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Kristi Louise Johnson
Brigham Young University

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in a Secondary School Setting

Kristi Louise Johnson

A thesis submitted to the faculty of
Brigham Young University
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Master of Science

Blake D. Hansen, Chair
Ellie L. Young
Betty Y. Ashbaker

Department of Counseling Psychology and Special Education

Brigham Young University

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ABSTRACT

Benefits of Peer Tutoring Students with Disabilities
in a Secondary School Setting

Kristi Louise Johnson
Department of Counseling Psychology and Special Education, BYU
Master of Science

Numerous studies have demonstrated the benefits peer tutoring provides to the tutee. However, studies measuring the benefits peer tutoring provides to the tutor are limited in quantity, detail, participant numbers and breadth. This study measured the benefits 151 peer tutors reported after peer tutoring for a semester in a special education class for students with severe disabilities. Peer tutors reported benefits in an essay response to the prompt: "What do you feel you have gained as a result of being a peer tutor?" The study identified the most common benefits obtained by peer tutors as measured by peer tutor generated responses of general peer-tutoring benefits. Findings suggest an extension of peer-tutoring benefits beyond the tutee exclusively and to the peer tutor.

ACKNOWLEDGMENTS

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DESCRIPTION OF THESIS STRUCTURE

This thesis, *Benefits of Peer Tutoring Students with Disabilities in a Secondary School Setting,* is presented in a hybrid or dual format. In this format, both traditional and journal publication formatting requirements are met.

The preliminary pages of the thesis reflect university requirements for thesis formatting and submission. The thesis report is presented as a journal article and conforms to the style requirements for future publication in education journals.

The literature review is included in Appendix A. Two reference lists are included in this thesis format. The first reference list includes only the references found in the first journal ready article. The second reference list includes all citations from the full literature review found in Appendix A. Peer tutor reading assignments are included in Appendix B. Data collection forms for coders are included in Appendix C and a breakdown of specific peer tutoring responsibilities is included in Appendix D.

Introduction

In spite of the widespread use of peer tutoring, where typical peers tutor students in self-contained classrooms, the most prominent research in peer tutoring measures the benefits students with mild disabilities or no disabilities receive as a result of class wide peer tutoring and peer tutoring in general education courses. Peer-tutoring research involving students with severe disabilities in self-contained, or near self-contained classrooms, provides insight into how peer tutoring benefits the tutee. However, studies measuring the benefits peer tutoring provides to the tutors of students with severe disabilities are limited in quantity, detail, participant numbers and breadth (Carter & Hughes, 2005; Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, Mathot-Buckner, Thorson, & Fister, 2001; Wilson, 1998).

Jones (2007), examined benefits peer tutoring provided to peer tutors by examining the impact of peer tutoring students with autism amongst 10- and 11-year-old student peer tutors. This study identified several benefits reported by the peer-tutoring population after answering a short questionnaire about their experience; for example, peer tutors reported increased self-confidence and pride in self, an increase in patience, knowledge of how to care for someone with a disability and an awareness of how lucky they were. However, the focus of this research concentrated on peer tutoring students with autism and a 10 to 11-year-old age group. Currently, the main focus of peer-tutoring research in a secondary setting focuses on the benefits students with disabilities receive as a result of being tutored by their same age peers.

Although some research does mention peer tutor satisfaction and perceived relevance of peer tutoring, no research was found exploring specific benefits received by peer tutors in a secondary setting (Gurry, 1984; Wilson, 1998). There has been a focus on changes in perception of individuals with severe disabilities (Roberts & Smith, 1999); however, research examining

free response, non-limited peer tutor perception of benefit has not been measured. In order to gain a more adequate and thorough understanding of the benefits provided by including typically functioning students with their peers in severe special education classes, it is necessary to examine the benefits typically functioning students (peer tutors) receive, not solely the benefits provided to students with disabilities.

Literature Review

Peer tutoring is often implemented in a wide variety of ways. Typically, a peer-tutoring program is tailored to meet the specific needs of a schools' population and culture. Peer tutoring may consist of peer tutors assisting students with significant disabilities in general education classes (McDonnell, Mathot-Buckner, Thorson & Fister, 2001). Other school situations may warrant peer tutoring in a setting where mainstream peer tutors help students with disabilities in a self-contained setting. Although peer tutoring generally occurs in a wide variety of settings, most research conducted on peer tutoring is focused on class-wide peer tutoring and peer tutoring in a general education setting (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, Mathot-Buckner, Thorson & Fister, 2001; Wilson, 1998). Furthermore, the majority of the research regarding peer tutoring focuses on the benefits tutees receive as a result of being paired with their same age peers (Carter & Hughes, 2005).

Research suggests that peer tutoring in general education settings increases tutee acquisition of skills, performance and retention. This is thought to be the result of peer reinforcement, social validation, and instruction (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990). Although a great deal of research regarding peer tutoring is focused on general education classrooms, with students who are merely behind or have mild/moderate

disabilities, it is thought that peer tutors provide similar benefits to peers in self-contained classrooms for students with severe disabilities.

Carter and Hughes (2005) facilitated and examined interactions between students with disabilities and students without disabilities. The results of this study indicated that students with disabilities benefit from social interaction with their same-age peers. However, they also report that in secondary settings these interactions are rare and sporadic and that increased social interactions with typical same age peers are beneficial for students with disabilities. This research identifies a focus, primarily, on increased social interactions and instruction and calls for additional research regarding the relationships developed as a result of peer tutoring and interactions.

The reported goal of this research is ultimately to add to current research regarding meaningful relationships, not solely to increase causal interactions. Peer tutoring has been identified in general education classrooms as an appropriate and effective method for social skills training and increased peer interactions (Greenwood, 1997). Additional research is necessary to determine the benefits of increased interactions and peer tutoring.

Training, Instruction and Methods

Research suggested that peer tutors and peer assistants, with training, are able to effectively instruct and support peers or tutees with their acquisition of required skills. For example, Carter and Hughes (2005) reported that social skills interventions delivered by peer tutors were just as effective as when these interventions and skills are delivered by adults.

Research indicated that self-report measures regarding self-efficacy, perceptions of skill acquisition and performance were the highest predictors of performance (Pietsch, Walker & Chapman, 2003). Though their research highlighted benefits focusing on mathematics, it is

believed that self-report regarding performance of desired skills is an effective measure in other content areas such as peer tutoring.

Peer Tutor Perceptions

According to Wilson's (1998) training and analysis of students engaged in tutoring students with moderate to severe disabilities, students report positive feelings about participation in the peer-tutoring program, as did the students with disabilities. However, the program was not reported to help with acquisition of skills amongst tutees, and teacher perception of the benefits of peer tutoring was inconsistent. This suggested that there may have been self-perceived benefits to peer tutoring students with disabilities regardless of actual progress to the students being tutored. In addition, it has been reported that training peer tutors in behavior modification, individual student factors, emergency procedures, data-taking, one-on-one instruction, and desired tutee skills increases both acceptance and knowledge of students with severe special needs (Gurry, 1984).

Longwill and Kleinert (1998) addressed some of the unexpected benefits peer tutors received as a result of peer tutoring. Their study addressed peer tutors self-evaluations of performance in a peer-tutoring program and quoted a peer tutor's positive experience in the class. The study also noted that meaningful friendships were formed between tutors and tutees, which prompted essays about the importance of friendship, inclusion, and acceptance of all persons. However, the specific benefits of peer tutoring were not the main focus of the study and were not outlined in a quantifiable fashion.

Although these studies show that peer tutors reported peer tutoring to be beneficial, there was no real exploration of what those benefits were, other than a general report that peer tutoring was well received by peer tutors. By determining what benefits are most commonly received by

peer tutors, researchers and practitioners presumably will be able to more effectively support and justify the academic and social value of implementing peer tutoring in self-contained classrooms for students with severe disabilities in secondary settings.

Statement of Purpose

Although there is a great deal of research validating peer tutoring as an appropriate method and intervention for students with disabilities and students that are struggling, research focusing on peer tutor benefits, particularly in secondary severe special education settings, is extremely limited. After a thorough search of Education Resource Information Center (ERIC) and Google Scholar, one article was found to focus on the benefits peer tutors receive. This research focused solely on peer tutoring of students with autism, lasted for a term and was conducted with students between the ages of 10 and 11.

There is limited research on benefits for the peer tutor; also, there is limited research on peer tutoring students with severe disabilities in secondary settings. As a result, additional research needed to be conducted to target the benefits peer tutors received. This was thought to be necessary to better understand the benefits peer tutors received as a result of peer tutoring students with severe disabilities in a secondary setting.

Research Questions

This study examined the following questions:

1. What are peer tutors' self-perceived benefits of peer tutoring students in a secondary special education class for students with severe disabilities, as measured by a free response essay question?

2. Are there commonly reported benefits, which recur at a significant level amongst peer tutors following an experience or experiences peer tutoring in a secondary special education class for students with severe disabilities?

Method

Participants

All 151 participants were students (peer tutors) between the ages of 13 and 18. This sample was selected from students who had enrolled in a peer-tutoring class over the course of four years or eight semesters. Of the participants, 68 males and 48 females had taken the class only once, while 15 male and 20 female participants had taken the class multiple times. The process for referring non-disabled students to peer-tutoring classes was not consistent among the participants: some were referred by counselors, some by parent preference and registration, some by personal preference and registration, and the remainder by necessity due to the unavailability of other elective classes. Peer tutors automatically received elective credit for each semester they were enrolled in the class if they met the criteria to pass peer tutoring for that semester. Peer tutors were permitted to take the semester-long class multiple times according to their preference as long as their schedule and the school counselor approved. Each peer tutor's responses, regardless of how many times the individual had taken the class or how many essays the individual had written, were coded as a single response. For example, a male participant may have taken the course four times and written four essays identifying life and future skills developed through the course. In this instance, although the benefit would have been listed four times in four different essays, it would still be coded as a single peer tutor's report that he had gained skills for life and the future.

Participants' identifying information was removed by the supervising teacher prior to being coded to ensure confidentiality. The participants attended a secondary high school located in a suburban community in the Western portion of the United States. The school consisted of approximately 2,000 students comprising the following racial makeup: 69.5% White, 19.9%

Hispanic, 4.6% Asian, 2.6% Pacific Islander, 1.3% American Indian, 1.2% multiple races, and 0.9% African American/Black. In addition, English Language Learners made up 7.7% of the population, 33.8% of students were considered to have low socio-economic status, and 10.2% of the student population had disabilities.

Measures

Peer tutors were required to write a two-page paper responding to the writing prompt "What do you feel you have gained as a result of being a peer tutor?" The papers were required to be two pages formatted with 1-inch margins and written in 12-point Times New Roman font. These assignments were due at the end of each semester in which the peer tutor participated in the class. This measure was a pre-existing assignment that had been required for four years, or eight semesters, prior to the data coding for this study.

Because a pre-existing assignment was used to assess the self-perceived benefits of peer tutoring, essays from previous years were reviewed by the classroom teacher to determine the most common themes. Although much of this research was analyzed by quantifying commonly occurring responses, it was hypothesized that peer tutors may report unique benefits. These responses may have been uncommon amongst enrolled peer tutors as a whole, or may not have fit well in broad or subcategories. In order to account for these responses an "other" category was included as a broad category. See Appendix C.

Self-report measures have been used to measure intentions, attitudes, and relationships between typically functioning students and their peers with disabilities in school-age children (Roberts & Smith, 1999).

Procedures

Peer tutors received introductory instruction during the first week of each semester and were required to turn in a disclosure document protecting the confidentiality of students with disabilities. In addition, this document contained a brief outline of classroom responsibilities and grading breakdowns.

Peer tutor instructional training. During the first two weeks of each semester, all enrolled peer tutors received an hour to an hour and a half of training on Applied Behavior Analysis administered by the special education teacher presiding over the peer tutoring and special education class. Participation in this training session was a pre-existing assignment for the class. Proficiency was measured by the special education teacher through verbal assessment, peer review, role playing, and completion of a behavior simulation using the iPad application *Behavior Breakthroughs™* (Lowdermilk, Martinez, Pecina, Beccera, & Lowdermilk, 2012). The peer tutors also received additional training of 45 minutes to an hour on direct instruction and data collection, as well as training on the individual goals of the students they tutored. During this training, peer tutors were observed as they practiced these techniques with their fellow peer tutors and the special education teacher prior to assisting students with disabilities.

Peer tutor rules and procedures training. In addition to receiving training, the peer tutors were given instruction regarding classroom rules, expectations, learning targets, assignments, and their final projects. Peer tutors also reviewed school policies, the class description, and contact information of their supervising special education/peer-tutoring teacher.

For the purposes of this study, it was assumed that students receive some benefits when they participate in peer tutoring. The papers that participants wrote at the end of the semester evaluating their experiences as peer tutors were not examined for the purpose of establishing

whether or not peer tutors felt there were benefits resulting from peer tutoring, but instead were examined in order to identify what specific benefits the peer tutors reported.

Research Design

As a result of the qualitative factors used to identify common themes and assign meaning to those themes throughout this research, it was necessary to implement a qualitative data analysis design to code data. The peer tutors were required to report benefits by writing an essay in response to a prompt. Themes were identified by exploring and interpreting peer tutor responses. In addition, peer tutor responses were coded to identify the recurrence of commonly identified benefits.

This study examined papers written by 151 peer tutors describing the benefits acquired as a result of peer tutoring. Peer tutor responses were compiled, labeled, and anonymized. Each participant's responses were counted as the responses of a single participant, regardless of how many times that student had taken the class or how many essays that student had submitted.

Data were coded and responses were analyzed to determine common peer-tutoring benefits. In addition, methods were recorded to ensure that data was recorded consistently between coders and to ensure that information was accurate. Conclusions about research and meaning were derived by examining statements made by peer tutors in their final papers in response to the prompt "What do you feel you have gained as a result of being a peer tutor?"

Data Analysis

The existing peer tutor reflection papers were reviewed and anonymized by the classroom teacher who was also the primary researcher. These peer tutor reflection papers were reviewed to determine themes. All themes that had been noted were then listed in detail and grouped according to commonalities. These common theme groups were then listed as potential broad

category benefits, and subcategories were chosen based on the more detailed themes that correlated with the broad category themes. See Appendix C.

The primary researcher was also the supervising classroom teacher. Because of this opportunity for potential bias, the primary researcher did not code any of the data. Rather, two independent coders were trained by the primary researcher to count the frequency of themes throughout the peer tutor reflection papers. These coders were presented with a sample of 40 of the 151 papers and were asked to independently code the papers as they had been trained. Coders achieved an inter-rater reliability of 88%, which was measured by comparing their analyses of broad category benefits. More specifically, broad category benefits were summed and compared.

These coders then coded the frequency of themes in broad and subcategories throughout the remaining 151 peer tutor reflection papers. In addition, coders identified benefits that did not fall into a specific category and placed them in the "other" category, along with a comment identifying what was specifically identified as a benefit. Following the initial coding of themes, an analysis was written describing the percentages of occurrence for each code.

Results

This section is organized as follows. Each broad category and subcategory is identified. Each benefit section contains a quote from a peer tutor. Each peer tutor is referenced by his or her anonymized number. Males who participated in peer tutoring once were quoted as M00#, while females who participated in peer tutoring once were quoted as F00#. Male participants who took peer tutoring multiple times were quoted as MR0#, while female participants who took the peer tutoring multiple times were quoted as FR0#. Then an interpretation of the most significant results in each benefit category is discussed. The percentage of peer tutor who reported benefits in each category are outlined in tables by broad category and then subcategory.

Daily Benefits

Responses describing a "brightened" or "better" day, responses stating that peer tutoring provided a relief or reprieve from stress, and responses indicating that peer tutors had fun or enjoyed helping were each recorded as both a specific subcategory and a broad category of daily benefits. See Table 1 for coded category results. The following is an example of a daily benefit response coded under this category.

> "I look forward to this class so much for so many reasons but mostly because I know that seeing my peers always puts a smile on my face and instantly whatever seemed to start off as a 'bad' day was a distant memory, if not forgotten, at the end of the day."
>
> -MR07 – Male Repeat Participant

Overall, 83 out of 151 (55%) participants reported receiving some type of daily benefit. As outlined in Table 1, female repeat participants were the most likely to report some sort of daily benefit. The most commonly occurring subcategory of daily benefits was having a better or brightened day. The daily benefit of a better or brightened day may have the capacity to improve peer tutors' overall experience while at school. A better day suggests increased satisfaction with daily personal circumstances, which may help combat the recent decline in life satisfaction and increase in depression among adolescents (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009).

Table 1

Perceived Daily Benefit

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Daily Benefit	55%	50%	60%	50%	80%
Better/ brightened day	31%	16%	47%	29%	75%
Sanctuary /relief/ reprieve from daily stress	3%	3%	7%	2%	0%
I liked helping/I had fun helping	30%	37%	20%	27%	20%

Patience

Coders recorded the theme of patience when responses addressed the following benefits. Responses describing increased patience with self and responses reporting increased patience with and understanding for others were each recorded as both a specific subcategory and broad category of patience. See Table 2 for coded category results. The following is an example of a response coded under the patience category.

"Being the oldest, I've always had to help my younger siblings. But when it came to homework, I was the last person they would ask. First because I was a horrible teacher and second because I had a short temper. Being a peer tutor has helped me develop skills and strategies that I've used at home. A teaching strategy I learned this year is modeling…it's so effective, and I've used it at home to help my siblings and it's helped me to be more patient."

- F005 - Female Single Enrollment Participant

Overall, 79 out of 151 (53%) participants reported receiving increased patience. Table 2 outlines

the responses of each set of participants. Ultimately, both female and male repeat participants

were more likely to identify patience as a benefit than one-time participants. This may suggest

that perceived patience increases when peer tutors take the class more than once. This may

provide support for allowing peer tutors to take the same course more than once, as there are

added benefits that come from repetition. This also may suggest that participants who feel they

gain patience by taking the class are more likely to register for the class multiple times.

Table 2

Perceived Increases in Patience

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Patience	53%	40%	67%	60%	70%
Patience with self	2%	4%	0%	0%	0%
Patience with others/becoming more understanding	53%	40%	67%	60%	70%

Kindness

A number of themes were coded as both specific subcategories and broad category

kindness. These include responses describing increased desire to be kind subcategory, responses

reporting a feeling that the participant shouldn't judge others subcategory responses describing

increased desire to be empathetic, subcategory responses reporting increased selflessness, and

subcategory responses describing increased love for others subcategory. Increased love for others

was included under kindness because this increase in love for others was not specific to

increased love for students with disabilities; rather, increased love for others included both those

with disabilities and those without. In addition, this love for others was typically followed by

some sort of generalized action indicating that this love for others prompted the participant to do

something or demonstrate this increased love for others through kindness. Responses reporting a

desire to encourage others were also recorded as both a specific subcategory and broad category

kindness. See Table 3 for coded category results. The following is an example of a response

coded under the kindness category.

> "[Student] has taught me not to focus so much on myself but lose myself in helping those
>
> around me."
>
> -FR12 – Female Repeat Participant

Overall, 75 out of 151 (50%) participants reported receiving a benefit related to kindness.

Female participants, whether they had taken the class once or multiple times, were most likely to

report that they felt they had gained an increase in kindness or that they had become more kind

as a result of their participation in peer tutoring. As demonstrated in Table 3, the subcategory

benefits most frequently reported were an increased desire to be kind, an increased love for

others, and a feeling that the participant shouldn't judge others. In addition, male repeat

participants reported a high rate of increased selflessness. This increase in selflessness may

contribute to increased life satisfaction, wisdom, and overall well-being (Dambrun & Ricard,

2011).

Table 3

Perceived Increases in Kindness

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Kindness	50%	32%	53%	58%	85%
Gained desire to be kind	22%	12%	27%	19%	60%
Feeling like shouldn't judge others	20%	13%	27%	23%	30%
Increased desire to be empathetic	4%	3%	0%	4%	10%
Increased selflessness	8%	4%	20%	6%	15%
Love for others	22%	12%	27%	25%	45%
Desire to encourage others	1%	0%	0%	2%	5%

Skills for Life and Future

Coders recorded skills for life and future when responses addressed the following

benefits. Responses describing increased ability to deal with sibling conflicts were recorded as

both a specific subcategory and broad category skills for life and future. Responses reporting a

general increased ability to deal with conflict with others were recorded as both a specific

subcategory and broad category skills for life and future. Responses describing improved

communication skills were recorded as both a specific subcategory and broad category skills for

life and future. Responses reporting feeling more prepared for eventual parenthood were

recorded as both a specific subcategory and broad category skills for life and future. Responses describing increased problem solving skills were recorded as both a specific subcategory and broad category skills for life and future. Responses reporting increased leadership skills were recorded as both a specific subcategory and broad category skills for life and future. Responses reporting developing teaching and mentoring skills were recorded as both a specific subcategory and broad category skills for life and future. Responses describing learning to listen and be attentive were recorded as both a specific subcategory and broad category skills for life and future. Responses reporting general improved relationships, specifically interactions, were recorded as both a specific subcategory and broad category skills for life and future. See Table 4 for coded category results. The following is an example of a response coded under the skills for life and the future category.

> "Overall what I gained from this class is more than I could ever gain from another class to help me in my life. I've learned a great deal of patience. I've learned to be a good listener. These two are great qualities to have to communicate with people. I've learned to deal with the bad trials I've been given. These kids are a real inspiration to me."
>
> -MR13 – Male Repeat Participant

Overall, 75 out of 151 participants reported receiving skills for life and the future. As is noted in Table 4, around 50% of all participants reported learning skills for life and the future in their responses. Peer tutor training as well as opportunities to practice these skills with students with disabilities may have contributed to this perception of benefit. The most commonly reported subcategories were developing teaching and mentoring skills and improved communication skills. Peer tutors were trained in direct instruction and then were required to consult with adults about student behaviors and progress throughout their peer-tutoring experience. This perception

of relevance and acquisition of skills for the future may increase peer tutor investment and confidence in abilities to meet challenges that may occur in the future.

Table 4

Perceived Gains in Skills for Life and Future

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Skills for life and future	50%	47%	53%	50%	55%
Ability to deal with conflict with siblings	5%	3%	7%	8%	5%
Ability to deal with conflict (other)	1%	0%	7%	2%	0%
Improved communication skills	15%	10%	13%	17%	25%
Feel more prepared for parenthood	3%	6%	7%	0%	0%
Increased problem solving skills	2%	1%	7%	2%	0%
Increased leadership skills	6%	6%	7%	4%	10%
Developed teaching/mento-ring skills	36%	31%	27%	42%	50%
Learned to listen and pay attention	3%	1%	20%	0%	0%
Better general interactions with others	11%	15%	20%	8%	0%

Change in View of Disabilities

Coders recorded change in view of disabilities when responses addressed the following benefits. Responses describing less fear for people with disabilities were recorded as both a specific subcategory and broad category change in view of disabilities. Responses reporting more respect for people with disabilities were recorded as both a specific subcategory and broad category change in view of disabilities. Responses describing surprise or amazement when seeing the achievements of people with disabilities were recorded as both a specific subcategory and broad category change in view of disabilities. Responses reporting a realization that people with disabilities were smarter than the participant had initially thought were recorded as both a specific subcategory and broad category change in view of disabilities. Responses describing a newfound recognition of the individuality of students with disabilities were recorded as both a specific subcategory and broad category change in view of disabilities. See Table 5 for coded category results. The following is an example of a response coded under the change in view of disabilities category.

> "I have to be honest. My counselor practically forced me into this class. I asked him to please transfer me out of that class, I wasn't ready for the big responsibility of helping disabled children. I was so nervous. The first day I got scared, someone touched me to the degree I got uncomfortable. The next week after that I started getting excited, I wanted to see the kids and their smiles, something about them made me admire them. I actually wanted to go instead of skipping class with my friends. I was really surprised with myself."
>
> -F003 – Female Single Enrollment Participant

Overall, 75 out of 151 (50%) participants reported a change in view of disabilities. While half of all participants reported their views of students with disabilities changed, as demonstrated in Table 5, female repeat participants were most likely to report a change in view of disabilities. The most commonly occurring subcategories were recognition of the individuality of students with disabilities and an increase in respect for people with disabilities.

Table 5

Changes in View on Persons with Disabilities

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Change in view of disabilities	50%	49%	47%	44%	70%
Less fear for people with disabilities	7%	10%	7%	4%	0%
More respect	18%	16%	27%	13%	30%
Amazed at achievements	12%	7%	0%	6%	50%
Smarter than previously thought	12%	13%	7%	10%	15%
Recognition of individuality	21%	16%	27%	19%	35%

Increased Confidence, Friendships, Self-Worth

Coders recorded increased confidence, friendships and self-worth when responses addressed the following benefits. Responses describing increased confidence were recorded as both a specific subcategory and broad category increased confidence, friendships and self-worth. Responses reporting that the participant had gained friendships were recorded as both a specific

subcategory and broad category increased confidence, friendships and self-worth. Responses stating that participants felt loved and accepted were recorded as both a specific subcategory and broad category increased confidence, friendships and self-worth. Responses reporting that the participant felt like they had made a difference and helped others were recorded as both a specific subcategory and broad category increased confidence, friendships and self-worth. Responses describing increased self-worth were recorded as both a specific subcategory and broad category increased confidence, friendships and self-worth. Responses reporting that participants felt as though they were trusted were recorded as both a specific subcategory and broad category increased confidence, friendships and self-worth. See Table 6 for coded category results. The following is an example of a response coded under the increased confidence, friendships and self-worth category.

> "The last thing that I gained a lot of is friends. I love meeting new people and that is exactly what I did. The friendships that I made through the whole term I hope to keep throughout high school. Everyone is so easy to talk to and would listen to you, if you had a problem with literally anything. Some of the best memories that I have had this school year have been in Peer Tutor."

> -F008 – Female Single Enrollment Participant

Overall, 57 out of 151 (38%) participants reported increased confidence, friendships and self-worth. As outlined in Table 6, repeat participants were almost twice as likely to report an increase in confidence, friendships and self-worth. This suggests that participants who felt peer tutoring provided them with these benefits were more likely to register for the class again. It is also possible that these benefits are magnified with increased exposure to the class. The most frequently reported subcategory was increased friendships in general. Peer tutors reported an

increase in friendships with students with disabilities, other peer tutors, faculty and staff and other individuals outside the class, resulting from their increased confidence.

Table 6

Increased Confidence, Friendships, Self-worth

Comment	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Increased confidence, friendships, self-worth	38%	19%	73%	40%	70%
Increased confidence	11%	1%	20%	13%	30%
Gained friendships	28%	16%	60%	25%	50%
Feeling loved, accepted	4%	0%	7%	8%	5%
Feeling like they make/made a difference and helped	5%	3%	13%	4%	5%
Increased self-worth	3%	1%	0%	0%	15%
Feeling trusted	1%	1%	0%	2%	0%

Gratitude

Coders recorded gratitude when responses addressed the following benefits. Responses reporting gratitude for the opportunity to take the class were recorded as both a specific subcategory and broad category gratitude. Responses reporting gratitude for a healthy body were

recorded as both a specific subcategory and broad category gratitude. Responses reporting gratitude for personal situation were recorded as both a specific subcategory and broad category gratitude. Responses reporting gratitude for life were recorded as both a specific subcategory and broad category gratitude. Responses reporting gratitude for friendships, whether existing friendships or new friendships with students with disabilities, were recorded as both a specific subcategory and broad category gratitude. See Table 7 for coded category results. The following is an example of a response coded under the gratitude category.

"I love being a peer tutor because it makes my day so much better. I am so much more happy after class. It has helped me to [be] a lot less selfish and a lot more grateful. Many of the students I tutor cannot do the same things I am blessed to do. From being a peer tutor I have become a more humble person. It's amazing to me how happy everyone in the class is. They're not always down because they have some sort of disability. They have taught me to always make the best of what you have. No matter what!"

-MR11 – Male Repeat Participant

Overall, 57 out of 151 (38%) participants reported gaining some type of gratitude. Gratitude was reported most frequently by repeat participants, as reported in Table 7. The highest reported subcategory was gratitude for the opportunity to take the class. This gratitude, in some cases, referred to the logistic ability to take the class. In most instances, gratitude for the opportunity to take the class followed or preceded other identified benefits, indicating that this gratitude was correlated to other identified benefits.

Table 7

Perceived Increases in Gratitude

Participants	Overall participant	Male – single participant	Male – repeat participant	Female – single participant	Female – repeat participant
Gratitude	38%	29%	53%	35%	65%
Opportunity to take class	25%	10%	40%	27%	60%
Healthy body	3%	1%	0%	6%	0%
Situation	1%	0%	0%	2%	0%
Life	6%	4%	0%	4%	20%
Friendships	10%	18%	7%	2%	5%

Motivation

Coders recorded increased motivation when responses addressed the following benefits. Responses describing a general increase in motivation to try were recorded as both a specific subcategory and broad category motivation. Responses reporting increased motivation to be a good example were recorded as both a specific subcategory and broad category motivation. Responses describing increased motivation to be mature were recorded as both a specific subcategory and broad category motivation. Responses reporting increased motivation to be responsible were recorded as both a specific subcategory and broad category motivation. Responses describing increased motivation to be a better person were recorded as both a specific subcategory and broad category motivation. See Table 8 for coded category results. The following is an example of a response coded under the motivation category.

"This class reassured what I want to do in the future. I want to work with others; I want to make them happy, help as many people as I can, work with all kinds of people and have experiences. This class re-opened my eyes to how much I enjoy pleasing and helping people, and how empathetic I can be.

-FR15 – Female Repeat Participant

Overall, 36 out of 151 (24%) participants reported receiving some type of increased motivation. Overall, female repeat participants were most likely to list increased motivation as a benefit. However, male repeat participants who listed motivation were more likely to list motivation in multiple subcategories. See Table 8. This increase in motivation seemed to be tied to a change in view of disabilities. The highest occurring subcategory, increased motivation to be responsible, was generally described as a peer tutor benefit because the students with disabilities had either been an example to them or because they wanted to help others less fortunate.

Table 8

Percentage of Participants Who Perceived Increases in Motivation

Comment	Overall participant	Male – single participant	Male – repeat participant	Female – single participant	Female – repeat participant
Motivation	24%	22%	47%	4%	60%
General increased motivation to try	7%	9%	20%	0%	5%
To be an example	3%	0%	7%	2%	15%
To be mature	4%	3%	7%	2%	10%
To be responsible	10%	9%	13%	2%	30%
To be a better person	7%	3%	27%	6%	10%

Hope

Coders recorded hope when responses addressed the following benefits. Responses describing increased hope for being able to have a good attitude were recorded as both a specific subcategory and broad category hope. Responses reporting that participants felt they could keep on trying were recorded as both a specific subcategory and broad category hope. See Table 10 for coded category results. The following is an example of a response coded under the hope category.

"It will all be ok. I love all the kids I have peer tutored and I have also learned a lot."

-MR12 – Male Repeat Participant

Overall, 4 out of 151 (3%) participants reported receiving some type of hope. As indicated in Table 9, increased hope was not reported by any of the female participants in the sample. While hope was not a commonly reported benefit among peer tutors, Male repeat participants reported increased hope in one fifth of their papers. These hope statements tended to be reassuring statements such as "it will all be ok" and "I can move forward no matter what my obstacles are."

Table 9

Perceived Increases in Hope

Participants	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Hope	3%	1%	20%	0%	0%
I can have a good attitude	2%	0%	20%	0%	0%
I will keep on trying	1%	1%	7%	0%	0%

Other

Coders recorded other when responses indicated some type of benefit that didn't accurately meet the requirements of any other structured category. These responses were varied and included items such as "I felt like I could trust others" and "It's ok to fail" and being able to keep a more positive attitude. See Table 9 for coded category results. The following is an example of a response that was coded in the "other" category.

"More than anything, in peer tutor I learned that it's okay to fail as long as you tried your best. I think that this is a valuable lesson to learn in life because we can't always be perfect all the time. We will fail, and a lot, so I believe that it is very important to learn how to fail. In peer tutor I learned just that. I learned this when other students around me would try to answer a question or something and get it wrong. [We] would say something like 'that's close but not quite there.'"

-FR05 – Female Repeat Participant

Overall, 19 out of 151 (13%) participants reported receiving some other type of benefit. Female participants who had taken the class multiple times were most likely to report other benefits that did not fit in other subcategories or were not identified as recurring themes. Some of these benefits were feeling like they could adapt, feeling trusted, learning to step out of comfort zone, gaining a sense of humor and feeling like it's ok to try new things and make mistakes.

Table 10

Other Comments

Participants	Overall Participant	Male – Single Participant	Male – Repeat Participant	Female – Single Participant	Female – Repeat Participant
Other Varied	13%	10%	0%	8%	40%

Discussion

The main purpose of this study was to gain a more adequate and thorough understanding of the benefits provided by including typically functioning students with their peers in severe special education classes. More specifically, the purpose was to examine the benefits typically functioning students (peer tutors) receive through this peer tutoring, rather than the benefits provided to students with disabilities. Although curriculum in self-contained classes is based off the core curriculum, it was thought that academic benefits to peer tutors would be relatively limited, due to the adaptive nature of the core curriculum. Because the research surrounding benefits provided to peer tutors is so limited, categories of benefit were determined prior to coding by reviewing the peer-tutoring papers for commonly occurring themes. Those themes were then further analyzed to determine possible subcategories.

Peer tutors who took the peer tutoring at least twice were more likely to report benefits received from peer tutoring students with severe disabilities. The daily benefit category was reported in 55% of essays, the patience category in 52% of essays, the patience with others/becoming more understanding category in 52% of essays, the skills for life and the future category in 50% of essays, the kindness category in 50% of essays, and the change in view of people with disabilities category in 50% of essays. These responses appear to be significant, as none of these students were provided with options or ideas of benefits to choose from, but were required to rely solely on remembered benefits and report in the form of a free response essay. These identified benefits were significant enough to peer tutors that at least half of participating peer tutors independently generated responses identifying these categories as ways peer tutoring benefitted them personally. Responses were collected over four years or eight semesters,

suggesting that these responses are the general responses peer tutors give, and not simply a theme of a particular class period, semester, or year.

In addition, participating peer tutors reported increased confidence, friendships, and self-worth in 38% of responses, gratitude in 38% of responses, increased mentoring and teaching skills in 36% of responses, a better or brightened day in 31% of responses, and having fun and enjoying helping in 30% of responses. The presence of these benefits throughout these peer tutor papers helps to identify the most significant benefits to peer tutors working with students with severe disabilities. This information provides support and validation for peer-tutoring programs involving students with severe disabilities.

Some of the benefits reported by peer tutors may have influenced benefits in other categories. For example, although a change in view of disabilities may appear to outline benefits students with disabilities receive, rather than the benefits peer tutors receive, it is important to recognize that this change in view and increased acceptance may contribute to other benefits in other categories. For example, less fear may have contributed to increased friendship. Increased respect may have led to an increase in peer tutors feeling like they shouldn't judge others. An amazement at the achievements of students with disabilities may have led to an increased motivation to try. While a change in view of disabilities may not appear to be a direct benefit to peer tutors, it is believed that this change in view may contribute to benefits in other categories.

It is possible that a higher percentage of peer tutors would have indicated receiving measured benefits had they been asked specifically about the measured benefits. Memory is fallible and requiring peer tutors in a high school setting to recall all received benefits of a semester long class in a two-page paper at the end of a semester during finals week may have

limited the accuracy and full reporting of received benefits. Perhaps providing peer tutors with a list of potential benefits and asking them to identify their received benefits may provide more accurate data, as this would minimize the possibility of peer tutors forgetting benefits they felt they received, however, it may introduce some bias.

It is also possible that the training the peer tutors received at the start of the semester may have contributed to their overall success as peer tutors, as well as influencing the benefits they felt they received. Peer tutors received a fair amount of training prior to working with the students with disabilities, which may have caused them to feel more prepared and capable of handling situations. For example, training in and an understanding of Applied Behavior Analysis at the start of each semester may have contributed to a change in view of disabilities. This may have occurred as the motivators of student's behavior may have become clearer to peer tutors. This also may have occurred as peer tutors were taught how their own actions influenced the behavior of the students with disabilities. In addition, responses indicating that peer tutors experienced a gain in skills for life and the future may have been influenced by training in direct instruction and data collection. Peer tutors practiced and enhanced their ability to instruct and record data as they worked with students with special needs. It is thought that training peer tutors prior to their peer-tutoring experience is a crucial step in creating a successful peer-tutoring program that benefits the students receiving peer tutoring as well as the peer tutors themselves.

These data are valuable to both researchers and school systems. The research regarding peer tutoring students with severe special needs in a secondary setting is very limited, and research examining the benefits received by the peer tutors of these students is even more limited. Throughout the review of existing literature, specific benefits to peer tutors in severe secondary settings were mentioned casually, were not examined in detail and were not quantified

(Carter & Hughes, 2005; Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, 2001; Wilson, 1998). This research fills an existing gap in research. In addition, the 151 participant sample size contributes to the generalizability of the data.

In addition, there is very little research or information available within school systems to validate the implementation of peer-tutoring programs on behalf of the peer tutors. In the experience of the supervising teacher and primary researcher, peer tutoring is typically viewed as being beneficial. However, these benefits are typically vague. For example, parents have reported that they feel peer tutoring will be good for their children, or will teach them about helping others, or will help them realize that they should be grateful, or will help them develop leadership skills. However, previously there were no readily accessible quantifiable benefits to report to parents, peer tutors, administrators, or school districts to support peer tutoring as a beneficial elective in a secondary setting. Nearly all existing research provides one-sided benefits received by students with disabilities. This research provides evidence of perceived benefits gained by peer tutors in the general education population when peer tutoring students with severe disabilities in a secondary setting that can be referenced and cited as support for implementing peer-tutoring programs in self-contained special education classrooms.

Limitations

Peer tutor responses were generated by free response to the prompt "What do you feel you have gained as a result of being a peer tutor?" Although this type of prompt allowed peer tutors to generate original benefits that were not influenced by the writing prompt itself, it is possible that not all peer tutors reported received or perceived benefits. This may have been the result of the length requirement of the paper and the free response format. A survey containing areas of benefit may have provided a more accurate distribution of responses.

In addition, this study did not employ the use of a pre or post questionnaire, and did not include demographics or a personal experience survey. It is possible that responses were influenced in part by personal experience rather than solely by peer-tutoring experiences. It may have been more helpful to determine peer tutors' previous exposure to and experiences working with students with special needs prior to taking peer tutoring. It may also have been helpful to determine a baseline to more accurately measure gained benefits.

This research was qualitative and, as a result, was subject to the interpretation of both the peer tutors responding to the writing prompt and the coders analyzing the data. Although coders demonstrated inter-rater reliability of 88%, qualitative research is limited by the variance of individuals interpreting and providing data. Also, the primary researcher was also the supervising classroom teacher. Although the coders did not have any connections to the peer tutor papers directly and the primary researcher did not code any of the data for analysis, coders were trained by the primary researcher, or classroom teacher, and therefore there is some risk of a transfer of bias.

Students are not randomly registered to peer tutoring. As a result, it is possible that although peer tutors are assigned to peer tutoring in a variety of ways (personal enrollment, counselor assignment, parent registration, etc.), students who value students with special needs may be more likely to enroll in the course than all students in the general education population.

Implications for Future Research

The results of this study imply that students within the general education population do benefit from being educated with and receiving opportunities to work with students with severe special needs in a secondary setting. In addition, this research provided specific, peer tutor identified areas of benefit for students in the general education population. Identification of

significant areas of benefit provides additional opportunities to quantify benefit for students within the general education population. Future research may focus on identifying benefits to peer tutors in a more quantifiable format. For example, peer tutors could be given pre and post surveys containing the benefits outlined in this study.

In addition, future research may outline areas of benefit growth when peer tutoring students with special needs. Because the areas of reported benefit were generated solely by peer tutor participants, results are limited to the individual ideas of students in a secondary setting. It may be beneficial to provide a survey to peer tutors outlining potential benefits, allowing peer tutors to more accurately reflect on potential benefits rather than relying on personal recollections and memories.

Implications for Practitioners

While peer-tutoring programs are common throughout the United States, very little research outlines the benefits peer tutoring provided to the peer tutors of students with severe disabilities. Typically, when peer tutoring students with special needs, peer tutors are exposed to content that is pulled from an adapted core curriculum. However, the justification of peer-tutoring programs cannot be solely based on the academic benefit peer tutors receive as a result of being a peer tutor. This research outlines specific benefits that enhance the overall experience of peer tutors in the general education population. Although there is a large amount of evidence supporting how peer-tutoring benefits students with special needs, this research provides evidence of benefits that are received by peer tutors involved in the peer-tutoring process, not solely the tutees.

Conclusion

Although there is a great deal of research supporting the benefits peer-tutoring programs offer students with disabilities, there are few studies that identify the benefits the peer tutors of students with severe disabilities receive from peer tutoring. In this study, peer tutoring counted as an elective credit in high school, identified the benefits of peer tutoring, provided validation and insight into the educational benefit of providing peer tutoring as an elective course. It is thought that several of the benefits identified by peer tutors resulted from the degree of repeated exposure to students with disabilities, as well as the requirements and training of the course itself. Although exposure to students with disabilities may potentially occur in general education courses and throughout the school and community, this exposure is relatively limited and as a result opportunities to obtain benefit may be limited. In addition, training regarding how to work with and respond to students with disabilities is not provided in the general education curriculum.

Peer tutors are asked to peer tutor in a variety of environments; some may peer tutor in general education courses such as Choir, Auto, Dance, PE and Art, while others may be required to peer tutor students in academic special education courses. Though these environments are varied, enrollment in peer-tutoring programs allows in depth exposure to students with severe disabilities as well as opportunities to model appropriate interactions for other students in the general education population who may not be enrolled in peer tutoring; particularly as opportunities for encounters with students with special needs have been reported as rare and sporadic for students in the general education population (Carter & Hughes, 2005).

Because 50% of peer tutors indicated that peer tutoring changed their view of students with disabilities, this suggests that a portion of the general education population also holds views

about students with disabilities that may be inaccurate and open to influence. Peer tutoring in general education courses as well as during lunch, assemblies, drills and passing periods allows increased exposure of students with disabilities as well as a model of how peer tutors effectively work with and communicate with students with disabilities. There may be an opportunity to help demystify and generalize interactions with student's special needs through peer tutoring.

While this study identified several benefits peer tutors receive as a result of peer tutoring students with disabilities, peer tutors were required to generate and compile benefits from memory. This allowed opportunities for peer tutors to forget or omit benefits they may have felt they received. Although this free response method of data collection limited the reporting of benefits, it did provide peer tutor generated benefits that were not influenced by the suggestibility of a survey. In addition, the number of participants contributes to the validity of this study and its results. This study measured the responses of 151 participants and identified their commonly reported benefits.

Ultimately, this study provides support for peer-tutoring programs by identifying the commonly perceived and reported benefits of a large sample of peer tutors who tutored students with severe disabilities in a secondary setting. There has been a lack of research identifying the benefit peer tutors of students with severe disabilities receive as a result of their peer-tutoring experiences. This research identifies previously unidentified benefits received by peer tutors of students with severe disabilities in a secondary setting. In addition, it provided insight into the most commonly identified and perceived benefits received by these peer tutors, as well as a previously limited starting point for future research.

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APPENDIX A

Literature Review

Typical Reported Peer tutoring Benefits

Peer tutoring is often implemented in a wide variety of ways and in a wide variety of settings. Typically, a peer-tutoring program is catered to meet the specific needs of a schools population and culture. Peer tutoring may consist of peer tutors assisting students with significant disabilities in general education classes (McDonnell, Mathot-Buckner, Thorson & Fister, 2001). Other school situations may warrant peer tutoring in a setting where mainstream peer tutors help students with disabilities in a self-contained setting. Although peer tutoring generally occurs in a wide variety of settings, most research conducted on peer tutoring is focused on class-wide peer tutoring and peer tutoring in a general education setting (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, Mathot-Buckner, Thorson & Fister, 2001; Wilson, 1998). Furthermore, the majority of the research regarding peer tutoring focuses on the benefits tutees receive as a result of being paired with their same age peers (Carter & Hughes, 2005).

Research suggests that peer tutoring in general education settings increases tutee acquisition of skills, performance and retention. This is thought to be the result of peer reinforcement, social validation, and instruction (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990). Although a great deal of research regarding peer tutoring is focused on general education classrooms, with students who are merely behind or have mild/moderate disabilities, it is thought that peer tutors provide similar benefits to peers in severe self-contained classrooms.

Carter and Hughes (2005) conducted research facilitating interactions between students with disabilities and students without disabilities. The results of this study indicated that students

with disabilities benefit from social interaction with their same age peers. However, they also report that in secondary settings these interactions are rare and sporadic and that increased social interactions with typical same age peers is beneficial for students with disabilities. This research identifies a focus, primarily, on increased social interactions and instruction and calls for additional research regarding the relationships developed as a result of peer tutoring and interactions. The reported goal of this research was ultimately to add to current research regarding meaningful relationships, not solely to increase causal interactions. Peer tutoring has been identified in general education classrooms as an appropriate and effective method for social skills training and increased peer interactions (Greenwood, 1997). Additional research is necessary to determine the emotional and meaningful benefits of increased interactions and peer tutoring.

After a thorough search of Education Resource Information Center (ERIC) and Google Scholar, one article was found to focus specifically on the benefits peer tutors received as a result of peer tutoring students with disabilities. This research focused solely on peer tutoring of students with autism, lasted for one term and was conducted with 18 students between the ages of 10 and 11 (Jones, 2007). This study identified the following student/peer tutor reported benefits measured through questionnaires: understanding of differences, better understanding of autism, increased pride and self-confidence, increased patience, feeling good about self, increased senses of responsibility and helpfulness, increase in skills for looking after an individual with a disability and a realization of how lucky they were and not to take things for granted. Although this information is detailed and valuable the participant size is limited. In addition, the age of the participants may have limited the reported benefits.

According to Resnick, Harris, & Blum (1993), caring and connectedness are protective factors that protect against high risk behaviors. This research also suggests that these factors surpass demographic variables in their ability to protect students. Their research calls for additional opportunities to foster a sense of belonging and acceptance among adolescents. The examination of these studies suggests that skills gained in peer tutoring may serve as protective factors that may guard against high risk behaviors (Jones, 2007; Resnick, Harris, & Blum, 1994).

In their research, Seligman, Ernst, Gillham, Reivich, & Linkins (2009), review the teaching of positive life skills to students in schools. Their research advocates for the teaching of skills for happiness in schools due to an increase of youth age depression and small rise in life satisfaction. While peer tutoring does not explicitly teach skills for happiness, it does, by nature, provide an increase in opportunities for service and altruism that are thought to contribute to an increase in well-being (Dambrun & Ricard, 2011).

Dambrun & Ricard (2011), reviewed the developmental processes that affect self-based psychological functioning. They examined the contrast between egocentrism in childhood and wisdom and maturity that comes with age. This was done to explore the effects of selfishness and selflessness on happiness. It is reported that as children age, egocentrism decreases. However, the study mentions the competition diminishing egocentrism faces as children meet goals and receive ego boosts throughout school successes. They suggest that an increase in maturity, altruism, prosocial behaviors and wisdom leads to a greater sense of well-being, this is more commonly found among older adults. It is thought that service and altruism, skills required when peer tutoring another individual effectively, may increase overall well-being and happiness. An increase in selflessness is believed to contribute to an overall increase in well-being.

Snyder (2002) compares hope to learned optimism, self-efficacy and self-esteem. Snyder identifies an increase in hope to better outcomes in "academics, athletics, physical health, psychological adjustment and psychotherapy." Snyder, Feldman, Shorey and Rand (2002) discussed how hope effectively influences an individual's ability to identify meaningful goals, outline a plan of action and then find the motivation to achieve those goals. Peer tutoring has been shown to teach responsibility, increase caring attitudes and build confidence (Jones, 2007). According to Bandura (1977, 1986, 1987), self-efficacy is an individual's confidence in their ability to exercise control over their environment or circumstance. Self-efficacy also includes a confidence in one's ability to exercise control over one's actions and motivations. This suggests that if peer tutoring increases confidence it may also increase self-efficacy, which may in turn increase student success in academics, athletics, physical health, psychological adjustment and psychotherapy.

Training, Instruction and Methods

Research suggested that peer tutors and peer assistants, with training, are able to effectively instruct and support peers or tutees with their acquisition of required skills. For example, Carter and Hughes (2005) reported that peer delivered instruction regarding interaction based interventions and skills are just as effective as when these interventions and skills are delivered by adults. It is thought that peer tutoring is typically an effective intervention that has the ability to benefit the students or tutees receiving the instruction. Peer tutoring can occur in a wide variety of settings, between typically functioning peers and/or between typically functioning peers and students with disabilities (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, Mathot-Buckner, Thorson & Fister, 2001; Wilson, 1998).

Self-report measures have been used to collect information regarding perceptions of typically functioning students in the school system. Roberts and Smith (1999) used self-report measures with elementary school students between the ages of 8 and 12 to determine attitudes toward students with physical disabilities. These responses were used to predict student intent based on attitudes and perceived behavioral control. It is thought that self-report measures can serve as an effective form of measurement when assessing adolescents and adults.

Research indicates that self-report measures regarding self-efficacy, perceptions of skill acquisition and performance were the highest predictors of performance (Pietsch, Walker, & Chapman, 2003). Though their research highlighted benefits focusing on mathematics, it is believed that self-report regarding performance of desired skills is an effective measure of perception and skill acquisition in other content areas such as peer tutoring.

Peer Tutor Perceptions

According to Wilson (1998), training and analysis of peer tutors engaged in peer tutoring students with moderate to severe disabilities produced positive feelings about participation in the peer-tutoring program for both tutors and tutees. However, the program was not reported to help with acquisition of skills amongst tutees, and teacher perception of the benefits of peer tutoring to tutees was inconsistent. This suggests that there may be self-perceived benefits to peer tutoring students with disabilities regardless of actual progress to the students being tutored. In addition, it has been reported that training peer tutors in behavior modification, individual student factors, emergency procedures, data-taking, one on one instruction, and desired tutee skills increases both acceptance and knowledge of students with severe special needs (Gurry, 1984).

Longwill and Kleinert (1998) addressed some of the unexpected benefits peer tutors received as a result of peer tutoring. Their study addressed peer tutors' self-evaluations of performance in a peer-tutoring program and quoted peer tutor's positive experience in the class. The quoted benefits were "This class will have more meaning than any other classes on your schedule…. Expect the class to be one you will remember for a lifetime" and "You are there for support, not to do students' work, a job they are supposed to be doing…. You will have learned that students with disabilities are capable of doing anything you are." The study also noted that meaningful friendships were formed between tutors and tutees which prompted essays about the importance of friendship, inclusion, and acceptance of all persons. However, the specific benefits of peer tutoring were not the main focus of the study and were not outlined in a quantifiable fashion.

Jones (2007), measured specific benefits students without disabilities received after peer tutoring students with autism. The benefits measured were acquired through questionnaires and outlined the benefits: understanding of differences, better understanding of autism, increased pride and self-confidence, increased patience, feeling good about self, increased senses of responsibility and helpfulness, increase in skills for looking after an individual with a disability and a realization of how lucky they were and not to take things for granted.

Although many studies show that peer tutors report peer tutoring to be beneficial, they do not typically examine what those benefits were, other than a general report that peer tutoring was well received by peer tutors (Carter & Hughes, 2005; Longwill & Kleinert, 1998). After a thorough search of Education Resource Information Center (ERIC) and Google Scholar, one article was found to focus specifically on the benefits peer tutors receive and to outline what some of those benefits were (Jones, 2007). Although specific benefits were identified, the

frequency of reported benefits was limited and unclear, indicating that half of participants noticed specific changes in themselves. By determining what benefits are most commonly received by peer tutors, and at what frequency, researchers and practitioners presumably will be able to more effectively support and justify the academic and social value of implementing peer tutoring in severe/self-contained classrooms in secondary settings.

Hunsaker (2014) reported that working with students with severe disabilities in middle schools may change the views of typically functioning peers in a middle school setting. In addition, it was reported that students who had a friend with a disability had a significantly higher positive outlook and perception of students with a disability. It is thought that having a positive peer-tutoring experience increases positive views of people with disabilities. This may increase opportunities for friendships as exposures are increased.

Current research of peer tutoring suggests that it is an effective practice for supplementing general course instruction and increasing the achievement of tutees. Some research also indicates that when peer tutoring in general education courses occurs, it may be academically beneficial to tutors setting (Galbraith & Winterbottom, 2011; Kohler & Greenwood, 1990; McDonnell, Mathot-Buckner, Thorson & Fister, 2001; Wilson, 1998). However, very little research is available which outlines the specific benefits peer tutors receive when peer tutoring students with severe disabilities in a secondary setting.

The existing research, which does acknowledge the benefits these peer tutors receive, either does not outline specific benefits or does not outline the frequency with which those responses were reported (Carter & Hughes, 2005; Jones 2007; Longwill & Kleinert, 1998). However, the benefits that are outlined as beneficial to peer tutors of students with severe disabilities do correlate with benefits that research has linked to overall success in adolescents

and adults, such as self-efficacy, motivation, self-esteem, increased friendships and changed views of individuals with disabilities (Dambrun & Ricard, 2011; Hunsaker, 2014; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Snyder, Feldman, Shorey, & Rand, 2002; Snyder, 2002). Though research does seem to suggest that peer tutoring is beneficial for students in the general education population, research and data are limited. This lack of data makes it difficult to either support or refute the claim that peer tutoring students with severe disabilities is beneficial for the tutees in the general education population.

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APPENDIX B

Peer Tutor Reading Assignment List

Assignment by semester enrolled:

1. Utah Paraeducator Handbook

2. Utah State Board of Education Special Education Rules – Section II – Identification, Location and Evaluation

3. Procedural Safeguards for Students with Disabilities and Their Parents Under the Individuals with Disabilities Education Act 2004

4. Utah State Board of Education Special Education Rules – Sections III and VII – IEP Development and Service Delivery and Transitions

5. Read a book or novel containing a main character with a disability – Write a brief summary about the book and your own opinion about how you felt the individual with a disability was portrayed.

APPENDIX C

Data Collection Form for Coders

Benefits	01	02	03	04	05	06	07	08
Patience								
with self								
with others/becoming more understanding								
Motivation to								
general increased motivation to try								
be an example								
be mature								
act grown up								
be responsible								
be a better person								
Skills for life and future								
ability to deal with conflict with parents								
ability to deal with conflict with siblings								
ability to deal with conflict friends								
ability to deal with conflict other								
Improved communication skills								
Feel more prepared for parenthood								
Increased problem solving skills								
Increased leadership skills								
Developed teaching/mentoring skills								
Learned to listen and pay attention								
Better general interactions with others								
Increased confidence, friendships, self worth								
increased confidence								
gained friendships								
feeling loved, accepted								
feeling like they make/made a difference and helped								
increased self-worth								
feeling trusted								
Kindness								
gained a desire to be kind								
feeling like they shouldn't judge others								
Increased desire to be empathetic								
Increased selflessness								
Love for others								

desire to encourage others								
Change in View of Disabilities								
less fear for people with disabilities								
more respect								
amazed at achievements								
smarter than previously thought								
recognition of individuality								
Gratitude								
opportunity to take class								
healthy body								
situation								
intelligence								
life								
friendships								
Hope								
I can do it								
Never give up								
I can have a good attitude								
I will keep on trying								
Daily Benefit								
better/brightened day								
sanctuary/relief/reprieve from daily stress								
I liked helping/I had fun helping								
OTHER								

APPENDIX D

Breakdown of Specific Peer tutoring Responsibilities

- Assisting in lessons

    o Social skills

    o Transition skills

    o Math skills

    o English skills

    o Generalization

    o Individualized academic and social tasks/IEP

- Recording formative daily data

- Assisting in behavior management through manipulation of own behavior

- Accompanying students to outside classes

    o Art: Painting, Ceramics, etc.

    o Fine Arts: Choir, Percussion, Drama, Dance, etc.

    o Physical education: Zumba, Weight Training, Fitness for Life, etc.

    o Clothing

    o Foods

    o ASL

    o Other elective courses

- Escorting students to lunch

- Monitoring errands and assignments

- Reporting all concerns and important information about student's interactions to the

    supervising teacher

- Fulfilling all possible peer tutoring expectations in and outside of class