ride of the stigma that consequences are automatically negative. You can have a positive consequence – it’s called a reward, but it’s a consequence to your actions.”

R2. Respondent Two indicated that “...the reward helps.” She shared that students earn points for their behavior and that, should a student not earn the points necessary to earn a reward that “it opens the bridge to talk about what can be done next time to make sure that (the reward is earned).”

R3. Respondent Three shared that she “definitely think(s) that students behave more appropriately when they have a reward building in to their day.” When probed further, the respondent shared that her students are motivated by a variety of options, and that the options change based on the topics being taught in school or dependent upon the season or general activities being offered throughout the school.

R4. Respondent Four shared that he utilizes primary and secondary reinforcers in his program. He shared that “...undoubtedly, reinforcements are necessary in the ES program.”

R5. Respondent Five shared that her “...entire day is worked around a rewards system.” However, she indicated that the technology is not always accessible, which poses a problem.

R6. Respondent Six stated that she feels that rewards do allow for students to behave more appropriately. Specifically, she shared that “each child is different, so they each have different expectations.”

*Question 3. What are some examples of rewards that you use with your students?*

Each of the six respondents provided examples of the specific types of rewards that they offer to their students. All six respondents indicated that they change, or

update, their reward system based on the individual students with whom they are working.

*R1.* Respondent One shared that he uses a token economy. He works with the support staff in his room to emphasize appropriate behavior and choices. “I try to have the adults who work in the room get a handful of tickets and put them in their pocket so that by the end of the day they are gone so they are constantly thinking about giving them out for positive behaviors.” The respondent shared that students may earn high-fives or verbal praise, as well as tickets to trade in to earn an opportunity to select from a menu of options. Students may select lunch with the teacher, Wii time, prizes from a box, free computer time, shoe-free classroom time, or snacks. Rewards carry different values in tickets. The Wii time prize carries the highest value. “It also teaches the kids that if they want to get to that, they have to manage their tickets.”

*R2.* Respondent Two shared that she “changes the reward system all the time and lets the kids know that they can work for lots of different things.” The respondent provided the following examples of rewards that she offers to her students: computer time, teacher helper with other classroom teachers, helpers as messengers with a school-based nutrition program.

*R3.* Respondent Three indicated that her use of rewards vary throughout the day based on that which reinforces her students. “Some of my students are reinforced by consumable items...while others are reinforced by numbers that represent the possibility to win a daily drawing...” The respondent also indicated



that she provides tokens so that students can purchase prizes from a school-based store at the end of each week.

*R4.* Respondent Four utilizes a daily point system with his students. When a student earns the expected number of points for the day, they can choose from prizes that range from a piece of candy to time on the iPad. The respondent shared that there are multiple levels of reward systems in place in his classroom. Ongoing, students earn tickets for displaying expected behaviors. These tickets can be traded in for iPad time, additional recess, or breaks. “There are opportunities to have gym time, laptop time, etc., so there are definitely many levels of reinforcement.”

*R5.* Respondent Five shared that she utilizes a prize box, distributes healthy snacks, and homework passes. Additionally, the respondent indicated that she provides opportunities for students to self-select a prize when they are caught doing something appropriate. “When I see them doing something good, I pass out these tickets, like raffle tickets, and they write their names on them. On Fridays, I pull two names and they get a tiny reward for doing something good.”

*R6.* Respondent Six shared that her students have an opportunity to go to a prize box on Fridays. Also, students can earn opportunities to have time on the iPad or to play with the miniature basketball net in the classroom. “Sometimes they use the computer as a break or as a reward.”

*Question 4. What is your background (comfort level) in technology use in the classroom?* Respondents revealed an array of levels of comfort insofar as understanding and working with various pieces of technology in their classrooms.

Specific examples of technology that is accessible to the teachers in their buildings played a role in their self-identified efficacy in use of the tools.

*R1.* Respondent One stated that “I feel very comfortable with technology.”

This respondent shared that he has transitioned from a chalkboard to a whiteboard projector, based on the updates in technology within his school and district. He indicated that he feels comfortable enough to work with any new program for a brief period of time and also shared that he believes he has the appropriate district support to help should he need assistance.

*R2.* Respondent Two has utilized an overhead projector in collaboration with her laptop to display activities. While working with an itinerant caseload and pushing in to classrooms, she indicated that she’s “...pretty comfortable (in) helping teachers use the laptops and iPads...” The respondent also shared that she finds that her students are very savvy with technology and that if she has a question, the students like to help. She shared that “...they also get that sense of pride.”

*R3.* Respondent Three shared that while she “loves using technology”, she also believes that “...things like an old-fashioned game can be just as reinforcing as an iPad for some of the students.” The respondent indicated that many of her students have the latest technology at home and so, at times, taking advantage of time to just sit and talk or play a game provides an opportunity for students to learn interpersonal skills. Further, the respondent shared that technology is good to have and that her classroom utilizes technology each day.

*R4.* Respondent Four self reports that he is “average to above average” when it comes to understanding technology. He indicated that his classroom makes use of

iPads, SmartBoard projector technology, and various technology tools, such as Power Point. The respondent indicated that he “...tries to use the technology for a purpose...and in many different forms.”

R5. Respondent Five shared that she “can help them to do research projects on the computer in the classroom...I can’t say I’m advanced on the computer, but I guess I’d say more intermediate.” The respondent further shared that her students will complete projects on the computers in her classroom if they did not finish them in their inclusion classrooms.

R6. Respondent Six shared that she “...is not as used to using technology in instruction.” The respondent shared that not every classroom in the school has a SmartBoard, and so she has not received training on that feature. She did share that teachers received iPads this school year and that there is a new capability to project from the laptop screen or iPad onto a larger surface for students to see.

*Question 5. How do you integrate technology in your lesson plans?* The responses to this question varied based on the amount and type of technology opportunities available to each of the respondents.

R1. Respondent One commented that he uses technology every day. “I don’t use markers,” he said. The respondent shared that not only does he make use of the whiteboard projector, he also integrates individual student computer time on a daily basis. By creating twenty-minute rotations for centers, students are afforded an opportunity to transition multiple times within a subject block. Within the rotations, there is choice for the students. The respondents shared that “...for students with emotional disturbances, control and choice are big for them.” The

respondent further shared that since he has developed an opportunity for self-selection and various rotations, "...it has helped out." Said the respondent, "The technology piece is pretty much evident throughout the day everywhere in the classroom."

*R2.* Respondent Two uses the computer to research apps and activities to supplement the programs that she is delivering in the classroom. Additionally, she indicated that not only does she show video clips as a motivator, she also converses with the computer technology teacher on a regular basis to learn about websites or apps that are being used in that classroom so she can find a way "...to coincide with the rewards system when (the students) request to use the iPads."

*R3.* Respondent Three discussed the various ways by which she makes use of the whiteboard projector for various lessons and interactive opportunities. One student, in particular, displays appropriate behaviors when he has the opportunity to use the pen to turn the pages with the literacy program. "...(T)hat has helped him to have less of an aversion to the literacy program we have...and it also helps him to have that leadership opportunity he's looking for." Additionally, the respondent shared that she demonstrates full group lessons and activities on the whiteboard with the projector and then has students work independently, either at their desks or on a personal computer.

*R4.* Respondent Four reiterated his response from the previous question, indicating that he makes use of various programs on the computer, such as Power Point, to not only teach lessons with the students, but to teach them how to use those programs to enhance their learning. Furthermore, the respondent also makes

use of various applications on the iPad “...for sort of a practice so the kids can kind of independently work.”

R5. Respondent Five shared that her students use the computers for research projects. Specifically, the respondent shared that she uses the computers so that students can take virtual trips to see locations that otherwise they may not have an opportunity to see. “The students do some research and we go on the computer to help with the report, doing more research, typing up the report, and seeing pictures.”

R6. Respondent Six makes use of the iPad to review basic skills and facts with her students. The respondent reported that while not all technology in the school is great, “...having the iPad this year has been really awesome because my kids really like to use it.”

*Question 6. Do your students have an option to use technology throughout the day?* Each respondent provided examples of technology that are utilized in their classrooms within their responses for previous questions. With this question, respondents were asked to speak to what their students have access to and use throughout the school day. Five out of the six respondents indicated that the iPad is a tool that is used by the students in the classroom.

R1. Respondent One indicated that beyond that which he had already shared, he is actively researching for apps on the iPad that will help his students with their spelling. “When they do a writing piece, let’s be honest, the dictionary is out of date for them. And, for them to look up a word, it actually frustrates them more and

wastes more time.” Therefore, the respondent shared that he has been integrating the iPad in his editing checklist as part of the writing process.

*R2.* Respondent Two shared that her students often make use of either laptops or iPads in the classroom. “...I have a feeling they have a good sense of technology starting in kindergarten all the way through sixth grade.”

*R3.* Respondent Three spoke specifically about one student with whom she is currently working to improve social skills. “I have one student who actually prefers to not go outside and play with other students...so as we are building up social skills during recess time, she brings in one friend and plays on the iPad together.”

*R4.* Respondent Four indicated that he did not have much more to share by way of technology access. He did share, though, that “...the choices are key in the forms of technology.”

*R5.* Respondent Five stated that her students “...have certain specific times when they do (have access to technology).” She provides a ten-minute reward for each student to use a piece of technology after they have completed a full block of academic work. Additionally, the respondent indicated that she finds that the use of technology allows for her students to see stories in color, which is “...helping them with their comprehension skills.”

*R6.* Respondent Six has five laptops and one iPad in her classroom that she indicated are available for student use throughout the day. “The iPad works better for them,” she stated. Additionally, this respondent services students who are included in general education classes, so she made note that some of those classrooms have access to SmartBoards and others do not.

*Question 7. Are there pieces of technology that your students prefer over others?* The recurring theme throughout the responses for this question indicate that the preference for a piece of technology is based on the individual student as opposed to an entire class.

*R1.* Respondent One summarized his thoughts by stating, “I think it’s really day to day, student to student, and it might even be morning to afternoon, so it all depends on how they are feeling and what all is going on.”

*R2.* Respondent Two shared that her students “...definitely prefer the newer technology.” Her students are afforded the use of a computer lab, laptop carts and iPads.

*R3.* Respondent Three explained that her students consistently request to use the speakers in the classroom. “This group of students loves to sing and they love to dance and that is their comfort...”

*R4.* Respondent Four stated that “the iPad is top tier.” While the students have opportunities to use other pieces of technology, such as netbooks and a Surface Pro, the respondent believes that the iPad is the students’ top choice.

*R5.* Respondent Five indicated that she believes “...all of the students would take a laptop computer over the iPad.” In her response, she indicated that her iPad does not have a variety of applications downloaded on to it, while her laptops are accessible to the Internet, so students can navigate to a site that they want more easily. “They ask if they can play a game on the computer, so often times I give them some time to play a game if they do the work that I ask them to do.”

R6. Respondent Six quickly responded, “yeah, they prefer the iPad.” She also shared that, at times, she’ll permit her students to listen to music on their phones, so long as they have headphones to keep from distracting the other students.

*Question 8. Do you feel that the use of technology in your classroom has contributed to your students exhibiting desirable behaviors?* All six respondents indicated that they do, in fact, feel that the use of technology in the classroom has contributed to the students exhibiting desirable behaviors.

R1. Respondent One agreed with the question with a response of “100%.” Additionally, he shared that “I think that without it (technology), not to say that I could not achieve the same results, I just think it would be a lot harder...I don’t think I could have my students be as independent.”

R2. Respondent Two shared that “...it’s definitely working for my older ones.” As this respondent works with a range of students, she shared that her older students are actively displaying modifications to their behaviors, while her younger students still view the use of the iPad or laptop as a toy.

R3. Respondent Three spoke to the challenge that exists in finding what exactly can be used to reinforce students’ behaviors, as it is never the same response for every student or every situation. However, she shared that “...once I was able to find out what motivated them and what reinforced behaviors, I integrated it (technology) into my day and I have found that their behaviors have changed overall.”

R4. Respondent Four quickly shared that he agreed “undoubtedly” that technology has contributed to his students displaying desirable behaviors. More



specifically, he shared, “I think that they (technology pieces) are desirable because it is the expectation of today’s culture. They (the students) are conditioned for technology. If they (the technology) are removed, the potency to influence would be less.”

R5. Respondent Five indicated “yes” to the question. Further, she shared that she has a student this year that really only responds to the computer and technology as a method for behavior modification.

R6. Respondent Six responded affirmatively to the question. She also stated, “I feel that sometimes I wouldn’t be able to survive without it (technology).”

*Question 9. Is there anything else that you might find helpful for me to know?*

The final question afforded the respondents the opportunity to share any additional information regarding emotional support students and the use of technology insofar as a tool for behavior modification. Five of the six respondents provided additional information to conclude the interview.

R1. Respondent One shared that, while he believes technology has greatly aided in his students’ demonstrating desirable behaviors, he also feels that “it has caused slight problems from time to time.” He stated that there are times when students do not want to get off of the technology when required to do so. “My motto in here is that if you can’t handle the responsibility of logging off, then you can’t handle the responsibility of logging on.” To work with students who are less than willing to transition from the technology to the next activity, the respondent has modified his approach by counting up to a certain number, as opposed to counting down. “I also realized that if I count up it’s a different effect than if I count down.

Counting down was almost like counting down to an explosion. I feel that there is less anxiety, frustration or anger when I count up.”

*R2.* Respondent Two stated that “...there is so much out there that can be beneficial not only in academics but also for behavior.”

*R3.* Respondent Three indicated that she had nothing more to add.

*R4.* Respondent Four shared that he feels “it’s hard to find research on technology and emotional disturbance. This could be a very powerful tool going forward.”

*R5.* Respondent Five stated that her “classroom is built around the reward system. This has contributed to the most success in all my years.” Using technology as a part of the reward system has provided students with tangible and current options. This respondent shared that the students with whom she is working have much more emotional disturbance than the students with whom she worked just fifteen years ago. Having technology available to integrate within the classroom and within the reward system has been beneficial.

*R6.* Respondent Six shared that she thinks “...technology is amazing...” and indicated that, for the most part, having it available for students has helped with their behaviors. She did share that, at times, there is a concern when students become frustrated because the speed of the Internet or the accessibility of some of the applications is compromised. Other than that, the respondent indicated, “...this is really good for them.”

## *Summary*

A quantitative method (online questionnaire) and a qualitative method (personal interviews) were utilized in this mixed methods study. Ten school districts in Bucks County, Pennsylvania were represented in the study, as twenty elementary school teachers responded to the online questionnaire. Over 70% of the respondents indicated that their perception is that students with emotional disturbance display desirable behaviors when they have the opportunity to earn time with technology.

The data collected from the questionnaire was used to ensure an appropriate sample size and representative cohort of teachers were included in the study. Additionally, as respondents individually volunteered their contact information to participate in an interview, those interviews took place concurrent to the questionnaire being open for additional responses. To that end, interviews were conducted and those responses were compared to the data collected from the questionnaire to ensure validity.

Six respondents to the questionnaire were able to participate in an interview to further discuss their perceptions about technology and its use in eliciting desirable behaviors within students identified with emotional disturbance. 100% of the interview participants indicated that they perceive that technology has a positive impact on the behaviors that their students display. Chapter 5 will further discuss the summary of the study, as well as provide a discussion to lead to further research in the field.

## CHAPTER 5

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### *Summary*

The purpose of this study was to collect perception data from elementary educators who work with students identified with emotional disturbance to determine if they believe that their students display desirable and appropriate behaviors when they have technology accessible for use. To accomplish that goal, it was first important to provide research in the literature review about emotional disturbance and technology in elementary schools. While research exists that speaks to specific pieces of technology employed within a study for behavior modification, this study aimed to add to the body of research to include the perceptions of the educators who work with students. Therefore, this chapter will provide a discussion of the findings, limitations of the study, recommendations based on the study conducted, and a conclusion.

Data were collected using two methods: a questionnaire (online) and an interview (personal), both of which took place during the fall of 2015. A questionnaire (Appendix B) was sent to thirty-five public school elementary teachers in Bucks County, Pennsylvania. Each of these teachers was identified as working with students with emotional disturbance. Of those thirty-five, twenty responded to the questionnaire, resulting in a response rate of 57.1%. These teachers were asked to respond to questions regarding their demographics (years of service as an educator, years specifically working with emotional support, grade levels with which they work, and school district). Additionally, and correlated to

research questions posited in the first chapter of the dissertation, respondents were asked to provide information regarding the types of technology available in their classrooms. Additionally, respondents were asked to respond to a Likert scale to determine their perceptions as to their students' display of appropriate behaviors when technology was made available in a lesson, when the students have the opportunity to utilize the technology in the lesson/class, and when the technology is embedded within a reward system/behavior plan.

The second method by which data were collected was through interviews. Six respondents participated in the nine-question interview (Appendix C). This qualitative component of the study intended to secure background information about each of the respondents, including the path they took to becoming a teacher of emotional support. The interview protocol was specifically designed in such a way that respondents were not lead to talking specifically about technology as a reward. It was after a discussion about rewards that the topic of technology access and use, as well as perceptions of its impact on behavior modification was discussed.

### *Discussion*

The intended research question for the study, as indicated in Chapter 1, was:

Do teachers believe that their students with emotional disturbance behave more appropriately when technology is introduced as a tool for work and/or as a reward? If so, do they find that expected tasks are accomplished? If not, do they find that the use of technology does not have an impact on a student's focus and behavior modification to demonstrate desirable behaviors?

The information gathered from the study, both from the questionnaire and the interview, indicates that technology does have an impact on desirable behaviors. The perceptions of the respondents to the study show that students demonstrate desirable behaviors when technology is available for use, whether in the classroom during a lesson or when integrated into a behavior plan as a reward.

While Chapter 2 revealed that there is significant research on technology in schools and a number of case studies that research the implementation of a piece of technology with a student identified with emotional disturbance, the field of research for the use of technology for behavior modification is burgeoning. In a society that is permeated by technology, coupled with contemporary students who do not know a world without the Internet, it will be critical that ongoing research takes place to make recommendations and to influence how we are educating our students, with a goal to teach academics, and, at the same time, to elicit appropriate and desirable behaviors.

None of the respondents to the questionnaire indicated that they disagree or strongly disagree to the following statement: I find that my students display appropriate/desirable building/school expectations when they have the ability to utilize technology if they earn the option to do so as part of a behavior plan or classroom reward. The overwhelming majority of respondents selected the options of either “agree” or “strongly agree”. These data show that technology does play a role in student behavior modification and, ultimately, it is important that teachers have access to technology in order to incorporate it into their classrooms and behavior plans. Additionally, as was shared during the interviews, it is crucial that if

technology is available for use that there are options so that if something is not working or access is limited that the teacher has the ability to monitor and adjust. Especially when working with students who are identified with emotional disturbance, it is critical that teachers are explicit with options and that they are able to provide what they say they can provide. As one respondent indicated, “The program or technology is too slow or the program froze so, sometimes, it can hinder...”

Six of the educators participated in an interview, in an effort to garner further information about their perceptions regarding technology and its impact on eliciting desirable behaviors. The prevailing response was that all six respondents find that having technology available for use does, in fact, elicit desirable behaviors among their students. Each of the respondents did speak to their implementation of a token economy system in the classroom, as well. While the format for each system was unique to the respondent and his/her students, each included technology as a reward option for the students. This was above and beyond the daily use of technology to complete lessons or activities.

The majority of interview participants also shared that, while they find technology to be very important and to have had a positive impact on their students’ behaviors, they have also had to implement strategies to conclude technology use, whether as part of the lesson or as a reward. One respondent stated that he reminds the students of the notion that “if they can’t handle the responsibility of logging off the computer/device, then they can’t handle the responsibility of logging on.” He indicated that he reminds his students of this, especially when there is

reward time built in, as it can be a challenge for some students to transition from a desirable activity to one that may be less desirable. A number of respondents also shared the concept of explicit time reminders for their students and transitions from one activity to the next.

An additional common theme that was present throughout the interviews was that teachers indicated that no one piece of technology was necessarily the best for each of their students. While the questionnaire data showed that the most common piece of technology in the classrooms was an iPad, not each of the participants in the interview indicated that the iPad is the top choice for their students. Rather, just as unique as each student is, so, too, is his/her choice in the technology that they utilize. This shows that having a variety of pieces of technology in the emotional support classroom will better serve the students and teacher in that learning environment. As one participant indicated, "it is the element of choice and the perception of control that also contributes to a student with emotional disturbance completing expectations."

One may question why the data showed that the most common piece of technology in the classrooms was an iPad. In contemporary society, there seems to be either the use of Apple products or Google products in public education. Depending on the Board of Education and the direction of the Director of Technology for the district will dictate which company is prolific throughout the schools. In all instances with the interview, the teachers had access to iPads in their classrooms. Additionally, until recently, the iPad was a product that was common not only in schools but in homes. With students having an understanding of how to



manipulate the technology, it is possible that this is a reason that they find the iPad to be desirable. Future studies may wish to look at the actual use of apps and materials on the iPad to determine if there is a correlation between a student's desire to use the tool and self-efficacy.

In examining the data, it was evident that the respondents to the questionnaire and the participants in the interview perceive that technology in the emotional support classroom is beneficial in having students in those learning spaces rise to the challenges of completing tasks and displaying desirable behaviors. As educators working in emotional support classrooms continue to monitor and adjust their rewards systems and behavior plans, they will look to implement a variety of technology options, keeping in mind that no one option may be effective for all students.

### *Conclusion*

The ultimate goal of this research was to provide an opportunity for elementary school educators who work with students identified with emotional disturbance to share their perceptions about the use of technology and if they believe that technology has a positive impact on desirable behaviors. An on-line questionnaire and a live interview were the two methods used by which to secure responses for this study.

Through the use of a questionnaire, to which twenty of the potential thirty-five respondents answered, questions were asked to garner demographic information about the respondents in order to secure representation from all levels of elementary school grades, as well as geographic diversity throughout Bucks

County. In all, ten of the thirteen public school districts were represented in the study. A series of questions were also asked of the respondents in order to determine access to technology in their classrooms. 100% of respondents indicated that they have multiple forms of technology available for use in their classrooms. Additionally, questions were asked for respondents to use a Likert scale regarding the perceived effectiveness of technology as a motivator to elicit desirable behaviors. At least 50% of respondents indicated that their perception is that when technology is used in a lesson, students demonstrate desirable behaviors. Further, over 70% of respondents indicated that their perception is that when students can earn the use of technology within a reward system, desirable behaviors are displayed by the students. These findings support the use of technology within reward systems. Further research can be done to determine effective strategies for the implementation of technology within reward systems.

The qualitative strand of the research included an interview with six respondents who indicated in the questionnaire that they would be willing to participate in the interview. Each of the respondents had the opportunity to more specifically share their perceptions of the effectiveness of technology as a motivator to elicit desirable behaviors through responses to questions that were designed to speak to individual classrooms and experiences. The results of the interviews showed that not only does having technology available for use in lessons, as well as for use within rewards systems provide for behavior management, so, too, does having options of technology. More than one respondent indicated that students gravitate towards the newest devices. As schools continue to evolve with the

technology offerings they provide, it will be important to keep in mind that students are digital natives and that what is being used within the school should mirror contemporary society. As was indicated in the research, there is not one piece of technology that fits every single student. Therefore, it is important for educators to remember that just like each student is unique, so, too, is each device of technology. Having options available in the classroom will result in greater success.

Additionally, as school boards are faced with fiduciary responsibility, it will be important that they and district administration recognize that students identified with emotional disturbance are more likely to display appropriate and desirable behaviors when they have access to technology. The educators who work closest with these elementary students have validated this to be fact.

It is important to keep in mind, however, that this study's intention was to identify the perceptions of educators as they saw how their students reacted to the use of technology. The study did not intend to identify specific use of technology nor the educational merit of the technology use. Additional studies may wish to look at student technology use to determine the specific programs being utilized, or, even, to determine if the technology itself is the "x" that is motivating the students to demonstrate desirable behaviors. Given that today's students are digital natives, an additional study may wish to look at the use of technology through the lens of the user, the contemporary student, to identify whether or not it is actually the technology that is the motivator.

### *Limitations*

The information that was garnered from the study provides a rich set of data to support the use of technology in behavior modification for elementary-aged students identified with emotional disturbance. Of the twenty public school teachers who responded to the questionnaire, 79% indicated that they either strongly agree or agree with the statement that desirable behaviors are elicited by students when they earn the use of technology as a reward system. While this response is favorable, only ten of the thirteen public school districts in Bucks County were included in the study. Two of the districts responded to a request to participate by indicating that they do not have emotional support programs. A third district responded after a few attempts at contact by sharing that they do not classify students in this program. Therefore, the responses garnered, while the majority of respondents were in agreement, do not necessarily represent the entire public school system in the County.

While there is an innate understanding as to what a desirable behavior is for an elementary school student, a limitation of this study is that there is not a definition provided that describes what, exactly, contributes to desirable behavior. Is the desirable behavior different for a student based on his/her specific learning and/or behavior goals? The assumption of this study is that a desirable behavior for an elementary school student with emotional disturbance is the same as a desirable behavior for any elementary school student. However, any further studies may wish to further explain what constitutes a desirable behavior and, possibly, correlate

specific rewards and technology to modifying specific behaviors within that definition.

Another limitation is the method by which the questionnaire was distributed. Utilizing an online portal to complete the questionnaire, while assuming that each potential respondent had access to complete the questionnaire, it must be noted that there is potential for increased response had the questionnaire been disseminated in another fashion.

An additional limitation to the questionnaire was that it requested information regarding technology accessible for use for both the teacher and the students. Each district and, in some cases, individual schools, may find that they have varying levels of accessibility to technology. It is possible that potential respondents did not participate because they did not perceive that the access to technology they have (or don't) would benefit the study.

Finally, the timing of the interview process took place during the months of November and December. While school is in session and not a factor in the timing, it was possible that potential respondents were not able to participate due to personal commitments given the various school-based activities (conferences, concerts), holidays and celebrations that take place during this time period. Taking into consideration the time of year when the interviews are being offered may benefit a researcher in garnering a greater response rate.

In conclusion, should a future researcher take these recommendations into consideration, it is possible that even more robust data can be collected regarding

the use of technology with elementary-aged students identified with emotional disturbance and the use of technology as a form of behavior modification.

#### *Recommendations for Future Research*

There are a number of modifications that a researcher may wish to explore when further developing this study. The current study is geographically isolated in that it focuses on one county in the state of Pennsylvania. While there are thirteen public school districts in Bucks County, there are 500 public school districts in the Commonwealth of Pennsylvania. A larger sample size may help the researcher to identify pieces of technology that contribute to desirable behaviors with even greater specificity. Further, having respondents who represent districts from across the Commonwealth participate in an interview may provide for a richer data set.

Another recommendation for future research would be to greater specify the questions that are asked in the interview protocol. Often, respondents would speak freely, as was the intention, but, in doing so, would provide a response to a question that, ultimately, answered more than one of the protocol questions. Reviewing the current protocol questions and subsequent responses would benefit a future researcher so that more specific questions could be crafted.

Also, a future study may wish to explore the ethical decision-making that takes place when it comes to how teachers are working to modify behaviors in their classrooms. It is possible that one may view the use of technology as a reward to be in conflict with his or her ethical standards. In a classroom, how are students being offered the opportunity to use newer technologies and what impact does that have

on the overall program of studies? A limitation would exist if a family has decided that they do not want their child to make use of technology at school. If this were the case, how would the teacher go about designing a reward system that is fair and accessible for the student, while peers are provided with the option to use technology? Again, these questions would serve as focus questions in a study that examines the use of technology from a lens of ethical decision-making.

Also, future researchers may benefit from participating in observations of classrooms. Taking time to observe technology being utilized in the emotional support classroom would provide an additional data set. Ultimately, this additional component could make the findings and correlations even stronger.

Finally, focusing on a very specific population of students within an elementary school setting may provide insight as to best practices that may work with a greater population of students. A future study may further this research by conducting surveys and interviews with classroom teachers, as well as observations of student behavior in what are considered general education classrooms. In doing so, results may indicate that schools should ensure access to a variety of technology.

## REFLECTION

The awe-inspiring task of selecting a very specific topic to research was, in fact, overwhelming at first. However, with guidance and support from my professors, colleagues and friends, I was able to focus on a population of educators for whom I have great respect and a cohort of students that I want to see be as successful as possible. Not only did the process of researching, writing, developing the study and synthesizing it all prove to be important in my life as a doctoral student, so, too, did the entire process have a great impact on who I am as an educational leader. It took a great deal of effort to balance my work as a school Principal and as a student researcher. Ultimately, the work that I have done on this project has made me a stronger leader.

For me, the opportunity to converse with emotional support teachers was, in a single word, awesome. To hear the passion that each individual has for what they do each and every day, and the dedication they exude in their efforts to break the learning and emotional barriers that the students with whom they work face daily has validated the respect I have always had for all educators. Specifically, however, I am humbled by the wherewithal that this particular group of teachers, collectively, demonstrates. While there are many challenges that face students, teachers and schools, it is reaffirming to know that some of our most needy children are being instructed and cared for by very dedicated teachers.

While difficult as it was to maintain focus and effectiveness in all areas of my life, as a doctoral student researcher and as a Principal, I can now continue my career as a stronger educational leader with a reaffirmation that good teachers are



doing great things for our boys and girls. As a leader, I look to celebrate the successes and support the pitfalls of the teachers with whom I work and the students that we all serve.

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## Appendix A - E-mail to Prospective Respondents

Dear Bucks County Educator Colleagues,

I am inviting you to participate in a study I am conducting for my doctoral dissertation on the topic of technology in the emotional support classroom. I am interested in learning about the perceptions of educators (classroom teachers) who work with students with emotional disturbance as to whether or not they feel that using technology in the classroom as either a reward or an option as part of a behavior plan has a positive effect on eliciting desirable behaviors among their students. I am asking for your participation because you can provide valuable insight based on your experience in the education of students with emotional disturbance.

The title of my study is “Does Technology Elicit Desired Behaviors in Emotionally Disturbed Students?: Perceptions of Elementary Educators”. This study is important because a better understanding of this phenomenon may allow school districts to appropriate funding to classrooms that educate students with emotional disturbance in order to outfit those learning spaces with ample technology.

The information you provide will help me to understand both your perspective on this topic, as well as understanding the process of conducting qualitative research. You may choose to not participate or stop participation at any time, without negatively affecting your relationship with me, school personnel, evaluations, or Temple University. If you choose to participate, rest assured that strict measures have been taken to ensure the confidentiality of your responses.

Participation is voluntary and will include the following:

- Participation in an on-line survey, not to exceed 30 minutes.
- Voluntary participation in a subsequent interview, face-to-face, to discuss specific examples of your perceptions in working with technology, emotional disturbance, and desirable behaviors.
- The interview will take place at a mutually agreeable, public location and will last no longer than one hour.

As the researcher, I will keep all information resulting from the survey and the interview confidential. Note that no names or any other identifying information will be used in the results of this study. Do note that the names of the school districts in which each respondent teaches will be shared in the context of the findings; however, there will be no responses that will tie a district or teacher to a specific response. The purpose of noting district names is to demonstrate accuracy in location, as only public school districts in Bucks County, Pennsylvania are being asked to participate in this study. Also you can, at your discretion, withdraw from this study at any time. If you chose to withdraw, I will destroy any information collected from you up to that point. No one will have access to your confidential

responses except me and the professor supervising this project, Dr. Vivian Ikpa (Vivian.ikpa@temple.edu) .

I am an administrator in the Centennial School District; however, please know that this study is being conducted for research purposes for my doctoral degree at Temple University. As such, your responses will not be used in any professional evaluation nor will it affect your relationship with school district personnel or me. My role in this study is as a Temple student researcher. Although the information you provide may be used in future research projects, or professional presentations, your identity and any information you provide will remain completely confidential.

This study protocol has been approved by Temple University's Institutional Review Board (IRB) Committee. To make sure that this research continues to protect your rights and minimize your risk the IRB reserves the rights to examine and evaluate the data and research protocols involved in this project. If you want additional information regarding your rights in this study please contact the Temple University Institutional Review Board at (215) 707-3390 or e-mail them at: [irb@temple.edu](mailto:irb@temple.edu).

Thank you for considering participation in this study. If you wish to participate, please click on the link below:

<http://www.questionpro.co/t/ALmHWZS5b3>

Respectfully,

Michael W. Donnelly  
Doctoral Student  
Temple University

## **Appendix B –Questionnaire Protocol**

### Directions for Participants

Thank you for taking time to participate in this questionnaire. As indicated in the initial e-mail correspondence you received, participation in this questionnaire is completely voluntary and anonymous. You may choose to answer question one with your name and provide your email address in question twelve if you would be willing to have me contact you to participate in a one-hour or less face-to-face interview about this same topic.

Please respond to the following twelve questions to the best of your ability. Your responses will be kept confidential and will only be viewed by me, the researcher. An analysis of the data collected will be shared with my advisor, Dr. Vivian Ikpa, and my Dissertation Committee, as the data are presented within the body of dissertation. Your responses will not be directly tied to your name at any time throughout the data collection or analysis processes.

Should, at any point, you wish to discontinue the taking of the questionnaire, you may simply close out of the window and your responses will not be saved. Should you complete the questionnaire, I will collect the data and will compare them to other respondents. These data will be analyzed and presented within my dissertation.

Again, thank you for taking some time to respond to these twelve questions. Your input is invaluable.

## Questionnaire Protocol

1. (Optional) What is your name?
2. In which public school district do you work?
3. Please select all of the grade levels with which you work: Kindergarten, First Grade, Second Grade, Third Grade, Fourth Grade, Fifth Grade, Sixth Grade
4. Please select the range of years of service you have been employed as a teacher: 0 -5 years, 6 – 10 years, 11 – 15 years, 16 – 20 years, 21 – 25 years, 26 – 30 years, 30 – 35 years, 35 + years
5. Please indicate the number of years of service you have been employed as a teacher working with emotional support.
6. I have the following devices of technology available for use in my classroom:  
(select all that apply) Desktop computer, laptop computer, iPad, tablet, Kindle, interactive whiteboard, other (please list)
7. From that list in question 6, the one piece of technology that I find most sought after by my students is: (please respond with one item).
8. I find that my students display appropriate/desirable building/school expectations when technology is utilized in a lesson.  
Strongly Agree   Agree   Neither Agree nor Disagree   Disagree  
Strongly Disagree  
Please comment:
9. I find that my students display appropriate/desirable building/school expectations when they have the opportunity to utilize technology during a



lesson?      Strongly agree   Agree   Neither Agree nor Disagree   Disagree  
Strongly Disagree

10. I find that my students display appropriate/desirable building/school expectations when they have the ability to utilize technology if they earn the option to do so as part of a behavior plan or classroom reward? Strongly agree   Agree   Neither Agree nor Disagree   Disagree   Strongly Disagree

11. I believe that having technology accessible to me has contributed to my students' ability to display appropriate/desirable building/school expectations?   Strongly Agree   Agree   Neither Agree nor Disagree   Disagree   Strongly Disagree

12. Is there anything else you would like to share about your perception regarding the impact using technology has on your students' behaviors?

13. If you would agree to participate in an interview about this topic, please indicate by providing your email address.

## **Appendix C - Interview Protocol**

### Directions to Participants

Thank you for taking time to participate in this interview. As indicated in the initial e-mail correspondence you received, participation in this interview is voluntary.

We will engage in a conversation with nine questions as our guide. As you respond, I will transcribe your responses, which will be kept confidential and will only be viewed by me, the researcher. An analysis of the data collected will be shared with my advisor, Dr. Vivian Ikpa, and my Dissertation Committee, as the data are presented within the body of dissertation. Your responses will not be directly tied to your name at any time throughout the data collection or analysis processes.

Should, at any point, you wish to discontinue participation in this interview, you may simply indicate so and the interview will be end. Should you complete the interview, I will collect the data and will compare it to other respondents and data collected from the questionnaires. These data will be analyzed and presented within my dissertation.

Again, thank you for taking some time to meet with me to participate in this interview. Your input is invaluable.

## Interview Protocol

1. I would like to learn a little bit about who you are. How did you come to be a teacher working with students identified with emotional disturbance?
2. You provide instruction and case management for elementary-aged students identified with emotional disturbance. Do you find that your students behave more appropriately when they have a reward built in to their day?
3. What are some examples of rewards that you use with your students?
4. What is your background in technology use in the classroom?
5. How do you integrate technology in your lesson plans?
6. Do your students have an option to use technology throughout the day?
7. Are there pieces of technology that your students prefer over others?
8. Do you feel that the use of technology in your classroom has contributed to your students exhibiting desirable behaviors?
9. Is there anything else that you might find helpful for me to know?

### Appendix D – Research Questions Matrix

Research Question	Corresponding Questionnaire/Interview Question
What are the types of technology that are currently available in the emotional support classroom?	OQ6 ; IQ6 ; IQ7
What are the options for use of technology that are currently provided to students?	OQ6 ; OQ11 ; IQ6 ; IQ7
Is the use of technology integrated into behavior support plans that are imbedded within the individualized education plan?	OQ9 ;
Do teachers believe that their students with emotional disturbance behave more appropriately when technology is introduced as a tool for work and/or as a reward?	OQ7 ; OQ8 ; OQ9 ; OQ10 ; IQ2 ; IQ3 ; IQ8

**OQ = Online Questionnaire**

**IQ = Interview Question**