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Table of Contents

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American Indian Special Educators and Distance Education

There is a serious shortage of special education teachers needed to serve in public school classrooms in the United States (Billingsley & McLeskey, 2004; Boe et al., 1998; Bornfield, 1997; Ingersoll, 2001; Westling & Whitten, 1996). The Council for Exceptional Children (CEC), the largest organization dedicated to the education of individuals with disabilities, predicts that the United States will need more than 200,000 special education teachers to fill vacant positions by the year 2006. The Bureau of Labor Statistics (1999) projects that between 1998 and 2008 the number of special education teaching positions in public and private schools in the United States will grow by 33.7%. This is especially significant since the identification of students with disabilities has increased while teachers available to teach these students has decreased each year (Brownell, Bishop, & Sindelar, 2005; McLeskey, Tyler, & Flippin, 2004). It is evident that the need for qualified special educators is significant.

Personnel shortages of certified special educators are even more acute in remote and rural communities (56.9% as opposed to 45.8% in urban districts) (Boe et al., 1998; Ludlow & Brannon, 1999; Menlove & Lignugaris-Kraft, 2004). Rural classrooms constitute a large portion of public schools within the United States. Statistics from the American Council on Rural Special Education (ACRES) report that 22% of all U.S. schools are considered rural, and 21% are considered small school (total 43%); 31% of all K-12 students attend rural or small schools. In the South, Appalachia, and the upper Midwest, over 30% of students are in rural schools (ACRES, 2004). According to a SPeNSE (2002) study 26% of all beginning teachers serve rural districts.

Many teachers who choose to relocate to remote and rural areas do not stay in the community for any significant length of time. Izzo (1997) indicated that one fifth of all rural special education teachers leave their jobs annually to pursue employment in larger districts and communities. Westling and Whitten (1996) found that, of the 158 rural teachers who participated in a survey, only 57% felt they were likely to be in their current position for five years or more. Teachers have cited various reasons for leaving their rural communities such as: (a) large teacher caseloads, (b) feelings of isolation, (c) lack of social opportunities, (d) lack of academic advancement, (d) low salaries, and (e) lack of administrative support and job requirements (Billingsley et al., 2004; Keiper & Busselle, 1996; McLeskey et al, 2004; Westling & Witten, 1996). Finally, teachers who plan to stay in rural communities typically have personal or

family connections to the community such as having been raised in or attended the school district in which they currently serve (Bornfield et al., 1997).

Due to the severity of teacher shortages, many rural district personnel are realizing that they must train and recruit teachers from their own communities. For example, some rural school districts are providing stipends for teacher training and are recruiting paraprofessionals, bus drivers, and even cafeteria workers to work as special educators (Passaro, Pickett, Latham & HongBo, 1994). District administrators are looking to teacher preparation programs for assistance in the recruitment and retention of highly qualified special education teachers in rural areas (Helge, 1984; 1991). One promising strategy for recruitment and retention of special educators in remote areas is distance education.

Distance education on-line learning represents the newest and fastest growing delivery system in all areas of education (Ludlow, 2006). Distance education is a technology format that delivers information that can be used for educational opportunities. Formats of distance education delivery can include: the Internet or satellite; interactive TV or audio; prerecorded TV or audio; CD-ROM and VHS tapes; or a computer based system such as the Internet, e-mail, or chat rooms.

American Indian Culture

Although each American Indian tribe is unique, there are similarities in certain aspects of tradition and language among the tribes. However, certain characteristics distinguish them from other populations. These unique characteristics may include (a) native language, (b) tribal customs/traditions, (c) tribal religious/ceremonial/social activities, (d) strong spirituality, (e) strong emotional connection to tribe(s), (f) residence in Indian communities (reservations), and (g) strong connection to immediate and extended family (BIA, 2007).

American Indian Demographics

The U.S. Census Bureau (2003) estimates there are 4.3 million American Indians/Alaskan Natives (AI/AN) in the United States (1.5% of total U.S. population). One third of the AI population lives in three states: California, Arizona, and Oklahoma. There are 563 federally recognized tribes. Some of the largest tribes include: Navajo, Cherokee, Choctaw, Sioux, Chippewa, Apache, Lumbee, Blackfeet, and Pueblo. Some 4.4 million American Indians claim membership in one or more of the federally recognized tribes. (U.S. Census, 2003).

In comparison to the overall U.S. population, Native Americans are more likely to live in the western United States (48%); less likely to live in urban areas (56%); more likely to have lower family incomes ($21,750 median family income); more likely to live in poverty (17%); and more likely to have lower levels of educational attainment (U.S. Census, 2004). Twenty-eight percent of American Indians do not graduate from high school, compared to the national average of 15%.

Only 42% pursue any form of higher education, compared to 53% nationally (American Indian College Fund, 2006).

Statement of the Problem

American Indians in Special Education

More than 18% of students enrolled in Bureau of Indian Affairs (BIA) and tribal schools are eligible for and/or are placed in special education (Faircloth & Tippeconnic, 2000). Native Americans are overrepresented in special education services (Faircloth & Tippeconnic, 2000; Gritzmacher & Gritzmacher, 1995), and underrepresented in gifted and talented education programs (Romero, 1994).

The reasons for the overrepresentation of AI students in special education are debated. Gritzmacher and Gritzmacher (1995) found that Native American students often are referred for special education assessment because culture combined with language and background contribute to a lower academic achievement of AI students. Further, once AI students are referred for special education, they are labeled as having a disability throughout their school careers. Several researchers have examined issues related to special education and AI students. They cite the critical need for appropriate assessment procedures as well as teacher training and curriculum development for this population (Johnson, 1992; Wells, 1991).

Need for AI Special Educators Trained to Serve AI Students

American Indian students have the highest overall disability rate compared to all racial/ethnic groups in the country, and it is estimated that there are over 44,000 American Indian school-aged students with disabilities (Wald, 1998). There is a need for special education teachers nationwide (Billingsley & McLeskey, 2004); however, considering an AI student's culture and background, many teachers who work with this population are not fully equipped to serve these students effectively (Littlebear, 1993; Mahan, 1997; Wells, 1991).

One way to serve AI students who have unique cultures and special education needs is the development of special education programs to train AI teachers to teach AI students. It is well documented that AI students can best be educated by AI teachers for several evidence-based reasons. For instance, McCarthy and Watahomogie (1999) and Erickson and Mohatt (1977) state that learning is enhanced when the teacher and student share the same language and culture. AI teachers are likely to be aware of native language and culture and utilize this information to modify teaching styles (Philips, 1995; Swisher & Tippeconnic, 1999). Further, AI teachers can provide "connectivity" to AI students' communities (Clear & Peacock, 1998; Deyhle, 1989; Swisher & Tippeconnic, 1999), and serve as an important role model for AI youth (Clear & Peacock, 1998; Kawagley & Barnhardt, 1999). As a role model, an AI teacher can enhance a teacher-student relationship by encouraging AI students to

remain in school (Bowker, 1993; Kawagley & Barnhardt, 1999; Swisher & Tippeconnic, 1999).

Purpose of the Study

In this study, the author addressed the following questions:

1. What are the demographic characteristics of the American Indian special education respondents?
2. What are the factors that promote participation in distance education for American Indian special educators?
3. What are the factors that inhibit participation in distance education for American Indian special educators?

Definitions

1. *Distance education* (DE) occurs when an instructor and student(s) are separated by physical distance and/or different location, but with the use of technology (i.e., voice, video, data, and print) information is transmitted to students (McIsacc & Gunawardena, 1996).
2. *American Indian* (AI) persons (based on self-identification) who indicated their race as American Indian, having origin in any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition (Office of Affirmative Action, Equal Opportunity, and Diversity, 2007).

Results

Factors in DE for AI Special Educators

Access. Many students who enroll in DE do so for convenience; they are either time-bound due to work or travel schedules, or location-bound due to geographic or family responsibilities (Galusha, 2007). In the present study, the majority of AI special educators who had taken a DE course, as well as those who had not, were equally concerned with access of local Internet services in their area. Unfortunately, access to basic technology and advanced networks is still an issue for some rural and poor areas (Tyro, 2004). Due to the geographic location of most American Indian reservations, these communities lag far behind their non-Indian counter parts in access to basic needs such as roads, utilities, housing, and telecommunications (Brown & Swanson, 2003).

Technical. AI participants who previously had not taken a DE course reported having difficulty with technical skills related to DE. Other researchers have found similar student frustration with technology in DE courses (Hora & Kling, 2001; Owsten, 1997; Partee, 1996; Whitworth, 1999; Wulf, 1996). Palloff and Prate (2003) have stated that the virtual student needs the same services as on-site students but have additional needs in the area of technical support.

Social. Not surprisingly, AI participants characterized the social environment in a distance education course as somewhat isolated due to lack of face-to-face contact. Geographical isolation has been noted as one of the major problems noted by DE students (Beard & Harper, 2002; Charp, 2002; Lynch, 2002; Meacham & Evans, 1989). In order to reduce feelings of isolation, an understanding of effective strategies in building collaboration and interaction among other students may be necessary. Collins et al (2002) suggests social "netiquette" training (i.e. dos and don'ts for participation in an online course) for distance education learners to alleviate isolation and social issues. Individuals socially negotiate meaning by interaction with others in various situations (Jamimillo, 1996).

Motivation. Data from the survey indicated that both inexperienced and experienced learners reported they were expected to take on more responsibility for their learning in an online course. Without the physical presence of the instructor to prompt procrastinators or offer constant reminders of deadlines, the responsibility of learning lies heavily on the student. Independent learners (i.e. those with self-direction and self-discipline) seemed to be more successful in the online environment as opposed to students who prefer taking notes and answering questions in a classroom setting with an instructor and peers present (Ko & Rossen, 2004).

Support services. In the present study technical support, access to the instructor, and prompt feedback were areas of concern for AI participants. Because there is no daily face-to-face contact with an instructor, DE students may need to seek communication and feedback. Keegan (1986) and Sheets (1992) found that DE students who did not receive adequate support through electronic communication were more likely to drop out. DE students may be at a disadvantage in accessing support services including contacting academic and administrative staff, obtaining study materials and borrowing library books. These disadvantages may lead to feelings of inadequacy and insecurity, and a lack of confidence among students (Wood, 1996).

Family/Time. Although distance education offers a flexible schedule, interruptions to family time are still a concern as more students with families use distance education as a means to complete a degree and certification requirements (Ludlow, 2006). In the present study, a majority of respondents indicated having families and household responsibilities. These responsibilities may result in time constraints that impede learning. Some researchers have concluded that younger, traditional learners are drawn to online learning because of the advancement in technology, whereas the non-traditional students may enroll due to convenience and flexibility (Collins & Galyon-Keramidas, 2006; Day & Sebastian, 2002). Given these findings, instructors of distance education courses may need to incorporate strategies for DE students to help them manage their time such as daily planners, assignment and exam calendars.

Instruction. Respondents in the survey who previously had experience with DE were concerned about interaction, feedback, and student questions. For AI students, learning how to learn may be a key element in DE. Skills such as listening, observing, experiencing, and intuition are traditions of learning and form the basis for skills used in every process of learning and teaching (Cajete, 1994). American Indian students may benefit from the visual models of someone demonstrating a skill and then engaging in private practice until mastery is obtained (Longstreet, 1978; McCarthy & Benally, 2003).

Pretraining. Respondents with prior experience in a DE course indicated that insufficient training may account for their lack of confidence in achieving success in online courses. Existing literature (e.g., Menlove & Lignugaris-Kraft, 2004) suggests several means to support and prepare distance learners to succeed with the delivery format including (a) a pre-course technology workshop, (b) help files and links on a course website, and (c) access to a technical assistant.

Prerequisite skills. With the absence of physical cues and face-to-face interaction, DE learners heavily depend on messages conveyed through text (Meyen & Lian, 1997). Reading, writing, and typing skills are important in any higher education class; however, in an online course these skills become the lifeline for distance education learners. In the present study, a majority of participants agreed that these skills were essential; unfortunately, literature on the level of student pre-skills needed to succeed in distance education is limited even more limited for AI (Collins, Shuster, & Grisham-Brown, 1999; Menlove & Lignugaris-Kraft, 2004).

Recommendations for DE Programs Serving AI Special Educators

Findings indicate AI special educators face unique challenges. Faculty or staff of institutions of higher education who are considering a DE program for AI participants should address DE issues unique to AI students. Based on the findings of the current recommendations for individuals developing and implementing DE for AI students.

Category	Recommendations
Access	Provide personal laptops (Brown et al, 2003).
	Offer assistance in the delivery format (i.e. workshops, user-friendly website) (Brown, et al, 2003; Menlove & Lingnugaris-Kraft, 2004).
Technical	Offer technical tutorials on course website (Muilenburg & Berg, 2001).
	Provide technical personnel at each location (Palloff & Pratt, 2003).
	Incorporate navigation, submitting, and downloading skills in early assignments (Meyen & Lian, 1997).
Social	Incorporate activities that include interactive activities using small groups or chat rooms (Wood, 1996).

	Organize a buddy system or teams so that daily contact is made between peers (Haythornthwaite et al., 2000).
Motivation	List structured timelines on course websites (Mitchem, 2004).
	Send automatic e-mail reminders to students (Ramirez & Costenda,1974).
	Provide a user-friendly tutorial on the course website for trouble shooting
Support	(Keegan, 1986; Sheets, 1992).
Services	Invite or organize a trip to campus so that students may familiarize themselves with campus or other resources (i.e. library, research, workshops) (Wood, 1996).
	Offer a structured timeline (Collins et al., 2006).
Family/Time	Utilize a variety of delivery modems (hybrid, blackboard)(Hilberg &
Instruction	Tharp, 2002).
	Provide immediate feedback through chat rooms, e-mails (Spangle et al., 2002).
	Use all modes (e.g. visual, auditory, tactile, and kinesthetic) when teaching concepts and skills. Use visual aids, drawings, illustrations or demonstrations, and do not limit activities to worksheets and lectures (McCarthy & Benally, 2003; Lonestreet, 1978).
	Present worshops and general information sessions (Menlove &
Pretraining	Lingnugaris-Kraft, 2004).
	Establish a required set of skills (reading, typing, and writing) needed to
Prerequisite	participate in a DE course (Menlove et al., 2004; Schnorr, 1999;
Skills	Stith, 2000).
	Offer specific workshops relating to DE (e.g. downloading, submitting, communication, time management (Collins et al., 2002; Mitchem, 2006).

Conclusions

There is a serious shortage of special education teachers for public school classrooms in the United States (Billingsley & McLeskey, 2004; Boe et al., 1998; Bornfield et al., 1997; Ingersoll, 2001; Westling & Whitten, 1996). The shortages of teachers is even more apparent in rural and remote areas specifically the American Indian population (Billingsley & McLeskey, 2004). Combined with the overrepresentation of AI students in special education the need to educate and train AI special education teachers is obvious (Faircloth & Tippeconnic, 2000; Gritzmacher & Gritzmacher, 1995).

With the increasing number of AI students represented in special education, the demands for AI special education teachers have also increased. McCarthy and Benally (2003) found that the benefits of AI teachers supporting and educating AI students with disabilities are abundant. For instance, sharing and understanding the same culture and language assists in developing a level of understanding and respect between student and teacher. It is important for AI children to experience schools that

employ AI adults who understand and respect their unique culture. McCarthy and Benally (2001) also suggest that AI students perform better in school and are better prepared for college when their teachers are American Indians. American Indian special education teachers who serve AI students with disabilities provide enrichment and a level of understanding when it comes to the demands and priorities of the AI families. When an AI teacher shares the same native experiences, they not only support the student, but also the parents, and possibly the community. With the demands and responsibilities of family and work in the AI culture, educators and students find it difficult to leave home to attend school. Finally, distance education has provided an opportunity for many AI individuals to obtain further training in education without leaving the area. In turn, this may assist in reducing the number of critically needed, highly qualified special education teachers in rural and remote areas (Menlove & Lignugaris-Kraft, 2004).

Distance online education is rapidly spreading into rural and remote communities bringing new opportunities in higher education. Given the increasing use of distance education and the need to alleviate the shortages of certified personnel including rural AI special educators, it is critical to recognize distance education issues from AI students' perspectives. Instructors are beginning to develop distance education courses for the first time and may need to provide supplements such as technical support, orientation on delivery format, and time management to enhance instruction. Factors that inhibit participation and promote participation are issues that must be addressed in order for students to take advantage of the opportunity. Knowing this information helps drive the instruction and program planning, factors that are important to the participation and success of a DE course for AI students (Knowles, 1980).

The goals for this research were to yield information on American Indian special education teachers who have and have not had experience with distance education. Secondly, was to investigate the factors that promotes and inhibits participation in a DE course for American Indian special education teachers. The results recognize factors that may be useful when designing distance education courses for the American Indian population.

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Anatomy of a Virtual Field Trip: Dissecting the Process

The first task that must be done is to decide on what exactly the virtual field trip (VFT) is to be used for…is it to be just a quick view of an area or location or is it to be used for specific study of a place? One this question has been answered then it will be possible to begin the process of idea mapping, tool selection, and then creation of the experience.

Once the specific purpose is decided upon then one can begin to assemble what one needs from personal visual images or from online or other relevant resources. A sample of an idea map is presented below in Figure 1.. This map was created with the free X-Mind software (http://www.xmind.net/) There are commercial versions available including the industry standard Inspiration™ (http://www.inspiration.com/) One of the important things to remember in any idea mapping software is that the ideas may change as you move forward.

Whenever one launches on a VFT project whether it be done by the teacher or by students, it is very important to make sure that all the ethical and fair use issues are understood. The whole idea of copyright is a very important thing to present to the students and certainly the teacher needs to be aware of them as well. If one is going to create the visual images for a specific project then part of the concern is eliminated.

If the material is going to be "published" on the web then there are some other considerations which must be thought of. If students are going to appear in the project it is always a good idea to clear with parents the use of the student images. Certainly student identifying information like name and location is extremely sensitive and in this age where there are some unsavory characters trolling the web, should almost never be used. If the VFT is going to be used ONLY within the school environment these caveats are less of a concern but should still be considered.

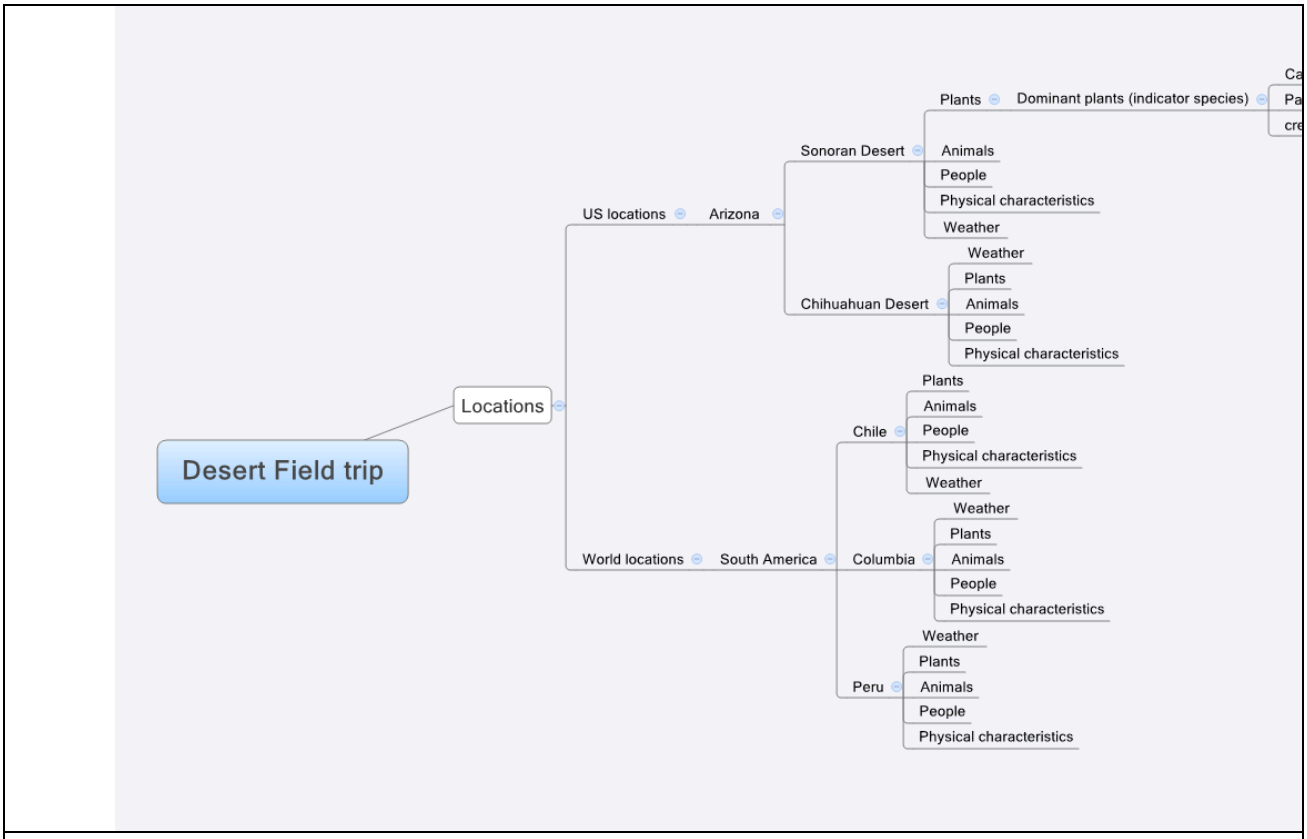

Figure 1. Mind map created using X-Mind© software on 15 February 2009 by S. Canipe

If one is going to use images and videos that others have created then it is very important to consider copyrights. Some sites are now being prepared that give educational uses a special consideration. Some images are provided copyright free while others are provided in a copyright friendly mode. Copyright friendly most often means that as long as the material is being used for non-commercial educational purposes all that needs to be done is the properly cite the owner. There are issues in use of images from sites like Flickr and U-Tube – both in terms of copyrights but also in terms of sometimes unsavory material being posted. Students should always be instructed to use sites like the copyright friendly sites like Pics4Learning (www.pics4learning.com) and WikiPreMedImages (http://www.wikipremed.com/image_archive.php)

The images below (Figure 2 and Figure 3) are from these sites respectively. There are a number of other sites but these two are offered as examples only.

Figure 2.
Konikow Sr., Bob. wtfl002.jpg . Pics4Learning. 15 Feb 2009 <http://pics.tech4learning.com>

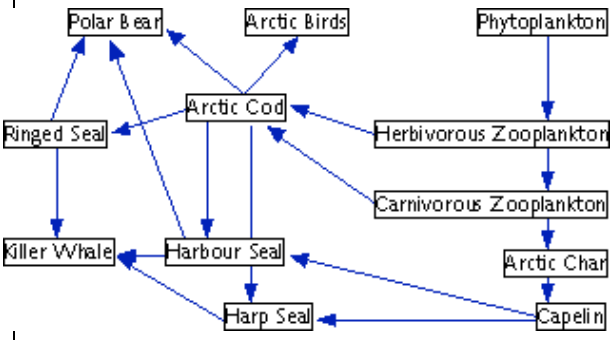

Figure 3.
http://en.wikipedia.org/wiki/File:Foodweb.png

In order to best decide what the "destination" of your trip will be it is important to consult the curriculum and syllabus that is being used. VFTs just like actual field trips should not be undertaken just to do them. They must match specifically with an outcome or standard that you have been tasked with meeting. A danger that some teachers fail to see is that since it is easy to do let's do it!! This is detrimental to learning and the use of VFTs to enhance learning.

When one starts with the outcomes from ones curriculum then it will be easier to focus on the specifics. The next steps after having a specific outcome in mind will eb to think of the possible ways this can be presented – using a website (locally on the intranet or globally on the internet), using a PowerPoint presentation, using a video CD or DVD, using Flash images or using regular DVD movies ot QuickTime images. To help inform these decisions it is important to think how student might use the experience. If students are only going to use the intra- or internet then one set of considerations is relevant. If they are likely to want to use on a personal device like and iPod then another set of considerations must take place. If they are going to view the material in a linear fashion (like watching a TV show) then another set of considerations is relevant – all these things must be considered before starting.

Images can be static like a photograph or moving like a video. It is possible, using widely available software like iMovie™ and MovieMaker™, to combine the two image types. Some minimal animation is also easily possible. Choices for the creator/designer abound. The purpose of this paper is not, however, to provide a tutorial on the various directions that one might take. It is designed to encourage the

reader to get out there and try the process. With the attempt will come success and learning.

Thus far it has been noted that the VFT will

1. decide on the purpose
2. match the purpose to a learning objective/outcome
3. begin to assemble various images needed
4. decide on the delivery process (PowerPoint; video, internet; etc)

After these four processes have taken completed the next step is the action oriented one of just doing it! Here will come some decisions about making edits in the images; adding titles; preparing any special features like QuickTime ™ three dimensional works.

At first the most efficacious way is to keep to the KISS principle (keep it simply simple) and not to try too many different things. One of the easiest ways to present a virtual field trip is to use a website. There is one that can be seen at http://travel.slcanipe.com/vietsprings/index.html. This site demonstrates what might best be described as a pre-trip visit. It is designed to prepare students for what they might see when they arrive. Another similar site is http://travel.slcanipe.com/Yellowstone/yellow.html. This one might be used as preparatory or study oriented.

In addition to plain photos there are panoramic images often called QuickTime ™ virtual reality or QTVR for short – there are a number already created on the web and many digital cameras now come with the ability to create these type images. One that is nice is found at http://www.virtualparks.org/scenes/ZOTRDx3TGJHYRkJe8JLTiqQ.html. Use the SHIFT key to zoom in on an area and the CONTROL key to zoom out. Simply left click and hold then move the mouse right/left and up/down to move about the image.

Once the images are placed into the site a decision about including sounds/music has to be made. These additions will increase file size so must be made with that as a consideration. If this is being delivered on an intranet or via CDS/DVD then the size is not as serious an issue. If the VFT is being delivered via the internet then transmission speeds come into play. The same consideration must be made with picture files sizes/resolution. It is easy with the high resolutions to have a file size fro one photograph that exceeds 4-5 megabytes.

So with these caveats what should be in a VFT creator's tool box? The following are listed as suggestions only. Where possible free/open source/shareware programs are listed. In some cases where there is a de facto usage standard, it has also been mentioned.

Program Name	Function	Site
Irfanview	Image viewing with simple editing. Free	www.irfanview.com
Gimp	More powerful image manipulation software – similar to PhotoShop in features	www.gimp.org
NVU & KOMPOZER (bug fixed version of NVU)	Website creation tool...from a FAQ on the site "...a complete Web Authoring System that combines web file management and easy-to-use WYSIWYG (What You See Is What You Get) web page editing. NVU is designed to be extremely easy to use, making it ideal for non-technical computer users who want to create an attractive, professional-looking web site without needing to know HTML or web coding."	http://www.net2.com/nvu/ http://kompozer.net/
OpenOffice-Impress	This is a presentation software similar to PowerPoint™ An advantage is that as part of the OpenOffice Suite of programs is totally free.	http://www.openoffice.org/
hugin	This is a panorama stitcher if your digital camera does not have one or if you are using a series of existing still images.	http://hugin.sourceforge.net/
JATC	The acronym stands for Just Another Tour Creator but this piece of software is a great help in assembling panoramas into a virtual tour	http://www.panoclub.de/jatc/
Window MovieMaker™	This is the only commercial version of the bunch but it is free for Windows users.	http://www.microsoft.com/windowsxp/downloads/updates/moviemaker2.mspx
Good Image sites for free or copyright friendly photos	And many others – these are just ones that I have used in the past. You can do a search on free educational images or free images. The first returns 56 million hits and the second 167 million so there are lots of good materials out there.	• www.pics4learning.com • http://www.wikipremed.com/image_archive.php • http://www.emints.org/ethemes/resources/S00001489.shtml • http://www.surweb.org/ • http://memory.loc.gov/ammem/index.html • http://www.pdphoto.org/
Free sounds and music	This site pulls together a number of places where sounds and music can be had…if used watch the specific requests – usually a link to the site.	http://www.stonewashed.net/sfx.html

The presentation at the 2009 ACRES Conference is available at the following URL – this will have examples used in the presentation at the conference in Denver.
http://travel.slcanipe.com/ACRES2009/

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Evolution of Special Education: *Brown v. Board of Education* Through the 2004 IDEIA

Abstract

The 1954 Brown V. Board of Education decision overturned a previous Supreme Court ruling which supported the construct of "separate but equal." As equal protections were provided to minority populations, consideration turned to students with disabilities. In 1975 Congress passed the Education for All Handicapped Children Act (EHCA), better known as Public Law 94-142, to ensure an education for all students. Reauthorized in 1990 and 1997, the EHCA evolved into the Individuals with Disabilities Education Act (IDEA). In 2004 the most recent reauthorization was completed, expanding the title to the current Individuals with Disabilities Education Improvement Act (IDEIA). This evolving legislation has enhanced the delivery of services to millions of students previously denied access to an appropriate education.

Introduction

The Civil Rights Movement and the 1954 *Oliver Brown et al. v Board of Education of Topeka et al.*, 347 U.S. 483 decision which extended equal protection under the law to minorities, paved the way for similar gains for those with disabilities. Parents, who had begun forming special education advocacy groups as early as 1933, utilized the *Brown* decision in support of equal educational opportunities for disabled students. Despite the changes being made for equal educational opportunities for minority students, full legislative support requiring the same opportunities for disabled students would not occur until 20 years after *Brown.*

Public Law 94-142 proved to be for disabled students what *Brown* became for minority students. It required public schools to provide students with a broad range of disabilities - including physical handicaps, mental retardation, speech, vision and language problems, emotional and behavioral problems, and other learning disorders - with a "free appropriate public education." Moreover, it called for school districts to provide such schooling in the "least restrictive environment" possible (Yell & Katsiyannis, 2004).

Reauthorized in 1990 and 1997, the EHCA evolved into the Individuals with Disabilities Education Act (IDEA). In 2004 the most recent reauthorization was completed, expanding the title to the current Individuals with Disabilities Education Improvement Act (IDEIA). In support of its original inception, this evolving legislation has enhanced the delivery of services to millions of students previously denied access to an appropriate education (Salend & Duhaney, 1999). In response to special education legislation, students with disabilities are not only in school, but also receive individualized instruction based on their unique challenges and needs. Furthermore, in more and more cases, special education students are spending increased time in the regular classroom settings with their non-special education peers (Kalambouka, Farrell, Dyson, & Kaplan, 2007).

Brown V. Board of Education

For most, the 1954 *Brown v. Board of Education* ruling is identified as the landmark civil rights case. In the ruling, the court affirmed that segregation of public schools was a violation of the 14th amendment, and as such, was unconstitutional. This ruling was of great significance in that it overturned a previous Supreme Court ruling some 60 years earlier, *Plessy v. Ferguson*, 163 U.S. 537 (1896) which supported the "separate but equal" philosophy (Jackson, 2008; Wraga, 2006).

Under the "separate but equal" 1896 Supreme Court decision, so long as equal services were available, no violation of the 14th Amendment had occurred. This decision provided the constitutional basis for segregation. This philosophy was applied to all facets of public life, including the provision of educational services.

In 1954 the *Brown v Board of Education* focused the country's attention on the issue of discrimination within the realm of education. The case centered on an elementary age student, Linda Brown of Topeka, Kansas who was required to ride a bus twenty-one blocks to attend her designated school, despite the fact that a school designated for White's only was located only five blocks from her home (Friedman, 1997). The disparity in ability to access educational services became the focal point regarding the "separate but equal" doctrine.

Though the plight of young Linda is forever tied to the *Brown v. Board of Education* case, the name is actually associated with a Supreme Court decision to combine five separate cases under the name of one of the plaintiff's, Oliver Brown (Jackson, 2008). The decision to combine the five cases was based upon the commonality of the remedy sought; improvement of the public education for minority, and in particular, African American students (Smith & Kozleski, 2005).

As *Brown* was heard, the defense argued that appropriate educational opportunities as required by the 14th Amendment were provided in each case, and sited the Supreme Courts previous ruling of *Plessy v. Ferguson* as validation of the

appropriateness of services (Golub, 2005). In contrast, the team in support of *Brown*, with Thurgood Marshall acting as a member, challenged the Court's 1896 ruling that the Constitution permitted "separate but equal" facilities for blacks but not for other minority groups who were permitted to enroll in White only schools (Klarman, 2002). With this as a basis, attorneys for *Brown* called into the question the practice of "separate but equal" when such doctrine only applied to African Americans.

Using social scientific findings available at the time, Marshall and his team argued that separate facilities worked to the detriment of African Americans and therefore were unequal. In their argument, the team cited that even if all material and staffing demographics were found to be consistent between segregated schools, the failure to provide meaningful interaction with others fails to provide enhanced learning opportunities (Klarman, 2000). In response to the arguments presented in behalf of *Brown*, the court retuned on May 17, 1954, and issued their landmark ruling against segregation stating that separate educational facilities did not meet the required standard to provide equality by failing to provide minority students equal educational opportunities essential to their success in life.

The impact of the *Brown* decision provided a catalyst for rapid educational and social reform movements. By ruling in favor of *Brown*, the Court affirmed that education is a fundamental right protected by the 14th Amendment, and that separate public schools identified solely for African American students was a violation of equal protection of rights as provided through the Constitution. In addition, the ruling affirmed that the provision of a meaningful education is essential to the performance of individual's basic civic duties. As such the court expressed the incongruity that a student could be expected to meet the expectations of a good citizen at the same time as being denied an appropriate education (Wraga, 2006). The Court also ruled that the provision of a state provided education must be made available to all students, regardless of ethnicity. Chief Justice Warren emphasized in the *Brown* decision that the segregation of students based on race perpetuates the notion of racial inferiority (Klarman, 2002). In his response, Chief Justice Warrant stated that the development of such a perception would have a negative social impact such that irreparable social and educational damage would be perpetuated.

As the educational impact associated with *Brown v. Board of Education* began to have a ripple effect on the provision of educational services across the country, other forms of "segregation" began to come into focus. With the concept of "separate but equal" for African American students being negated in the highest court, other groups would seize the opportunity to address educational inadequacies. Just as issues associated with racial segregation were brought to the forefront of the American media, services for special needs students would become the new "separate but equal" battle ground (Smith & Kozleski, 2005).

Education for All Handicapped Children Act (1975)

An investigation in to the educational history provided within the United States finds that services to students with disabilities were often limited in scope and at the discretion of the local education agency. As such, the treatment of children with disabilities within the educational setting prior to 1970 varied considerably. As more frequent challenges under the equal protection clause of the 14th Amendment came to the forefront, the realization of a need to provide an appropriate education for all students, regardless of ethnicity or handicapping condition, came to bear (Chin, 2004). Meeting the educational needs of students with disabilities began to be seen as an inherent right, as opposed to the previous contention, which outlined an appropriate education as a reserved privilege.

Until the mid 1970s, millions of children with disabilities were either denied the provision of an education, or received inadequate services. Local school administrators had the authority to identify students as "uneducable" and refuse enrollment. In other instances, students with disabilities were permitted to enroll, but were placed in regular education programs without the provision of special services. More severe students were often provided special programs in conjunction with the public school, though services which were provided often lacked meaningful educational impact (Chin, 2004).

Further legislation in the 1960's provided additional funding specifically for the education of handicapped students, and in 1966 the U.S. Office of Education founded the Bureau of Education for the Handicapped. The 1960's also saw the introduction and expansion of programs specifically targeted towards students with learning disabilities and emotional disturbances (Podemski, Marsh, Smith, & Price, 1995).

With expanding opportunities for students with learning disabilities and emotional disturbances, services for students with mental retardation began to take center stage. In 1972, two cases that would have significant impact on the rights of a public education for students with handicaps were heard at the federal level. The first, *Pennsylvania Association for Retarded Children (PARC) v. Pennsylvania,* 343 F. Supp. 279 (1972) challenged the state relative to the rights of mentally retarded children to receive a free public education. In addition, the court outlined that, whenever possible, such students should be educated with their non-handicapped peers (Kuriloff, True, Kirp, & Buss, 1974).

The introduction of EHCA legislation provided the first entitlement for special educational services for all students between the ages of 5 through 21, regardless of the basis or severity of the handicapping condition. EHCA contained four guiding provisions: evaluation; due process; Individual Education Plans; and Least Restrictive Environment (Algozzine & Ysseldyke, 1984).

Although P.L. 94-142 is credited as key for students with handicapping conditions, many rights had been established through state legislation and a growing number of federal court cases. The congressional bills which evolved to form Public Law 94-152 were originally introduced in 1971 and provided the catalyst towards special services as provided today (Podemski, Marsh, Smith, & Price, 1995). As described earlier, this process began well before 1975.

Public Law 94-142 was a response to Congressional concern for two groups of children: the more than 1 million children with disabilities who were excluded entirely from the education system and the children with disabilities who had only limited access to the education system and were therefore denied an appropriate education (Essex, 1999). This latter group comprised more than half of all children with disabilities who were living in the United States at that time.

As a natural response to the increasing awareness of the needs of students with special educational needs, the EHCA continued to evolve (Huefner, 2000). In 1986 several amendments were made to the EHCA. The 1986 amendments were imposed to address three primary issues.

1. The eligibility criteria were extended to disabled or developmentally delayed preschoolers between the ages of three to five.
2. Incentive state programs were provided to states to assist in developing meaningful intervention programs for children from birth to two years of age. These funds were intended to provide interventions for children who were exhibiting developmental delays, or were at risk for developmental delays.
3. The ability of parents to recoup attorney's fees for cases in which parents prevailed under the EHA (Huefner, 2000).

These issues of improved access became guiding principles for further advances in educating children with disabilities as 94-142 evolved into what we commonly have known as the Individuals with Disabilities Education Act, or IDEA.

Individuals with Disabilities Education Act of 1990

Fifteen years following the introduction of the Education of the Handicapped Act (EHA), the Individuals with Disabilities Act (IDEA) was introduced, effectively eliminating the term handicap, while introducing the term disability in its place (Huefner, 2000). This evolution in terminology was spearheaded by a variety of advocacy groups. In asking for this change, advocacy groups believed that the term disability was less demeaning than the term handicapped. Under this argument, the term handicapped was identified as being synonymous with its original roots of beggars with cap in hand requiring dependence for survival (Huefner, 2000). Reference to the words handicapped and disabled was eliminated from the Act with an emphasis on language in which the individual is recognized, as opposed to placing a person's identity in conjunction with their handicapping condition.

In addition to changes in basic terminology, IDEA provided for expanded eligibility categories; autism, traumatic brain injury, multiple impairments and deaf-blindness. Regulations also provided additional clarification separating hearing impairment from deafness. This provided a total of 13 categories of disability.

The broad based changes associated with IDEA required a contextual change to the way in which the needs or special education students are provided. Increased accountability measures and litigation spurred districts to ensure components of IDEA are fully implemented. As states and LEAs began to fully comprehend and implement the requirements of IDEA, the winds of change were blowing with the impending re-authorization of IDEA.

Reauthorization of IDEA (1997)

In implementing the IDEA 97, the 105th Congress provided several amendments addressing a wide range of legal and programmatic issues. The new law required that each IEP for children with disabilities relate programming provided to achievement in the regular classroom setting. This increased involvement in general education curriculum was emphasized with the requirement of states to establish performance goals for children with disabilities and include such children in state assessments (Huefner, 2000). Schools were given specific statutory authority regarding discipline of students with disabilities, and new authority was given to hearing officers to change the placement of such children.

Discipline of students with disabilities became forefront with the amendments and provided educators flexibility in disciplining students with disabilities, while at the same time requiring school to act in anticipation of challenging behavior rather than simply punishing students for misbehavior associated with their identified disabilities (Zurkowski, Joyce, Kelly, & Peter, 1998). Specifically, the re-authorization provided a balance between the rights of students with disabilities, while allowing schools to address the need for safe school settings.

In introducing the amendments to the 1990 IDEA, Congress found that research and practice since the inception of PL 94-142 supported that a meaningful educational system for the present and the future must include high academic standards with specific performance goals for students with disabilities (NICHCY, 1999). In addition, IDEA 97 outlined significant changes in assessment processes, with increased academic expectation for students with disabilities. In many aspects, IDEA 97 was developed with components of Goals 2000 entwined in the new language. This foundation was expressed with goals to increase school readiness, improve academic outcomes, improve student competencies, improve facility safety, increase literacy, increase skill sets of teachers, increase graduation rates and increase parental involvement.

The 1997 amendments placed an increased emphasis on educational results, while improving the quality of special education services and providing specific avenues for enforcement. As the 1997 amendments were implemented, particular concerns were outlined regarding the integration of students with disabilities into the regular classroom (Yell & Katsyannis, 2004). Federal regulations required that the multi-disciplinary team consider placement in regular education but without a presumption that every special needs student would be instructed in the general curriculum.

Taylor and Baker (2001) indicated that the mainstreaming of handicapped children had underscored the need for guidelines governing the discipline of handicapped students. Neither Section 504 nor P.L. 94-142 addressed this issue. This left the courts to determine the legal ramifications involved. With IDEA 1997, new regulations concerning discipline would need to be addressed in response to statutory and regulatory requirements, as well consideration of how behavioral intervention plans and strategies would be part of the disciplinary process (Zurkowski, Joyce, Kelly, & Peter, 1998).

IDEA Improvement Act (IDEIA) of 2004

Three major initiatives set the stage for the introduction of the IDEIA, and the movement away from the historic discrepancy analysis process for special education identification. These three initiatives included the President's Commission on Excellence in Special Education (2002), the Learning Disabilities Summit of 2002 sponsored by OSEP, and the National Research Council report on minority students in special education (Haager, Klinger, & Vauhgn, 2007).

Prior to the implementation of the identified initiatives, the National Joint Committee on Learning Disabilities (NJCLD) expressed concern to the Office of Special Education (OSEP) regarding accurate or timely identification of students with Learning Disabilities (NJCLD, 1997). Bradley and Danielson (2004) have characterized the response from OSEP to the letter submitted by NJCLD as the "LD Initiative." The LD initiative was founded as a multifaceted attempt to coordinate the activities of advocacy groups, educators, researcher and other stake holders towards an improved and expanded method for LD identification.

Through this partnership, the ultimate goal was to create an alternative identification process that would be both more accurate and efficient than the previous LD identification model. Reliance on the discrepancy formula for LD identification had been noted as failing to identify many students that would have benefited from a more timely identification. In addition, the discrepancy model of LD identification failed to provide meaningful data to the classroom teacher.

As the NJCLD began to coordinate efforts on the LD initiative, Response to Intervention (RTI) was presented as a noteworthy alternative to the standard discrepancy model. Utilizing the conceptual framework associated with RTI, the reliance on students to fail before receiving intervention services is avoided. RTI provided a theoretical change from process to outcomes for students with disabilities. This shift was significant regarding LD identification which now provided an avenue to focus on early intervention rather than on the cause of LD (Bradley, Danielson, & Doolittle, 2005).

Education leaders are faced with a practical question when considering the discrepancy model: Is there a viable alternative? In part, this question has been answered through the rise and implementation of the Response to Intervention (RTI) model. RTI has become a key component of IDEIA in that it provides remedial intervention and addresses some important theoretical issues. Additionally, RTI provides associated data to direct instruction and identify, in a timely manner, students who may require special education and related services (National Joint Committee on Learning Disabilities, 2005).

For students who demonstrate academic difficulties, early intervention is a vital component of the RTI model. Early interventions focus on academic achievement for all students, including those who could be considered as having a reading learning disability (RLD). The RTI model provides clear data which may be used as a component of the RLD identification process, especially with regard to the preventative and remedial resources which are provided to at-risk students.

Summary

Prior to the landmark *Brown* decision in 1954, schooling for students from racial and ethnic minorities was characterized by unequal educational opportunities. As a result of this decision, the foundation was laid to provide an appropriate education for all students; regardless of minority or disability status. This right was cemented with decisions associated with *PARC* and *Mills* which found any form of educational exclusion unconstitutional and asserted that all children should be provided equal educational rights and opportunities.

Brown, PARC and *Mills* centered on issues relating to equal access and spearheaded the movement to remove such obstacles. However, even with established legal precedent, change did not come with ease. Forced into providing educational opportunities for all children, states and schools struggled to provide required services. Federal mandates, beginning with EH and evolving through EHCA, provided both guidance and financial support to assist states and schools in meeting this requirement.

As special education law has evolved through IDEA, the re-authorization of IDEA and the most recent IDEIA, an increased emphasis on the student as

opposed to the condition has increased. Through identified failures in meeting the needs of students in a responsive and timely manner, new opportunities have arisen to provide early intervention and identification, as opposed to the previous "wait to fail" model. Where *Brown, PARC* and *Mills* addressed the issue of equal and appropriate access to educational opportunities, the new IDEIA extends beyond this premise to provide not only equal access but equal outcomes.

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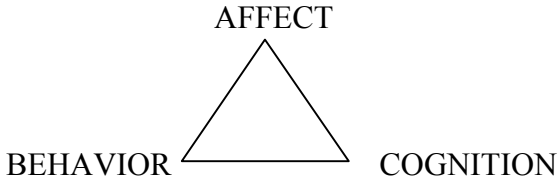
First Attempts Using Bibliotherapeutic Lessons: Special Education Teacher Reflections

Four special education teachers agreed to use bibliotherapeutic lessons and share their reflections on several variables. Reflections may provide a better understanding of issues first-time users face, and possible modifications to facilitate learning to use such lessons effectively.

Premise

Both federal law and best practices from our discipline indicate that research based practices should be used in Special Education. Some research based practices may be used in combination with other, complementary practices in order to increase frequency of use and / or to enhance possible outcomes.

Affect, behavior and cognition are interdependent so that a change in one necessitates a change in the other two.



There are researched based practices that can be used with students who have disabilities as well as the general education population which may positively impact affect, behavior, and cognition.

A wide body of research shows that instruction through well structured cooperative learning groups, used regularly with fidelity, provide both academic and social support to students, form a context of trust, and positively impact behavior through social skills instruction and practice (Johnson and Johnson.)

Higher mental functions (cognition) develop through people in a child's life (e.g. parents and teachers.) Children come to understand the habits of the mind,

culture, speech patterns, written language, and other symbolic knowledge through this social interaction. It is through this experience that the child constructs knowledge and derives meaning (Vygotsky.)

Faulty thinking patterns (i.e. thoughts which involve illogic, error, misinformation) which impact behavior and mood (herein referred to as *affect*) can be examined towards the goal of identifying and correcting the flaw (Burns.)

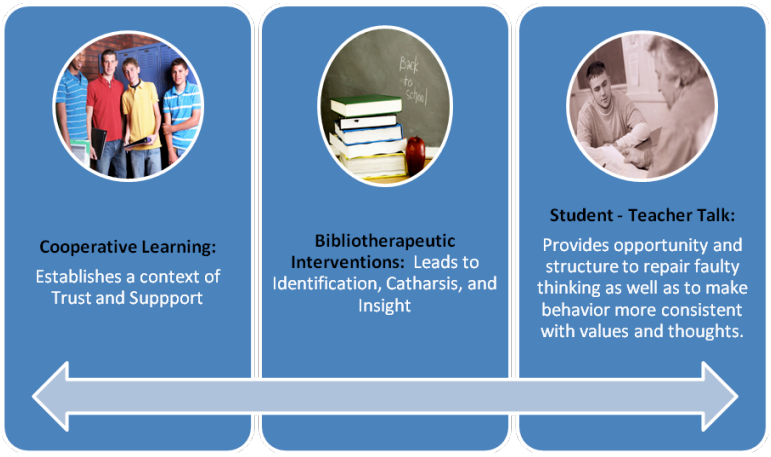
Learning stressful information about oneself such as one's flaws can create extreme discomfort in some individuals. Defense mechanisms serve to protect individuals from the anxiety about the stressful information so that it does not become too overwhelming (Freud.) Defense mechanisms include but are not limited to denial, and distortion, and may be seen in children and youth, especially those with emotional or behavior disabilities.

Defense mechanisms are often obstacles when working with students regarding their behavior, feelings, and thinking. However, use of bibliotherapeutic interventions can provide a means for indirectly addressing stressful issues that interfere with student success, and which are difficult to discuss directly with a student when defense mechanisms are routinely triggered. One of the benefits of bibliotherapeutic interventions is that they provide emotional distance from sensitive issues so that the issues can be discussed with less defensiveness. This social interaction between a responsible adult (teacher) and child (student) can then be completed via a Life Space Interview (Redl,) Cognitive Coaching (Costa and Garmston,) or other teacher-counseling (talk) interventions.

While Bibliotherapy can only legitimately be practiced by licensed therapists, teachers in both general education and special education can utilize books and other literature to help their students learn about themselves as well as options in life (Prater, Johnstun, Taylor-Dyches, & Johnstun, 2006.) Furthermore, bibliotherapeutic lessons can employ the regular curriculum and be integrated into typical comprehension instruction, making it easier to integrate students with disabilities and other special needs with their general education peers (Riordan & Wilson, 1989.)

Three Complementary Interventions

Cooperative learning, bibliotherapeutic lessons, and some form of teacher counseling (such as Life Space Interview, Cognitive Coaching, or some form of cognitive-behavior intervention) are complementary interventions which can be used together in order to provide a strong environment and process within which teachers can assist students to address and improve issues related to learning, socialization and other aspects of their disability.



What Is Meant By Cooperative Learning?

Cooperative learning is the application of social psychology in the classroom. The model of cooperative learning developed by Drs. David and Roger Johnson (1989,) University of Minnesota, involves 5 key elements that maximize effectiveness: positive interdependence, face-to-face interaction, individual accountability, direct instruction of social skills, and processing. The outcomes of academic support and social support provide a context within which students are more likely to trust and be trusted, necessary in order to engage in genuine reflection, deep discussion or behavior change.

What Is Meant By Cognitive Interventions And Cognitive-Behavior Interventions?

Cognitive interventions, applications of cognitive psychology, are designed to help an individual reflect on their own thinking (cognitive processes) and to self-regulate their own thought (faulty thinking,) and would fall into the realm of meta-cognition. Cognitive-behavior interventions are applications of cognitive-behavioral psychology. Although not visible, this branch of thinking works on the premise that cognitive behaviors (thinking) can addressed with the laws of behavior modification in order to elicit change.

Since students can develop and improve their thinking behaviors in a relationship with an adult (Vygotsky,) such as their teacher, then teacher-student interaction, to wit talk, can be an important intervention for individuals with disabilities. Cognitive-behavior interventions include Life Space Interviews, associated with the name of Fritz Redl, as well as Cognitive Coaching, associated with the names of Drs. Art Costa and Robert Garmston. Although only the life space interview is specifically designed for use with students with disabilities, other tools can be adapted and utilized with the same student population.

In Life Space Interviews the teacher and student explore factors involved in a conflict. It is not punitive but rather corrective of future behaviors (Handbook of Communication and People with Disabilities: Research and Application by Dawn O. Braithwaite and Teresa L. Thompson, page 112.)

Cognitive Coaching, "…is a supervisory/peer coaching model that capitalizes upon and enhances cognitive processes….to learn something new requires engagement and alternation in thought," (Overview of Cognitive Coaching http://www.cognitivecoaching.com/overview.htm.) The coach's role is not to solve issues but to facilitate another's thought process so that they solve their own issues – the coach serves a mediating function. Some of the basic tools teachers can use when working with colleagues also employ with students as well, derive from this model. They include (a) asking cognitively stimulating questions, (b) reflective listening, and (c) giving directives that require thought.

Dr. David Burns is known for his work in the area of mood therapy and his many publications, including Feeling Good: The New Mood Therapy (1999.) One of the tools he uses with his clients can be adapted for the classroom as well. It is the formulation of a T-Chart that helps a student examine his thinking and make corrections on those elements which are faulty or untrue. The teacher can help the student understand that even a small change in thought can lead to different outcomes, often more positive, desirable outcomes.

What Is Meant By Bibliotherapy?

Bibliotherapy, per se, is the therapeutic use of books to elicit identification, catharsis, and insight in order to solve personal problems in personal therapy. Similarly, bibliotherapeutic lessons can be based on the study of a reading selection in order to elicit these same three responses towards the goal of examining and discussing, and perhaps resolving, issues related to oneself within the purview of education and school.

How Can Some Aspects of Bibliotherapy Be Integrated Into Reading Lessons?

In a bibliotherapeutic lesson the teacher provides typical reading or language arts objectives, but also an objective related to affect, behavior or cognition, such as friendship and the qualities of a good friend. The teacher introduces to the class the sensitive issue through the introduction of a carefully selected story, so that discussion is about the story characters and situation, and ostensibly not about any student in class. This provides a kind of emotional distance so defenses may be lower. Lower defenses means more information may be accepted by the students and they will think and talk about the ideas that arise in the lesson.

How Can Teachers Effectively Extend And Follow-Up On The Lessons?

Once the story has been studied and discussed, including comprehension questions and questions related to identification, catharsis an insight, the teacher can bring the topic closer to each individual student by including an extension activity to the lesson. In this extension activity to the lesson the teacher has the students take the affective, behavioral or cognitive issue and extend it in some personal way. Each student may develop a list of qualities they personally would value in a best friend, and share them with a cooperative learning partner, for example, and then the class. These might be posted about the classroom for future reference. Students are able to hear about and see their own ideas but also the ideas of the other students in class, and perhaps compare and contrast them. Furthermore, there is an artifact present in the room for future reference.

And Then?

Then the issue learned during the bibliotherapeutic lesson provides a basis for teacher-student talk when related issues arise in the natural course of the school week. Teacher can naturally refer back to the affective, behavioral or cognitive issue studied during the bibliotherapeutic lesson during a Life Space Interview, via cognitive coaching, or by helping the student examine his thinking pattern related to the affective issue. The issue is not new, is already understood on some level by the student, vocabulary for discussing the issue has already been introduced, and if necessary, discussion can be framed within the context of the characters of the story to reduce the possibility of defensive behavior.

Why These Three Interventions?

The purpose of the cooperative learning is to establish a context of *trust* and *support* in the classroom, and a *sense of inter-connectedness* among the students so students can begin to understand how their own behavior impacts others, and vice-versa. Furthermore, by emphasizing the instruction, practice and use of good *interpersonal skills*, as well as student *reflection*, students may perceive it to be *safer to risk* self examination.

The purpose of the cognitive interventions is to encourage special education teachers to examine and utilize *effective models for talking with students* when the purpose is to elicit student reflection and behavior change.

The purpose of bibliotherapeutic interventions or lessons (with the extensions) is to provide *content, new ideas*, for the students to think about and to discuss during the cognitive interventions with the teacher.

The overall outcome is to elicit positive changes in affect (including mood,) behavior and / or cognition (thinking) among our students who need such change.

What Do We Find Out When We Explore Teachers' First Use Of Bibliotherapeutic Lessons?

Recent personal communication with both colleagues and special education teachers suggests that many teachers may not use and / or have not heard of bibliotherapy or its use with students in educational settings. The topic may be considered unusual or uncommon.

It is safe to assume that if bibliotherapeutic interventions are considered uncommon or unusual, or have not been heard of by special educators, then they are not being used or are used infrequently or by a very few teachers.

The purpose of this preliminary inquiry is to collect initial teacher thoughts regarding their efforts to use bibliotherapeutic lessons when they have not used them previously. Their reflections are clustered and reviewed, towards the goal of better understanding issues related to teacher first use, in order to make such lessons more readily useable and easier to introduce.

The Inquiry

Four special education teachers, three veteran and one novice, expressed interest in the bibliotherapeutic lessons and agreed to participate in a small inquiry related to the initial use of bibliotherapeutic lessons in a special education setting. Veteran is used to describe a teacher with four or more years experience in special education. Novice is used to describe a teacher in an initial teaching placement in special education.

Teacher	Novice or Veteran	Grade Level	Disability Types
#1	Veteran	Primary	Mild / Moderate
#2	Veteran	Primary	Mild / Moderate
#3	Veteran	Secondary	Mild / Moderate
#4	Novice	Secondary	Mild / Moderate

The four teachers are provided with bibliotherapeutic lessons, implement the lessons and each completes a follow-up structured reflection after each lesson. Completed reflections are returned and comments summarized and clustered. Eight lessons are being provided each teacher. Lessons for secondary students are different from lessons for primary students in that they selections are made to be age and developmentally appropriate. Although no formal training of the teachers is involved, some written information on bibliotherapeutic lessons, as well as cooperative learning and teacher-student talk interventions was initially provided.

Structured Reflection

The structured reflection is completed in the form of a survey, and consisted of brief identifying information (they are not anonymous) and ten items (nine open-ended and one forced-choice) related to:

- Teacher's planning for the lesson
- Teacher's implementation of the lesson
- Teacher thoughts while teaching as well as after teaching
- Teacher behavior / words
- Teacher perception of student response to his/her behaviors and words
- Teacher observation of identification, catharsis, and insight
- Follow-up activities after the lesson (teacher-student interaction)
- Ways the teacher was able to connect the bibliotherapeutic lesson and student learning to follow-up activities (teacher-student interaction)
- Teacher perception of his/her effectiveness connecting the follow-up (teacher-student interaction) to the lessons.
- What the teacher would like us to know.

Preliminary Findings

The initial intent of the inquiry was that the lessons would be provided to the teachers and implementation and reflection would be completed during the fall semester of 2008. Lessons and reflections have taken the teachers longer to complete than initially expected, and are still in progress. Submission of Teacher Reflections lags behind implementation of the lessons, and have been slower in arriving than anticipated. One teacher overlooked completing one reflection. Elementary school special education teachers have implemented lessons most consistently. One has been very diligent in returning reflections. The novice teacher lags furthest behind in implementation and reflections.

Preliminary Findings

The initial intent of the inquiry was that the lessons would be provided to the teachers and implementation and reflection would be completed during the fall semester of 2008. Lessons and reflections have taken the teachers longer to complete than initially expected, and are still in progress. Submission of Teacher Reflections lags behind implementation of the lessons, and have been slower in arriving than expected. However, some interesting themes are emerging from reflections submitted to date. Five will be discussed herein.

Time. Teachers mention time frequently, and for two reasons. The first reason is to plan, modify lessons to fit the needs of their students, and to understand and feel prepared. The second reason time was mentioned is because implementation takes longer than was anticipated. Teachers may only have short blocks of time, e.g. twenty minute segments with their students in some pull-out programs, and need to spread the lesson over five days.

Student engagement. Teachers mention that students have lots of questions and lots of things they want to share. It was recommended that stories be read multiple times for the students, and they "eagerly" looked forward to having them read each time. Student engagement seems to address the second time issue; lesson implementation takes more time because students are very engaged and want to share or ask questions. This appears to be a very positive outcome as engagement with the bibliotherapeutic objectives suggests the issues is relevant and important to the students.

Need to teach vocabulary. Some of the teachers mentioned the need to teach vocabulary so the students would have the words to describe feelings or situations. This appears to be a positive outcome as the students may be better prepared to engage in meaningful follow-up with the improved vocabulary as well as the discussion experience from the lesson.

Students relate lessons to their lives. Teachers commented that the students make connections between the bibliotherapeutic objectives and their own lives, both at school and at home, and want to share these during the discussion.

Teachers referred to the lessons during follow-up teacher-student talk. This may be a change for the teachers but is desirable as an important objective of implementing the bibliotherapeutic lessons is to prepare students better for being receptive and finding value in the teacher-student talk that ensues during the regular course of education. Furthermore, this theme suggests the teachers are facilitating students in making conceptual connections between their own lives and the issues from the lessons, and strengthening these connections by asking students to utilize the information at the moment.

Final Comments

This is a small and very preliminary inquiry and cannot be generalized.

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From Indian Girl, to College Student, to Special Education Teacher: One Person's Perspective

In North Dakota, few Native Americans are licensed to teach children with disabilities. As a result, Native American students attending school in North Dakota are primarily taught by white teachers. Rude and Gorman (1996) suggested that this may cause students to infer that their family's values and culture merit less respect than those of white children. One obvious way to solve this problem is to increase the number of Native American special education teachers. For this to happen, more Indian people must attend and graduate from four-year teacher preparation programs. Historically, North Dakota's four-year universities have not attracted, retained, and adequately prepared Native American teachers. While 7 % of North Dakota's population is Indian, only 3% of students in four-year institutions are Native and about 2% of the state's teachers are Native Americans. The discrepancy between the number of Indian children attending North Dakota's schools, and the number of Native American adults teaching in those schools is problematic.

Although Native Americans are well represented at North Dakota's two-year colleges, few attend four-year institutions offering teacher-preparation programs. Table 1 compares students at North Dakota's two-year and four-year colleges. North Dakota's two-year institutions currently enroll student populations that are 84% white, 13% Native American, and 3% other. On the other hand, the student populations of North Dakota's four-year colleges are 91% white, 3% Native American, and 6% other. North Dakota's general population is 89% white, 7 % Native American, and 4% other. These data suggest that, at North Dakota's four-year institutions white students are overrepresented and Native American students are underrepresented. On the other hand, Native Americans are overrepresented on the campuses of North Dakota's two-year schools. One reason for this difference may be that many of North Dakota two-year colleges are located on or near reservations. All five reservations in North Dakota have two-year tribal colleges or tech schools within their borders.

Table 1: North Dakota College Enrollment

	General Population	2-year college	4-year college
Native American	7%	13%	3%
White	89%	84%	91%
African American	1%	1%	1%

Latino	1%	<0.5%	1%

Although 8% of North Dakota's school-aged students are Native Americans, at least 14% of special education students and 32% of gifted students are Indian. This suggests that a disproportionally high number of Native American children are classified as exceptional learners.

Data describing the number of Native American teachers in North Dakota are particularly disturbing. Only 2.4% of our general education teachers and 2.2% of our special education teachers are Native Americans. About 96% of North Dakota's general education teachers and 97.4% our special education teachers are white.

The literature suggests that students may benefit by receiving instruction from teachers whose background, philosophies and values are consistent with their own (Rude & Gorman, 1996; Tippeconnic, 2003). In North Dakota, that clearly is not happening.

Increasing the number of teachers who are Native Americans should be a goal of North Dakota's four-year colleges and university communities. Community, family and teachers are factors that should be considered when four-year colleges recruit Native American students.

It is common that many students from reservations are at a greater economic disadvantage and often there is a greater prevalence of physical, emotional, or substance abuse taking place in homes and schools (Fleming, 2007). Despite this, Native Americans hold tight to what is left of their families, traditions, and culture. On reservations most children are raised by their extended family. As these children grow into students, they know their place. These are lifelong values that continue into adulthood. So, Native American students choose two-year colleges because they are closer to home, family, and there is a greater sense of support.

At "home" there are always people that can be counted on to help students through hard times. Furthermore, students often have people for whom they are responsible. When Native American students choose to attend a four-year college in bigger cities, they are separated from their family and community support systems. Once leaving that comfort zone, they are often alone. Big off-reservation cities can also cause culture shock. Indian students shift from fighting to survive the prejudices within their own community, to surviving in a new society; one where there are people with different values, priorities and prejudices.

When administration, faculty and staff of off-reservation four-year institutions fail to understand and address the issues faced by Native American students, those students are not likely to adjust to university life (Ness & Huisken, 2002). A key

component of retaining Indian students is finding a place where they can feel comfortable, safe, and receive support. That can be a specific organization, class, or department. For example every university has student ambassadors to welcome new students. If more Native American students were ambassadors, four-year institutions might create an ambiance that is more welcoming.

College students are led to believe that their professors will be unbiased and fair. When students sit in a lecture and faculty members make derogatory comments about any minority culture, students may react in multiple ways. Often, minority students take those comments from one person and one class, and generalize the statements to be from all people and classes. They sometimes assume that the instructor is talking about them. Once that occurs students feel they cannot succeed and therefore don't because of self-fulfilling prophecy. Indian students become a reflection of fear, failure, and inferiority to others (Heimbecker, Medina, Peterson, Redsteer, & Prater, 2002). Because of this, students may turn to alcohol and drug abuse, anger cycles, and eventually end up returning to the reservation where they often times become another Indian statistic.

There are success stories. For example, an Indian girl who grew up in the type of environment described, left the reservation to the big city knowing that she would return home to teach one day. She knew the kinds of supports and encouragement she needed and went looking for them. If universities didn't just wait for a remarkable student to demand support, but made an effort to have options available not only for Indian people, but all people, the recruitment and retention rates might increase.

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Implementation of Response To Intervention In a Rural School District

Abstract

While the intent of the No Child Left Behind Act (NCLB) is to ensure the success of every child, increasing special education and Limited English populations are creating significant challenges to meeting this goal. As part of the 2004 Individuals with Disabilities Education Improvement Act (IDEIA), early intervention services were granted significant credence allowing for a focus on preventing academic failure as opposed to maintaining the traditional "wait to fail" model. This paper provides a review of the Response to Intervention (RTI) model and provides current data, as part of an ongoing study, of the impact in a rural school district in Northern Nevada.

Introduction

In 2004, the IDEIA was signed into law providing significant revisions to the earlier Individuals with Disabilities Education Act (IDEA). A key component to this reauthorization gives districts the ability to utilize funds and resources for early intervention programs such as active tracking and academic interventions designed to avoid the need for a special education placement. Even so, the introduction of IDEIA has not come without challenges. A debate has ensued with regard to the appropriate methodology for accurate diagnosis of learning disabilities. This debate is focused on the standard "wait to fail" model which typically has established student eligibility for services during the third and fourth grades.

Educators continue to focus on the difficulties which arise from the use of standard intellectual assessment and academic assessment models to establish eligibility. Lewit and Baker (1996) estimated that more than 50 percent of all students served through special education carry the identification label of LD, and that the average cost to provide special education services is 2.3 times the cost of regular education services. In addition, Roush (1995) found that of those students identified in the category of LD, 80 percent qualify within the area of reading.

A central issue in identifying reading learning disabilities is the ability to discriminate between students with a true learning disability and those who simply demonstrate low academic functioning (Algozzine, Ysseldyke, & McGue, 1995; Kavale, 1995). For students to demonstrate low academic performance, achievement must be variant from anticipated performance according to the student's cognitive ability.

With the increased focus on early reading under NCLB, the number of students identified as having a learning disability has increased. The U.S. Department of Education (2000) noted that 1.2 million students were identified as LD in 1979-1980, with an increase to 2.8 million by 1998-1999. From 1981 to 1991, students between the ages of 6 and 21, as identified through the IDEIA, increased by 38 percent. Of this increase, the largest population (44 percent) occurred among students between the ages of 12 and 17 (Lyon et al., 2001).

The discrepancy model − IQ/Achievement disparity − is based on conceptual flaws (Vaughn & Fuchs, 2003). IQ is commonly used to measure an individual's potential by assessing responses to questions associated with logical reasoning, problem solving, and critical thinking. IQ tests are designed to assess factual knowledge, definitions, and fine-motor coordination (Siegel, 1999). However, cognitive tests are more effective in assessing student knowledge than providing predictive evidence of future learning potential (Vaughn & Fuchs, 2003). IQ tests are poor predictors of students likely to benefit from remedial services (Kershner, 1990).

Under the discrepancy model, learning disabilities are identified by comparing a student's I.Q. or cognitive abilities with his or her performance on academic measures. However, there are numerous conceptual and practical difficulties associated with the discrepancy model for LD identification, and some states and districts have chosen to implement a RTI model.

Response to Intervention

The RTI model identifies LD or reading learning disabled (RLD) students based upon their failure to respond to interventions. This model not only identifies students earlier but it also provides enhanced opportunities for intervention services. Students who receive intensive, high quality interventions early in their academic careers can make significant academic gains quickly. The majority of students who respond favorably to intensive interventions continue to perform well post-intervention (Coyne, Kame'enui, Simmons, & Harn, 2004). The ultimate goal of the RTI model is to provide effective academic interventions which allow for student success, and reduce the number of students who are referred and placed in a special education setting (Fuchs, Fuchs, Harris, & Roberts, 2006; Pugach & Johnson, 1995).

RTI does not make assumptions about the underlying causes of a student's reading difficulty; instead it recognizes that the difficulty may lie within the child, the intervention, or both (Case, Speece, & Molloy, 2003). Seven characteristics have been associated with treatment unresponsiveness: phonemic awareness, phonological memory, rapid naming, intelligence, attention or behavior, orthographic processing or demographics (Al Otaiba & Fuchs, 2002), and interventions can be implemented to address one or more of these characteristics.

Investigators have reported favorable results using RTI approaches (Case, Speece & Molloy, 2003; Vellutino, Scanlon, & Lyon, 2000). Torgesen (2000) calculated that three-quarters of primary students who are at-risk for reading difficulties can catch up with their average-achieving peers through "effective, comprehensive" beginning reading interventions. Research suggests there is some evidence that a window of opportunity exists in early grades, where intensive interventions are more effective at preventing reading difficulties for many at-risk students (Coyne et al., 2004). Early intervention in reading correlates to the level of success that students have later in their academic careers (Lennon & Slesinski, 1999).

The Response to Intervention (RTI) model provides remedial interventions and addresses important theoretical issues. RTI has the following necessary conditions:

- Data associated with direct instruction and identification,
- Timely planned interventions,
- Frequent measurement with technically accurate assessment, and
- Implementation of well-designed general education interventions.

Children who fail to respond to well-implemented instruction may be candidates for special education or for more intensive early intervention efforts.

The Three-Tier RTI Model

Effective use of RTI features explicit and systematic instruction, ample practice opportunities, and immediate feedback. The success of a three-tier program model depends on the use of a sensitive early measurement tool, like DIBELS (Kamps et al., 2003; Vaughn & Linan-Thompson, 2003). The application of RTI involves a multi-tiered framework that outlines processes and programs interventions for students who demonstrate academic difficulties. This framework most commonly involves a three-tiered model, which are identified as Tier I, Tier II, and Tier III with each level differentiated by its focus on the type of intervention.

Tier I implements high quality instructional and behavioral supports for all students in the general education curriculum. This level utilizes universal assessments of students' literacy skills, performance in academics and behaviors. Based upon data collected, teachers plan and implement a wide variety of research-based teaching strategies. The success of such strategies is continuously assessed through on-going

criteria based measurements (CBM) which guides further instruction. During the Tier I process, students receive differentiated instruction based on the ongoing data collection and corresponding review.

Vaughn and Linan-Thompson (2003) indicate that high-quality Tier II interventions target struggling learners through assessment, which is then followed by additional targeted instruction in the essential reading components and progress monitoring that uses results to inform instruction. Tier II activities address students whose performance and academic growth are delayed as compared to other same age and same grade students. Students in Tier II receive additional intervention services beyond those offered in the general education classroom.

Tier II relies heavily on the data collected and analyzed during Tier I. Teacher referrals and CBM probes provide the basis for interventions, staff engagement in collaborative problem solving, and they design and implementation of instructional supports. Key personnel trained in the RTI process provide support for the process. The process involves a continuous improvement model; students' progress is carefully monitored, data collected, new or improved interventions planned, and intervention implemented. The school continually addresses the question: "Has the student responded to the intervention?"

If a student fails to respond to Tier II interventions, then the student is moved into Tier III. Tier III interventions shift the focus from whole group and small group activities to more frequent small group and one-on-one interventions. Again, this tier utilizes data collected from multiple level sources; e.g. continuous CBM probes, systematic tracking of students' progress and classroom assessments. Data and collaborative planning provide a basis for Tier III interventions. If a student fails to meet the goals associated Tier III, then special education services are considered.

The reauthorization of IDEIA and the greater implementation of RTI will allow for the creation of new relationships between classroom teachers and special education teachers, between NCLB and IDEIA, and most importantly, improved learning for students with disabilities (United States Department of Education, 2004). The RTI model allows for earlier identification of students through a problem-solving approach, effectively screens out non LD students and provides appropriate remediation to non LD students. As a result, the number of students who enter Tier III and subsequently a special education setting is reduced (Vaughn & Fuchs, 2003). Finally, there is a corresponding reduction in the number of minority students who are placed in special education (Harris-Murri, King, & Rostenberg, 2006; Harry & Klinger, 2007). Results show that students and classroom teachers experience greater support as they address academic deficiencies (Vaughn & Fuchs, 2003).

The Study

Because the effectiveness of RTI within the identified district has not been evaluated beyond standard anecdotal evidence, it is the intent of this ongoing study to provide statistical analyses of data relative to the impacts of RTI, identification of special education students, and special education qualification rates. Data available at the time of publication are provided, with complete analysis to be conducted during early 2008.

The rural district in the study was the first in Nevada to implement RTI. The district, which is located in north-central Nevada along the I-80 corridor, served approximately 3,400 students during the 2006-2007 school year. During this same school year, 15 percent, or approximately 500 students, were identified as eligible for special education services. For the same year, the district's ethnicity ratios were as follows: White 65.8 percent, Hispanic 27.9 percent, Native American 5 percent, African America 0.4 percent, and Asian/Pacific Islander 0.9 percent. Free and reduced lunch status for the 2006-2007 school year was reported at 29.6 percent.

This implementation of RTI has occurred over a three-year period and encompasses all schools within the district. All elementary schools are utilizing CBM as a component of the RTI model. While the model has been implemented district wide, this study is an ongoing evaluation utilizing data from three elementary schools, identified as A, B, and C. Individual data are in the process of being collected and analyzed for students who are identified for specific intervention services through the RTI program. The completed study will primarily focus on students who were part of the program at the Tier II or Tier III levels of intervention and also will evaluate the effectiveness of the RTI program and the use of CBM.

The district provided staff development for the types and levels of interventions. Examples of Tier II small group interventions include Word Search, Repeated Reading, and Story Prediction. Examples of Tier III, One-on-One Interventions include Echo Reading, Drill Sandwich, and Incremental Rehearsal.

Results

Initial results show strong support for RTI. Utilizing a comparison of the 2004-2005 school year with the 2006-2007 school year, significant changes in both the percentage of students referred for special education and the qualification rates were noted. Table 1 provides baseline data collected prior to the implementation of the RTI model. Specifically, the number of students referred, number tested for special education placement, and percentage found eligible are provided. As indicated, the pre RTI qualification rates ranged from 65% to a high of 85%.

Table 1
Pre Implementation of RTI Data (2004-2005) for Three Elementary School in the Study

Schools	Population	Referred for Testing	# Qualified for SPED	% of Referred found Eligible
A	400	26 (7%)	20	77%
B	290	14 (5%)	12	86%
C	520	20 (4%)	13	65%

The data summarized in Table 2 provides a summary of percentage of referrals and percentage of SPED eligible referrals after implementation of RTI. The results indicate that the number and corresponding percentages of students referred for special education decreased. Respectively the percentages by school changed from 7% to 5%, from 5% to 4%, and from 4% to 1%. These are relatively small changes; however, meaningful changes occurred in the accuracy of referrals for consideration for SPED services − students who failed to "respond to Tier III interventions." Schools A and B had 100% of referred students eligible for SPED services while School C moved from 77% eligible to 85% eligible. This finding suggests that the "correct" students were referred for assessment. Thus, after implementation of RTI, SPED assessment resources were used much more efficiently. For small rural districts, efficient use of resources is paramount.

Table 2
Post Implementation of RTI Data (2006-2007) for Three Elementary School in the Study

Schools	Population	Referred for Testing	# Qualified for SPED	% of Referred found Eligible
A	408	20 (5%)	17	85%
B	277	12 (4%)	12	100%
C	504	5 (1%)	5	100%

The data indicate that students who received Tier II services tended to "Respond to Interventions." That is to say, 150 students were involved in Tier II interventions; however, only 42 students were referred to SPED Assessment. Thus, when both years are considered, 72% of the students who were involved in Tier II services were judged to make satisfactory progress and were not referred for Tier III services.

The levels of utilization of intervention services were monitored over the two year period for students who received Tier II and Tier III services. During the 2005-2006 school year, a total of 66 students received services at Tier II and 16 students received Tier III services. Of these students, only 20 were placed in special education. During the 2006-2007 school year, a total of 84 students received services at Tier II, and just 34 students received Tier III services. As shown in Table 3, the discrepancy

between the number of students receiving services at Tier III and those placed in special education is a result of roll-over referrals from the previous school year.

When the data from the three tables are consider jointly, the results indicate that the number of referrals for special education assessment has decreased and the percentage of placements from referrals has increased. The results suggest that implementation of RTI has provided better services to students and improved efficiency by referring students for SPED assessment more accurately.

Table 3.
Summary of Numbers of Students Referred for Services in Tier II and Tier III by Year

	Tier II	Tier III	Placed in SPED*
2005-2006	66	16 (24%)	20
2006-2007	84	26 (31%)	34
Total	150	42 (28%)	54

* Placement into SPED included carryover recommendations from the previous year.

Conclusion

Perhaps the greatest concern to arise from the discrepancy model of LD identification was the over-reliance on a quantified discrepancy. Such focus on the discrepancy forced schools to fail to meet the intent of the law. One result of the discrepancy model reduced the identification of LD students to a statistical difference between ability and achievement. For many students, the model failed to accurately identified disabilities. In addition, the model failed to provide timely identification and corresponding interventions.

With the implementation of IDEIA, districts have an opportunity to build upon previous experiences, focus on appropriate educational outcomes, and meet the needs of students. Early intervention services can avoid special education placement for some students, provide appropriate services for SPED students, and support effective teaching and learning for all.

The District has successfully implemented the RTI model, provided aligned professional development, and both teaching and learning have improved. As a result, there has been an increased collaboration between regular and special education teachers, provision of a continuous improvement model for enhancement of services, and implementation of ongoing data collection and analysis. In addition, the district has served as a model for other rural districts throughout the state, which has brought increased self-efficacy to the entire staff.

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Including Vocational Rehabilitation Counselors in the Transition Process for Special Education Students

Transition from high school to the adult world of work for students with disabilities is becoming an important aspect of special education and rehabilitation services, as mandated by new federal legislation. The most recent of those new laws is the Individuals with Disabilities Education Act (IDEA 1997) which requires transition planning as

> a coordinated set of activities for a student with a disability that --(A) is designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (B) is based upon the individual student's needs, taking into account the student's preferences and interests; and (C) includes instruction, related services, community experiences, the development of employment and other post-school adult living objectives, and, when appropriate, acquisition of daily living skills and functional vocational evaluation (IDEA, retrieved March 5, 2008 from http://www.ed.gov/offices/OSERS/Policy/IDEA/the_law.html).

Although transition plans are developed for students with disabilities, many plans do not translate to successful transition to the adult world of work. Michaels and Fararra (2005) found that many of the IEP goals were set in isolation, apart from family members and students, taking a "we-they" position. This position tends to exert power over the transition planning process, and disenfranchises the student. Michaels and Fararra (2005) recommend a person-centered approach to developing IEPs and transition plans which keeps the family and the student at the center of the process. They recommend planners take student strengths and support needs into consideration, and build relationships with appropriate community systems, among others.

Successful transition from school to work is a primary goal of the educational process. For many students, transition plans include support for developing skills for work or college after high school. However, without a well-defined transition plan, many students with disabilities do not achieve the transition goals, including becoming productive workers. Because of this, they are more likely to be unemployed, or at worst, incarcerated. In fact, they state that after 5 years after high school, only 63.5% of those with disabilities were employed (Sabbatino and Macrine 2007).

A critical element of the planning process is to include student interests, strengths and needs, including vocational services (Savage, 2005). Employment opportunities for students transitioning from school to work are greatly enhanced when specific vocational rehabilitation services that include education or training services are positively correlated with eventual employment outcomes in the community (Johnson, Stodden, Emanuel, Luecking, & Mack, 2002), especially when paired with normalization (Kohler & Field, 2003). According to Kohler and Field (2003) normalization is making certain the norms of everyday society are something all people experience, including individuals with disabilities. Sabbatino and Macrine (2007) discuss variables related to successful school-to-work programs that may be utilized during the planning process. In their study, they found that the variables leading to successful transition from school to work include the use of IEPs during the planning process, educating students in inclusive settings, and documenting process in work-related skills. It was particularly important that high school students be placed in an actual work setting along side peers without disabilities, and that the plan included the development of work opportunities during high school. The key to such success is collaboration among teachers, parents, the student and administrators, as well as community resources.

Johnson, et al (2002) further emphasize the use of community resources in the transition planning process. They recommend that post secondary education services be appropriately managed and supported through community resources, and that meaningful employment opportunities be a part of the post secondary plan. To meet those objectives, it is helpful when a vocational rehabilitation counselor is involved in the transition planning process. Their role is to coordinate employment services, including vocational assessment, job placement, supported employment, and funding for training or other postsecondary education opportunities.

O'Leary (n.d.) recommends that transition team members rethink the involvement of representatives of community agencies, including vocational rehabilitation and others, even though

> The involvement of other agency personnel in IEP meetings has been one of the more difficult areas in implementation of the transition requirements. There are numerous problems in trying to include and involve personnel outside of the educational system. Those problems include both the adult agencies as well as the schools. For instance, it is not uncommon to hear that adult agencies don't show up or tell school personnel that they do not want to be involved until a certain grade or age. At the same time it is not uncommon to hear from adult agencies that they have large caseloads, that schools do not invite them until the last minute or they cancel or re-schedule IEP meetings without the courtesy of informing them of the change. While it is important to recognize that there are issues between diverse groups and agencies, it is important that we remind ourselves that there is a "common focus" and that focus is on the future of the young person with a disability. If a young person

> with a disability will be in need of any post-school service, support or program to help in assuring a successful transition to adult life, then schools do have a responsibility to them and their family. Schools should identify, inform and link, in a timely manner, that student and parent to the appropriate post-school service, support or program before the student exits the school system. That also includes inviting and welcoming those agencies as equal partners in the design, development and implementation of the transition planning in the student's IEP. (O'Leary, n.d., Mountain Plains Regional Resource Center http://www.rrfcnetwork.org/images/stories/MPRRC/TOP/Documents/whathowwho.pdf , retrieved March 5, 2008).

Method

Special education teachers are busy people. Including the services of a vocational rehabilitation counselor will not only increase the odds of success of the transition from school to work (Johnson, et al., 2002; Kohler and Field, 2003; & Sabbatino and Macrine, 2007) but take pressure off the teacher and school system, both in terms of time and funding required to see the plan to fruition. But how much do special education teachers know about the VR services, and to what extent to they use them?

In order to determine public school special education teachers' knowledge and use of use of vocational rehabilitation (VR) counselors in the development of transition and services, a survey was given to 41 special education teachers in three Montana high schools. There were 22 surveys sent back with a return rate of 54%.

Survey Instrument

The survey instrument included the following questions:

1. Do you know the role of a vocational rehabilitation counselor?
2. Do you know the name of the VR counselor designated to your school?
3. Which of these services do you think a VR counselor could provide to a student in special education?
   - Funding for training
   - Funding for college
   - Funding for job placement
   - Assessment
   - Other (explain)
4. Are you aware that VR counselors can authorize a vocational evaluation?
5. How many times have you been in contact with the VR counselor this school year?
6. If so what was the purpose of the contact? (check all that apply)
   - Training

- College
- Job placement
- Assessment
- Other (please explain)

7. From your understanding which of the following is the responsibility of the VR counselor? (check all that apply)
   - Initiate contact with special ed teacher to explain VR services
   - Initiate contact with high school counselor to explain VR services
   - Initiate contact with school to see which students are eligible for VR services
   - Conduct vocational assessments on students before they graduate
   - Contact the student's family when it is determined a student is eligible for VR services
   - Provide work experience and training before a student graduates
   - Attend IEP transition meeting in the student's senior year
   - Provide work experiences and training after a student graduates from high school
   - Other (please explain)
8. How many times in the last year has a VR counselor contacted you regarding a particular student?
9. How many times in the last year has a VR counselor contracted you regarding visiting with students at your school?
10. Do you use the VR counselor as part of transition planning?
11. What is the percentage of your transition plans with students that include some active involvement of a VR counselor?
12. At what grade do you believe a VR counselor should meet with a student for transition planning assistance?
13. From your perspective what are some of the challenges to VR and special education working together to meet the needs of students?

Results

The Teachers

All of the teachers surveyed worked in high schools, and were involved in transition planning. All but two teachers had more than six years of teaching experience in special education. Most of them functioned as resource room teachers, although other positions were held by them as well. In fact, many teachers were responsible for more than one role within the special education department, as indicated in Table 1.

Table 1
Positions of Special Education Teachers

Position	Number of Teachers
Resource Room Teacher	15
Strategies Teacher	10
Life Skills Teacher	7
Independent Living Teacher	3
Vocational Education Teacher	5
Other	5

Note: Some teachers indicated they functioned in more than one position.

The teachers surveyed showed an awareness of the potential services that could be provided by the VR counselor with regard to transition planning, especially in terms of providing assessments and vocational supports after graduation (see Table 2) However, very few teachers indicated that VR counselors were involved in the transition planning process with their students. Only six of 22 special education teachers responded that VR counselors were involved in the transitional planning process, and only two of 22 reported specific contact with VR counselor, and those were related to vocational assessments (Table 3 and Table 4).

Table 2
Knowledge of the VR Counselor

	Frequency of Teacher Responses		
Knowledge Construct	Yes	No	Somewhat
Role of VR Counselor	8	4	10
Name of VR Counselor	4	18	NA
Ability to Authorize Vocational Evaluation	12	10	NA

Table 3
Use of the VR Counselor

Contact	Number of Contacts
In Contact with VR Counselor	1
VR Counselor Contact made	1
VR Counselor Contact about Student	1
VR Counselor involved in Planning	6

Table 4
Purpose of Contact with VR Counselor

Service	Frequency of Responses
Training	0
College	0
Job Placement	0
Assessment	2

The numbers are disheartening, but the qualitative comments provided by the teachers show where the problems may lie. The final question of the survey reads: "From your perspective what are some of the challenges to VR and special education working together to meet the needs of students?" The teachers provided 18 separate comments explaining the challenges to creating partnerships with VR. When coded qualitatively, the responses fell into four distinct categories: (1) Lack of communication between special education programs and VR with six responses, (2) Time Constraints with five responses, (3) Lack of knowledge or misunderstanding of the roles of VR with five responses, and (4) Money and resource constraints with two responses. Below are some sample comments

Lack of Communication

- I don't even know who the VR counselor is for [my school]
- I think voc rehab is a great program but we as a school do not always feel supported by voc rehab. I refer students and parents but never hear back.
- It is hard to reach them (VR counselors) for meetings

Time Constraints

- Time to connect
- Time constraints for sped teachers given our work loads.

Lack of Awareness and Knowledge

- Knowledge of each other's roles and how to connect with one another and family members of students
- Lack of knowledge of the VR program and lack of communication.
- I need awareness and education about the services and a contact person to consult.

Lack of Money and Resources

- Lack of state funding; VR being spread too thin; waiting lists for program availability that discourage teachers and parents
- Limited people resources

Conclusions and Recommendations

Early intervention and planning for transition of students with disabilities from the school to the work place is critical (cite). Studies suggest that students who are given the opportunity to plan for vocational services and receive vocational services, such as job coaching and supported employment during high school fare much better after graduation.

Our research shows that special education teachers are somewhat aware of the services offered by VR counselors, but don't fully understand how to bring them into the transition planning process. The qualitative data suggest that they lack knowledge about the process, but that most of the problem may exist because the level of communication needed to include VR is low, which could lead to lack of knowledge about services available.

To begin to improve the process and ultimate help students and their families, special education administrators and vocational rehabilitation services administrators within communities should meet to better understand both the needs of students and potential services, bridging the gap between special education teachers and VR counselors

In addition, more research into the problem is needed. Because these results are based on a small sample of three schools, a statewide or region-wide survey should be developed and disseminated to teachers to determine the overall use of VR counselors. Are there differences, for instance, in rural area use versus that in the larger towns and cities in the state or region.

More information is needed regarding the perspectives of VR counselors, with regard to transition planning and services. Perhaps with more information about the

services offered, and the needs of the students, the two could come together to better serve students as they begin the process of transitioning from school to the world of work.

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The Principal's Role in Supporting Teaching the Challenged Learner

Introduction

Over the last twenty years, the population of students identified as learning disabled has drastically increased (Martin, Martin, & Carvalho, 2008). The debate concerning the education of special needs students has also amplified. In various subject areas, it is common to incorporate adopted trends in the education of these students. Some accepted teaching techniques may have been devalued early on, but returned later in the instructional arena to be used again (Swanson, 1999). Due to the growth of the special needs population, there has been a rise in the need for the expansion of successful instructional methods in the classroom (Martin et al.). Intervention steps should be incorporated in education early in the process.

Because of the growth in the special needs population, a substantial number of students are likely to endure academic challenges. Regular education teachers as well as special education teachers should be well prepared to provide intervention strategies for special needs students to assist them with meeting their educational goals. To date, more research is needed to describe the types of successful strategies and interventions.

The study was conducted in the Mississippi Delta region by faculty from the Thad Cochran Center for Rural School Leadership and Research. The focus was help for P-12 teachers and administrators in handling the particular issues which stem from this location and the added demands of a rural setting, high poverty, and tight budgets. Rural special education teachers, regular classroom teachers, and administrators have particularly challenging situations. The purpose of this study was to identify and describe the methods currently being used in regular and special education classrooms with students who are showing difficulty learning. The effectiveness of those strategies was evaluated through reporting current practices and perceptions of those practices. Current practitioners were surveyed concerning the strategies they found effective, the types of support they have had made available to them, and suggestions

for how they could be better helped with resources and training. Implications for practice for support services needed for the teachers and students were explored.

Review of Literature

In preparing to introduce effective teaching strategies, teachers should be open to educating students in a variety of ways (Winebrenner, 2003). Learning challenged students do not use learning strategies as effectively as do other learners; they process more slowly (Coyne, Kame'enui, Carnine, 2007). Teachers must be able to experiment with various techniques when they observe students are not learning the concepts they are teaching. Compounding the academic issues, students who continue to fail are at risk of becoming behavior problems. According to Winebrenner, there are several concepts teachers should utilize when tackling learning challenges of students. Teachers should be aware that numerous students with learning challenges prefer tactile and visual instruction. It is necessary for teachers to make use of differentiated instruction. Many students need to see the *big picture* before trying to comprehend the smaller parts; therefore teachers should begin by teaching the concepts and then move to the details. Goal setting is also important; teachers should demonstrate to students how to set realistic short term goals and accept recognition for reaching those goals. Assignments should be manageable so students can focus on what they are capable of achieving and experience success. Any new knowledge should be related to previous knowledge. Students should be able to connect the new skills with old skills and recognize patterns. The teacher should present organizational skills with direct instruction such as requiring a set of books for home and school, color coded notebooks, assignment trackers, and other similar organizational procedures. The teacher should also engage every sense in learning actions; movement is a vital part of the learning process to a child with learning disabilities; technology is often of great assistance with the learning process. Early and continuous intervention and remediation are imperative to the success of the learning challenged child (Swanson, 2001). Students with exceptional learning needs have been embedded in the field of education for many years. Educators have struggled to find programs and strategies that foster success. Improvements are being made in identifying children with special needs. As this trend continues, the techniques and materials must also improve in order to accommodate their unique needs (Martin et al., 2008).

Methodology

The purpose of the study was to identify and describe the methods currently being used in regular and special education classrooms with students who are showing difficulty learning. The degree of success and failure was analyzed through reporting current practices and perceptions of the effectiveness of those practices. Current practitioners were surveyed concerning the strategies they found effective, types of support they have had made available to them, and any suggestions for how they could be better helped with resources and training. Special needs students, regular and

special education teachers, and administrators will benefit from the results in this study.

This study examined the perceived effect various teaching techniques have on the success of students in school. The investigation also examined collaboration between the regular education teachers and special education teachers. The collection of data determined the most current and commonly used methods for teaching special needs students. This study explored the methods that are viewed as the most beneficial to student achievement. The qualitative, descriptive design included survey administration as well as follow up interviews.

Surveys were given to thirty regular education and special education school teachers, and administrators in a middle school setting. Seventy-six percent of the surveys were returned; four were administrators, five were special education teachers, and fourteen were regular education teachers. Sixty percent of those surveyed had been in the field of education for five years or more. Fifty-eight percent of those had ten years or more experience. The teachers were chosen using convenience sampling. Researchers created a survey designed to identify teaching strategies commonly used in the classroom. It focused on several areas of instruction such as whole group, ability grouping, small group, differentiated instruction, remediation, interventions, peer tutoring, and technology use. Strategies teachers used less often in the classroom were examined as well. The survey was comprised of an open-ended writing assignment and open-ended questions concerning the perceived effectiveness of the strategies.

Researchers gained Delta State University Institutional Review Board approval. Then surveys were delivered to the participants. The surveys were anonymous, but participants were asked what they taught, what level they taught, and for how long they had taught. The participants were apprised of their rights and that the submission of the survey constituted their agreement to participate. The participants returned the surveys anonymously. A reminder e-mail was sent to encourage participants to return their surveys. One researcher was a participant on the school's campus.

The survey responses and open-ended writing assignment were analyzed for content and qualitative themes concerning teaching methods. Data were subjected to content analysis to identify emergent themes in the responses. The researchers identified the frequencies and modes of the most common teaching methods that were perceived as the most effective strategies for supporting learning disabled students.

Findings

The results yielded actual techniques that practitioners in the field have found to be effective in their schools, as well as perceived needs to increase teachers' effectiveness in the facilitation of learning for all students, especially for the

challenged learner. These results can be generalized to other schools for use with other students by regular classroom teachers, special education teachers, and school administrators.

Among the methods cited by regular education teachers, special education teachers, and administrators as currently being used were lecture and hands-on activities. Special education teachers also included small-group, role play, and discussion. Regular education teachers added large-group, storytelling, peer tutoring, telling a partner what you have learned, direct instruction, graphic organizers, and independent practice. Overall, regular and special education teachers, as well as administrators agreed that hands-on activities along with lecture were the most effective in helping learning challenged students achieve success. All parties agreed that group work played an important role in student achievement. Special education teachers, in particular, added that discussion was critical to learning disabled students' ability to comprehend. They also stated that most students were visual learners, needed material to be broken down into small segments, and required ample time to ask questions. The methods cited as most effective for the regular education student and for the challenged learner were similar with the exception that large-group, drill, and structured lecture were included for the regular education student only. The least used methods included small-group and one-on-one instruction because of the limits of time and class size. Special education teachers stated lecture alone was the least used and least effective method; however, this was not noted by either administrators or regular education teachers. Cooperative grouping was seen as ineffective by administrators. Regular education teachers added that technology was not used often because of availability and lack of teacher training.

Resources teachers had available to them included presentation software, presentations developed by book publishers, LCD projectors, resource books, textbooks, various websites, computers, manipulatives, accelerated math, and accelerated reading programs. Special education teachers added games, computers, and globes to the list. All groups also agreed that valuable resources included other teachers and administrators. Most of those surveyed knew how to access the resources and did take advantage of them. All those surveyed had taught or were currently teaching inclusion students.

While most felt comfortable teaching students with learning disabilities, they all felt more training was necessary. A few regular education teachers commented that they had experience working with these students but no formal training. The participants agreed more training was needed in the area of differentiating their instruction and learning about the various learning disabilities. Special education teachers specified needs in the areas of Autism, Asperger Syndrome, and motivational strategies. Both regular education teachers and administrators felt that more training was needed with hands-on strategies and teaching with manipulatives. Some regular education teachers stated they did not feel that they had adequate training to use

technology successfully in their classrooms; also noted as areas for needed training were working with students who were far below grade level in reading and English Language Learners. About sixty-seven percent of those surveyed thought they were qualified to teach inclusion students; they all thought communication was a key element in the success of teaching learning disabled students.

Both teacher groups suggested the need for additional teaching assistants as the most important way they could be helped in the classroom. Administrators and regular education teachers added that better communication was critical. Regular education teachers wanted more technology in the classrooms, smaller class sizes, additional training with various learning disabilities, and adequate planning time.

In conclusion, it would seem a mixture of strategies used together is most beneficial in helping learning disabled students. This is supported by the responses given most often by the sample surveyed. The purpose of the study was to find teaching strategies that are perceived to be effective for learning disabled students. The teaching strategies found to be effective for the challenged learner are the same as those effective for all students. Special education teachers have less faith in the value of lecture than do the other groups. There is a need for teacher training in the use of technology and specific learning disabilities. Hands-on activities are critical to successful learning for all students; however, teachers need more training in this area. Because of the extremely high rates of poverty and percentage of students diagnosed with learning disabilities in the rural Mississippi Delta region, the active engagement of students is especially critical here. Regular and special education teachers need additional help in the classroom provided by teaching assistants. Everyone seems to feel that better communication among all those who provide support for students is needed and it appears that the wide-spread use of inclusion may be improving this. There have been significant advances in teaching the challenged learner; however, additional research is needed. Students, educators, and administrators alike will benefit with the expansion of this study.

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Reflective Teaching and Learning in a Reading Clinic

Introduction

The work of John Dewey (1998) on reflective thinking and inquiry is well known and often cited. Dewey identified reflective thinking into two distinct phases: "(1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle, and dispose of the perplexity."(pp. 17-19). His research laid the groundwork for reflective teaching and learning.

The purpose of this exploratory study was to analyze the reflections of preservice teachers on their teaching. The study analyzed individual reflections from a pre-course survey, midterm reflection, and weekly reflections, end of course survey and final reflections. The question that framed the study was: Are there any patterns of reflectivity that emerge?

Methodology

Subjects and Setting

The focus of the study was the reflections of 12 teacher education students enrolled in a Reading Clinic class, during the spring semester of 2008. The course consists of a lecture component and a clinical experience. The college students were paired with a student who was referred to the college reading clinic because they struggled with reading. Each clinician tutored a child weekly, for ten weeks throughout the semester.

Prior to the start of the course, the college students were asked to anonymously complete a pre-course survey. The survey asked for ratings of "Always, Sometimes, Never" to specific questions. Open ended questions were also included. At the end of the course, the students anonymously completed the same survey again. Each week, students were asked to provide lesson plans and reflect on the effectiveness of the instruction or intervention as well as how well the instructional objectives were met. Additionally, students provided a Midterm and Final Course Reflection of the overall experience, which are the focus of the analysis.

Analysis

Students were directed to write their Midterm and Final Course Reflections anonymously. They were told that they should reflect on the clinic course experience and write about how they felt and what they thought about the experience. The papers were collected by the graduate assistant who randomly assigned numbers from 1-12. A coded list was kept by the graduate assistant so that comments from the first reflection could be traced to the second reflection. The reflections were collected, copied and given to a colleague who conducted a blind review. The reviewer was asked to look for patterns that emerged. As the Midterm Reflections were read, themes began to emerge and codes were assigned to statements corresponding with those themes. Two general themes emerged from the Midterm Reflection, and a third emerged from the Final Reflection.

Method

Subjects and Setting

The focus of this study is the reflection of 12 teacher education students taking a Reading Clinic class, during the spring semester, 2008. The course consists of a lecture component accompanied by a clinical experience, in which the students are paired with an elementary- aged child referred to the college because they struggled with reading.

Students are asked to provide lesson plans each week, and reflect on the effectiveness of the instruction or intervention as well as how well instructional objectives were met. In addition, students provided a Midterm and Final Reflection of the overall experience, which are the focus of the analysis.

Analysis

The reflections at both midterm and the end of the semester were gathered and read to discover the emergence of themes among the students. Students were kept anonymous, but each was assigned a number from 1 – 12 so that comments from the first reflection could be traced to the second. As the Midterm Reflection comments were read, themes began to emerge and codes assigned to statements corresponding with those themes. Two general themes emerged from the Midterm Reflection, an a third emerged from the Final Refection.

Results

Two themes emerged during the analysis of the midterm reflections: (a) fear of harming the child, or doing more harm than good when it came to instruction or intervention, and (b) facing the difficulty of keeping the child on task or the need to increase a child's motivation to read. The third theme to emerge during the final reflection was: (c) the importance and appreciation of the application of reading

theory, assessment and reading strategies, in the hands-on or one-on-one nature of the clinic structure.

Emerging Themes

Theme One: Fear of harming or hindering the child's reading ability. Of the 12 students in the clinic, eight expressed a concern that they would harm the child or make matters worse. Two of those expressed concerned about meeting or working parents as well. Of the eight students, five were able to alleviate their fears almost immediately through the use or discovery of reading or motivating strategies. An additional student who expressed this fear also stated that he or she knew they could actually help the student, but did not indicate the use of any strategies. The strategies used were learned either in the lecture portion of the class, or in other reading classes.

Of the five students who utilized strategies, all of them expressed increased self-confidence as a result. A few students (not included in the five) continued to feel uncomfortable, but expressed *lack of confidence in the child*, or frustration with the process, and they both expressed a continuation of these attitudes in the Final Reflection. The use of strategies and subsequent improvement by the child, led to an expression of increased self confidence and subsequent self-efficacy among those five students.

Theme Two: Facing the need to keep the child on task or motivated. For the Midterm Reflection, seven of the 12 students expressed a concern about the ability to either keep a child on-task or increase their motivation to read. Some of the children wanted to draw or actually shut down during the time they were at the clinic. Once again, among the seven students who expressed this concern, five of them used either creative (or individualized) strategies (such as talking about NASDAC races, using special stories, or playing games during the intervention or lesson) or strategies they had learned in reading classes. All of the students employed these strategies following specific assessments, such as the use of a running record an informal assessment. Based upon these assessments, the students differentiated their lesson plans and interventions and used specific strategies such as the use of word families and CVC words. As a trend, once the children started to improve, they became motivated to excel, which brought relief and increased self-efficacy to the students, because they realized the strategies employed were effective.

Two of the seven students who expressed this concern did not say they drew upon strategies, but relied instead on the *hope* that their charges would soon improve.

Theme #3: The recognition of and appreciation for the opportunity to apply reading theory to practice. Student comments on the Final Reflection included reiterations of the first two themes, but a third and unique theme emerged during this reflection. Five of the 12 students expressed that the course was the best they had

taken in the teacher education program, that the experience gave them improved self-efficacy for their knowledge and ability to teach, or that they were convinced that they would be successful as student teachers or as future teachers.

Conclusions

The study attempted to answer the exploratory question: Are there any patterns of reflectivity that emerge? The study identified three emergent themes of reflectivity. The themes included: 1. Fear of harming or hindering the child's reading ability, 2. Facing the need to keep the child on task or motivated, 3. The recognition of and appreciation for the opportunity to apply reading theory and practice. Students also changed their attitudes and beliefs about themselves as teachers. Self-efficacy and increased self confidence were noted as the three themes were examined.

Teachers and teacher educators are asked to use reflection as a way to bring the new knowledge of practice to consciousness (Lyons, 2006). In this study, the pre-service teachers identified changes that they made in their teaching. They used strategies previously learned from the lecture component and other reading classes. After administering informal assessments, all of the clinicians differentiated their lessons and planned instruction based on the instructional needs of their individual student. As a result, the students improved and the clinicians gained self confidence and self-efficacy. At the conclusion of the course, several students expressed self-efficacy for their knowledge and ability to teach and were positive they would be successful future teachers.

Implications for teacher education

Reflective teaching should be incorporated into teacher education courses. As Zeichner stated, "There is no such thing as an unreflective teacher." (p. 207). We can look closely at how we use reflection in our courses and most importantly, how we use the information we gather. Important questions emerge, such as: Are the students learning? Are there changes to consider in my teaching practice? Dewey has suggested that change is a potential outcome of reflective thinking.

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Special Education and Neuroscience

Abstract

For many children in both rural and urban centers, the learning process is one that has its share of highs and lows. Some classes are a wonderful experience while others can be an exercise in frustration. For individuals who have suffered from a traumatic brain injury (TBI), the return to the classroom can often mean that even the areas that were once easily understood and quickly learned can now be as difficult to comprehend and retain as the subject material they had difficulty with pre- injury. This paper will look at how recent neuroscience research into memory, can be used to strengthen curriculum enhanced with emotion to help these students rebuild their educational goals and their lives.

The Importance of Memory

Perhaps the single most important facet of working with brain injured students is the realization of just how badly memory is affected by an injury to the brain. Memory is what defines us as individuals and that raises the understanding of who you are. The complexity of how memory works has perplexed philosophers for centuries and modern science for decades. "The nature of memory is not rightly understood if it is regarded as merely a general talent or capacity." (Gadamer, 2000). It is memory that, due to damage of the brain, needs to find alternative or new pathways for learning. It is the teacher who is the facilitator in this process. Having a student memorize something does not necessarily mean memory, as a process, is functioning. The complexity of the personality and the unique experiences of the individual are woven into one's memory, and the ability to learn allows the person to grow.

There are some support services for teachers working in this field as of this writing, yet few principals or teachers with special training to assist in dealing with the problems facing these students or the teacher. The teachers that are working in this new field work in predominately medical facilities with nurses, aids, and physical therapists. Even the internet generally only offers the medical perspective on brain injury. Perhaps an even more striking example is the fact that the young men and women returning from the war in Iraq are receiving treatment for TBI on a physiological approach, but not on an educational cognitive level. What is most striking is that these individuals face the same struggle that students with a TBI in a classroom face, memory problems. (Hoge, 2008).

The problems that arise in the classroom with students, who have a TBI, are often a result of memory problems. These result in a person's inability to plan activities, carry them out and to problem solve. Also the brain injury can affect the person's ability to understand consequences for certain actions, and to consider other options. These deficits cause the individual to fail at things many times and often depression and lack of self-confidence results. These students have changed, and it is the teacher they often look to for help. Except to help, teachers need to understand these student's new lives. The obstacles that affect learning and rebuilding their lives are inevitably intertwined, and the primary obstacles are self-image and memory.

Many times the general practitioners working with these students prescribe tranquilizers and sleeping pills because they often seem more anxious than depressed. The result of such medications has an effect on their ability to concentrate and remember what the teacher is doing in the classroom.

The depression the students often face has an affect on memory in a number of ways. Firstly, they may often have hyper-distractibility, a term often used by psychologists. So much had happened to them so quickly, their injury, loss of friends, family problems, etc. that they just have too much on their minds. As a result, they have great difficulty focusing and concentrating on the classroom activities. What appears to happen is that new information is less likely to be processed into memory engrams because of a decreased ability to focus on environmental stimuli. (McEwen and Sapolsky, 1995). This is called a shallow memory trace by neuro-psychologists, and because the information is not as permanently encoded because of distraction, in this case brought about by depression, the person is more likely to forget. Secondly, a person's ability to retrieve a memory is affected. To retrieve and reconstitute a memory can be difficult at the best of times; damage to the brain compiled with depression makes it even more difficult. The person is trying to concentrate on what is being taught, for example, but the other problems on his or her mind are interfering with the task at hand.

It is also important for the teacher to be aware of either a biological memory problem or a memory problem that was manifesting itself as a result of depression. A depressed person may simply not be paying attention to events or care enough to be bothered to remember what was being taught. The only way to establish what is occurring is by obtaining the medical information on the student and know what that type of injury can do to memory. As well it is good practice to consult with the psychologist to see what may be happening in their personal life post injury. This is called dual-diagnosis, and it can be extremely frustrating to deal with for a front line teacher, yet it can also allow the teacher to better understand what approach may work best. Once this has been understood, the teacher can now approach the student's needs more effectively.

Rebuilding Memory

Memories and experiences in youth seem so powerful and alive and perhaps that is why the arts, paintings, music, film, have such an affect on us throughout our lives. These art forms allow us to turn back the hands of time and we are young again, like when the world was new. In terms of the brain physiology involved, it is critical to keep in mind that the Limbic system is critical in linking information to memory. "Information must pass through the reticular activating system (RAS) and the limbic system to be acknowledged, recognized, and connected with relational memories, patterned, and ultimately stored into long- term memory. (Willis, 2007). Educators can use perhaps the greatest tool for repairing an injured brain, and helping to restore memory, that tool, is the use of emotional laden curriculum.

The famous modern day writer Stephen King (who was once a High School English teacher; by the way), was being interviewed once and said something quite interesting about youth and memory. He was asked where he got his imagination for his stories from. He said that when we're young we have a marvelous third eye, imagination, and as children imagination sees with twenty/twenty clarity. As we grow older, it dims and the boundaries of imagination begin to close and become tunnel visioned. We lose our ability to think around corners and the world becomes only what we focus on and pursue, career, family, etc. and we lose that ability to imagine. Artists break open that tunnel and allow you to look at the world in a different way, if only for an instant, yet often that instant remains in our memory for life.

Many artists, authors, and filmmakers seem to have the dreamy eyes of a child as author Ray Bradbury once said. Orson Welles famous comment about filmmaking, "It's the best set of electric trains a boy ever had." Also states the youthful exuberance art can create in a person. The students with a TBI in the classroom are, in a sense, like small children again. They have lost the trappings of a complex world and are now enthusiastic about rebuilding their lives, they want to be back in the world of friends and family, but they feel they can never really be the same person again. The opportunity for a whole 'new' person is there, and the teacher may have the key to awakening the child in them again. That childlike wonder and awe can be rekindled and used to help with memory, learning, overcoming depression and discovering their own new path. That key is emotion.

The Emotional Link

> Art is that in which the hand, the head, and the heart
> of man go together.
>
> - John Ruskin (Social Philosopher)

"To be sure, knowledge of the brain's structure and functioning might well hold interesting implications for learning and pedagogy. But the only way to know for sure whether something is possible is to try it. And should one succeed despite the

predictions of neuroscience, that success becomes the determining fact. Success will cause us to change the ways in which we think about the brain, rather than revising the ways in which we think about pedagogy." (Gardner, 2001).

A recent study by researchers in Finland found that stroke patients who listened to music for a few hours a day, showed marked improvement in memory and focused attention, versus individuals who did not listen to music. The study further showed that the emotional stimulation had a direct effect on the recovery at a biological level, of the damaged areas of the brain. (Sarkamo, 2008).

The Arts can have a tremendous impact on the student's memory process. They are often able to recall what they had viewed or the emotional response to music and this, in turn, can has a positive impact on their learning and on their self-esteem. The depression they face after their injuries is often linked to their poor memories and mental processing abilities. The dramatic music and visual images and the resulting emotional responses can have a great impact on the memory processing patterns in the brain, and help them to function more efficiently. The students can fell better about their situation, and because of heightened interest, they will often put more effort into other classroom activities.

How to get students focused and interested in any subject content, arise time and time again in the classroom, in both regular and special needs programs. The Arts, Music, Film, etc. can often be the perfect source of stimulation to get the ball rolling and have these students confront difficult questions and look at the world and themselves differently post injury. Posing these questions is essential to open pathways to learning, and using the arts is a beautiful way to create the questions. As Gardner states, "The questions are natural ones for young persons to pose. However, they are rarely articulated in explicit philosophical terms. Rather, they are posed in the language of fairy tales, myths, "pretend" play, and, in a cinematic age, films and video." (Gardner, 2001). If the teacher uses dramatic music, or well written, visually striking films, then the questions are presented and the philosophical discussions may arise as a result At the very least the student is fixed and concentrating, and this combined with that downshifting biological rush in the brain, often resulting in the inevitable link gate to creating or triggering a memory and the start of the learning process.

One can see how the use of the subjective (in this case the Arts in curriculum) can have an effect on the objective (the biology of the brain). The result is the individual is better able to learn because of the stimulation that the art form provides. Art is very dramatic in nature and that is why they can be so are effective by having a tremendous impact on the biological memory systems of the brain. Howard Gardner has talked about the input and use of art as an educational "pathway for understanding."

Recent research on how students develop or create a mental image when reading, shows that if that student can form a visual image of the text he is much more able to recall the information and develop proficiency as a reader and writer later on. (Gambrell & Jawitz, 1993). This helps show the importance of both memory, and the way the brain utilizes both visual and emotional areas of the brain to encode information.

There can be real life issues that arise from the arts, and Howard Gardner explains why this is. "Education in this pathway ought to be inspired by a set of essential questions: Who are we? Where do we come from? What do we consider to be true or false, beautiful or ugly, good or evil? What is the fate of the earth? How do we fit in? What is the earth made of? What are we made of? Why do we live, and why do we die? Are our destinies under the control of God or some other 'higher power'? What is love? What is hatred? Why do we make war? Must we? What is justice and how can we achieve it?" (Gardner, 2001).

The Arts allow teachers to pull students into new ways of thinking about the world and about the students own life. Many great and interesting discussions can occur by using the Arts as a teaching tool for students with a brain injury. Invariably the questions that art creates in a person with TBI can be used to help the student better relate to issues that they themselves are dealing with. Who am I? Where am I headed now? Do people still love me and why? All important questions to these students and often an emotional piece of music or visual medium can help the student concentrate, relate to, and encode into memory.

Emotions have not been seriously studied by cognitive scientists until fairly recently. (Lazaraus, 1999). What has been learned is that emotions are often associated with motivation. Motivation is action in pursuit of a goal; emotions can hinder or help goal achievement. (Lazaraus, 1999). It would appear that the Arts can help with motivation, in that new pathways of thinking are created. If a person is subjected to a new and exciting emotional experience, the person reacts to it. This causes attention to be focused, memory to be stimulated, and foundation for new learning to take place.

The student who listens to the music or watches film, understands its premise, and reacts to it physiologically. The memory connections are made at a basic cellular level; new neuronal connections are made, as well as understood and retained at a higher cerebral level. Emotion becomes the catalyst between brain and mind. Daniel Goleman, in his book, "Emotional Intelligence", believes that a high emotional quotient is more important than intellectual knowledge in succeeding in life. (Goleman, 2006). He states that emotions have a tremendous impact on how we process information and make decisions, and they also have a great deal to do with memory retention. The Arts can help focus attention and possibly help students improve in both short and long-term memory retention.

Implications for Teachers

If there is one thing we probably all remember about school, it was whether or not the teachers made learning interesting. The teacher's primary goal is to get and keep the students interested and focused. "Arousal is important in all mental functions. It contributes significantly to attention, perception, memory, emotion, and problem solving. Without arousal, we fail to notice what is going on - we don't attend to the details." (LeDoux, 2003). The use of various art forms allows important aspects of brain function to be stimulated. This in turn helps the brain injured individual focus and maintain attention, which intern results in improved memory. The Arts in curriculum can help:

1. Art can be representational, allowing a depiction of a literary event.
2. Art can be used to provide organization and structure to aid with sequencing.
3. Art can be used to clarify abstract concepts.
4. Art can help to transform from imaginary to tactile knowledge, aiding with recall, and depicting a concept differently.

Perhaps most importantly, this classroom activity becomes a more enjoyable way to relearn or learn new information, and to discover the hidden potential in this special population.

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Summary of Keynote Address

Dr. Lorna Idol is interested in supporting school districts in coordinating special education and literacy instruction for struggling readers within the Response to Intervention Model (RtI). Five years ago, the Individuals with Disabilities Education Act, IDEA, was rewritten and signed into law (2004). This Act changed many sections of the statute to reflect new ideas around learning disabilities and the concept of a pre-identification strategy called Response to Intervention or RtI. The RtI Model is intended to help educators utilize a Three-Tier Intervention Model for struggling readers.

The emphasis of RtI is to focus on providing more effective and scientifically-based reading instruction by encouraging earlier intervention for students experiencing difficulty learning to read. One assumption is that this model will prevent some students from being identified as having learning disabilities by providing intervention as concerns emerge. Key to the successful implementation of this model is for general education and special education to work together collaboratively in coordinating literacy instruction for struggling readers within the RTI model.

James (2004) identified some essential questions that researchers and program implementers would need to address as a result of the implementation of this Act. The state of the art in response to these questions in reported in this address. The questions are:

- At what point does a student qualify for intervention in the RTI model?
- How much intervention is appropriate within the Three-Tier Intervention Model?
- How is the quality of the intervention monitored?
- What is the level of acceptable student progress?
- At what point will a student will be deemed to be "nonresponsive-to-intervention"?
- If a student is identified for special education and is determined to have learning disabilities, how will his or her program and instruction differ from what was previously received?
- How will the instruction be provided?
- How will special and regular educators collaborate to support the student?
- How will the RtI model affect the provision of accommodations both in the classroom?
- How will the RtI model affect the provision of curricular and standards-based assessment?

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Technology in Special Education

In small and large communities throughout the world, technology is an integral part of business, education, and home. Technology is a communication tool, which connects people anywhere in the world. Many children have access to a number of technological tools that can be used in the classroom to develop a variety of skills. Many of these tools are items that students use each day outside of school. Some of the technological tools available to children today include I-pods, MySpace, Face Book, Instant Messaging, Blogs, Wikis, digital cameras, digital video cameras, and multi-purpose cell phones that take pictures, just to name a few. Teachers can take advantage of the technology children are already familiar with and use it to increase skills in school. Within this paper, I have identified why technology is a critical issue in special education and have included information on a number of technological tools and how they can be used in the classroom.

With the passage of "No Child Left Behind" (2001), educators are required to develop lessons that will help students develop higher level thinking skills, provide authentic assessments, and work to increase achievement levels. Technology needs to be developed and incorporated into schools to help students with disabilities develop higher level thinking skills. This in turn will increase their ability to effectively function in the real world (NCREL, 2008).

Technology can provide all students with new ways of communicating, writing, and demonstrating what they know about a topic or the content that is presented in their classrooms (Kingsley, 2007). However, many teachers lack the training and confidence to integrate technology successfully into the classroom. Often support for those who do infuse technology is lacking (NCREL, 2008). In order for technology to be integrated into curriculum and used successfully, teachers need to have time made available to them to practice the technology, collaborate with team member on how to use the technology in the classroom, and have the opportunity to observe others (NCREL, 2008).

Using technology in the classroom involves providing student-centered activities that will increase higher level thinking skills in students. The greatest barrier to using technology successfully in the schools is the lack of training for pre-service and in-service teachers. There are many teachers who use technology for presentation purposes such as power point or video. Some teachers who are more skilled in using technology may use it for more student-centered learning providing an avenue for research, discovery, analyzing and synthesizing data. Teachers who use a teacher-led or lecture approach to instruction most likely will not integrate technology into their classrooms. Student-centered classrooms use technology to connect students to real-life experiences which will benefit the students as they grow into adulthood. Teachers, who use technology in their classrooms, tend to have a constructivist point of view on teaching

that helps to develop a students' individually constructed meaning. Students in this type of environment are encouraged to construct meaning from their environment as opposed to instruction that is delivered in a traditional method. The traditional method of instruction involves the teacher transmitting information to the student. The traditional teacher views technology as a method of presenting information rather than interacting with the information. If constructivism is encouraged and utilized, then technology would be utilized more in schools (Teo, Chai, Hung, & Beng, 2008).

School districts tend to provide one-day trainings that occur as needed. Training in technology needs to be on going from year to year exposing pre-service teachers and teachers to the latest technologies and how to implement them into their instruction. On-line or distance training can be used for pre-service and in-service teacher training. This is a cost effective way for school districts to provide training to a larger number of teachers (Hasselbring, 1991).

Special education classrooms are especially affected by the lack of training for pre-service and in-service teachers. Sixty percent of students receiving special education services have learning disabilities and emotional problems (Hasselbring & Williams, 2000). Computer-based instruction can be beneficial students with disabilities as it can improve the students' skills and assist them in understanding content knowledge (Hasselbring & Williams, 2000). Technology can level the playing field for students' with disabilities. However, teachers must be adequately trained in how to use the technology and be able to implement technology into the classroom (Hasselbring & Williams, 2000).

Students with disabilities often have lower expectations placed on them by teachers. Teachers modify the curriculum and teach basic skills rather than develop lessons and activities to develop higher level thinking skills. Many students with disabilities are involved in pull-out programs that limit their access to the general education curriculum being used with their same age peers. Teachers should provide challenging activates and curriculum for all students. The integration of higher level thinking skills and authentic tasks are beneficial to all students. Students with disabilities need to be provided with authentic tasks that will generalize to real world situations. This will present them with more opportunities for success in their adulthood (NCREL, 2008).

There are many technological tools that can be used to enhance learning and aide in developing skills in students with disabilities. The statistics regarding the reading and writing skills of students with disabilities are sobering. Eighty percent of the students identified as having a learning disability, have been identified as having a reading disability (Elder-Hinshaw, Manset-Wiliamson, Nelson, Dunn, 2006). Students with disabilities, particularly in reading, can benefit from reading assistive software with a speech element. Using technology that contains the speech and text elements has shown to increase the comprehension rate, fluency and accuracy of students reading. Using multimedia inquiry projects further enhances the development of reading comprehension skills while providing authentic experiences. Multimedia inquiry projects encourage students to read for meaning, summarize, identify main ideas and sequence events.

Students must construct projects, analyze information, and organize their information. The multimedia inquiry projects provide the opportunity for students with disabilities to develop higher level thinking skills while completing and developing an authentic project (Elder-Hinshaw, Manset-Williamson, Nelson, Dunn, 2006).

As technology has evolved over the last ten years, its use has begun to filter into general education and special education classrooms. Parents and teachers are recognizing how talking storybooks, digital notebooks and internet use can benefit all students. Research in the area of technology has identified many ways in which technology can be used to promote literacy skills. Parents and children can work together using digital storybooks to develop reading skills at home and writing programs to increase the reading and writing abilities of many students. These programs are especially beneficial to students with disabilities in that it allows theses students to access and practice building these skills at school and at home (Jeffs, Behrmann, Bannan-Ritland, 2006).

Podcasts, recordings used over the internet and mobile devices are being used to record storybooks for parents and children to listen to and model from. Children learn through modeling. They can learn through modeling others as well as themselves. Video self-monitoring avails students the ability to read aloud, video record themselves and then review themselves reading. The use of video self-monitoring has helped increase student's reading fluency and comprehension. This technology is an effective, beneficial and inexpensive tool to teach reading to all students (Skouge, Rae, Boisvert, 2007).

Digital storytelling is a technological application that allows students to develop and create their own stories. The stories can be autobiographies, biographies, creative stories, and documentaries, just to name a few. Student's with or without disabilities use a variety of literacy skills to develop their digital stories. Students must identify topics, conduct research, write a script, and produce a story that will reflect on their identified topic. This involves using higher order level thinking skills such as organization, synthesizing, analyzing, and creating. Students can combine visual images with their written work that helps their comprehension. This is a great motivational tool for students. Digital storytelling is an effective tool for a teacher to engage students in lessons or to introduce a new topic. Through the use of digital storytelling, students with disabilities have an opportunity to develop communication skills as they research their topics, ask questions, collaborate with others, and create their scripts. Digital storytelling can be used across content areas to provide documentaries about history and digital diaries for science field trips and experiments. The research in this area is not extensive. However, there is evidence to prove its benefits (Robin, 2008).

Text-to-speech reading programs provide opportunity for students to practice phonological decoding with immediate feedback, develop comprehension skills and develop increased reading speed. When students do not have to spend additional time on decoding they are able to concentrate on the content of the text which leads to better comprehension. This is especially true for difficult or challenging words. Students with poor reading skills and attention problems benefit from the text-to-speech reading programs. One disadvantage of text-to-speech programs is that they are slow. Students

with higher reading abilities tend to comprehend less (Sorrell, Mae Bell, McCallum, 2008).

Presenting curriculum in electronic form can provide more authentic learning experiences, the availability to practice writing, reading, developing graphics, and listening to text. Videos, PowerPoint, digital recordings, text-to-speech of grade appropriate materials, all can lead to developing reading skills that will enable students with disabilities to be successful in school and real world situations. Students with severe disabilities have the ability to produce text-to-speech that will allow students who have speech difficulties convey their ideas and finished products to others (Michael, Trezek, 2006).

PowerPoint presentations (PP) can be an effective tool used by teachers to engage and hook students into a lesson. PP presentations are abundant all over the world and used in a variety of businesses, universities, schools, and other situations in which people communicate to others. There are some concerns with PowerPoint presentations. Specifically, research has suggested that PP presentations take away the engagement of people in conversation and are often used as a tool to communicate information in detailed form. PowerPoint presentations are seen as more teacher centered with the teacher acting as a technology master instead of providing pertinent information to students for learning. Students often prefer video, I-pods, and other forms of technology that are more entertaining and engaging (Crag, Amernic, 2006). If a teacher uses PP, it is important that he/she develop it to be interactive with students.

The interactive whiteboard provides a tool in which electronic information can be displayed allowing for students to interact with it. The interaction and discussion that can be developed through the use of the interactive whiteboard can lead to a very lively, engaging, learning environment. Using interactive technology invites more than learning basic skills into the classroom. Interactive whiteboards can be used for discussion, debate, and analyzing information, while allowing all students to be an active participant in their learning. Interactive whiteboards provide versatility in presenting information as digital information from a variety of places and in vast numbers. It can be displayed and flipped back and forth to in quick periods of time. The interactive white board allows teachers to be creative and develop lessons and activities that can be utilized by all students (Wood, Ashfield, 2008).

There are many advantages for using technology. Teachers can design their curriculum to be more individualistic while providing authentic evidence of students' learning. Cooperative learning is a benefit of technology. Students with or without disabilities learn to work and collaborate together to develop projects and learning experiences. This is beneficial for all students as it teaches them the importance of teamwork, communication, organization, delegation and technology skills, all of which will be beneficial for students as adults in the world outside of school. Discussion boards and blackboards are two additional technologies that students and teachers can use that are beneficial. Discussion boards are an online tool for communicating, posting questions, answers, links to resources, and discussion about a particular topic. Electronic

blackboard organizes class assignments, reading, further research information, class information, and a variety of other resources (Adcock, 2008). Blogs are an online tool similar to blackboard and discussion boards. Blogs can display class information and homework information. It is a useful tool for posing questions and discussion to students.

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Author Index