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The Psychological, Behavioral, and Educational Impact of Immigration: Helping Recent Immigrant Students to Succeed in North American Schools

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Abstract

Educators’ lack of knowledge of the cultural and immigration overlays on behaviors presents a quandary. It makes it difficult, given the present state of assessment in this area, to determine whether an emotional or behavioral disorder exists, or whether the behavior is acceptable to the newcomer’s culture and therefore reflects a cultural marker. This article addresses factors to be considered in making this differentiation, and provides information and guidance in meeting the psychological, emotional, and social needs of recent immigrant students.

The Psychological, Behavioral, and Educational Impact of Immigration: Helping Recent Immigrant Students to Succeed in North American Schools

Taking up residence in Canada or the United States is a dream that has come true for millions upon millions of immigrants since the inception of these two nations. Today, as in the past, new arrivals must cope with multiple issues of personal adjustment as they come into contact with a new language or dialect, peculiar laws and regulations, unfamiliar value systems and social customs, and myriad lifestyle changes (Barowsky & McIntyre, 2010; Berry, Phinney, Sam, & Vedder, 2006; Grossman, 2004; Inose & Yeh, 2002; Organista, Organista, & Kurasaki, 2003; Tong, 2002).

For immigrant children and youth, entry into North America brings to the forefront immediate and important decisions regarding who they are now, culturally and ethnically speaking, and who they will become (Cartledge & Milburn, 1996; Tong, Huang, & McIntyre, 2006). Each newcomer must make decisions, regarding the degree to which they will sustain the social conformities and personal values of the home culture that are essential to one’s present self-identity, and the extent to which the ways of the new culture will be adopted (Berry & Sam, 2003; Phinney, 2003; Yeh, Okubo, Ma, Shea, Ou, & Pituc, 2008).
Young immigrants may or may not recognize the necessity of revising their personal identity now that they reside on the North American continent. They do endeavor to gain the “intercultural competence” that will allow them to function well in the majority society, while maintaining and strengthening their psychological, social, and linguistic ties to their ethnic groups, and families (Yeh, et al, 2008). During this time, every incomer must determine whether the use of the North American dialect of English (or the Quebec version of French) and incorporation of mainstream North American behaviors and values, requires an overwhelming psychic and cognitive cost, or whether the cost of the surrendering part of one’s present sense of self is worth the benefits to be accrued.

While they will undoubtedly incorporate many of the host culture’s ways, they will experience uncertainty as to the extent that each culture should comprise the new sense of self (Barowsky & McIntyre, 2010; Tong, 2002; Tong & McIntyre, 1998). Newcomers are forced by emerging circumstances to make frequent, and often-times difficult choices regarding their personal identity. Some are successful in making this transition to a new and positive sense of self while others may be unable to clear all of the new linguistic and social hurdles. As a result, they may withdraw from making the effort to incorporate new cultural components with their older and more established first culture.

The resultant self-identity for each individual will contain different characteristics. Each will vary in degree, encompassing both the original and newfound cultures. The degree to which each composite is represented in the new inter-cultural identity depends on their social and educational experiences, cognitive abilities, skills, needs, and support systems. The one common element in the successful formation of an optimal “cross-cultural identity” (Lupi & Tong, 2001) is that the two cultures are viewed to be symbiotic and complimentary, rather than competitive and combative (Tong, 1998; Tong, 2002; Tong, Huang, & McIntyre, 2006).

This transition of entry into the new educational setting creates multiple cognitive, linguistic, social, and psychological challenges for immigrant learners. For these children, immigration has often entailed losing close friendships and social support networks, while having to create new relationships in unfamiliar and often threatening surroundings (Hernandez & McGoldrick, 1999; Yeh, et al., 2008). The manner in which school personnel interact and intervene with immigrant pupils has an enormous impact on their motivation, achievement, self-image, and behavior (Ma, 2008; Tong, Huang, & McIntyre, 2006), and can make the difference in the establishment of a healthy intercultural identity. It can also serve as a protective factor in the development of psychopathology (Barowsky &, McIntyre, 2010; Gangi & Barowsky, 2009).

This article addresses the intra-personal and inter-personal implications for recent immigrant students. It provides guidance in understanding and addressing psychological, emotional, social, and educational issues related to language use, and culturally-based learning and behavioral patterns.
Difficulties in Adaptation

Upon arrival to North America, children and youth rarely experience a fluid and unhindered acculturation process (Yakushko, Watson, & Thompson, 2008). For the vast majority, movement along the intercultural path produces tension and doubt, requiring continual adjustment to one’s new country. This adaptation requires the negotiation of obstacles encountered and brings stress at different times during the intrapersonal transformation to some aspect of “cross-cultural identity” (Grossman, 2004; Lupi & Tong, 2001; Tong 2002).

In running this gauntlet, they must learn to interact with the dominant culture (and others) as part of the adjustment process (Yeh, et.al, 2008), often resulting in “acculturation stress”; the anxiety and confusion arising from less-than-successful attempts to adapt to their new surroundings (Berry, et.al, 2006; Grossman, 2004; Pumariega, Pumariega, & Rothe, 2005).

Optimally, acculturation, the complicated and progressive process of intertwining cultures and languages, results in a positive cross cultural identity (Barowsky & McIntyre, 2010; Tong, et.al, 2006) in which they will become “bicultural” or “integrated” (Berry, et.al, 2006; Cartledge & Milburn, 1996), taking pride in their ability to cross back and forth over cultural, linguistic, and social thresholds.

Successful achievement of a well-formed cross cultural identity involves the intricate and delicate blending and mixing of the values, behaviors, and languages of the old country with those of the new one (Berry, et.al, 2006). This is no easy task when they frequently hear contrasting messages from various socially significant people about which culture’s mores’ are “best”.

Children of school age are particularly susceptible to an emotional disequilibrium and internal distress that results from the frequently contrasting demands of the home and non-acculturated peers and adults on one hand, and North American schools and acculturated peers and adults on the other (Banks, 2002; Cartledge & Milburn, 1996; Dillon & Suarez-Morales, 2007; Grossman, 2004; Nieto, 2004; Tiedt & Tiedt, 2005). For immigrant, asylum seeker, and refugee students, this intercultural tug-of-war can manifest itself in the formation of psychological and behavioral problems (Barowsky & McIntyre, 2010; Berry, et.al, 2006; Gangi & Barowsky, 2009; Grossman, 2004; McBrien, 2005; Pumariega, et.al, 2005; Suarez-Orosco, 1989; Zheng & Berry, 1991) or impairments in academic achievement (Grossman, 2004). Failure to provide timely treatment measures, due to the belief that immigrant children normally experience great anxiety in the early days of immigration, may bring serious psycho-social consequences such as aggression, depression, or delinquency (Ma, 2009).

How educators address cross-cultural issues has an enormous impact on their students’ emotional and educational outcomes (Barowsky & McIntyre, 2010; Tong, et.al, 2006). Imposing mainstream North American school culture on immigrant students can cause them to undergo even greater degrees of culture shock (Grossman, 2004). Failure to consider and incorporate students’ cultural characteristics contributes to the creation of unintentionally alienating
environments that promote estrangement, disinterest, conflict, and rebellion (McIntyre, 1995, 1996a; Nieto, 2004).

**Language Differences**

In addition to encountering and having to learn the social mores of the host country, immigrants are also exposed to a new language and must learn English (or its North American dialect) in order to better meet life challenges and take full advantage of their host culture’s opportunities. Language and culture are inextricably interwined in the process of acculturation and can thus not be overstated (Brown, 2000; McBrien, 2005; Sheets, 2005; Tong, 2000). English language ability is often seen as the most crucial indicator of cultural adjustment/acculturation level (Schumann, 1990; Mouw & Xie, 1999; Yeh, 2003, Yeh & Inose, 2002; Yeh, et al., 2008) and psycho-social adjustment of immigrants (Ying, 1996). Linguistic proficiency mitigates communication difficulties and allows fuller access to the dominant culture, enhances interpersonal interactions, and boosts self-esteem (Yeh, et al., 2008). The successful acquisition of English depends on the synchronization of the linguistic and cultural aspects of acculturation (Hernandez, 1997; Tong, 2000).

Communication is directly involved in the development of play, peer relations, and classroom behavior. Lack of English language fluency is a source of stress in terms of performance and experiences among immigrant adolescents (Yeh, et al., 2008). Difficulty in communicating needs and desires, intentions, concerns, and feelings in the form that others are able to comprehend can contribute to problematic behavior (or the perception of it by others) as well (Grossman, 2004; Lasky, 1994; Rueda & Forness, 1994). Consequently, language differences can contribute to disorders in social, emotional, or behavioral development (Grossman, 2004; Lasky, 1994; Rueda & Forness, 1994, Tong, 1999b).

For immigrant students with limited English proficiency, trying to integrate two languages and backgrounds can create cultural tension and conflict stemming from their new experiences in an unfamiliar environment (Grossman, 2004; Simoes, 1991; Tong, 2000). This may be true as becoming proficient in a second language may come at the expense of losing comfort in one’s identity and culture (Brilliant, Lovich, & Markson, 1995). Social adaptation of new immigrants to America is a complex phenomenon. It requires attention not only to the social and psychological adjustments that individuals experience, but also how they use their languages to signal their degree of acculturation to the host culture (Tong, 2000). A central point in the discussion on biculturalism further encompasses how the home and English languages are used. Mayher (1990) indicates, their usages reveal the thinking of individuals regarding their ethnic and cultural preferences and values.

**Assessment Issue**

Unfortunately educational systems have demonstrated a long term inability to accurately assess the cognitive, behavioral, social, and learning needs of culturally different and immigrant students (Grossman, 2004; Inose & Yeh, 2002; McIntyre, 1996a, Organista, Organista, & Kurasaki, 2003). Recent immigrant children and youth are at especially high risk for having
their culturally-based behavior identified as being abnormal (Grossman, 1995; McBrien, 2005; McIntyre, 1996a). Conversely, many culturally different youngsters in need of help for their emotional and/or behavior distress do not receive needed services (Grossman, 2004; Inose & Yeh, 2002; Kandula, Kersey, & Lurie, 2004). These factors make accommodation for cultural differences essential in accurate assessment of culturally diverse children (Council for Exceptional Children, 1989).

In particular, children of undocumented immigrant families, and youngsters from war-torn and politically repressive countries, are especially vulnerable to psychological damage, yet are unlikely to have their needs recognized or addressed by professionals (Barowsky & McIntyre, 2010; McBrien, 2005; Pumariega, et.al, 2005). Additionally, due to cultural variations in how mental health issues are viewed and addressed, immigrant parents may not recognize, or acknowledge, the need for their children to receive mental health services (Alegria, et al., 2004).

The manifestations of over-and-under identification phenomena of emotional/behavioral issues underlines the pressing need for the development and implementation of more accurate methods of assessment for culturally different youngsters, a long unfulfilled “mandate” made over two decades ago (Argulewicz & Sanchez, 1983; Duran, 1989; Figueroa, 1989; McIntyre, 1995; Ortiz & Polyzoil, 1986).

More recent assessment and intervention models such as Response to Intervention (RtI), Functional Behavior Assessment (FBA), and Positive Behavior Intervention Support (PBIS) may offer more effective assessment procedures. However, their effectiveness may be undermined if stressors associated with acculturation are not brought in for consideration prior to making a determination of mental health status. Inaccurate assessment of acculturation stress and culturally based reaction patterns are likely to interfere with accurate assessment when based only on current Western nosology and administered by mental health professionals trained in that orientation (Barowsky & McIntyre, 2010; Organista, Organista, & Kurasaki, 2003). An example of this oversight can be seen in the use of a commonly used measure of behavior. The Behavior Assessment System for Children (BASC) may be culturally biased against some ethnic groups (Cho, Hudley, & Back, 2003). Even the practice of comparing children to cultural norm tables, rather than eliminating cultural bias, may actually amplify the problem (McIntyre, 1995). In other words, there is no such thing as an unbiased assessment (Shepherd & Stephens, 2010).

This phenomenon has also shown to hold true in the evaluation of achievement. Many of the widely used achievement and intelligence measures fail to accurately measure ability in culturally different students (Hagie, Gallipo, & Svien, 2003; Shepherd, 2010).

In an attempt to acknowledge the problems inherent in differentiating cultural traits from disabilities, the New York City Board of Education has cautioned its schools “not to refer new immigrant students to special education in their first 3 years in the U.S. to prevent inappropriate placement” (Advocates for Children, 2005).

Assessment does not reside in a silo and can be effective only when it leads to a path to addressing the needs of an individual. This path contains many curves in which we encounter
cultural, constitutional, environmental, family, and educational influences. Consideration of acculturation stress is a key factor in addressing the needs of an increasing population of immigrants, many of whom have sustained emotional trauma in their re-location (Barowsky & McIntyre, 2010; Gangi & Barowsky, 2009). Diagnostic procedures and criteria must be scrutinized given the near always differing cultural expectations/customs found in these immigrant children under consideration, and the acculturation process with all its variations between individuals.

**Educator Awareness of Cultural Differences and Immigrant Issues**

There are often vast differences between the cultural mores and patterns of “appropriate” behavior that were learned and promoted in our immigrant students’ previous schools and those expected in North American educational settings (Brown, 2000; Coutinho, Oswald, & Forness, 2002; McBrien, 2005). Value orientations often vary by culture, as do actions considered to be either appropriate or aberrant under various circumstances (Grossman, 2004; Light & Martin, 1985; McIntyre, 1996a; Shepherd, 2010; Toth, 1990). As a result, social and emotional problems often occur when individuals possess a repertoire of behavior appropriate to one culture, but reside in a very different culture (Shepherd & Stephens, 2010; Sue, 2003).

Teachers’ self-unaware beliefs, attitudes, and priorities are reflected in their classroom behaviors and practices (Rimm-Kaufman & Sawyer, 2004). This may be demonstrated by American and Canadian educators who typically utilize teaching and behavior management styles consistent with European American mores and behavioral patterns (Grossman, 2004). For immigrants, actions considered to be “normal” in their home culture are often at risk for being misinterpreted as “abnormal” by teachers not from those groups (Grossman, 1995, 2004; Lasky, 1994; McBrien, 2005; McIntyre, 1996b; Shepherd & Stephens, 2010). As individuals, we are often self-referent. It is not uncommon for individuals from one cultural group to view the cultural markers or behavior patterns of another as being “odd” while regarding our own cultural practices, to be a standard to which others should aspire. Even well-intentioned teachers who are not consciously prejudicial can misinterpret the cause and meaning of students’ behaviors when they view the actions from their own cultural perspective (Grossman, 1995; McBrien, 2005).

Educational personnel who lack cross-cultural awareness are also at risk for reacting to culturally determined behaviors in ways that are ineffective, counterproductive, or offensive (McBrien, 2005; Tong & McIntyre, 1998; Zirpoli, 2005). Indeed, educators’ lack of familiarity with culturally different patterns of behavior frequently results in culturally and/or linguistically different students being misidentified as possessing a disability when none in fact exists (Anderson, 1992; Gersten & Woodward, 1994; Harry, 1992; Shepherd & Stephens, 2010; Utley & Obiakor, 2001).

**Teaching Styles versus Learning Styles**

The significant impact of cultural, linguistic, and social factors on student learning is now well recognized (McBrien, 2005; Rueda & Forness, 1994). However, it is only since the mid 1980s that these factors have been recognized as important contributors in conceptualizing and
fostering learning (Ford, 1992; Franklin, 1992). According to Tharp (1989), psychocultural incompatibilities between teacher and child can impede learning and social adjustment. These incompatibilities revolve around four areas: Social organization of teaching and learning; sociolinguistic factors (such as teacher wait time and instructional rhythm); participation structures, and general patterns of cognitive functioning (e.g., holistic versus sequential, visual versus verbal, and other learning style characteristics and associated participatory behaviors).

English proficient immigrant students who are aware of the behavioral expectations of the mainstream culture may still be penalized by teaching methods that conflict with their culturally determined learning and participatory styles. The way in which teachers are taught to teach, and the instructional methods typically used in North American educational settings, are often incompatible with the cognitive styles and experiences of culturally and linguistically different students (Carbo, 2009; Grossman, 2004; Ishii-Jordan & Peterson, 1994; McIntyre, 1996a, 1996b; Shepherd & Stephens, 2010). Those differences may result in learners being perceived as less competent than is truly the case (Gollnick & Chinn, 2005; McIntyre, 1996b).

Again, schools typically promote a style of cognition consistent with that of the European American cultural group (Brislin, 1999; Grossman, 2004; Hilliard, 1988; McIntyre, 1993, 1996a; Tharp, 1989, 1995) and neglect the “distinctive traits” of minority students (Vasquez, 1990). This remains a faulty approach as student performance has been shown to be in part, a function of the match between cognitive style of teacher and that of student (Cafferty, 1980). Further, failure to match teaching style to students’ culturally determined ways of learning, knowing, and expressing information, can contribute to the development of emotional and/or behavioral problems (Grossman, 2004; McIntyre, 1996a, 1996b; Park, Pullis, Reilly, & Townsend, 1994; Rueda & Forness, 1994). The academic failure that results from this mismatch between teaching practices and culturally based cognitive styles can cause emotional distress in students and may create much of the "misbehavior" about which teachers complain (Grossman, 2004; McIntyre, 1996a, 1996b).

For the immigrant student, this mismatch leading to academic failure will also have a negative effect on self-esteem (Grossman, 2004). As a result, it would not be uncommon for these students to exhibit: “Defensive behaviors” (e.g., refusing to engage in academic tasks, destroying products) as a result of the frustration experienced in their attempts to learn, and in order to prevent continued failure and the resultant further lowering of their self esteem (McIntyre, 1996b); “reactionary” behaviors (e.g., throwing a workbook onto the floor, cursing) due to overwhelming frustration or secondary feelings related to it; and onset of depression (Rueda & Forness, 1994). Once again, modifications to a Western ethnocentric pedagogy are often necessary in order to promote achievement and social/psychological adjustment for immigrant students, with a clear understanding that stress can exacerbate their problems (Coburn, 1992).

**Recommendations**

Understanding the importance of the school in the life of a resettled child or immigrant and adolescent is vitally important. Looking at a group of 76 Somali adolescents who had been relocated in the United States, Kia-Keating and Ellis (2007) found that “adolescents who
experienced more attachment, commitment, involvement, and belief in their school had attained higher levels of self-efficacy” (p.37). This strongly supports the positive role the school maintains in the development of resilience in this at-risk population. The degree to which the school can provide support by bolstering the feelings of competence will play a strong role in the academic, social, and emotional adjustment of the most vulnerable. We can enhance this connection in ways that reinforce self-esteem and do not undermine the fragile psychological foundation upon which they managed to survive and function in a venue with which they have limited familiarity. The primary agents of support within this milieu are the teachers and the manner in which they accommodate the possible discrepancies between how they have learned to teach and how their “charges” have learned to learn.

Given the often found teacher-student mismatches in culturally-based behavior and cognitive styles, and the problems inherent in assessing the academic and behavioral needs of immigrant youth, schools in geographic areas receiving immigrants have a need, perhaps unrecognized, for specially trained teachers. In this vein, the Parliamentary Assembly for the Education of Refugees and Internally Displaced Persons (2004) recommended that “In addition to basic education, refugees and IDPs require specific psychological care, cultural orientation and language training. This calls for specially trained teachers and specific material.” The Assembly identified the need to: “train teachers for the specific education of refugees and IDPs.” (sub-point 9, viii).

**Teacher Training**

These recommendations of the Parliamentary Assembly, pertain to refugees, the most psychologically traumatized and fragile group of immigrants (Barowsky & McIntyre, 2010). It should be cautioned however, that there is marked heterogeneity within this nominal group and a “one-size” fits all paradigm fails to reflect the mosaic of needs specific to different individuals. It is prudent for teacher training programs and professional development of pronounced or emerging immigrant presence to incorporate both culture and individual- specific differences in program design. Courses and learning modules/units should address not only adjustment issues related to acculturation, but also optimal educational practices for the culturally different behavioral and learning patterns often present in this group of learners. Many districts fail to recognize the connection between culturally competent classroom management and instruction. In grave error, they address the presently popular focus on raising scores on standardized achievement testing.

Even when pupils are not demonstrating objectively problematic behavior, they may be perceived as doing so (McIntyre, 1997; Sbarra & Planta, 2001; Shepherd & Stephens, 2010) and will result in the teachers’ response that may be regarded as punitive or at the very least insensitive. Becoming a culturally competent educator requires one to examine the effects of one’s own cultural identity, biases, and pre-formed stereotypes on children’s behaviors (Zirpoli, 2005). Teachers’ own self-referent cultural notions denoting how young people should “behave” have effects on the education provided to their charges (Anderson, 1992; McIntyre, 1996a, 1996b; Shepherd & Stephens, 2010; Tucker, et al., 2002).
Educators can then be guided to the development of a better understanding of how cultural and experiential background affect the way one behaves, and conversely, how one perceives and judges the actions and reactions of those who are unlike oneself in significant ways (McBrien, 2005; McIntyre, 1996a). Gaining a more complete understanding on many levels of the poly-ethnic and complex nature of our diverse national population and how this diversity evolved, helps teachers to maximize their effectiveness (Tiedt & Tiedt, 2005). When trained to knowledgeably examine and address culturally-based cognitive styles and behaviors, professionals can better ensure that they are treating their charges in a fair, appropriate, and equitable manner (Costner, 2007; McIntyre, 1996a).

To better match instruction and interventions to the culturally-based learning and behavioral styles of their students, teachers must become skilled in modifying their traditional procedures that often penalize culturally different pupils (Grossman, 2004; Marshall, 2002, McIntyre, 1996a, 1996b). In more common special education parlance, differentiation of instruction is the key! By modifying classroom practice to work with a pupil’s cultural style rather than against cultural traits, a more positive student self esteem and motivation can be built (Grossman, 1995; 2004; McIntyre, 1996b).

Making use of teaching and behavior management styles that are designed to match students' early cultural cognitive and behavioral styles would further reduce acculturation stress (Grossman, 2004) and inappropriate referrals for special education (Hoernicke, Kallam, & Tablada, 1994; McIntyre, 1996b; Shepherd & Stephens, 2010).

Up to this point, we have been looking at the learning and behavioral patterns of immigrants, refugees and newcomers through the lens of a deficit model. It is also important that educators recognize and utilize the strengths that immigrant children bring through the schoolhouse door (Grossman, 2004).

The transition from this model emphasizing the pathology of individual learning differences to one capitalizing on strengths, can be made with the assistance of educators and supportive personnel that reside within the current school infrastructure. While it is desirable to seek the direction of educators and counselors from the child’s same culture, this may not always be possible (Barowsky & McIntyre, 2010). The key however, is to employ a staff that can see beyond their own culture-bound values and try to understand the context that gave rise to the pupils’ behavior and learning styles. Adjustment and acculturation transcends merely developing a complementary achievement and behavioral match between individual and venue. Emotional adjustments often require the availability of mental health services.

While the provision of culturally relevant mental health services is important to promoting optimal psychological adjustment for this population in transition (Yakushko, Watson, & Thompson, 2008), it is not always called upon. Given the underutilization of mental health services by immigrants (Alegria, et al., 2004), and mandatory school attendance, it falls to educators to help newcomers in their classrooms to more adeptly acculturate, and move toward a positive cross-cultural identity. While basic approaches and practices may need cultural tuning, proficiency in these basic procedures provides the foundation upon which cross-cultural skills
can be built. Aside from the biological family, the classroom teacher is in a position to have
greatest continuity in the acculturation process and develop a trusting relationship with the
student. More specifically, teachers with specialized training in the education of individuals with
emotional and behavioral disorders (EBD) are already knowledgeable regarding specialized
academic and social-emotional educational interventions, and are often skilled in addressing
psychological and behavioral concerns. Their effectiveness with EBD youth, is validation to
their ability to build trusting interpersonal relationships with troubled individuals. With regard to
linguistic issues, teachers with certification in teaching English to speakers of other languages
(TESOL) hold specialized knowledge and skill in providing supports to English language
learners.

This building of trust bonds is especially important when attempting to counsel and/or teach
refugee youngsters (Barowsky & McIntyre, 2010) who have experienced a history of betrayal
and threat perpetrated by “authority figures” in their original countries as well as other places
along the indeterminate path of migration. To re-establish a sense of trust within a strange venue
not yet associated with safety, the focus should emphasize an openness to dialogue between
child and peer as well as child and teacher “Counseling” procedures such as active listening,
“classroom counseling” (McIntyre, 1987) and “life space crisis intervention” (Long, 2001) are
good examples of strategies that can be effective. The need to reduce conflict and resolve
differences without the threat of repudiation should be an essential component. These might
include:

- Peer mediation and conflict resolution systems
- Social skills and anger management curricula
- Anti-bullying programs
- Cognitive behavior therapy and interventions
- Problem solving
- Bibliotherapy, art therapy, movement therapy and play therapy
- Cooperative learning practices
- School safety programs
- Response to intervention (RtI)
- Positive behavior interventions and supports (PBIS), among others.

Miller (2007) suggests that “problem oriented strategies” that manage the concern (e.g., problem
solving), and “emotion oriented strategies” to deduce the level of emotional distress experienced
are effective approaches and can be used with immigrants.

There are additional efforts that have been seen to be effective beyond the individual classroom
but a school-wide level. These approaches are best offered as a culture of welcoming and
inclusion of newcomers and can be viewed as a systems approach.
Systems Solutions

On a school-wide scale of interventions, other avenues to reach and teach immigrant youth include institutionalization of:

- “Newcomer programs” (Chang, 1990) that make the school environment more welcoming and inviting.
- Anti-bias clubs (Collins, 2000) that help to create environments that provide physical, psychological, and intellectual safety.
- After school “culture clubs” (Tong, Huang, & McIntyre, 2006) in which students of all backgrounds share their ways with others via structured activities.
- After school English language instruction.
- Culturally competent assessment teams skilled in identifying ecological influences on behavior.
- Culturally relevant mental health services (Yakushko, Watson, & Thompson, 2008).
- Hiring of members of the immigrant community in order to communicate to the students (and the immigrant community) that their group is welcomed and valued in the building.
- Working with local housing agencies to assure that students’ family are in safe environments, as decent housing conditions appear to promote pro-social behavior in immigrant children (Ma, 2009).
- Working with social service and mental health agencies to assure that students and their families are receiving all the societal supports to which they are entitled.
- Seeking out immigrant community leaders, and former/present educators and mental health workers, to serve as “cultural informants” (New York State Department of Health, 2009), persons who can inform school personnel of cultural proclivities.

Structured approaches to making the new environment more hospitable to learning and acculturation for the newcomer do not necessarily assume the need for group training. Self-aware teachers recognize that the main responsibility rests on their shoulders as individuals and that group training may not always be available.

Self Instruction

Aside from the written archives provided by journals and reference texts, the cyberworld has opened additional and often more up to date resources for self instruction. Electronic training and materials (e.g., podcasts, readings with accompanying activities, learning modules) regarding general diversity issues and awareness; culturally-based learning styles and behavioral patterns; and culturally competent assessment, instruction, and behavior management can be found online at the ever-increasing resources of:

- http://www.behavioradvisor.com and

Information regarding the teaching of English Language Learners is located at:

- http://iris.peabody.vanderbilt.edu/resources.html and
- http://www.eslcafe.com
An excellent array of print resources that provide descriptions of the cultural proclivities and markers of various ethnic groups can be found at http://www.interculturalpress.com

A wide array of pamphlets regarding culturally competent educational practices for various ethnic immigrant groups can be purchased from the California State Department of Education.

**Summation**

For immigrant children and youth, a successful transition to one’s new country is characterized by the development of a secure and emotionally comfortable “cross cultural identity” (Lupi & Tong, 2001; Tong, 2002; Tong, et.al, 2006). This identity, to be stable, and not the source of either interpersonal or intrapersonal conflict, must balance the values and practices of one’s home and host cultures in a personally efficacious manner. All students attend school, a societal setting and microcosm of the new world in which they have now “chosen” to live. It is here that they will be on their way to become participating citizens. It therefore falls to educators to facilitate successful negotiation of this voyage by adding new knowledge bases and skill sets that allow them to reach and teach their changing student body. In addition to our academic focus, on the social-emotional-cultural front, it is essential that school-based professionals help immigrant youngsters recognize that they can retain their old culture and language while at the same time becoming more proficient in understanding and using the English language and mainstream North American ways. A positive interpersonal relationship with culturally competent educators assures that the positive bi-cultural message is heard by our newcomers.

The building of trusting, nurturing, and supportive relationships with adults and peers in the school setting, while important for all students, is essential for recent immigrant students (Suarez-Orozco, Pimentel, & Martin, 2009). For those immigrant students who are refugees, the school plays a major role in providing a contemporary experience that serves a protective factor with regard to social adjustment (Barowsky & McIntyre, 2010), often with the need to use innovative strategies (Gangi & Barowsky, 2009).

Immigration continues to change the “face” of North America in many interpretations of that word. Due to the discovery of pertinent information and effective instructional and interpersonal practices, now more than ever, we are situated to optimally educate our new and future citizens; not just in the academic arena, but the intrapersonal realm as well. It is incumbent upon concerned and conscientious educators to seize the opportunities made available to them.

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High Anxiety: Addressing Family Issues in the Transition of Students with Disabilities from Middle Grades to High School

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Abstract

This article documents the development of a protocol that addresses the anxieties and tensions felt by the families of students with disabilities when they face the daunting transition from middle grades to high school. The tool grew out of a study of schools that form meaningful partnerships with diverse families of students with disabilities, funded by the U.S. Department of Education, Office of Special Education Programs (OSEP). The article details the process of developing the transition protocol, which is based on the real life experiences of families involved in the study and their experiences with transition. It expresses the families’ fears for the social and academic success of their children and how schools can help to counter these. The complete protocol, including assistance with logistics, a sample lists of topics for the session and a scripted guide for facilitators are available free of charge from the Inclusive School Network.

High Anxiety: Addressing Family Issues in the Transition of Students with Disabilities from Middle Grades to High School

Having friends, dating, driving cars, even just doing homework are all common teenage high school experiences but for families of students with disabilities, these everyday issues may become challenges magnified by their children’s disabilities. Will my child have friends? Will the teachers in a large high school understand the nature of my child’s disability? How will my child feel if the other students begin to drive and date and he or she cannot? Little wonder then that the transition process becomes a matter of anxiety and tension for these families.

The ICARE Schools study, funded by the U.S. Department of Education, Office of Special Education Programs (OSEP), focused on the families of students with disabilities and their connections with their adolescent’s schools. Over a 4-year period, ICARE staff worked closely with two middle schools and their families to unpack and describe some of the innovative approaches and strategies used by schools to engage all families in the education of students with disabilities. Transition issues were not on our radar screen when we began to identify and document middle schools that form meaningful partnerships with the families of students with disabilities, particularly families from culturally, linguistically, and socio-economically diverse backgrounds. However, soon we found ourselves engaged in conversations with families of soon-to-be-high-schoolers, and the team had nowhere to go but forward.
Early in the study, we held focus groups with families and talked about the concerns they had for their children. Although our discussion centered on the families’ relationship with their middle schools, we found transition to high school was a topic of high interest to our families. They convinced us that the typical transition activities, such as guided tours and family information sessions were not sufficient for their children to make this important and difficult step. Many students with disabilities are moving into high schools from a smaller, safe environment in middle school with systematic communications between home and school. We learned that these schools and all schools transitioning students with disabilities to high school need to recognize they are not just transitioning students, they are also transitioning families.

This realization led us to undertake the development of a family transition process, using one of our schools as a pilot site. First, we went back to the transcription of those early family focus groups and listed the transition concerns parents had expressed. These included:

- Homework
- Fear of children getting lost in the building
- Fear of children getting lost in the system
- Social concerns: dating, sex, driving, being shunned
- Will they be able to handle the work?
- How do parents interact with the system at the high school?

We reconvened some of the families who had expressed these concerns and whose children had gone through the transition process and were now finishing their ninth grade year at the high school. We discussed their’ previous concerns and asked how it had all worked out and we documented their responses. The next activity was to conduct a Family Transition Group from among families whose children were about to graduate from eighth grade and move up to the high school. The positive relationship between the school and its families facilitated recruitment for the Family Transition Group. Even so, we asked counselors to issue personal invitations to families whose children with disabilities would be transitioning to the high school in the fall. A total of 20 family members attended the session, including parents, grandparents and one older sibling.

We invited a high school representative, a case manager with extensive knowledge of programming at the high school as well as some middle school counselors to attend the session. These participants were asked to listen quietly until the end of session and then to provide information in response to parent concerns and make connections that would facilitate personal contact with them or others at the high school.

Preparation for the Family Transition Group included setting the place, the time and the tone. Since the families were comfortable at the middle school, we used a large classroom and scheduled the session for two hours beginning in the early evening. We asked families not to bring their children, so that they could speak freely about their challenges and concerns. In order to set an impartial tone, we decided that it was best for the facilitator to be a neutral party rather
than a teacher or administrator. In this group, one of the researchers served as facilitator, but a social worker or even a guidance counselor would also be a good choice.

We informally divided the session into three chunks. The first was devoted to families introducing themselves and telling why they appreciate the middle school. The following quotation is typical of what we heard.

I have found that they are approachable. Sometimes educators are in their own little worlds and the parents are in their own little worlds. I find that here if I have anything that I want to discuss from the teachers to the principal. I can approach them, I can contact them, whatever, send emails and I get responses back.

The second portion of the session began with a discussion of the specific fears and concerns that families had about the transition of their children to the high school. Here are some typical family responses.

I feel like I’m releasing my child into a different population and you know, to me, high school, you don’t have the same hands on as you had in middle school. I mean, I’m trying to give up some of my control and that kind of stuff, but at the same time, that’s such a new territory for me and for him. I have two children that are finished but to me, but for him because of special needs, I feel like I still need to have that little bit of control and I feel like I’m going to lose it.

I’m also concerned about the socialization because…in high school the kids are much, more, for lack of a better word, aggressive. You know, that concerns me because my son’s not like that. He’s very low key, very laid back and I’m concerned that because he’s going to be kind of isolated in a special education class.

Here the teachers always communicated with us and if my son is missing work or something they would tell me, you know, email to me, and make sure, and I know sometimes I hear from teachers you need to be independent, teachers don’t really care for this. It like, bothers me because my kid is in special education, he needs someone, maybe sometimes as a parent you always want to baby your child, its true because it’s a true concern that if I don’t support my child and care for him he’s going to fall apart. And my concern is how is the communication with teachers (going to work?)?

In all, the list generated by the Family Transition Group, included the following concerns, which we jotted down on chart paper as they arose in the conversation.

- Getting lost in the system
- Who are the “team” at the high school?
- Will child feel part of the high school?
- Getting lost (building size)
• Socialization: Will they be picked on? Will they be isolated? They are blossoming now, will it continue?
• How will I know if they are doing well in class? Will we get support? How do I communicate with the teachers?
• If I “release” my child or step back will anyone support them?
• The middle school “team approach” may not be duplicated? What is the approach at the high school?
• How will my child deal with opposite sex relationships

The third portion of the session was devoted to allaying the families’ concerns. We began by comparing the list they had just generated with the list that had been addressed the previous evening by families that had already gone through the transition process. Looking at the two lists side by side, we noted that with the exception of homework, family concerns were the same in both groups.

Then we shared the experience of the previous year’s families, which brought a sense of relief in the group. On the topic of getting lost in the building or the system, families reported, “Most of the kids within a week or two did find their way around the building”. Getting lost in the system, however, remained an issue for some students. As summarized by the facilitator, the problem is one of being willing to ask for help.

We talked last night about how there are two types of kids in this world. There are those who are kind of out there and if they need help the world knows about it, right? And then there are the kids who just as part of their personalities, they won’t ask for help. You know, they just won’t ask anyone for help. So no matter how many people there are around who would help them if they asked, they won’t ask. So that was a problem that the students and their families did encounter at the high school.

In terms of dating, families found that, in ninth grade, children are not ready yet to really get into the dating scene the way they will later. “In ninth grade kids still hang around together in groups. They don’t break off into relationships so much.” Driving too was an issue that families decided they could worry about later, focusing first on the problems that are really ninth grade issues.

The families experienced with transition had some advice for those about to undertake it. The first thing they said was to ask for help right away.

If you have a problem at home or you think your child is having a hard time with a particular thing, it is okay at the high school to call. If you get the wrong person, they will forward you to the right person. There is a responsive team at the high school...so get to know your support team right away.

One parent advised that families “work on the class selection with your kids. If they have particular interests as you fill out the selection forms with them, try to work on that with them right away.” Another mentioned that if the child insists on a particular class, you might want to
let him try it. “I mean, if you think it’s within reason, try it in ninth grade. That’s a good time to have that experiment.”

At this point, the high school representative was introduced and spoke directly to the scheduling issue. As a case manager at the high school, she is responsible for scheduling classes for students with disabilities and offered the following guidance.

If your particular child has trouble with transition (from one class to the next) I would take a look at the schedule and make sure he doesn’t have four major subjects in a row. Maybe your child should have two subjects, gym, an elective, lunch and then two other subjects… I don’t think there’s a problem with the transition. It keeps the day moving. But if your particular child does have trouble with that, with the amount of changes maybe we could design his schedule especially so that it doesn’t hinder him as much. A lot of kids take gym at the end of the day because they’re just done. When I do my schedule, I design the schedule, math first period English second period… get them when they are fresh in the morning. Some kids that are on medication, their medication wears off in the afternoon.

The high school representative, a woman with 30 years of experience in the field said later that she was struck by the depth of feeling and deep concern among the families in the group. She said it was an “eye opening experience” for her and she responded by offering special accommodations to the families.

I’m going to mail a letter out to every special education parent and have one day or two days set aside this summer just for us to meet, you bring your child and we’ll walk around. You have my phone number, call me any time, July, August; I’ll always get back to you. If you have a concern about the schedule, if you want to bring your child for a visit or to meet me, call anytime. It’s an open door policy.

As we watched families gather around the high school representative in the hallway after the meeting, talking about their children, taking her business card and generating a cheerful hubbub of conversation, we realized that creating a formal process for replicating this kind of experience would be a service to middle schools, high schools and, especially, families of students with disabilities. The complete protocol, including assistance with logistics, a sample lists of topics for the session and a scripted guide for facilitators are available free of charge from the Inclusive School Network. Go to www.inclusiveschools.org/resources and click on “Transitions.”
Identifying and Helping Struggling Readers

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Abstract

How do children excel in learning if they struggle with the basics of reading? The question of helping struggling readers shows progress and broadening their minds with intelligent information is being researched every day. Research suggests that there are many strategies and interventions for students achieving below their reading grade level that can be utilized to promote reading effectiveness and mastery. Research also underscores that students must have a strong foundation in reading in order to adequately progress from grade level to grade level. There is an enormous amount of emphasis bestowed on our nation regarding the importance of reading; however, there are still many struggling readers in our country today. Teachers must recognize signs of struggling readers and provide relevant interventions and strategies that lead to quality reading.

Identifying and Helping Struggling Readers

Research underscores that there is an epidemic of struggling readers in schools across America. “There appears to be eight million struggling readers between grades fourth through twelfth” (National Center for Education Statistics, 2003). To close the achievement gap and promote successful reading, schools must adequately prepare teachers to identify struggling readers and teachers must design effective strategies and interventions to assist them in reading. According to Campbell & Crystal (1999), “studies indicate that when students get off to a poor start in reading, they rarely catch up.” The purpose of this research is to examine struggling readers to determine what types of interventions are successful in helping children succeed.

Early Education Reading Development

Early reading skills are crucial in the development of children and children who learn to read early reap the benefits when they start school. “One of the primary goals of early elementary education is the development of basic reading and literacy skills, and yet in 2003 barely one-third of a nationwide sample of fourth graders was reading at or above a proficient level” (Donahue, Daane, & Grigg, 2003). In order for children to receive a firm foundation in reading there are essential reading skills that must exist. These essential skills must be present in order for children to have equal opportunity to access the general curriculum. Thus, there are five main areas that children should learn in their early years to promote successful reading development and they consist of: orthographic, phonological, morphological, semantic, and syntactic systems.
Orthographic Systems

Orthographic processing involves the visual look of a word or string of letters. Research suggests that the ability to automatically orthographically process strings of letters as words might depend on the so-called word form system, which may develop over time with experience with words. Thus, it is imperative that this reading skill is learned in the early years of education.

Phonological Systems

Phonological systems involve the sounds of language called phonemes. In order to learn how to read, the phonemes that a child knows from spoken language (phonology) must be mapped on to the printed letters on the page (orthography). Therefore, this reading skill is imperative in building a strong and firm foundation in reading. Students who lack this skill often struggle with reading throughout the course of their learning.

Morphological Systems

Morphological processing involves the smallest meaningful units of language, called morphemes; noticing morphemes can help children to understand the meanings of words. Thus, morphemes lead to strong vocabulary acquisition skills. Also, acquisition skills allow students to expand their vocabulary skills and understand the unknown words they encounter.

Semantic Systems

Semantic processing involves the meaning of words; learning new words and increasing one’s vocabulary helps to develop the semantic system. Some children begin school with large vocabularies based on their experiences with spoken language, while other children, who have had less experience with language, enter school with smaller vocabularies (Hart & Risley, 1995). As a result of this, some students start school with a disadvantage and often do not catch up with their peers.

Syntactic Systems

Syntactic processing involves the order and arrangement of words in phrases and sentences; children can use syntactic processing to distinguish the difference between sentences with different meanings that contain the same words. Consequently, knowing grammar can help improve reading and decoding abilities which are integral in the syntax of grammatical organization.

These underlying principles reveal that “reading is a complex process involving multiple skills and systems that must be coordinated in order to result in fluent reading behaviors” (Adams, 1990). Reading involves each of these systems working in collaboration with the others. One of the goals of learning to read is fluency or quick, effortless, automatic processing with limited use of cognitive resources. When each of the processes contributing to reading becomes automatic,
this frees limited cognitive resources to allow for higher-level comprehension and engagement with the text. If any one of the processes is weak or not automatic, it can contribute to poor reading; therefore, it reveals that teaching reading should ideally address each one of these components of the reading system.

**Levels of Reading in Education**

Children begin learning to read early in their education. "When children become good readers in the early grades, they are more likely to become better learners throughout their school years and beyond” (Van den Broek, McMaster, Kendeou, & Espin, 2007). A language rich environment forms the necessary building blocks for reading. These building blocks include decoding, fluency, vocabulary and comprehension. Preschool and kindergarten children start the reading process with some critical early skills to promote successful reading in latter grades. Also, to promote successful reading children “learning to read” start to recognize the letters of the alphabet, practice with sounds of the alphabet, form sounds to make words, and are playing letter and word games. “Research shows that children who develop the basic skills of phonemic awareness and letter-sound knowledge early on are more likely to be strong, successful readers” (Van den Broek, McMaster, Kendeou, & Espin, 2007).

Teachers start building on everyday skills with kindergarten, first and second graders who are “learning to read” by teaching basic reading skills that will be used for their entire life time. It is important that students understand print concepts, phonics, and phonemic awareness by the end of the second grade. “Children who have difficulty with rhyming games, learning the alphabet, and associating sounds, and those who fail to recognize the letters of the alphabet by the start of kindergarten are at risk of developing reading difficulties” (Hamilton & Glascoe, 2006).

According to research, students who are in third, fourth, and fifth grades should master fluency, comprehension, spelling, writing, and vocabulary in order to possess the proper skills necessary for effective reading. “A child’s third-grade reading ability is reasonably predictive of overall long-term academic achievement” (Hamilton & Glascoe, 2006). To help with comprehension in middle and high school, teachers use printed material, as well as other strategies that include whole and small class discussions, student lead reading reviews, experiments, projects, and various other types of activities. “Seventy-five percent of children with reading disabilities] who are identified before the third grade continue to have reading disabilities into the ninth grade and fewer than two percent go on to participate in a four-year educational program after high school” (Hamilton & Glascoe, 2006).

**Reading Comprehension**

Reading comprehension is what allows the reader to interact with the text in a meaningful manner. It’s the path from passive reading to active reading and from letters and words to characters and contexts. Reading comprehension is a vital link to effective reading and it is a strong factor in our educational and professional lives. For many, reading comprehension also unlocks the door to a lifetime of reading recreation and enjoyment. “It matters little what else they learn in elementary school if they do not learn to read” (Fielding, Kerr, & Rosier, 2007).
Reading is essential to every aspect of life as individuals need to learn how to read and comprehend all types of data in order to progress through society. Unfortunately, there are no quick fixes for optimizing reading abilities. “As many teachers and parents will attest, reading failure has created a tremendous long-term consequence for children’s developing self-confidence and motivation to learn, as well as for their later school performance” (Yatvin, 2002).

“Reading difficulties are common and are associated with poor long-term academic achievement” (Hamilton & Glascoe, 2006). When a student is suspected of having reading comprehension difficulties, details should be accumulated immediately to assess the level of deficiency. “Evaluation of a child’s developmental, educational, and family histories in conjunction with standardized tests (e.g., Ages and Stages Questionnaires, Parents’ Evaluation of Development Status, Safety Work Inventory and Literacy Screener) can increase recognition of risk factors for reading difficulties” (Hamilton & Glascoe, 2006). Students with below average reading levels may struggle with a variety of deficiencies. “Struggling readers encounter negative consequences such as grade retention, assignment to special education classrooms, or participation in long term remedial services” (Campbell & Crystal, 1999). Further, as they progress through the grade levels, the academic distance from those who read well grows more pronounced.

Research has proven that “reading comprehension consists of several levels of understanding, beginning with an understanding of the literal meaning of text” (U.S. Department of Education, 1995). Thus, comprehension is a very complex entity and is sometimes viewed as a single skill, when in actuality it has many aspects. “While there are no easy answers or quick solutions for optimizing reading achievement an extensive knowledge base now exist to show us the skills children must learn in order to read and comprehend well” (Yatvin, 2002). This causes difficulties for teachers because it can be viewed as a combination of the student’s reading ability, as well as an understanding of the material. “These skills provide the basis for sound curriculum decisions and instructional approaches that can prevent the predictable consequences of early learning failure” (Rapp, 2007). Comprehension must go beyond reading a classroom textbook. Teachers must insist students become active learners and participants in their education. Teaching children to become active learners helps students’ levels of comprehension and it promotes self-efficacy in the area of understanding.

**Important Concepts in Reading Comprehension**

There are multiple levels to becoming active learners in reading that consist of using schema and prior knowledge, summarizing information, setting a purpose for reading, activating critical thinking, and using meta-cognitive awareness. These concepts allow students to form a stable foundation in reading and are necessary skills for reading effectiveness. Teachers must adequately assess and develop strategies that will ensure that all students have the opportunity to read on grade level with their counterparts.
Using Schema and Prior Knowledge

Students use the schema theory to organize their prior knowledge and experiences. A schema is an outline with different concepts grouped together under larger categories. This particular aspect of memory enables students to understand new information. Schema underscores that student’s gain access to information in long term memory by following paths to other related items. “For example, reading about particular concepts triggers a spontaneous spread of activation to other concepts that are, in mind of the reader, associated with what is being read. These associations may have come about during reading of earlier parts of the text or may preexist in the reader’s prior semantic knowledge” (Van den Broek, McMaster, Kendeou, & Espin, 2007).

Using prior knowledge plays an important part in a student’s learning process of reading comprehension. “One of the most important determinants of how you can learn about something is how much you already know about it” (Slavin, 2006). Students often experience difficulty in comprehension because of inadequate knowledge of the subject matter. “Prior knowledge regarding the topic of reading passages is one of the most important kinds of knowledge children bring to reading comprehension” (Locke, 2002). Providing real life experiences is helpful in building background knowledge. At the same time, students with greater knowledge on subject matters will understand and learn more. It does not matter what type or how the material is presented in the lesson.

Summarizing Information

Students can also increase comprehension and learning as they summarize information. Summarizing requires one to form a brief statement that represents the main idea of the information being read. Another type of summarizing involves cooperative learning in which the student summarizes the reading material in one paragraph and gives a presentation to a group of peers. This requires the reader to read the text, summarize, and interact with other students. Summarizing data both inside and outside the classroom is an important concept of learning how to comprehend content subjects. Students sometime use rote learning or memorizing facts. This information is useless to the student because it does not tie in with other information they have acquired.

Setting a Purpose for Reading

Teachers must realize that all children will not like to read and will need to have a meaningful reason to complete the task. Therefore, children need to have a purpose to get the most out of reading. The teacher must remember to have age relevant educational material. This could include reading an article about their favorite show, reading directions on how to play a video game, or reading a book about something that really interest them. As young children actively read, they must draw their own conclusions by asking themselves questions about what is happening in the story. Conversely, older students might create and form predictions and opinions, distinguish relevant from irrelevant information, determine the credibility of a source, identify logical fallacies, make analogies or write questions about the subject matter that they
Critical Thinking

Critical thinking is an important component of reading comprehension. “In fact, the importance of including both basic and higher-order skills in reading instruction has been reflected in reviews of the literature that distinguish between “inside-out” (e.g. decoding) and “outside-in” (e.g. comprehension) skills” (Bus & Van Yzendoorn, 1999). Critical thinking is the ability to make rational conclusions based on observation or information. Reading strategies and thought-producing questions guide the students through the process of developing the skills they need to become better at reading comprehension. This component underscores the fact that “when students are asked to think while proceeding through a text, they often give responses that explicitly reflect attempts to establish coherence” (Van den Broek, McMaster, Kendeou, & Espin, 2007).

Meta-Cognitive Awareness

“The products of comprehension are indicators of what the readers knows and understands after reading is completed, whereas the processes of comprehension are those cognitive activities by which the reader arrives at those products” (Van den Broek, McMaster, Kendeou, & Espin, 2007). Students who are meta-cognitively aware have knowledge regarding their own learning and seek to display their knowledge in various forms of assessments. These students can improve their reading comprehension because they are aware of their limitations. These students know that to become a better reader, one must set aside more time to read. These students also have an effective plan to reread a particular item that is not understood repeatedly until the meaning is clear.

Conclusion

The reasons some students struggle with reading are as varied as the students themselves. There is not a “magic key” that fits every situation because all children learn and read at different levels; however, children who are taught to read at home and at an early age are generally much more successful in school and provide a significant advantage in reading. Therefore, it behooves educators to identify struggling readers early in the stages of learning so that the problem can be addressed and fixed. Reading is truly fundamental and it is necessary for all aspects of life. As educators, it is imperative to realize that children arrive to various education facilities with expectations of learning and it is our sole responsibility to provide a sufficient education. Reading is one of the most important elements in learning and if it is not properly addressed it could force a child to fall behind with little hope of ever catching up. Researchers have studied and proven that reading can be learned if interventions and strategies are utilized. It is up to educators to meet children where they are in reading and bring them along on the reading journey.
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Research in Reading Interventions for Students with Emotional and Behavioral Disorders

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Abstract

The purpose of this study is to examine research trends in reading intervention research for students with emotional and behavioral disorders (EBD). Thirty studies published between 1990 and 2010 that met all pre-established criteria were included in the descriptive analyses. The authors examined the literature to assess the following variables across time: (a) participant characteristics, (b) participant placements, (c) study type used, (d) outcome measures, and (e) intervention areas. Results indicated that researchers mostly used single-subject designs; the main intervention area in most of the studies was fluency; most of the studies were conducted with participants from resource room models and the number of studies on reading interventions for students with EBD was overall very limited.

Research in Reading Interventions for Students with Emotional and Behavioral Disorders

Children and adolescents with emotional and behavioral disorders (EBD) exhibit both academic and behavioral problems (Epstein, Kinder, & Bursuck, 2009). Aggressive and disruptive behaviors, disobedience (Maughen, Pickles, Hagell, Rutter, & Yule, 2006), tantrums, and disruptive verbalizations (Mayfield, Golston, Walsh, Reoubssin, Sergent, & Hickman, 2005) are characteristics of students with EBD. In addition, students with EBD present poor academic skills which result in low grades (Wagner, 2005) and low graduation rates (Malmgren & Leone, 2008). Furthermore, students with EBD are less likely to be members of a club or participate in social groups; their grade point averages are lower than those of students with other disabilities and dropout rates are much higher (55%) than for any other disability category (Wagner, 2005).

Although students with EBD have both academic and behavioral problems, researchers have historically focused more intervention research on behavioral problems than academic problems (Webby, Faulk, Barton-Ardwood, Lane, & Cooley, 2003). It has been well documented that research on the academic status of students with EBD is very limited (Epstein et al., 2009). For example, Miller, Miller, & Wheelen, 2009) examined the status of experimental research on interventions designed to modify the behaviors of children with EBD from 2000 to 2003, and found that the most frequently used dependent variable was appropriate and inappropriate behavior both in school and social interactions. In another study, Mooney, Epstein, Reid, and Nelson (2003) examined trends in academic intervention research for students with EBD and
found that only 55 studies have been conducted since 1985.

**Theoretical Framework**

It is important to note that students with EBD demonstrate significant difficulties in reading (Coleman & Vaughn, 2000). According to Wagner (2005), students with EBD were approximately 2.2 grade levels behind in reading. Furthermore, students with reading difficulties present both depression and anxiety than those with typical reading skills and students who have poor reading in mid to late adolescence would have increased risk for internalizing behaviors (Carr & Punzo, 2003).

One method of addressing the academic problems of students with EBD is to implement effective interventions (Mooney et al., 2003). Even though students with EBD exhibit significant academic delays, little research has addressed the effect of academic interventions for these students (Coleman & Vaughn, 2000; Falk & Wehby, 2001). Furthermore, relatively very few studies have addressed the effect of reading interventions for students with EBD specifically (Coleman & Vaughn, 2000).

Several researchers have reviewed academic status of students with EBD over the years. For example, Epstein and his colleagues examined research on the academic status of adolescents with EBD and found 15 articles met the criteria for inclusion to their study (Epstein et al., 2009). However, the authors reviewed the literature only for the academic status of adolescents with EBD and it was not focused especially on trends in reading intervention for students with EBD. In another study, Mooney and his colleagues examined the status and trends in academic intervention research for students with EBD (Mooney et al., 2003). Results of this study indicated that settings were generally special education classrooms, researchers were mostly used single-subject design, and there has been a decline in number of studies published.

Trout, Nordness, Pierce, and Epstein (2003) conducted an exhaustive examination of the current state of the literature on the academic status of students with EBD. The authors examined the literature to evaluate student characteristics, placement settings, academic subject areas, and measures used to evaluate academic achievement. In addition, Trout et al. (2003) examined the trends in the research on academic status of students with EBD and found that the number of articles assessing the academic status of students with EBD has rapidly increased. Although this study was a comprehensive examination of the literature on the academic status of students with EBD, Trout et al. (2003) did not focus on a specific academic skill area such as reading.

Few studies have reviewed the literature on reading intervention for students with EBD. Coleman and Vaughn (2000) reviewed the literature and provided a summary of reading intervention research with elementary school students with EBD and found eight articles that met their selection criteria. Although previous reviews have concentrated on the academic status of students with EBD, additional reviews are needed for several reasons. First, none of the reviews have focused on all school levels. Second, most of the reviews published have focused on academics in general, not reading specifically. Finally, none of the reviews have reported...
National Reading Panel (NRP) reading components in their results. Reporting these components in reviews can provide the opportunity to understand which components of reading more research is needed (Browder & Shear, 2003).

This study makes several contributions to the literature addressing research involving reading intervention for students with EBD. First, investigation of research trends in reading interventions research summarizes what has been done in the past and suggests what can be done in the future. For example, it has become obvious that students with EBD have reading deficiencies but it is not widely apparent what specific skills they lack (Trout et al., 2003). Therefore, it is possible to conclude that future studies should examine specific skill areas to determine their significance. Second, the need to consider the effect of such characteristics as outcome measures, and reading skills on academic success is fundamental to improving future research. For example, according to the 32nd Annual Report to Congress on the Implementation of Individuals with Disabilities Education Act (U.S. Department of Education, 2010), 21% of the students with EBD received all their instruction in regular education classrooms, which is more than the percentage of the students with EBD who received their education in special education classrooms. Therefore, to serve students with EBD better, it is crucial to realize unique characteristics of this population and determine the direction of future research in light of these facts. Finally, this study establishes a baseline for understanding what already exists in the relevant literature. It is our hope this information will be used to help determine the direction of future research in this important area.

Despite the importance of research published since 1961 on the academic status of students with EBD, several questions about student characteristics, and specific academic skills remain unanswered, for example, it is obvious that students with EBD have reading deficiencies but it is not apparent what specific skills they lack (Trout et al., 2003). Therefore, the purpose of this study is to examine the trends in reading intervention research for students with EBD. Specifically, six questions directed this study. Some of the questions were also used in Mooney et al.’s (2003) study which examined the status of and trends in academic intervention research for students with EBD. Additional questions were added by the researchers. These six resulting questions are:

1. What participant characteristics were described in the reading interventions literature?
2. Where did studies take place?
3. What design types were used?
4. What school levels were targeted?
5. What outcome measures were targeted?
6. What types of intervention have been employed?

Method

Selecting Articles

Studies were identified by searching computer databases and a hand search of all issues of the Behavioral Disorders, Journal of Emotional and Behavioral Disorders, Remedial and Special Education, Exceptional Children and Journal of Special Education from 1990 to 2010. The authors checked the titles and abstracts of every issue of these journals between the specified
dates. Electronic databases utilized in the search included Educational Resources Information Center (ERIC), Academic Search Elite and PsycINFO. The following keywords were used to frame the search: (Emotional disturbance OR behavioral disorder OR emotional and behavioral disorders) AND (reading). Moreover, previous studies that reviewed the literature on any type of academic intervention research for students with EBD were identified and reviewed. Finally, the reference lists of all included articles were searched. In addition to 14 articles found by the hand search, more than 500 titles were initially identified for review by the electronic database. However, because the authors searched multiple databases, many of the initial titles were duplicates and irrelevant to this research interest. When these duplicates and irrelevant titles were eliminated, 68 articles were remained. Abstracts of these 68 articles were read and coded by one of the authors. In addition, the authors sent e-mails to the editors of the journals in which the authors did hand search in order to inquire about in-press articles to be sure that the review included all articles relevant to the topic. All of the editors responded e-mails and stated that there were no relevant articles in press. Finally, articles from the electronic database search were included in the review if they met each of the following criteria:

1. Participants were students who were receiving special education services under the category of EBD.
2. Article was published in a peer-reviewed journal.
3. At least one of the dependent variables had to be an academic measure of reading skill.
4. Publication data was between 1990 and 2010.

**Procedure**

A coding form was developed to record information presented in the articles that were chosen. Articles were coded by the first author. The coding procedure was similar to that used by Mooney et al. (2003).

**Participants and Settings**

The following items were coded for participants:
- Sample size was categorized as the total number of participants for a given intervention type.
- Participant grade-level was coded as elementary, middle, or high school level. Elementary school was defined as Kindergarten through 5th grade, middle school as 6th through 8th grade, and high school was identified as 9th to 12th grade.
- Age of the participants was coded as range, mean, or exact age.
- Gender was categorized as all males, all females, both, or not identifiable.
- Race was categorized as reported or not reported. When reported, categories were: Caucasian, African American, Hispanic, Native American, Asian American, and other.

Setting in which data were collected will be categorized as:
- General education classroom
- Special education resource room
- Special education self-contained classroom
- Classrooms (Unspecified)
- Non-classroom school settings (e.g. lunchroom, courtyard)
- Separate special school, day school, or clinic
- Residential facility
- Home
- Other
- Not reported or clearly specified

**Designs**

Research design were categorized as single-subject or group study.

**Dependent Measure**

Dependent measures were coded as:
- standardized tests
- grades
- teacher ratings
- curriculum-based measurement (CBM).

**Characteristics of Intervention**

Characteristics of intervention were coded as comprehension, fluency, phonics, phonemic awareness, vocabulary.

**Results**

Of the 30 studies included in the review, 3 (10%) were published between 1990 and 2000, 12 (33%) were published between 2000 and 2005, and 15 (57%) were published between 2005 and 2010. The number of articles focusing on reading problems of students with EBD has increased between 2000 and 2010 and more than half of the studies were published in the last ten years.

Student age was reported in 28 (90%) of the studies. Of these, 18 (58%) included students 5 to 12 years old, 6 (19%) assessed students 12 to 16 years old, and 1 (3%) involved students in the 16 to 21 year old age range. Between 1990 and 2000, 3 (11%) of the studies included elementary school students and 1 (4%) included middle school students. From 2000 to 2010, 5 (19%) studies included elementary age students and 2 (7%) included middle school students.

Race/ethnicity of the participants was reported in 10 (32%) studies. Of those, 7 (22%) studies were conducted with Caucasians, 10 (32%) were conducted with African Americans and 1 (3%) was conducted with Hispanics. None of the studies were conducted with Native Americans or Asian Americans. Two studies included only African American students. Trend analysis revealed that the number of studies reporting race/ethnicity of the participants increased over time. Finally, the analysis demonstrated that the number of studies including more than one race/ethnicity also increased over time.
Twenty-nine of the thirty studies reported intervention settings: 10 (33%) were conducted in self-contained classrooms, 8 (27%) in separate special schools, 6 (20%) in other settings (e.g. private room, summer camp), and 5 (17%) in special education resource rooms. Only 1 study (3%) assessed students in general education classrooms. Five studies (17%) were conducted in more than one setting.

Another finding is that single-subject research has been the commonly used design for conducting reading interventions for students with EBD. Of the 30 studies, 26 (87%) used single subject designs, whereas only 4 (13%) used group designs. Even though single subject design is the predominantly used research design, it appears the kinds of research questions that can be answered using this design are limited (Mooney et al., 2003).

With regard to outcome measures, 11 (37%) used number of items answered or identified correctly, 9 (30%) used words read correctly per minute (WPM), 6 (20%) used standardized tests, 5 (17%) used comprehension questions answered correctly. One (3%) used number of assignments completed. Trend analysis revealed that researchers tend to use more than one outcome measure.

Most of the articles (n = 22; 73%) focused on improving reading fluency of students with EBD. Reading comprehension skills were the focus of 9 (30%) articles. Five (17%) focused on phonemic awareness and an additional 2 (7%) focused on phonics. Only one (3%) study focused on vocabulary. Trend analysis revealed that studies focusing on phonemic awareness area were increasing over time. None of the studies published in the first two decades focused on phonemic awareness and all of the studies focusing on phonemic awareness were published in the last six years.

**Discussion**

The aim of conducting a systematic review of research was to assess the current state of knowledge, identify trends, and offer suggestions for future intervention research aimed at improving reading achievement for students with EBD. Several previous studies have reviewed the literature on the academic status of students with EBD in terms of participant characteristics, placements, and outcome measures. However, areas of reading intervention have not previously been examined. The resulting study demonstrates several findings characterizing reading intervention research for students with EBD.

There are four major findings from the present study. First, the results of the analyses, consisted with earlier research by Coleman and Vaughn (2000), showed that research on reading interventions for students with EBD is very limited. Using broad search criteria, which included studies targeting all school age children served in both public and non-public placements, this search netted only 30 studies in the broad category of reading. Conversely, Lingo, Staton, and Jolivette (2006) published a review of 27 intervention studies for students with learning disabilities focusing on reading comprehension alone.
Another issue is the student characteristics described in the literature. Findings of this study indicated that only a few studies reported race of the students with EBD. Although students of minority status identified with EBD constitute more than one third of the EBD population (U.S. Department of Education, 2010), these students are not represented in reading intervention studies. Moreover, only three studies concentrated solely on minority students. The second issue on student characteristics is gender. The results of the analysis, consistent with the earlier research by Mooney et al. (2003), revealed that no studies focused solely in female populations and most of the studies included males. Understanding the differences between male and female students is a crucial factor for answering academic needs of all students (Trout et al., 2003). Most of the studies examining young adults with disabilities clarify the significance of gender as a differentiating variable in educational outcomes (Williams & Mcgee, 2004). As Trout et al. (2003) noted, without a separate analysis of academic achievement by race and gender, it is difficult to find out whether there are some differences exist within these students in terms of gender and race.

The third noteworthy finding is about placement settings where interventions implemented. Similar to Trout et al.’s (2003) findings, the authors found that majority of the research on reading interventions for students with EBD have been conducted outside the general education sweepings. Almost half of the students with EBD (i.e. 48%) are educated in general education settings for 40% or more of the typical school day. On the other end of continuum, 18% are still being educated in completely segregated settings (U.S. Department of Education, 2010). Unfortunately, just five of the studies included in this review were conducted with participants from resource room models and only one study involved participants served primarily in general education settings.

As schools across the country are being mandated by IDEA to include students with EBD in the regular education environment to the greatest extent possible, the need for interventions that will easily transfer to general education settings can only grow. The underrepresentation of participants being served in general education environments is a limiting factor in the utility of the findings reported in this review since the generalizability of findings across vastly different settings is a tenuous prospect. The inordinate number of interventions that were carried out with participants working independently or in a one-on-one setting may also limit the generalizability of findings, particularly to general education settings.

The fourth finding is about design and dependent measures. The results of this study displayed that single subject was the most commonly used study type. This finding is similar to those reported by Mooney et al., (2003). Single subject research is a scientific methodology used to define fundamental principles of behavior and constitute evidence-based practices (Continho, 2006). Even though single subject research design is used commonly, it is not possible to answer all the questions (Maughan et al., 2006). Therefore, researchers should use group designs as well as single subject designs.

The final finding is about the reading intervention area. According to National Reading Panel (NPR, 2010), there are five essential components of reading instruction: (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. Each of these areas has an
important role on improving reading achievement of students with disabilities. Results of our analysis showed that most of the studies focused on fluency. For example, vocabulary is an important component of reading comprehension (Fuchs, Fuchs, & Kazdan, 2009). While vocabulary is an important component of reading comprehension, none of the studies conducted with students with EBD has primarily focused on vocabulary. Therefore, more research is needed on other areas such as phonics and vocabulary.

In conclusion, the researchers would agree with Coleman and Vaughn’s (2000) earlier observation that a “dramatic need” still exists for research on effective reading interventions for students with EBD. In particular, the need for interventions targeting high utility as well as high level skills is particularly acute. The depth and scope of research in reading interventions for students with EBD is clearly lacking. Special and general educators are obligated to meet both the social and academic needs of this population. Researchers can make this possible by providing evidence of efficacious practices that have a high likelihood of success in a variety of school settings and by reporting findings to practitioners. Only then educators can begin to increase the academic achievement of students with EBD to more acceptable levels.

References
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Personal Epistemology and Self-Efficacy in the Special Education Teacher

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Abstract

This report summarizes the personal epistemology and self-efficacy concepts and how they affect special education teachers. This report is based on the social cognitive theory, perceived and collective efficacy, and how the conceptual thoughts of a special education teacher affect their instructional focus in the classroom. Self-efficacy beliefs are identified from four principals of information: enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. These concepts are important for special education teachers and the administration alike to help the instructional and learning environment.

Personal Epistemology and Self-Efficacy

People’s beliefs in their efficacy have diverse effects and such beliefs influence the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize (Bandura, 1997). Hofer (2006) identified the conceptual framework of personal epistemology and the connection of motivation, cognition, and learning as a focus of educational psychologists.

Personal Epistemology

Personal Epistemology has been correlated with three different names throughout the educational psychology literature. King and Kitchener (1994, 2004) identified some of them as reflective judgment, epistemological or epistemic beliefs, ways of knowing, and epistemological reflection. Hofer and Pintrich (1997) worked on clarifying the definition of personal epistemology, the nature of an individual’s conception of knowledge and how these conceptions are related to learning, teaching, and education. Hofer and Pintrich (2002) suggest connections between personal epistemology and conceptual change, and they advocate further research on the relation between epistemology and motivation, learning strategies, pedagogical approaches, and classroom context.

Hofer (2006) suggests that personal epistemologies are those beliefs that an individual holds about knowledge, knowing, and are related to learning and achievement thus, differentiating these beliefs by disciplines (i.e., special education) and judgment domains (e.g., self-efficacy). Personal epistemology is a process fostering productive attitudes and student epistemologies which are important to instructional outcome (Lising & Elby, 2005). Hofer (2001) states personal epistemologies help us understand how individuals resolve competing knowledge.
claims, evaluate new information, and make fundamental decisions which affect their personal lives.

Hofer (2001) provides three general views that demonstrate an existing connection among learning, instruction, and epistemology:

1. Epistemology is developmental. Development is the aim of education and part of the goal of education is to foster epistemological development.
2. Epistemology exists in the form of beliefs. Learning is influenced by epistemological beliefs which individuals hold.
3. Epistemology is either theory-like or exists as more fined-grained epistemological resources, which are engaged in ways that are context-dependent.

It is self-efficacy and teacher beliefs which seem to be an integral part of personal epistemology. Gaining a further understanding of self-efficacy through a review of the literature will help identify how these components relate to special education teachers. Schommer-Aikins and Easter (2006) provide further support stating it is highly likely that personal epistemology plays a role in how teachers make decisions about curriculum, instruction, and evaluation.

**Self-Efficacy**

Bandura (2006) states conceptions of human nature have changed markedly over time and through cognitive self-regulation, humans can create visualized futures that act upon the present, construct, evaluate, and modify alternative courses of action to secure valued outcomes, and override environmental influences.

Social cognitive theory helped advance a review of human functioning that accords a central role to cognitive, vicarious, self-regulatory, and self-reflective processes in human adaption change (Bandura, 1986). The concept of reciprocal determinism and the triadic reciprocal causation help to show how the human agency operates within the interdependent causal structure involving (a) personal factors in the form of cognition, affect, and biological events, (b) behavior, and (c) environmental or external influences (Bandura, 1986).

Although collective efficacy is widely recognized to be important to organizational functioning there is little research in this area (Bandura 1986). The study of collective efficacy is important, in part, because of its possible effect on performance (Parker, 1994). Teachers’ confidence of their own abilities to educate students in their classrooms can be related, but is not identical, to their knowledge of other schools’ abilities as a whole, to educate students. Parker (1994) stated there are several reasons for teachers’ confidence to be identified: first, teachers have more detailed information about their own classrooms than they have about their school as a whole; second, talented individuals can sometimes rise above a weak institution and perform well; third, untalented individuals can find themselves surrounded by talented colleagues.
Perceived Self-Efficacy

Perceived self-efficacy refers to beliefs in one’s capabilities to organize and execute courses of actions required to produce given attainments (Bandura, 1997). A strong sense of efficacy enhances human accomplishment and personal well-being; people with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided (Bandura, 1994).

Bandura (1997) stated self-efficacy beliefs are constructed from four principal sources of information: enactive mastery experiences that serve as indicators of capability; vicarious experiences that alter efficacy beliefs or transmission of competencies and compares with the attainments of others; verbal persuasion and allied types of social influences that one possesses certain capabilities; and physiological and affective states from which people partly judge their capableness, strength, and vulnerability to dysfunction.

Enactive Mastery Experiences

Enactive mastery experiences are the most influential source of efficacy information because they provide the most authentic evidence of whether one can master whatever it takes to succeed (Bandura, 1997). Successful accomplishments enhance one’s self-efficacy, however failed accomplishments diminish the belief that one can be successful. How people behave can often be predicted by the beliefs they hold about their capabilities and by what they are actually capable of accomplishing, for the self-efficacy perceptions help determine what individuals do with the knowledge and skills they have (Pajares, 2001). Elder and Liker (1982) provided a good example of this effect in their analysis of an enduring impact of hard times during the Great Depression on women’s lives. Some adaptive resources for women identified were: early economic hardships left them more self-assured and resourceful in later years, and they did not have to struggle through hard times. Women who were less equipped to cope with adversity, severe economic hardship left them less intellectually astute and with a sense of ineffectualness and resignation in their later years.

The extent to which people will alter their perceived efficacy through performance experiences depends upon, among other factors, their preconceptions of their capabilities, their perceived difficulty of the tasks, the amount of effort they expend, the amount of external aid they receive, the circumstances under which they perform, the temporal pattern of their successes and failures, and the way these enactive experiences are cognitively organized and restructured in memory (Bandura, 1997). By altering one’s perceived self-efficacy, an individual is able to reconstruct past experiences and improve performance by accessing their memory.

Vicarious Experience

Efficacy appraisals are partly influenced by vicarious experiences mediated through modeled attainments (Bandura, 1997). Modeled attainments have the ability to influence success or failure of an individual and raise or lower perceived self-efficacy. When a model with whom the observer identifies performs well, the efficacy beliefs of the observer most likely are enhanced;
when a model performs poorly, the efficacy beliefs of the observer tend to decrease (Goddard, Hoy, & Woolfolk Hoy, 2004).

Modeling influences do more than provide a social standard against which to judge one’s own capabilities and competent models transmit knowledge and teach observers effective skills and strategies for managing environmental demands (Bandura, 1994). In conveying cognitive skills by verbally modeling thought processes, models verbalize their thoughts about how to use concrete plans and strategies to diagnose and solve problems, generate alternative solutions, monitor the effects of their actions, use coping self-instructions to overrule self-doubts, use self-praise to provide motivational support for their efforts, and manage stress (Meichenbaum, 1977; Meichenbaum & Gilmore, 1984; Schunk, 1989).

**Verbal or Social Persuasion**

People who are persuaded verbally that they possess the capabilities to master given activities are likely to mobilize greater effort and sustain it than, if they harbor self-doubts and dwell on personal deficiencies when problems arise (Bandura, 1994). Verbal or social persuasion has the ability to be a powerful tool and can influence perceived self-efficacy of an individual. Persuasory or persuasive efficacy attributions, therefore, have their greatest impact if people have some reason to believe that they can produce effects through their actions (Chambliss & Murray, 1979).

Bandura (1977) stated that people are led, through persuasive suggestion, into believing that they can cope successfully what has overwhelmed them in the past; efficacy expectations induced in this manner are likely to be weak and short-lived. Successful efficacy builders do more than convey positive appraisals; they raise people’s beliefs in their capabilities and structure situations for them in ways that bring success and avoid placing individuals in situations where they’re likely to fail often (Bandura, 1994).

**Physiological and Affective States**

Somatic indicators of personal efficacy are especially relevant in domains that involve physical accomplishments, health function, and coping with stressors (Bandura, 1977). Individuals have the capability to assess their own physiological and emotional states during activities which may or may not alter their performance. People differ in their proneness to dwell on their somatic states of reaction; some are quick to focus in ruling on their sensory experiences, others are more externally oriented (Carver & Scheier, 1981; Duval & Wicklund, 1972).

Pennebaker and Lightner (1980) stated the less absorbed people are in activities and events around them, the more they focus attention on themselves and notice their aversive bodily states and reactions and taxing situations. Attention has very limited capacity, so there are only a few things to which one can attend to at any given time (Kahneman, 1973).
Collective Efficacy

Perceived collective efficacy refers to a group’s shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments (Bandura, 1997). Bandura (1993) found that the collective efficacy of the school staff play a key causal role in path analysis predicting school achievement in reading and mathematics.

Collective efficacy is associated with the tasks, level of effort, persistence, shared thoughts, stress levels, and achievements of groups (Goddard, Hoy, & Woolfolk Hoy, 2000). Many of the challenges life centers on are common problems that require people to work together with the collective voice to change their lives for the better. The strength of families, communities, organizations, social institutions, and even nations lies partly in people’s sense of collective efficacy that they can solve the problems they face and improve the lives a unified effort (Bandura, 1997).

Collective teacher efficacy is the perceptions of teachers and the school that the efforts of the faculty as a whole will have a positive effect on the students (Goddard et al., 2000). Bielaczyc and Collins (1999) suggested that the role of a learning community is a component of collective efficacy and identified eight dimensions in such a community: (a) the community has goals; (b) the community engages in a variety of learning activities providing for individual development and collaborative construction of knowledge; (c) the teacher’s role is that of an organizer and facilitator of student-directed activities; (d) community members embrace different roles at various times respecting each other’s differences; (e) resources and processes of learning are shared among community members; (f) members provide feedback to one another and develop ways to share ideas, knowledge, and skills; (g) members develop in-depth understanding of key ideas and share knowledge that contributes to the growth of the community; and (h) community members create products that can further the understanding of the community (pp. 269-292).

Pintrich (2001) suggests that teachers are either facilitated or constrained by epistemological beliefs. As the research base grows in this field, the need to speak directly to practitioners about the utility and importance of attending to beliefs about knowledge and knowing. Their influence on strategy use, comprehension, conceptual change and cognitive processes becomes vital (Pintrich, 2001). Additionally, teachers need increased attentiveness to teaching the epistemology of their fields, discussing how knowledge develops and how it is validated (Pintrich, 2001).

Pajares (2002) states that the beliefs that teachers hold about teaching and learning, including beliefs about their students, have a significant influence on the teachers behaviors. Pajares (1992) asserts that beliefs are the best indicators of the decisions that individuals make throughout their lives, for example, the choices they make for teaching strategies in the classroom. Teachers’ beliefs about the importance of the content taught, their beliefs regarding appropriate instructional strategies and their sense of self-efficacy have all been found to influence instruction (Hargreaves & Fullan, 1992; Loucks-Horsley et al., 1998).
Conclusion

In summation, special education teachers have a conceptual focus on teaching and learning in their classroom. Understanding how personal epistemology influences an individual allows them to use their own knowledge to support motivation, learning strategies, pedagogical approaches, and classroom context. Self-efficacy is how we perceive our own capabilities to deliver instruction and influence the learning process in the classroom. Collective efficacy is influenced how well the school, administration, and teachers support the students and the learning environment.

References


85-95.
Cooking for Independence:
Middle School Students Gain Skills While Cooking

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Abstract

Middle school students with intellectual disabilities often have difficulties achieving independence with instrumental activities of daily living (IADLs); therefore, these skills must be taught in school. IADLs are a complex component of skills that require a higher level of cognitive reasoning such as community mobility, shopping, meal preparation and clean-up. A cooking club was utilized to help intellectually middle school students with disabilities gain independence in IADLs. Those students were enrolled in a multi-aged, self-contained, special education class when they participated in the cooking club; they showed an increased independence with meal preparation, shopping, community mobility, purchasing transaction skills, menu selection and overall self confidence.

For the past decade, there has been an increased focus on integrating people with intellectual disabilities into the local community (Drysdale, Casey & Armstrong, 2007). This has created a need to equip those individuals with the knowledge and skills needed to be successful in this community. Some of the skills needed for success include: community mobility, shopping, and meal preparation which require more abstract cognitive skills. These complex skills have been defined as instrumental activities of daily living (IADLs) by the American Occupational Therapy Association (2008). Because parents of children with intellectual disabilities tend to be over protective, independence in IADLs must be taught in school (Drysdale, Casey & Armstrong, 2007). The purpose of this paper is to describe how a cooking club was utilized to help middle school with intellectual disabilities students gain independence in IADLs.

Goals of the Cooking Club

The primary goal of the cooking club is to increase the students’ ability to independently:

- Plan a balanced meal
- Prepare a shopping list
- Select items in a store from a shopping list
- Complete a purchasing transaction
- Prepare a meal following a recipe
- Set a table
- Serve a meal family-style
- Clean-up after a meal
Students who participate in the cooking club will:

- Improve social skills
- Increase friendships
- Compile a personal picture cookbook (cookbook will contain all of the picture recipes that the student has mastered)

**Forming the Cooking Club**

The middle school students range in age from 12-16 years old, and have a variety of diagnoses such as, Down’s syndrome, Autism, Mental Retardation, Traumatic Brain Injury, and language impairment. All of the students are in a self-contained, multi-aged, special education class where they receive the majority of their instruction. Nevertheless, students who require support beyond that which is provided by the classroom teacher are targeted for sessions with an occupational therapist and/or speech therapist. When participating in the Cooking Club a slight departure from these regular procedures is evident. For example, students work in small rotating groups of three persons to host the Club meal. These small groups are formed, dissolved and reformed until every student has had an opportunity to serve as host.

**Roles of the Groups Facilitators**

To ensure success, in completing all Club activities, the group facilitators should include a special education teacher, occupational therapist, and speech therapist. Although the roles of these facilitators are interchangeable they are typically, as follows: the special education teacher is responsible for selecting the student team that will host the group, assisting the team with menu selection and preparing the picture recipe; the occupational therapist is responsible for assisting the students with creating invitations for meal guests, preparing the shopping list, selecting items in the grocery store, completing purchasing transactions and preparing the meal; while the speech therapist is responsible for assisting the students with communication needs in the community and for facilitating conversation during group interactions.

**The Cooking Club in Action**

Once a month a team of students is chosen by the special education teacher to host the cooking club, the team consists of 3 students who work co-operatively to complete the steps involved in planning and preparing a the meal. Each team member gets the opportunity to invite a student from another self-contained special education class to participate in the club meal. If there is a disagreement regarding an issue, then a vote is taken among the team members. This process helps to improve social skills and foster friendships. In addition to inviting the guests, it is also the responsibility of the team to select the menu, make the shopping list, shop for the items on the prepared list as well as prepare and serve the meal to the invited guests. The occupational therapist helps team members create invitations for the cooking club guests. The students have the choice of using pre-made invitations or creating invitations from scratch. The occupational therapist works with the team on communication management which includes handwriting.
keyboarding, visual and fine motor skills and at times assistive technology devices to create the invitations. After the students have selected a meal from Cooking Made Easy (a cookbook that contains step by step pictures of breakfast, lunch and dinner recipes which have been created by the group facilitators), the occupational therapist assists the students with making a shopping list. Depending on the students’ functional level this step can be achieved in the following ways: students make a written shopping list from the recipes; students use pictures from a store circular to create a picture shopping list; or students can use picture cards.

Next, the students are required to locate and purchase the items on the prepared shopping list during a community-based instruction outing. Community-based instruction is a systematic training of individuals in functional skills within the natural community setting where such skills are used to enhance the transition to independent living in the local community (Education.com, 2006). In other words, community-based instruction occurs outside the educational environment within the natural community, such as grocery stores, malls or department stores. In the middle school, students participate in community-based instruction two times per week. The role of the occupational therapist in this setting is to assist students with community mobility which includes crossing the street safely, navigating in the store, locating items in the store, using a cart or basket, and completing the purchasing transaction. It is also the responsibility of the students to store purchased items in the appropriate place in the kitchen; this activity is a component of home management (AOTA, 2008).

Finally, the day of the Cooking Club meeting the team members prepare and serve the meal. The meal is served family-style with facilitators available to assist with communication needs, facilitation of conversation and proper table manners. Once the meal has been completed, the team is responsible for clean-up and restoring order to the kitchen and dining area.

Effectiveness of the Cooking Club

Parents of the cooking club participants have reported an overall increase in independence in IADLs and self-confidence in their children. They have reported that their children have begun to participate in activities at home such as: independently preparing meals for themselves, participating in shopping tasks and home management activities such as putting groceries in their appropriate place, and clean-up tasks like washing the dishes, sweeping and cleaning the table. Generally, the group facilitators have observed that students who participated in the cooking club show an improvement in social skills, self-reliance, self-esteem, co-operative learning and independence in IADLs in the areas of community mobility, communication management, shopping, meal preparation and clean-up. Thus, it is evident that utilizing a cooking club is an effective way to address IADLs in the middle school setting.

References


A Student’s Guide to Navigating the IRB: How to Successfully Navigate a Potentially Overwhelming Process

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Abstract

Graduate students must complete a research project to receive their degree. In addition to this basic requirement, the student may be required to submit a research proposal and application to the governing Institutional Review Board (IRB) for approval prior to beginning the research project. This article describes the IRB process and offers tips for successful navigation of the procedure.

I did it! I got into graduate school. Initials were eventually going to follow my name! My parents and my grandma were so proud. I knew I could handle the class work, and I was excited about the prospect of doing a real piece of research. I was on my way, but what I did not know was the obstacle that lay ahead.

Excited and nervous, I entered my first thesis meeting with my advisor. We discussed several possible research topics and after a lot of reading, thinking, and a couple more meetings discussing that reading and thinking, I settled on a topic. I was going to investigate the potential usefulness of Functional Assessment in determining the maintaining contingencies of non-contextual speech (sometimes called delayed echolalia) by children with autism and autism spectrum disorders. A research proposal was in my future. As my advisor discussed my writing plan, he began to drop some unexpected initials: IRB. Apparently, my advisor was not the only person from whom I would need permission to begin my investigation. These mysterious initials, IRB, were also going to review and assess my proposed investigation. It seemed that their approval was more important than my advisor’s. Yet, I still did not know who or what the IRB was. As a result of my experience, I write this paper in the hopes of helping other students who are faced or will be faced with the mysteries of the Institutional Review Board a.k.a., IRB.
What Is the IRB and Why do I Need Its Approval?

Within the U.S. Department of Health and Human Services, lies the Office for Human Research Protections. This body governs all Offices of Research within every research institution in the United States. These research institutions include universities, public and private hospitals, clinics, and other organizations conducting research with humans. Safeguards were created for Human Subjects as a result of ethical concerns about “the preservation of autonomy, beneficence, nonmaleficence, and justice pertaining to research in human subjects” (Colt and Maynard, p.1605). It is unlawful for research practices not to meet the guidelines set forth by the Office of Human Research Protections (Bronte-Tinkew, Allen, & Joyner, 2008).

Within the Office of Human Research Protections lies the reason why student researchers must receive permission from their educational institutions to conduct research. Receiving permission to conduct research means that the research protocol you, as the student researcher, have written has been thoroughly reviewed using the guidelines set forth by the Office of Human Research Protections. These guidelines protect your participants’ safety as well as protect you as the researcher from liability in case something goes wrong in your study. Participants will receive information about your study that enables them to determine whether they want to participate or not; this information must be written at their level of understanding (Skarbeck, Henry, & Parish, 2006, Kennedy, 2005). In addition to the guidelines that exist for research protocols involving adult participants, specific guidelines (derived from Public Law 106-310) exist for research protocols involving child participants. A parent must give consent for a child under the age of 18 to participate however you may also explain your research to a child participant over the age of 6 and ask them to agree to be a part of the study (Skarbeck, Henry, & Parish, 2006). Each institution’s Office of Research enforces these guidelines.

Offices of Research take on different names within different research institutions, all derivative of the Office of Research. However, the name does not change the responsibilities of each office. Each institution’s Office of Research is responsible for overseeing all aspects of research within the institution including integrity and responsible research practices. Different departments within the Office of Research govern these differing aspects of research (e.g., Biomedical, Animal Science, and Social Behavioral). The IRB oversees the latter of these; ensuring responsible research practices.

IRB stands for the Institutional Review Board. The Institutional Review Board is the body within a research institution charged with reviewing all proposed research protocols to ensure each meets the guidelines set forth by the federal Office of Human Research Protections. The IRB is usually organized into departments according to content area. Large research institutions often have some of the following IRBs, Biomedical Institutional Review Board, a Cancer Institutional Review Board, and a Behavioral and Social Sciences Institutional Review Board. IRB members consist of faculty and other institutions staff who sit on the board and review research proposals on a predetermined schedule using the guidelines set forth by the corresponding IRB. Your research advisor will help you determine which IRB should review your research protocol.
Information specific to your research institution may also be available via the Internet. Additionally, you may find that your advisor has received prior IRB approval via a grant-writing process. If this is the case, then your advisor will help you proceed under the terms and conditions of the ruling grant. Assuming that no prior approval has been received, you will need to take part in the IRB review process and submit an application.

**Application and Review Process**

The student and his/her advisor are responsible to report research projects to the appropriate IRB. You are required to wait until you receive approval notification from the IRB before you begin any part of your research. The IRB application and review process is as follows (see Figure 1).

1. Develop research topic with your advisor
2. Write and obtain approval from your advisor for your research protocol
3. Determine appropriate IRB review application (exemption, expedited review, or full review)
4. Submit IRB application and research protocol
5. Respond to IRB with necessary revisions or with acknowledgement of final approval of research protocol

In general, you will find three different types of applications: exempt, expedited, and full, for presenting your research protocol to the IRB (Lynn & Nelson, 2005). The first step is to determine what level of review your protocol requires. It may qualify for an exemption from the IRB Review. The purpose of the exempt process is to identify short-term research projects that pose a low-level risk to the participants. Projects that usually qualify for exemption take three forms, surveys, typical classroom activities (e.g., note-taking), and chart reviews. Using the Guidelines for Exemption from IRB Review, you are provided with a list of questions regarding the nature of your work and the involvement of your participants. The exemption application is usually reviewed by an IRB staff representative who will provide you with relatively immediate feedback. At this point, if your application is approved, you will be free to begin your research. If you do not qualify for the exemption, you will have to file one of two types of applications, expedited or full review, to the governing IRB.

The next review process is the expedited review. This application can be found at your IRB. The application begins with a series of questions to help you determine whether your protocol qualifies for the expedited review process. If so, fill out the rest of the application and submit to the appropriate IRB per application instructions. The expedited application does not go to a full board meeting for review; a senior level reviewer of the IRB will review your application. Since only one person reviews the expedited applications, they are usually reviewed more quickly. However, the timeline on the turnaround for this application varies depending on the availability of the senior reviewers. Once you are notified of your approval you are free to begin your research. If you do not qualify for the expedited review or your application is disapproved, it will be necessary to fill out a full review application if you wish to continue with your research.
The application for IRB Review is necessary for research protocols that require a full review by the review board. This application requires detailed responses to specific questions regarding your protocol and the risk it will pose to the participants of your study (Kennedy, 2005). Instructions are provided on each application on how to answer the questions and how to submit the application and your protocol to the appropriate IRB. Following your submission of the full application, a staff reviewer will briefly review your application for completeness. The staff reviewer will inform you if your application is missing any necessary components. Once the staff reviewer has determined that your application is complete, he/she will send the application to the board meeting. Usually, the board will meet 1-2 times per month to review full applications. The response of the board to your application will take one of three forms: (a) approved, (b) approved with conditions, or (c) disapproved.

- **Approved.** Full approval from the IRB means that you may start your research immediately. IRB approval for the study is based solely on the protocol that you submit. If you decide that major changes must be made to the protocol to answer your research question then you must submit these changes to the IRB for approval prior to implementing the changes. Major changes could include items such as modifications made to the population of participants or to the measurement tools you are going to use. Minor changes could include brand of materials used within the study or a 1-minute time change in the amount of time students are given to complete their work. Your advisor will help you determine what constitutes a major change in protocol. The approval is usually good for 1 calendar year. At which point, if the research is still being conducted or the data are still being analyzed, then an extension application must be completed and submitted to the IRB.

- **Approved With Conditions.** If approved with conditions, the board will provide you with a list of conditions that specify modifications that should be made prior to full approval of your protocol. It is common to require the researcher to provide evidence that the necessary modifications have been made (e.g., phone scripts, consent letters, and revised data sheets). After these modifications, as stated by the conditions, have been submitted, the IRB will review again and determine whether the modifications meet guidelines for final approval.

- **Disapproved.** If disapproved, you must critically analyze your research protocol, the risk to your participants, and the answers to your application questions. The IRB will usually provide a list of reasons for the denial. In the event of a disapproval, it is good practice to make the necessary and recommended modifications to your research protocol and respond to application questions and to resubmit your entire application. The major difference between a disapproved application and one that has been approved with conditions lies in the resubmission of the modifications (Fiske, 2009). To respond to the disapproved application, you must submit a new application in its entirety.
Figure 1. IRB application process.
Here are some tips on completing your corresponding applications:

- **Start early.** An initial response from the IRB could take 3-5 weeks. Final approvals usually do not come until 2-3 reviews of your application have occurred. Applications are reviewed in the order they are received so plan accordingly. Most review boards do not have a “rush” status if you are trying to graduate.

- **Ask questions before you begin writing.** Emailing questions to the designated IRB representative has become an increasingly efficient means of communicating questions and concerns specific to your application. The more detailed you can be in your questions the more likely you will receive a helpful response and the less likely you will receive an answer of, “It depends.”

- **Read the directions.** Each application comes with a set of instructions that should be diligently followed when completing the application.

- **Detail the methods section.** The review board, to ensure that there is no danger to the participants in your study, will critically analyze the methods section of your research protocol. Detail is very important in this section. Ask another person to read the methods section and act out the procedure. If he/she has questions regarding the procedure, then you should rewrite this section of the methods.

- **Take care when writing consent letters and recruiting material.** Consent letters and recruiting materials, including phone scripts, are an extremely important part of your application. Consent letters outline the research purpose and procedures in everyday, non-technical language. Additionally, consent letters detail the rights of each person as a participant in the research study. See Figures 2 and 3 for examples of recruitment and consent letters.

- **Keep your advisor informed.** You should always check with your research advisor to ensure you are taking the necessary precautions to protect your participants and yourself.

- **Notify supporting agencies.** It is important to obtain support and approval from other governing agencies if necessary. Participants may come from a variety of different environments including school districts, hospitals, or clinics. In using these participants, you must report your proposed research to each institutions office governing research practices. This means that you may have to apply to multiple IRBs before beginning your research.

The IRB process can take anywhere from 2 weeks to 6 months (Lynn & Nelson, 2005). The timeline can vary based on your application. If you answer each question completely and provide enough detail that the board can make an informed decision then the turnaround time on your
application will be shorter. Putting extra time and care into your application at the start of the process can significantly reduce the amount of time the entire process will take. It is necessary to allot enough time to receive approval to conduct your research, but also to allot enough time to be able to conduct your research. You do not want to ‘cheat’ research because you received your approval too late to complete your entire study.
September 2, 20--

Dear Parent/Guardian:

My name is ----------------- and I am currently a graduate student in ----------------- at -------------------University. One of the requirements for completing my course of study is to conduct a research project. I will be conducting my research under the supervision of my faculty advisor, Dr. ------------------ , a professor in the College of ----------------. I am writing to you to explain my research to you and to ask your permission to include your son/daughter in my study. The following is a description of the study I am planning to conduct and an explanation of your rights.

My study will use functional assessment to determine the purpose of delayed echolalia displayed by some young children. For example, does your child use delayed echolalia to seek attention from others. The functional assessment will involve an interview with you, direct observation of your child, and assessment of the delayed echolalia. During assessment sessions conducted in your home, I will set up your child’s room to determine whether attention, removal of work or being alone is the purpose of the behavior. Each session will last for 5 minutes, during which I will track the number of times delayed echolalia is present and how long each occurrence of delayed echolalia lasts. During the assessment of attention, your child can engage in any preferred activity. I will give your child praise and attention when delayed echolalia is present. During the assessment of removal of work, I will ask your child to perform a moderately difficult task. Each time delayed echolalia is present; I will remove the task for 10-15 seconds and then ask him/her to do the task again. During the assessment of being alone, I will observe your child in a room by himself to determine if delayed echolalia is present. Assessment sessions will be video and audio taped for the purposes of data collection only.

Before the study would begin, I would meet with you to discuss your child’s language skills, things and activities he or she enjoys, and the kinds of situations in his or her life from which you would like delayed echolalia removed. Following the functional assessment, I would meet with you to discuss the results and the intervention that would be implemented as a follow-up to the assessment.
Parent/Guardian Information Letter  
September 2, 20##  
Page 2

Your son/daughter would be involved in the assessment for approximately 30-minutes, three to five days per week for approximately 2 weeks. You are not in any way obligated to grant permission for your child to participate in this research, and your child will not be penalized in any way for not participating. If your child does participate, you have the right to withdraw him/her from the study at any time without prejudice to you or your child. During any session, if your child asks to stop or shows signs of wanting to stop, the session will be terminated. Please be assured that your child’s name will not be revealed in any publication, document, recording, computer storage or any other form of report or presentation developed from this research.

Attached are two copies of the assessment consent form. By signing this consent form you grant permission for your child to participate in the assessment part of this study. You should return a signed copy of the consent form in the stamped, return envelope and keep the second copy for your records. During the meeting to discuss the results of the assessment, I will provide you with 2 additional consent forms concerning the intervention phase of this study. At that time, you will not in any way be obligated to grant permission for your child to participate in this research, and your child will not be penalized in any way for not participating. If you have any questions regarding this research or your rights related to participation in this research, feel free to call me at home at (###) ###-#### or call Dr. ---------- at (###) ###-####. If you have questions about your child’s rights as a research participant, you can call the Office of Research Risks Protection at (###) ###-####. Thank you for your cooperation.

Sincerely,

Enclosures: 2 copies of Consent Form for Participation in Educational Research  
Self-addressed stamped envelope
Figure 3. Sample consent form.

Form for Participation in Educational Research

I agree to allow my child to participate in a research study evaluating the effects of social praise on delayed echolalia. Ms. ------ will conduct this study under the direction of Dr. ------. The nature and purpose of this study have been explained to me, and I understand that instructional sessions will require approximately 30 minutes, five to seven times per week for approximately 12 weeks.

I also grant permission to Ms. ---- and Dr. ---- to video and audio tape the research sessions for data collection purposes and to obtain test scores and other information from the Autism Program to describe my child’s disability and current level of functioning for the purpose of writing the research report. I understand my child’s and my own identity will not be revealed to anyone not directly involved in conducting the research, or by means of publication, documentation, computer storage, or any other form of report developed from this research. Additionally I understand I may withdraw my consent for participation at any time. If I have any questions with regard to this study, I can call Dr. ------ at (###) ###-#### or ------ at (###) ###-####. If I have questions about my child’s rights as a research participant, I can call the Office of Research Risks Protection at (###) ###-####.

__________________________
Child’s Name

__________________________
Signature of Parent or Guardian

Date

----- ------
M.A. Student Researcher

Date

-----
Professor and Faculty Advisor

Date
Tips for Successful Navigation

Ask your advisor. Your research advisor is a resource. More than likely, he or she has been through the research process many times before. Attention to detail is very important and your advisor can help you with ensuring the completeness of your protocol and that you have used the most appropriate wording.

Check due dates. Find out the IRB review schedule and set timelines. Review boards usually meet on a set schedule, either bi-monthly or monthly. Often the date that a review board meets is not the date that your application is due. Your application is due prior to the board meeting date. To ensure that your application is reviewed on the date of your choice, you should have your application in at least one week prior to the application due date.

Be thorough. Follow every instruction in the application. Often guidelines are provided regarding the information necessary to include in response to application questions. Utilize the checklists that accompany the application. These checklists will help ensure that you do not skip parts of the process.

Duplicate everything. Keep exact copies of all correspondences with the IRB. Additionally, provide both your advisor and family/friends with copies of your application. This precaution will prevent total loss of your work in the face of natural or technological disasters.

Schedule extra time. Try not to schedule anything for the day you submit your proposal to the IRB. Submit your proposal in the morning so that if you are told that you need to make more copies you have time to do so. Once you have completed submitting your application, take the afternoon off and do something nice for yourself. This will be a big accomplishment and you should take some time to relax, but not too much!

Ask for a receipt when submitting your application. The receipt should contain a listing of the items you submitted, the date and time you submitted, and the signature of the person who received the materials.

What to Do While You are Waiting

It is important to make sure that during every step of the process you are productive including while awaiting a response from the IRB. The following will help you be prepared to implement your proposal immediately upon receiving the happy news regarding the approval of your study:

1. Begin gathering materials that you will need to implement your protocol.
2. Set up training timetables for training primary and secondary data collectors as well as any people (parents, teachers, or peers) that will be implementing the research procedures.
3. Continue to work on your literature review. The application process could take up to 6 months so it is necessary to keep up with current research so that you have a complete literature review.

4. Keep in contact with staff that eventually will be involved in implementing your research. Teachers, aides and principals should be aware of the status of your application.

**Conclusion**

The IRB process can seem daunting and overwhelming but keep in mind that thousands of students have successfully navigated this process and you can too! Do not be afraid to ask questions. Ask your advisor, ask former students, ask current students, and talk with your peers who are going through the same process. Use the Internet to find answers to questions you might have specific to your institutions’ IRB. Additionally, you may find guidelines and tips from your institution that will help you along the way.

**References**


**Teacher Candidates’ Knowledge of Special Education Law**

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**Abstract**

This study sought to assess teacher candidates’ knowledge of special education policies and procedures as mandated by the federal government. It also examines factors associated with accurate knowledge. A sample of 111 teacher candidates, drawn from a Missouri private university, completed a survey. Overall, teacher candidates lacked accurate knowledge and misperceived their lack of knowledge. The most significant predictors of accurate knowledge were completing more special education courses and having positive attitudes toward inclusion. Additionally, this study revealed no differences in knowledge between regular education teacher candidates versus special education teacher candidates.

**Teacher Candidates’ Knowledge of Special Education Law**

In 1975, Congress passed the Education of All Handicapped Children Act (EAHCA). It later changed to the Individuals with Disabilities Education Act (IDEA) in 1990. Prior to the passage of IDEA schools limited access for students with disabilities to educational opportunities by excluding them from public schools and by not providing an education appropriate to their needs; however, IDEA gave students with disabilities an enforceable substantive right to a free, appropriate public education in the least restrictive environment (Katsiyannis, Yell, & Bradley, 2001). Therefore, students with disabilities had a legal right for education in the least restrictive environment.

In the end, the legal rights of IDEA led to inclusion or the push for educating students with disabilities in regular education classrooms to the greatest extent possible. For example, from 1995 to 2005 the percentage of students with disabilities in the regular education classroom for more than 80% of the school day increased from 45.3% to 52.1% (National Center for Education Statistics, 2009). Moreover, since the passage of IDEA, subsequent amendments and court cases increasingly pushed for more inclusion of students with disabilities in the regular education classroom (Yell, Katsiyannis, & Hazelkorn, 2007). Much prior research focuses on determining factors associated with the successful implementation of inclusion of students with disabilities such as teachers’ attitudes, severity of student disability, teacher training, administrative support, classroom structure, and student and teacher perceptions (Avramidis & Norwich, 2002; Elliot, 2008; Leatherman, 2007); however, little research explores educators knowledge of special education policies, procedures, and laws.
Literature Review

Although several laws impact the education of individuals with disabilities, IDEA greatly increased the educational responsibility placed on states to fully educate students with disabilities by combining a bill of rights for children with disabilities with federal funding (Murdick, Gartin, & Crabtree, 2007). IDEA contains six basic principles: zero reject, nondiscriminatory assessment, procedural due process, parental participation, least restrictive environment (LRE), and individualized education program (IEP). The principle of zero reject holds that all students with a disability are entitled to a free and appropriate public education (FAPE). Nondiscriminatory assessment is the principle that testing procedures be racially or culturally nondiscriminatory.

The third principle, procedural due process, guarantees the rights of all persons involved in the provision of educational services for children with disabilities. The principle of parental participation mandates that parents be provided an opportunity to participate in issues pertaining to their child’s evaluation, placement, and IEP development. The fifth principle, LRE, focuses on the assumption that the preferred placement for students with disabilities is the regular classroom. Lastly, the IEP is a collaboratively developed document designating the individualized educational program for a student with a disability.

Due to the variety of inclusive practices, the complexity of IDEA, and the continuous changes and updates made to the laws by federal and state agencies, many administrators and teachers lack complete knowledge of the policies, procedures, and issues related to special education (Brookshire & Klotz, 2002; Mitello, Schimmel, & Eberwein, 2009; Salisbury, 2006; Valesky & Hirth, 1992). Nevertheless, laws require they implement the policies and procedures. Educators are frequently confronted with situations involving students with disabilities requiring proper action and documentation in order to provide a legally compliant education and to avoid litigation (Etscheidt, 2006; Militello et al., 2009; Zirkel & Scala, 2010). Thus, having adequate knowledge of special education law is pertinent for regular and special education teachers because they are held accountable for proper implementation of that law.

In a random sample of secondary school principals, Mitello et al. (2009) conducted a survey on legal knowledge and practices. They found that principals reported special education as an area where they received frequent threats of a lawsuit. Principals also indicated special education as a law category they advised their teachers on and claimed they wanted their teachers knowledgeable about it. Hence, administrators not only express special education law as vital knowledge for teachers, they also indicate it as an area of insufficient knowledge for teachers.

In another study, Brookshire and Klotz (2002) surveyed regular education and special education teachers on their knowledge of special education laws. They found that although special education teachers scored higher on their knowledge of special education law than regular education teachers, they both lacked knowledge on the topic. Brookshire and Klotz also found that while regular education teachers held accurate
perceptions of their insufficient knowledge of special education law, special education teachers held an inaccurate perception of their insufficient knowledge. Although these findings offer insight into educators’ knowledge of special education law, the survey contained questions involving situations in which teachers chose whether it met compliance or violated compliance. This format offers participants a 50 percent chance of guessing an answer correctly. In addition, the situation-based questions may cause confusion in comparison to more direct questions on the laws.

In order to improve educators’ knowledge of special education issues, recent legislation, researchers, and government officials emphasize the importance of teacher preparation as a means to achieve the goals of federal policy (President’s Commission on Excellence in Special Education, 2002). In a qualitative study of special education teacher candidates’ understanding of instructional strategies for students with disabilities, Wasburn-Moses (2008) found that many candidates lacked understanding that aligned with IDEA and the No Child Left Behind Act (NCLB) of 2001. Since most teachers receive their preparation through a college teaching program (National Center for Alternative Certification, 2010), it is essential that those programs train teachers in special education. The purpose of the present study is to identify teacher candidates’ knowledge of special education policies and procedures and explore some of the factors associated with that knowledge. While some research suggests teachers and teacher candidates lack accurate knowledge of special education policies and procedures, these findings require additional support. In addition, since a multitude of factors may associate with having accurate knowledge of special education policies and procedures, this study explores possible predictors of knowledge. This study aims to answer the following research questions:

- Do teacher candidates have accurate knowledge of special education policies and procedures?
- Is there a significant difference in the knowledge of special education policies and procedures of regular education teacher candidates versus special education teacher candidates?
- Do teacher candidates have accurate perceptions of their knowledge of special education policies and procedures?
- Does a positive correlation exist between teacher candidates’ knowledge of special education policies and procedures and the number of special education courses they completed?
- Do teacher candidates’ attitudes toward including students with disabilities in the regular education classroom, the number of special education courses they completed, and perception of their knowledge predict their actual knowledge of special education policies and procedures?

**Method**

**Study Design**

The present study employed a cross-sectional design with administration of a questionnaire to participants. The researcher recruited participants from the Department of Educational Studies at Saint Louis University. After receiving permission from
professors, the researcher visited nine classes at an agreed upon date and time. The researcher, then, invited students to complete a questionnaire during their class and collected them upon completion. Of the 195 students in the department of educational studies, 111 completed the survey. The remaining 84 students did not complete the survey due to absenteeism, a current internship, or a lack of agreement from their professor to administer the survey during class.

Survey Instrument

Each participant completed the survey of special education perceptions and knowledge; a survey developed by the researcher for the present study. The survey assessed perceptions with three questions regarding attitudes toward inclusion of students with disabilities in the regular education classroom and two questions regarding participants’ perception of their knowledge of special education policies and procedures. Participants answered all of these questions on a five point Likert scale (strongly agree, agree, uncertain, disagree, and strongly disagree).

The survey instrument assessed knowledge of special education policies and procedures with accurate and inaccurate statements addressing the six principles of IDEA. Three statements addressed each principle. Participants responded to the statements on a four point Likert scale (yes, it is accurate; it is probably accurate; it is probably not accurate; no, it is not accurate). The researcher employed this design in order to reduce the likelihood of guessing correct answers. Lastly, the survey asked participants demographic questions including their major, academic year, number of completed special education courses, semester planning to student teach, GPA, and sex.

Data Analysis

For questions regarding attitude toward inclusion and perception of knowledge, numbers ranging from one to five were assigned to each Likert scale option. The numbers were totaled from the three questions regarding attitudes to provide an inclusion attitude composite score for each participant such that higher scores indicated positive attitudes. Similarly, numbers from the two questions regarding perception were totaled providing a knowledge perception composite score for each participant in which higher numbers indicated perceiving accurate knowledge. For knowledge of IDEA, numbers ranging from one to four were assigned to each Likert scale option. The total from all the questions provided a knowledge score for each participant. However, following a content validity test in which professionals in the field of special education reviewed the questions, the researcher removed two questions from the analysis due to possible confusion. One of the questions assessed procedural due process and the other assessed zero reject. Therefore, the special education knowledge component totaled to 16 questions with eight containing accurate information and eight containing false information. Participants had the possibility of scoring between 16 and 64 points with higher scores indicating accurate knowledge. The researcher also calculated total scores for each of the six principles.
Results

Demographic Characteristics

The sample for the present study included 111 undergraduate students; however, 12 respondents were removed from analyses because they did not indicate having a major in the field of education. Table 1 displays demographic characteristic of the sample. All potential respondents completed the survey yielding a 100% response rate with female participants accounting for 80.8% of the sample and males accounting for 19.2% of the sample. The majority of the participants indicated their current academic standing as junior (36.4%) or senior (32.3%). Of the participants, 85% indicated a major in the field of regular education, while 14% indicated a major in the field of special education. Lastly, most of the individuals declared their major as either elementary education (38.4%) or secondary education (23.2%).

Table 1
Teacher Candidate Characteristics

<table>
<thead>
<tr>
<th>Descriptive characteristic</th>
<th>Responses (N = 99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of completed special education courses</td>
<td>0 – 15 (M = 1.86)</td>
</tr>
<tr>
<td>GPA</td>
<td>2.10 – 4.00 (M = 3.47)</td>
</tr>
<tr>
<td>Academic year</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>24.2%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>36.4%</td>
</tr>
<tr>
<td>Junior</td>
<td>36.4%</td>
</tr>
<tr>
<td>Senior</td>
<td>32.3%</td>
</tr>
<tr>
<td>Certification only</td>
<td>4%</td>
</tr>
<tr>
<td>Major</td>
<td></td>
</tr>
<tr>
<td>Early childhood</td>
<td>10.1%</td>
</tr>
<tr>
<td>Early childhood special education</td>
<td>4%</td>
</tr>
<tr>
<td>Elementary</td>
<td>38.4%</td>
</tr>
<tr>
<td>Middle school</td>
<td>12.1%</td>
</tr>
<tr>
<td>Secondary</td>
<td>23.2%</td>
</tr>
<tr>
<td>Special education mild-moderate</td>
<td>11.1%</td>
</tr>
<tr>
<td>Foreign language</td>
<td>1%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>19.2%</td>
</tr>
<tr>
<td>Female</td>
<td>80.8%</td>
</tr>
</tbody>
</table>
Responses to Questions

Table 2 presents participants responses to attitude and perception questions. Overall, participants indicated a high level of agreement with the statement that students with disabilities should be included in the regular education classroom to the greatest extent possible. They indicated a slightly lower level of agreement with the statements that inclusion has a positive impact on the learning of students with disabilities and that inclusion has a positive impact on the learning of students without disabilities. These three survey questions formed an inclusion attitude composite score \((M = 13.12, SD = 1.82)\) which resulted in a slightly negative skewness of \(-0.76\) with a range of 8 to 15.

Table 2
Means, Standard Deviations, and Percentages for Attitudes and Perceptions

<table>
<thead>
<tr>
<th>Statement</th>
<th>(M)</th>
<th>(SD)</th>
<th>Percentage strongly agree or agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion of students with disabilities positively affects their learning.</td>
<td>4.43</td>
<td>0.67</td>
<td>89.9</td>
</tr>
<tr>
<td>Inclusion of students with disabilities positively affects the learning of students without disabilities.</td>
<td>4.22</td>
<td>0.74</td>
<td>81.8</td>
</tr>
<tr>
<td>Students with disabilities should be included in the regular education classroom to the greatest extent possible.</td>
<td>4.47</td>
<td>0.71</td>
<td>89.7</td>
</tr>
<tr>
<td>I have sufficient knowledge of special education policies and procedures as mandated under IDEA.</td>
<td>3.70</td>
<td>0.92</td>
<td>65.7</td>
</tr>
<tr>
<td>I am receiving adequate preparation through my coursework at Saint Louis University on special education policies and procedures.</td>
<td>3.98</td>
<td>0.80</td>
<td>82.8</td>
</tr>
</tbody>
</table>

Participants indicated an average level of agreement with having sufficient knowledge of IDEA and with having adequate preparation on special education policies and procedures from their education program at Saint Louis University. The answers to these two questions formed a knowledge perception composite score \((M = 7.68, SD = 1.48)\) which resulted in a slightly negative skewness of \(-0.80\) with a range of 2 to 10.

For ease of interpretation, Table 3 displays participants’ composite scores for each IDEA principle and participants’ overall knowledge composite score. Knowledge composite scores ranged from 35 to 52 with a mean of 43.74 and a standard deviation of 3.30 (see Figure 1). The composite score also resulted in a slightly positive skewness of 0.15. Overall, students scored more accurately on questions regarding LRE \((M = 8.98, SD = 1.41)\) and procedural due process (one question removed, \(M = 6.41, SD = 1.02\)).
Conversely, students scored the least accurate on questions regarding parental participation ($M = 6.41$, $SD = 1.09$).

Table 3  
Means and Standard Deviations for IDEA Principles

<table>
<thead>
<tr>
<th>IDEA component</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nondiscriminatory assessment composite score</td>
<td>8.07</td>
<td>1.35</td>
</tr>
<tr>
<td>IEP composite score</td>
<td>8.42</td>
<td>1.22</td>
</tr>
<tr>
<td>LRE composite score</td>
<td>8.98</td>
<td>1.41</td>
</tr>
<tr>
<td>Parent participation composite score</td>
<td>6.41</td>
<td>1.09</td>
</tr>
<tr>
<td>Zero reject composite score</td>
<td>5.43</td>
<td>0.99</td>
</tr>
<tr>
<td>(one question removed from analysis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural due process composite score</td>
<td>6.41</td>
<td>1.02</td>
</tr>
<tr>
<td>(one question removed from analysis)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge composite score</td>
<td>43.74</td>
<td>3.30</td>
</tr>
</tbody>
</table>

Figure 1. Histogram of knowledge composite score
Analysis of Responses

The first research question asks if teacher candidates have accurate knowledge of special education policies and procedures. In order to assess teacher candidates’ knowledge, the researcher performed a test of one population mean using a test value of 50 on the knowledge composite score. The test value of 50 was chosen because a score of 50 demonstrates 70% accuracy on the assessment. Therefore, statistically significant results indicate that the group performed significantly different from the test value of 50. The t-test revealed statistically significant difference between knowledge composite scores and the test value, \( t(96) = -18.70, p < .001 \) (two tailed). Thus, teacher candidates performed significantly lower than a score of 50 indicating they lack accurate knowledge of special education policies and procedures.

The second research question addresses whether or not there is a significant difference between the knowledge of special education policies and procedures of regular education teacher candidates versus special education teacher candidates. An independent samples t-test was conducted to evaluate the mean difference between teacher candidates majoring in special education versus teacher candidates majoring in regular education on their knowledge, knowledge perception, and inclusion attitude. No statistically significant differences were determined for knowledge composite scores between the two groups, \( t(95) = .86, p = .39 \) (two tailed). In addition, no significant differences were determined for knowledge perception composite scores, \( t(97) = -1.11, p = .27 \) (two tailed), or the inclusion attitude composite scores, \( t(95) = .13, p = .90 \) (two tailed), between the two groups. Thus, teacher candidates have similar knowledge of special education policies and procedures, similar perceptions of their knowledge, and similar attitudes toward inclusion despite their major.

The third research question asks if teacher candidates have accurate perceptions of their knowledge of special education policies and procedures. In order to answer this question, the researcher conducted an ANOVA to explore the difference in knowledge composite scores among different levels of agreement with having sufficient knowledge of special education policies and procedures as mandated under IDEA. Level of agreement was recoded into three categories (agree, uncertain, and disagree) due to the few responses in the strongly disagree category. No statistical difference was found for knowledge between the groups, \( F_{2, 94} = 85, p = .43 \), indicating that teacher candidates lack an accurate perception of their knowledge.

Another ANOVA was conducted to explore the difference in knowledge composite scores among different levels of agreement with receiving adequate preparation through coursework at Saint Louis University on special education policies and procedures. Level of agreement was again recoded into three categories (agree, uncertain, and disagree) due to the few responses in the strongly disagree category. No statistical difference was found for knowledge between the groups, \( F_{2, 94} = .92, p = .40 \), indicating that teacher candidates lack an accurate perception of their preparation from coursework on special education policies and procedures.
The fourth research question inquires if a positive correlation exists between teacher candidates’ knowledge of special education policies and procedures and the number of courses they have completed. The researcher explored the relationship between the two variables using the Pearson correlation coefficient. There was a significant, positive correlation between the two variables, \( r = .18, n = 96, p < .05 \) (one tailed), with higher knowledge composite scores associated with higher number of special education courses completed.

The last research question asks if teacher candidates’ attitudes toward including students with disabilities in the regular education classroom, the number of special education courses they completed, and their perception of their knowledge predict their actual knowledge of special education policies and procedures. In order to answer this question, the researcher conducted a hierarchical regression analysis using knowledge composite scores as a dependent variable (see Table 3). The analysis used inclusion attitude composite scores, knowledge perception composite scores, and number of courses completed as independent variables after controlling for GPA, sex, anticipated semester to student teach, and regular education versus special education major. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity.

Model 1 included GPA, sex, anticipated semester to student teach, and regular education versus special education major as predictor variables. The model failed to indicate a good model fit \( (F_{4, 78} = .31, p = .87) \), suggesting that none of the variables significantly predict knowledge of special education policies and procedures. Model 2 utilized inclusion attitude composite scores, knowledge perception composite scores, and number of courses completed as independent variables. Model 2 demonstrated a good model fit \( (F_{7, 75} = 2.19, p < .05) \), explaining 9.2% (adjusted \( R^2 = .092 \)) of the variance in knowledge composite scores. In this model, inclusion attitude composite scores \( (\beta = .618, p < .01) \) and number of special education courses completed \( (\beta = .369, p < .05) \) explained the largest amount of variation of knowledge with attitude toward inclusion \( (\beta = .326, p < .01) \) making the greatest unique contribution to knowledge when controlling for the other variables. It was unexpected that perception of knowledge would not have an impact on actual knowledge \( (\beta = -.048, p = .848) \). These findings indicate that having positive attitudes toward inclusion and completing more special education courses predict accurate knowledge of special education policies and procedures; however, an individual’s perception of their knowledge failed to predict their actual knowledge.

Table 3
Hierarchical Regression Analysis of Knowledge of Special Education Policies and Procedures (Standardized Coefficient)

<table>
<thead>
<tr>
<th>Major</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Regular education</td>
<td>-.300</td>
<td>-1.082</td>
</tr>
<tr>
<td>2=Special education</td>
<td>(-.029)</td>
<td>(-.104)</td>
</tr>
<tr>
<td>GPA</td>
<td>.148</td>
<td>.562</td>
</tr>
</tbody>
</table>
Sex
0=Female 1=Male

Semester to student teach

Number of special education courses completed

Attitude toward inclusion

Perception of knowledge

Constant

Adjusted R$^2$

$\Delta R^2$

F-statistic

$\Delta F$

$* p < 0.05, ** p < 0.01$

**Discussion**

Findings suggest that teacher candidates lack knowledge of special education policies and procedures. Moreover, the candidates perceived they held accurate knowledge despite their poor performance. These findings support an earlier qualitative study by Wasburn-Moses (2008) who found limited knowledge of IDEA among teacher candidates. It also supports the previous finding that special education teachers misperceive their inaccurate knowledge of IDEA (Brookshire and Klotz, 2002); however, the present study suggests that both regular and special education teacher candidates misperceive their inaccurate knowledge. This misperception is troubling because teacher candidates may take incorrect actions in future situations due to their belief of having accurate knowledge of special education policies and procedures.

Of interest is the finding that the number of special education courses an individual completes and holding a positive attitude toward inclusion predict accurate knowledge of
special education policies and procedures. This finding supports previous recommendations that teachers require quality preparation programs with classes addressing special education (Avramidis & Norwich, 2002; Brookshire and Klotz, 2002; President’s Commission on Excellence in Special Education, 2002). States may also want to alter their certification requirements. Missouri, for example, requires a minimum of one special education course for certification of elementary school teachers (Missouri Department of Elementary and Secondary Education, 2010). Moreover, since many preparation programs may require few special education courses, teachers may benefit from inservice training in special education policies and procedures.

Positive views toward inclusion also predicted accurate knowledge. In addition, the majority of teacher candidates agreed that inclusion is positive for students with and without disabilities. The majority also agreed that students with disabilities should be included to the greatest extent possible. These positive views reflect the philosophy behind IDEA and court decisions pertaining to the law; however, the factors influencing the positive attitudes are unknown. Surprisingly, no correlation existed between positive attitudes and the number of special education courses completed. Future research should further explore the interaction and the factors influencing positive attitudes. Nevertheless, since past research indicates an association between teachers’ attitudes toward inclusion and implementation of inclusion for students with disabilities (Elliot, 2008; McLeskey & Waldron, 2002), this finding suggests that teacher candidates’ in this study may exhibit a willingness to implement inclusion when they begin teaching in the classroom.

Several factors failed to yield significant findings. Particularly notable was the lack of difference among teacher candidates’ training to be regular education teachers versus those training to be special education teachers. Both groups demonstrated similar knowledge, perceptions of their knowledge, and attitudes toward inclusion. These similar findings may have occurred because the majority of participants from both groups completed between zero and three special education courses or because of the low representation of special education teacher candidates in the sample. Nonetheless, differences between the two groups may occur once they complete their teacher preparation program or once they experience implementing inclusion in the classroom. Since past research on inclusion suggests that previous experience with inclusion influences positive attitudes toward inclusion (Horrocks, White, & Roberts, 2008; Leatherman & Niemeyer, 2005), teacher preparation programs may benefit from incorporating internship experiences with inclusion.

There are several limitations to this study. First, due to the relatively little published research on the issue of knowledge of special education policies and procedures, a replication of this survey with a larger sample is warranted. Second, it is unknown if teacher candidates will apply their knowledge to real-life situations in the classroom. Thus, future research should assess knowledge of current regular and special education teachers and their actions in real-life situations. Lastly, although the present study suggests that taking more special education courses predicts knowledge, it is unknown which specific courses have the greatest impact and what teaching strategies best impact
knowledge. Future research should examine best methods for instructing teacher candidates and teachers on special education policies and procedures.

References


National Center for Education Statistics. The condition of education. Contexts of


Department of Education Office of Special Education and Rehabilitative Services.


A Veteran Special Education Teacher and a General Education Social Studies Teacher Model Co-teaching: The CoPD Model

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Abstract

This research explores using participant ethnography, the theoretical and practical underpinnings of the combination pedagogical approach of co-teaching and embedded professional development within the Co-teaching Professional Development Approach (CoPD). The structure of this approach is presented and the research findings examine the outcomes of this approach within the context of two general education social studies classrooms. The findings indicate that CoPD offers a suitable approach to accommodating with students with disabilities in a specific general educational setting while demonstrating the potential content knowledge benefits to special educators, the pedagogical benefits to the general educators and the academic and social benefits to students with disabilities.

A Veteran Special Education Teacher and a General Education Social Studies Teacher Model Co-teaching: The CoPD Model

Teaching is a profession that requires dedication and commitment. Research shows that 40 to 50 percent of new teachers will leave the field within 5 years and this problem is more acute in special education (Cook & Boe, 1998; Kozleski, Mainzer, & Deshler, 2000). Often it is not the lack of commitment or skills that causes high rates of attrition among new teachers. Instead, many new teachers find that rather than teaching, they spend most of the school day attempting to resolve behavioral problems and issues they have not been appropriately trained to deal with, (Yell, 2009). According Pane (2010, p. 87) “classroom discipline is a major concern of American teachers and a primary reason many leave teaching” and often these behavioral problems are common among some students with disabilities. Unless the teacher is trained in special education (SPED) techniques, they feel unprepared to instruct those students with a variety of disabilities and requirements (Leko & Brownell, 2009). In a review of literature from 1958 to 1995 researchers found that 82 percent of general education teachers felt that having students with disabilities in their classrooms would require additional work and more than half of those surveyed felt that having students with disabilities in their classrooms required “significant changes in their classroom procedures” (Scruggs & Mastropieri, 1995, p. 68).
Within this context of concerns for the preparedness of general education teachers to instruct students with disabilities, this paper proposes the Co-teaching Professional Development (CoPD) approach. Combining co-teaching with embedded professional development to create the CoPD model is a new terminology. Given this fact, the existing literature refers either to co-teaching or professional/embedded professional development independently. The CoPD approach presents the pedagogy of a veteran special education teacher (VSPED teacher) as she provides daily professional development training to a general education social studies teacher (GEdSS teacher). The primary aim of this paper is to present the practitioner based approach Co-teaching Professional Development and discuss how it allows for the effective delivery of social studies content to students with disabilities in a general education classroom. The CoPD approach advocates that the embedded professional development component of this approach, allows for this training on an ongoing basis.

This research presents a model for using the co-teaching professional development approach (CoPD) to both integrate students with disabilities into general education classrooms and provide needed skills to general education teachers to successfully instruct these students. Hence, the Co-teaching Professional Development approach will allow for an inclusive setting that supports the needs of students with disabilities and the general education teacher.

**Background to Co-teaching Professional Development**

**Defining students with disabilities**

Steele (2007) notes that the key points in defining students with learning disabilities are, “normal intelligence, discrepancies between intelligence and classroom performance, academic deficiencies in at least one subject area, the lack of other disabilities such as mental retardation, exhibiting inappropriate behaviors for students’ age, academic failure, and unhappiness or depression” (p. 59). Students with learning disabilities often have one or more of the following; low-level reading skills and writing skills, processing problems, memory disorders, spoken language problems, organizational problems, and behavioral and social deficits, (Munk, Gibb & Caldarella, 2010; Steele, 2007).

Disabilities among populations 3 to 21 years that qualify for special education services include physical impairments such as deafness or blindness; mental impairments such as Down syndrome; autism; medical conditions such as brain injury; and learning deficits, such as dyslexia; and behavioral disorders. Throughout this paper specific disability categories will be referred to using acronyms adopted from Barry (1995), these are LD for learning disabilities, BD for behavioral disability and CD for cognitive disability. Similar to Barry (1995) these labels are used to identify how the students are provided the help that they need.
Contextualizing the need for co-teaching and embedded professional development (EPD)

Co-teaching according to Leko & Brownell (2009); Mastropieri et.al (2005); Ploessi et al. 2010) is (an educational approach in which general and special educators work in a coactive fashion, jointly teaching students who are academically and behaviorally diverse. According to Ploessi, Rock, Schoenfeld & Blanks (2010, p. 158) “over the past decade, co-teaching has become a popular approach to special education service provision in which two teachers work together to support diverse students”.

The other approach discussed in this paper focuses on embedded professional development (EPD) because the classroom practices explored focuses on how a VSPED teacher and a GEdSS teacher work together with SPED students while simultaneously training the GEdSS teacher in techniques that work for all students, especially those with disabilities. According to West (2002) EPD is formal and informal learning that occurs as educators engage in their daily work activities. EPD according to this writer may be facilitated through a range of conversations and activities that includes peer coaching, mentoring and study groups. In the Co-teaching Professional Development (CoPD) model, EPD is facilitated through a process on co-teaching which allows the VSPED teacher to train the general education teacher in the hows of accommodating students with disabilities independent of the VSPED teacher (career skill). This CoPD model may occur over one or multiple years through daily teaching, planning, interactions and observations. The benefits of this are confirmed by Ploessi, et al. (2010) who notes that “combining the strengths of general and special educators in the classroom can be deeply beneficial to students and teachers alike” (p. 158).

According to Leko & Brownell (2009) many teachers acknowledge that “they need to improve their practice for students with disabilities, but they often believe that school-wide professional development (PD) efforts have failed to meet their specific needs” (pg. 64). Professional development is often delivered in a half-day meeting covering a targeted strategy or particular teaching strategy with no opportunities for follow up or questions regarding implementation (Garet et.al, 2001). This model of professional development in teaching according to Little (1993) “is not adequate to the ambitious visions of teaching and schooling” (p. 229). However, many administrators perceive embedded PD as an expensive endeavor because it involves two teachers in these EPD classrooms. In the short term EPD is expensive but in the long term it provides training to the general education teacher that would be otherwise difficult to come by, leaving them more competent to instruct all students in their classrooms. Therefore, combining co-teaching and EPD creates the Co-teaching Professional Development classrooms (CoPD) model.

Students with disabilities and the legal framework

The Co-teaching Professional Development classroom is influenced by the special education law ‘Individuals with Disabilities Education Act’ (IDEA). The 2004 IDEA law mandates that students have involvement in the general education curriculum. It also
regulates the implementation of a free, appropriate education in the least restrictive environment (LRE) for students with disabilities (U.S. Department of Education, 2004).

However, IDEA does not specify how school districts should interpret the phrases *involvement with the general education curriculum* and the *least restrictive environment*. This lack of specific direction has led to confusion and conflict among educators and parents (Yell, 1995). School districts across the country have interpreted these phrases in a variety of ways. Some schools have implemented full inclusion, in which all students with disabilities are placed in general education classrooms with support of some type from the special education department, while other school districts carry out a modified version of full inclusion. Educators generally agree that schools need to effectively integrate students with disabilities into classrooms. When referring to access within the context of general education curriculum, Soukup, Wehmeyer, Bashinki & Bovaid (2007, p. 102) stated that “frequently this is interpreted simply as synonymous with student placement in the general education classroom”.

According to Steele (2007) the passage of the Individuals with Disabilities Education Act amendments in 1994 and 2004 and the No Child Left Behind NCLB Act 2002 increased the numbers of students with mild disabilities that are served in general education classrooms rather than in special education settings. In 2008 the National Center for Educational Statistics found that 95 percent of all students with disabilities were enrolled in public schools in the United States. They also found on average the typical general education academic class is composed of nineteen general education students and five students who receive special education services (U.S. Department of Education Institute of Education Sciences, 2008). The implication is, as much as 21 percent of students in the average classroom may require some type of differentiated instruction. In 2002 students with disabilities were enrolled in academic general education courses at a rate of 10 percent higher as compared to the rate in 1987 (U.S. Department of Education Institute of Education Sciences, 2008). The changes observed means that general education teachers are increasingly asked to accommodate these students, often in the absence of appropriate training and support.

**Social studies and students with disabilities**

While presenting a practitioners model, this research also attempts to fill a gap which exist on the use of special education adjustments in the teaching of social studies in an inclusive general education classroom. Therefore, this research empirically investigates the Co-teaching Professional Development model in an inclusive social studies classroom. According to Steele (2007), the Individuals with Disabilities Education Act of 2004 has allowed more students with disabilities to enroll in history, political science, geography and economics (social studies) classes, creating many challenges for social studies teachers who must teach disabled students these content materials.

Steele (2007) notes that teachers of social studies have to first be aware of the range of disabilities present in their classroom and then teach social studies using several modifications that may foster success in this discipline. Some of these modifications
include making text book and writing modifications, memory and organizational strategies and encouraging active participation. To effectively use these modifications the social studies teacher needs to decide how he/she will integrate and include the students with disabilities into the classroom. For Kunc (1992) integration allows the teacher to fit the student into existing programs with the necessary support. This writer also notes that inclusion of students with special needs in the general program of study often implies a restructuring of the curriculum, pedagogy and modifications to foster a sense of belonging in the students. According to Paulsen (2008) the 26th Annual Report to Congress indicates that “64 percent of students with disabilities at the secondary level receive their social studies instruction in the general education classroom” (p. 313). This figure is also high among language arts (49 percent), math (53 percent), and science (66 percent). Additionally, sixty-five percent of the teachers interviewed by Paulsen (2008) reported making at minimum moderate modifications or used a special curriculum for their students with disabilities in social studies classrooms. The critical question is, to what extent are social studies classes inclusive; therefore this paper presents a working practitioner based approach.

For De La Paz, Morales & Watson (2007, p.134) “reform in social studies education is changing the way in which students learn history and providing new reasons for learning history”. Social studies is aimed at producing the ‘good citizen’ through the study of people in their temporal, spatial and socio-economic locals. It is therefore appropriate that social studies classrooms are the venue for evaluating the extent to which inclusion facilitates academic success of students with disabilities.

In special education classrooms students are isolated for parts of the school day. This isolation according to Suter & Giangreco (2009, p. 82) creates numerous problems including the unnecessary dependence of students with disabilities, interference with peer interactions and relationships and increased likelihood of being a target of bullying. Therefore the Co-teaching Professional Development model addresses these issues by training the general education teachers, while the special education teacher acquires some content knowledge. The CoPD approach suggests that the special educator should spend more time providing specialized instruction in a general education setting that provides training and models pedagogy for the general education teacher who over time will be able implement some of these strategies. It is important to note that it has been persuasively argued that because of their complex learning challenges, students with disabilities need access to the most highly qualified, competent, and creative teachers, special educators, and related service providers (Brown et. al., 1999; Suter & Giangreco, 2009).

Methodology

The research seeks to answer the following questions: What impact does Co-teaching Professional Development (CoPD) have upon a general education teacher and a special education teacher? What pedagogical changes occur after time spent working together? What does an example of implementing CoPD in a general education social studies classroom look like and what are the outcomes? These research questions are
contextualized by the notion that an expanded continuum of services may increase students’ access to a free general education. Effective alternatives, such as co-teaching, and embedded professional development need to be explored and purported.

The research is sited in an affluent suburban community of a declining rust belt city in the Midwest. The school hosts approximately 250 students more than 90% of who are Caucasian. The students in this school are mainly from middle and upper middle class homes, with less than 3 percent of the students in the school qualifying for free and reduced lunch. To answer the research questions the researchers held informal and unstructured, structured and electronic interviews with the veteran special education teacher (VSPED), Hannah and 2 general education social studies teachers (GEdSS), Ned and Sally. Hannah has taught for seventeen years in both elementary and secondary settings. She is qualified as a VSPED teacher because she holds both a masters and a bachelor degree in special education. She holds a license to teach kindergarten through twelfth grade in all subjects in special education and all subjects in general education kindergarten through eighth grade. Ned participated in a CoPD social studies classroom from September 2009 through June 2010. Ned has been teaching social studies for 4 years and he was selected for this study because he was interested in improving his teaching through the proposed CoPD approach. Sally participated in the CoPD social studies classroom from September 2010-January 2011; she has been teaching for over 30 years. She was included in this study to compare a veteran general education teacher in the co-teaching role to a less experienced teacher in the same role (Ned). Both co-teaching teams were placed in a 9th grade social studies classroom for the respective academic years.

The social studies class of coteachers Hannah and Ned included 29 students, 31 percent (N= 9) of these students were students that had disabilities which required differentiated instruction. The social studies class of co-teachers Sally and Hannah included 19 students, 6 of whom are females and 13 males. Fifty-five percent of this class had disabilities that require differentiated instruction and modifications. The disabilities in both social studies classes included cognitive, behavior, learning impairments and autism. Ned and Sally’s primary pedagogies included lectures, note taking, map work, worksheets, reading, discussions and tests.

The research is paradigm as qualitative participant ethnography, the veteran special education teacher (VSPED) teacher/researcher reported on her use of Co-teaching Professional Development (CoPD) in and with the general education social studies classroom and teachers. Through informal conversations and unstructured interviews thick descriptions about the structure, implementations and results of CoPD were gathered. Data was also gathered on the successes, failures and adjustments made of CoPD over 2 academic years 2009-2010 and 2010-2011 through structured and unstructured interviews with the veteran special education teacher (VSPED). The interviews with the general education social studies teachers (GEdSS) spanned 2 years and 6 interviews. The interviews with the 2009/2010 GEdSS teacher (Ned) occurred from mid-September 2010 until January 2011. Interviews with the 2010-2011 GEdSS teacher (Sally) occurred from August 2010 until January 2011. The interviews were tape
recorded and then transcribed or recorded as field notes, in combination they were manually coded and the emerging themes identified and analyzed within the context of the research questions. Existing research on co-teaching and professional development was then used to assess the validity of the thick descriptions and themes that were the outcomes of the data collection.

Structure of Co-teaching Professional Development model

Meet before the school year begins

This is the initial discussion about expectations of each other and their students. Later the VSPED and GEdSS teachers need to have more in depth discussions about the ‘nuts and bolts’ of running a CoPD classroom. It is important to have both teachers open and enthusiastic about working together (Mastropieri et.al., 2005). According to Ploessi, et al. (2010) “to effectively provide special education services, co-teachers must work closely together, combining techniques, goals and curricula”. Hence this initial meeting is vital to establishing the co-teaching relationship. At the first meeting, both teachers should establish an overview of the year or period over which they will implement the CoPD approach. If this is a secondary classroom, the teachers should discuss the general objectives to be covered over the period. Bring textbooks, computers and other materials necessary to put together a preliminary outline (skeleton) for the month/semester, finalize assignments and schedules. This type of planning is supported by Ploessi, et al. (2010) who adds that thoughtful planning is an important part of designing effective instructions.

Discuss the “big” issues: Expectations and roles of each teacher

During the subsequent meetings the two teachers should discuss expectations for classroom behavior. Who will handle what? Discuss how daily instruction will occur. How will day to day planning occur? When will there be time to discuss how the day went? Who will be grading? Will it be shared? Are both teachers speaking to the class as a whole or is it only the general education teacher? Discuss vocabulary to be used by teachers. This may sound trivial but it is important to the perception that students have of the class/teachers. Discuss how the special education teacher will be initially presented to the class. Are both teachers speaking to the class as a whole or is it only the general education teacher. For example if the content teacher says, ‘I decided to skip the test today’ compared to ‘We decided to skip the test today’, this communicates a different message to students. Is there a place to put personal items (such as keys, glasses, etc.) for the teacher entering the room each day? Is the general education teacher open to having his/her desk shared during the class? What is mine, what is yours? For Ploessi, et al. (2010) “focusing on seemingly simple skills such as effective speaking and listening builds a solid foundation for improving co-teaching interactions” (p. 159).

Divide up responsibilities to prepare for the first day/week of school

The content area or general education teacher is the expert in content; the special education teacher is the expert in pedagogy and differentiating instruction. This
corresponds with the discourse put forward by Mastropieri et al. (2005). Merging these skills requires patience and some trial and error:

- Discuss how to handle the inevitable issues that arise between the two. During the initial conversations finalize plans for the first day of classes.
- Have a great first day planned and be prepared to model how the co-teaching will go throughout the year.
- Be sure to explain to students why they have two teachers.
- Meet at the end of the first day to debrief and ascertain each person’s perspective/s and possible modifications that may be deemed necessary. It is important that the special education and the general education teachers meet briefly each day during the first couple of weeks of classes to continue to debrief, plan and modify as the year begins to unfold.

For Ploessi, et al. (2010) designing and planning lessons together allows for more effective co-teaching, hence the necessity of these debriefing sessions.

The fundamentals of the CoPD approach are supported by Mastropieri et al. (2005) who after observing several co-teaching classrooms found that their strengths are subsumed in the co-teachers’ ability to forge strong working relationships, motivate themselves, each other and their students, allocate time to co-planning, show appreciation for the curriculum, foster effective instructional skills, employ disability-specific adoptions and show expertise in the content area.

**Findings**

For the school being studied it was found that the consequences of NCLB have resulted in increased pressure for students to perform well on standardized tests. Therefore, many teachers are inclined to move quickly through the curriculum as they are cognizant of the impending test. Such a scenario results in reduced opportunities to follow ‘teachable moments’, because the focus is more on the outcome/s of learning and less on the process of learning which is a the critical component for students with disabilities. This problem was acute in social studies and history cases that required the students to interact with large volumes of abstract information, which is not always easily understood by students with disabilities. This finding necessitated the Co-teaching Professional development Model, since it offers the social studies teachers the opportunity to meet some of the needs of students with disabilities while improving on their pedagogy.

A second finding of the study indicates that team work between the coteachers is critical to the success of the Co-teaching Professional development model. The study also found that fundamental to this team work is the acknowledgement of the roles each teacher plays in this model. To demonstrate this finding, Hannah recalls her initial work with Ned, “when I first joined the class I observed Ned, the social studies teacher, for a week or so as he taught a unit on ancient China. As he discussed events taking place in the 1200’s I noticed many of the students (both with disabilities and without) did not seem engaged or interested in what he (Ned) was discussing. I remember thinking that the ideas he was teaching about were quite abstract to the students living in 2009”.
At the end of the initial observation, Hannah and Ned discussed her impressions of his lessons. During these discussions Hannah suggested that they could create interest and involvement with an activity that allowed the students to discover what other events were happening globally during that time period (1200s) to give students perspective on the times and places they were studying both then and in the future. “Ned was receptive. We had the students create a timeline chart that eventually spread around the entire classroom. This chart allowed the students to visibly compare a variety of historical events in the timeline that ultimately covered from the early 1000’s to the current day.” This example of successful teamwork in CoPD model demonstrates that the general education social studies teacher (GEdSS) has content knowledge and the veteran special education teacher (VSPED) has expertise in pedagogy, and by combining the two, the model was able to accommodate all the students as Ned presented this and other abstract social studies topics. Boon, Fore & Spencer (2007) used technology within co-teaching social studies classrooms and had similar findings with teachers involved expressing that it was a positive learning experience as students found new ways of interacting with social studies information.

The study also found that within the Co-teaching Professional Development model (CoPD), Hannah is able to define the requirements for students with disabilities to ensure that they make progress in the general education curriculum as dictated by IDEA. By being an active participant in the social studies classroom this veteran special education teacher (VSPED) is able to modify the curriculum and assignments in real time, allowing for adaptations to the needs of the students as they occur.

The study found that the successes of Co-teaching Professional Development (CoPD) are to a large degree dependent on the personalities and receptiveness of all participants. Hence the model is compelled to accommodate personality differences. The experience of the 2010/2011 Co-teaching Professional Development (CoPD) social studies classroom which involved Hannah and the general education social studies teacher (GEdSS) (Sally) yielded initial results that are different from Hannah’s experiences in Ned’s classroom during the previous academic year. At the beginning of the school year Sally stressed to the social studies students that correct spelling on all assignments was required. If a student misspelled anything they received half credit for the correct answer. As a result of Sally’s approach, the students were receiving low grades and many were not passing social studies because they struggled with spelling. This discouraged a number of the students, especially those who are challenged by their disabilities. During their CoPD planning time Hannah suggested that they reconsider the spelling requirement for this social studies class. Several discussions occurred in which Hannah discussed the students’ objectives along with the required state benchmarks that were being targeted. After several weeks of dialogue, Sally agreed to this suggestion and for those students with a disability correct spelling was no longer a requirement.

Sally is not as receptive as Ned, hence, while Co-teaching Professional Development (CoPD) works, Hannah believes it would be more effective if both teachers are able to embrace their roles within this classroom. Having implemented and refined the CoPD
model over the several years, Hannah the veteran special education teacher (VSPED) notes that “the success of CoPD in social studies or any classroom for that matter is dependent on the receptiveness of the content area teacher”.

The previous finding indicates that the general education social studies teacher’s (GEDSS) reactions to this model have been mixed. The 2010/2011 Sally stated early in the semester, “I feel that this is one more prep that I have to do on top of six already! I really don’t have the time or energy to fit in more conference time to plan for this one hour.” This kind of reaction is not uncommon, according to Ploessi, et al. (2010) “co-teaching may be popular but it does not come naturally… the greatest obstacle to co-teaching is the lack of preparedness of the educators involved… because it requires an additional set of skills that are rarely used when teaching alone” (p. 158). Alternatively in 2009/2010 Ned stated that “I have really enjoyed teaching together. I feel like I’ve learned a lot and it has helped me look at my teaching ideas in different ways. I would like to co-teach again with someone.” This finding corresponds with those of Mastropieri et.al. (2005) who indicates that volunteer coteachers report more positive perceptions than teachers who are assigned co-teaching classrooms. Given this fact “co-teaching partners can be trained to increase their efficiency” particularly as it pertains to establishing their roles and interacting with students (p. 261).

Discussions

Co-teaching Professional Development strategies and their effectiveness

Co-teaching Professional Development (CoPD) has several broad pedagogies that are seen as important to the successful implementation of the approach. These broad strategies represent the general framework for the teachers to operate in the classroom and within these smaller strategies are used to ensure effective teaching and learning. Here the focus is on four specific pedagogical approaches discussed by Cook & Friend (1995); Ploessi, et al. (2010), one teach-one assist, team teaching, parallel teaching and station teaching. In One teach-one assist, one educator takes the educational lead in the classroom, the other teacher moves through the room supporting students as needed. In Parallel teaching, both teachers jointly plan and instruct simultaneously to half of the students. The third strategy in CoPD is Team teaching. Here, both teachers plan and instruct, alternating the role of primary instructor within individual lessons. The fourth and final CoPD strategy is Station teaching; here the instructional content and physical space of the classroom are divided into two or more zones where each teacher is responsible for instructing at specific stations.

The sub-strategies used with these four broad frameworks are often viewed as the modifications made to accommodate the students with disabilities. According to Hannah, “there are disruptive students who are not students with disabilities too! It does add to the workload of teachers, but these strategies actually work for all the students”. Within this context, it is important to note that students with disabilities do have reading levels that vary, hence the four strategies mentioned allow for variations to their learning systems that are often beneficial. On the matter of reading levels Hannah noted that “the
majority of students identified with a learning disability do read below grade level, most struggle with reading comprehension, understanding what they read; their word identification skills are adequate but understanding what they’ve read is difficult especially text books”. This veteran special education teacher went on to note that text books have improved over the twenty years she has been working as a special educator. Some of the improvements noted are the addition of more pictures, graphs and reading cues such as bolded words, subject headings, and some books and aspects of books on CD among other changes. These according to the teacher are a good basis for the implementation of the four fundamental approaches in Co-teaching Professional Development (CoPD).

The four broad pedagogy frameworks that are at the core of the CoPD model allow the veteran special education teacher (VSPED) and the general education social studies teachers (GEdSS) to modify their smaller strategies to meet the needs of all the students in the class. Often teachers encounter problems when teaching social studies to students with disabilities because of several factors, including complex chapter tasks that require an evaluation of causal relationships. For Allington (2007) working with select texts on various social studies topics at the appropriate level may assist those students with disabilities who struggle with reading. History and social studies readings are complex, often the text includes words and terms that have meaning that vary in historical, contemporary and literal settings. This, according to Boon, Fore & Spencer (2007) may impact reading comprehension which is “a major challenge for many students with learning disabilities” (p. 166).

According to Hannah, “in 2009/2010 Ned and I did not use the text book often. There was only one room set which was used about 3 times. In contrast the 2010/2011 social studies teacher, Sally, assigns the students a book for the year and on an average of three times a week she requires them to answer questions from a worksheet she created. The worksheet is tailored to the chapter in a sequential order so that students may follow along with the book and fill in the answers. There is some time to work during class but any remaining work needs to be done at home”. In this instance, the CoPD model allows for modifications to suit the content area teacher’s approach to teaching social studies. Hannah was able to implement more creative modifications in Ned’s social studies class, whereas in Sally’s classroom, Hannah was less creative and her role was more supportive. She made accommodations for the needs for students with learning disabilities, cognitive disabilities, and autism on a more individualized scale, hence providing the students with “the distinctiveness and intensity considered to be important features of special education” Mastropieri et.al. (2005, p. 261). According to Hannah “I personally like to have students find a way to interact with the text, which is what Sally does. For students with disabilities this kind of text book interaction might include the use of sticky notes to highlight certain subjects, or I have the special education department buy the students their own copy of the text so they can write in the book”.

Irrespective of the strategies that have been used, many students with disabilities experience difficulties comprehending social studies materials related to abstract events that might impact the world. These students also encounter difficulties critically thinking
through common themes in history and social studies. Discussions of countries that are far away are in the realm of abstract for many students with disabilities. According to the Hannah “I try to make the subject as relevant to them as possible, providing lots of pictures, videos, and projects to make the subject come alive”. This veteran special education teacher stated that the main strategy in the Co-teaching Professional Development (CoPD) model is to modify the work load or offer one-to-one assistance while the class is in progress for LD and CD students. “In general we sometimes reduce the amount of work required for each of the following areas for example have them write two paragraphs instead of five... with reading I might quietly read to the student or read the highlights if all the other students are reading silently”. In the CoPD classroom it is common for the teachers to create reading assignments that pair stronger with weaker readers, thus creating positive interdependence among the students. Although one student in the pair may be a weaker reader, he or she is still given the opportunity to be exposed to the materials, to verbally participate in the activity and make contributions. One of the CoPD teachers may also work with the students with LD and CD after class to ensure that these students have the opportunity to keep pace with the rest of the class.

While improving teacher effectiveness, effective inclusion of students with disabilities is facilitated, according to Ploessi, et al. (2010) teacher effectiveness is one of the most important factors affecting school achievement and to optimize students’ learning of cotaught content, educators should teach together, monitor student progress and reflect on lessons that have been co-taught.

The availability of two teachers within the classroom increases the opportunities for one-to-one work with students. This is important and according to Zigmond (2006) “students whose disabilities are manifested in reading and writing problems are likely to find these content-rich and text-rich classes particularly difficult” (p. 250). This according to Salend (2005) is common among CD and LD students. To accommodate these students the VSPED and the GEdSS teachers in the CoPD classroom practice scaffolding through structured assignments that the students with disabilities may complete in smaller sections. While doing this the LD and CD students are assisted in developing outlines or notes and then they are encouraged to work independently. According to Allington (2007) this type of multi-sourced, multi-level curriculum plan facilitates effective teaching and learning.

The Co-teaching Professional Development (CoPD) model also accommodates learning disabled (LD) and cogitatively disabled (CD) students by addressing learning issues such as processing problems. This is done by ensuring that most of the information the students need are available in written form, for example writing the assignments on the board instead of just stating what the assignment is. Processing problems are also accommodated through the use of guided notes activities. According to Konrad, Joseph & Eveleigh (2009), guided notes are useful because they encourage engagement during lectures. Many of the students with disabilities found in the CoPD classrooms under study are encouraged to “write everything down!” (Hannah). This is done through emphasis placed on the use of daily planners. Often the use of daily planners and developing the habit of writing everything down is quite helpful to those students who

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have organizational problems (Bryan & Burstein, 2004). It is important to note that this strategy is not always successful especially with students who have memory disorders. Therefore, the CoPD teachers encourage students to adopt the strategies they have been introduced to, that work best for them, this for Allington (2006) focuses on matching the students with the most appropriate curriculum materials. The strategy of writing everything down also extends to the use of study guides which the CoPD teachers create for those students who need to have the material streamlined. According to the veteran special education teacher, “when I provide the students with the study guide, I use the opportunity to discuss with the student how I made the guide, how to use it and most importantly how they can make their own in the future”.

Sub-strategies within Co-teaching Professional Development (CoPD) also include the use of visual organizers “in the 2009/2010 classroom we had students create story maps of a historical event we were studying” (Hannah). This allows for visualization of where events occurred in relation to each other and how previous events impact current ones. “Visual organizers such as time lines, Venn Diagrams, inductive towers, concept maps, causal chains, force fields, and flow charts help students recognize and take control of the intellectual processes which bring meaning to the study of academic content” (Clarke, 1991, p. 526). This approach allows the students to develop and practice writing and vocabulary skills. This also helps them with not only keeping pace with the rest of the class but also with essay writing and test taking, thereby allowing the general education social studies lessons to be responsive to struggling readers and other students with disabilities (Allington, 2007). This approach is good because in the 2009/2010 classroom there was “no major emphasis on the memorization of dates; instead, it placed emphasis on a more global understanding of the subject or at least the most important facts, this proved effective for the students with disabilities” (Ned).

Students with behavioral and social deficits are not excluded in the CoPD classroom “we try to create situations where we can work on social skills on a regular basis. One of my jobs is to encourage all students, particularly BD individuals. Every day the goal is for all students to participate and connect during the entire class; does it happen? No. But we try to come up with activities that challenge the students’ to be cognitively engaged” (Hannah).

The successes of the Co-teaching Professional Development model

In a January 2011 interview with the general education social studies teacher (GEDSS) from 2009/2010 (Ned), some of the benefits of the CoPD begin to emerge. Ned is not currently co-teaching and he now teaches 8th grade social studies. As he reflected on his co-teaching experience from the previous academic year, he noted that “I find myself using a lot of the same activities and strategies that Hannah suggested and modeled for me last year. The year is going very well and I am having a great deal of success because of my experiences with the CoPD approach. I am also having a lot of fun with the kids and they all seem to be learning! I think I am reaching more kids”.
The success of Co-teaching Professional Development (CoPD) depends on the crucial rhetoric; do both teachers want to do this? How comfortable is their relationship? Have they invested time in the practice? According to the Hannah “it seems to work well, but at our school this is antidotal. Our principal is currently in favor of providing service in this manner, so I anticipate more CoPD classrooms in the future. Co-teaching Professional Development (CoPD) strategies used in the general education social studies classrooms allowed the subject materials to be modified when appropriate and accessible to those students (such as cognitively impaired individuals) who would ordinarily not function well within this classroom setting. The strategies critical to the success of CoPD also assist those students who are at risk for failure and dropout. This is because the presence of an additional teacher provides them with more support. Mastropieri, et.al. (2005) supports this point when he added that in co-teaching classrooms receive high quality instructions.

The CoPD model advocates that students with disabilities should take the subjects they need in order to prepare for the future they are interested in pursuing. If they are uncertain about the future they want to pursue, they should have the option of trying a variety of classes and disciplines. A student with cognitive impairments might experience difficulties with the academic expectations of a general education classroom. However, with the modifications from CoPD, they might make appropriate educational gains.

Co-teaching Professional Development (CoPD) is cognizant of the social isolation students with disabilities face in inclusive school and classroom settings. According to the veteran special education teacher “many students with disabilities do not pick up social skills by observation as compared to their general education peers” (Hannah). This inability to learn at the same rate reduces the students with disabilities’ capacities and opportunities to form significant relationships with their peers. This makes developing real friendships or even class friends difficult. Often students with disabilities are perceived by other students as different and this adds to the turmoil of adolescent development and the result is social isolation (Vaughn, 1996). According to Hannah, social isolation is “true for students with attention deficit disorder and those with cognitive impairments. It does not help when teachers are not sensitive to this. Two of my students with cognitive impairments are in another social studies class. The teacher has grouped these two students by themselves in an ongoing work group, this isolates them as the rest of the class is in groups of four. My two students are sitting alone with each other in a room of thirty kids”. The result of this is, these students are likely to rate lower than their peers on sociometric scales.

Mary, a sixteen year old girl with cognitive impairments and numerous friends, is one of the many examples of the positive impacts of the Co-teaching Professional Development (CoPD) model. Mary admits that she comes to school because she wants to be with her friends, whom she would like to spend more time while at school. Mary’s reading comprehension level is at the 3rd grade level. Over her school career attempts to remediate and assist her in making academic progress have led her to have the majority of her classes in special education classrooms. In 2009/2010 she was placed in the CoPD
social studies classroom. She participated in project work with her peers, who were supportive, and the social studies tests and classroom activities were modified for Mary’s needs. This allowed her to end the year with a C in social studies. During conversations with both Mary and her parents there was a definite sense of satisfaction with her progress. “Mary is one example of a student, who has been positively impacted by the CoPD model, it is apparent that it contributes to the quality of life of many students with disabilities in my school” (Hannah).

**Conclusion**

Co-teaching Professional Development (CoPD) provides educators with a multiplicity of opportunities to improve on how they meet the academic and behavioral needs of an increasingly diverse student population. The benefits to the participating teachers in CoPD are plentiful. As Ned stated, “I think when there are two teachers we see more possibilities in instruction. It took a while to define our roles, the different expertise, but once we did that, it all clicked together. This was my fourth time teaching 9th grade social studies, but it was the most fun I’ve had!”

From the veteran special education teacher’s perspective CoPD offers a variety of possibilities. First it allows for observation of students on a daily basis. There is reduced chance that students will be confused or lost for any length of time. It provides the opportunity to remediate problems, from social skills to outlining a text book chapter to understanding abstract content materials. Co-teaching Professional Development (CoPD) also allows the special education teacher to increase his/her knowledge of the content, in this case social studies while building the pedagogy skills of the content area teacher. After time spent working day-to-day with the special education teacher, the various techniques and strategies to improve instruction for all students can become more readily accessed in their daily repertoire; thus creating rooms throughout the school that are appropriate placements for all students. CoPD enables the participating teachers to have real learning opportunities.

While these are real successes from the implementation of this model, they are anecdotal and are limited to this one school and group of teachers who have combined existing knowledge on co-teaching and embedded professional development to enhance the accommodations of students with disabilities in general education social studies classes. The implication of this for future research is expanding the use of this model into other social studies classrooms, other disciplines and other schools to determine the extent to which the outcomes chronicled in this study are replicated. Further research would also require an evaluation of the outcomes of this model in other settings in aid of making modifications to the model’s structure and implementation to increase its effectiveness in accommodating students with disabilities in general education classrooms.
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*Encyclopedia of Children's Health, Answers Corp. partner.*
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How Do Job Related Field Experiences Affect Job Readiness in Secondary Transition Students?

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Abstract

This research was conducted to determine if job related field experiences improved the confidence of secondary transition students. There were six students included in the study. The students ranged in disabilities from emotional and behavioral disability, borderline cognitive disability and severe (IQ under 60) disability. In addition, the case managers of the identified students and other transition teachers were surveyed. Students completed a survey about their ability to independently complete job seeking tasks. They then participated in field experiences to practice these skills. After practice and the opportunity to independently complete the skills, the students were asked to rate their level of independence again. The case managers of the students were asked to rate their abilities at the beginning of the study and again at the end. Transition teachers were asked to describe their observations and practices in regard to community involvement for secondary transition students. After practicing job related skills in the community students rated their ability to independently complete the tasks at a higher level than before the field experience. The case managers also rated the student ability levels higher after the experiences than before. In addition, the surveyed transition teachers reported benefits and practices in using field experiences.

How Do Job Related Field Experiences Affect Job Readiness in Secondary Transition Students

Transition is a part of the Individuals with Disability Education Act (IDEA) of 1997 that puts an emphasis on teaching all students to be as independent as possible following high school. Transition teachers often find it frustrating to help students learn job skills, social skills and independent living skills, only to have them not use the skills they were taught independently, despite their ability to do so. Transition students may be taught these skills, but without practice and confidence they will continue to rely on other people to help them with tasks that they have been taught to do, and are able to do, for themselves.

According to a summary of brain-based research by Eric Jensen (2010), a leader in brain-based learning, physical activity and emotion are crucial to the learning process. Andrew Halpern (1996) examined the research about post-school outcomes for students with disabilities. Two of the findings, in relation to field experiences, show that students with disabilities are either unemployed or underemployed at higher rates than the general population and that they experience major problems in the area of social and interpersonal functioning (Halpern, 1996). One of the explanations for these findings, given by Halpern, is that students with disabilities lack the skills needed to obtain a competitive
job, or function in socially appropriate ways in society (Halpern, 1996). In regard to self-esteem, Richard Luecking and Merdith Gramlich (2003) state that, “work-based learning has been shown to improve student’s self-esteem.” (p. 1). Field-experiences, often employed by transition teachers, help students gain confidence, employ physical activity and emotion, improve employability skills and improve social functioning.

Many special education and transition teachers take their students into the community for work and social experiences. However, in a survey done by the Waisman Center, at the University of Wisconsin-Madison, the top four areas that special education teachers expressed a need for more professional development involved work related topics (2010). While research has shown the ways students learn best, problems students face after high school, and the benefits of work-based learning, there is still a question about the benefits of the community and job related field experiences. It is of value to know if the time and effort put into these activities is effective for students to learn the skills they need to live as independently as possible.

**Literature Review**

Secondary students spend their high school career planning and preparing for adult life. This is a daunting task for most, but even more so for students with special needs. Most students, especially those with special needs, rely on the adults in their lives to plan, coordinate, and take care of everything from laundry to securing a job. Special education students have begun getting more help in this important transition period since the reauthorization of the Individuals with Disabilities Education Act (IDEA) of 1997. This act required transition services be provided to all students with disabilities in the public school system that are ages 16-21. These services include independent living, vocational skills, job experience, post-secondary education, and other training as appropriate (IDEA, 1997). IDEA 2004 went a step further and explicitly stated “the purpose of special education is to prepare [students] for further education, employment, and independent living.” (20 U.S.C. 1400 (33) (c) (1)).

With the addition of transition services to the 1997 IDEA, students with special needs are now receiving more help planning and preparing for adult life. However, with this planning and preparing has come more dependence on other adults to plan and coordinate a number of these services including job placement, adult services, and others. Often, students lack the experience and confidence they need to coordinate their own services and make sure their needs are met. These students, in particular, need to become more independent and able to plan and coordinate their needs and services as an adult with minimal assistance.

While the 1997 IDEA provided transition services to students with disabilities, it did not specify how those services should be provided. That is where special education teachers of transition-aged students begin to struggle. Thus, more information is needed to determine best practices in order to equip secondary transition students with the confidence needed to make plans for their adult life. One strategy to increase confidence
in secondary transition students is through job related field experiences, or community outings and activities.

Social Cognitive Theory

According to a review of Arthur Bandura’s social cognitive theory from the Learning Theories Knowledgebase (2010) Bandura stated, “Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action.” (p. 1). Bandura’s (2010) social learning theory contains four necessary conditions for effective modeling which include attention, retention, reproduction, and motivation. Attention is captured with distinctive aspects of the environment that grabs one’s attention. Retention requires recalling what one paid attention to, reproduction is reproducing the parts of the experience that grabbed the observer’s attention, and motivation is the need to have a reason to model the behavior (Learning Theories Knowledge Base, 2010). Each of the previous conditions can be accomplished with activities in the community.

In addition to the conditions of social learning, is an important piece, self-efficacy. Self-efficacy can also be described as self-determination and confidence. Self-efficacy is determined by one’s judgment of their capabilities. Bandura’s social cognitive theory defines certain capabilities of humans including symbolizing, forethought, learning through vicarious experience, self-regulation, and self-reflection (Pajares, 2002). Symbolization takes meaning from the environment, aids in problem solving, and provides structure and meaning (Pajares, 2002). Through symbolism, human beings are able to model observed behavior. In planning alternative strategies, or forethought, humans can plan for anticipated consequences and make alternate plans. When people engage in vicarious learning they receive the benefit of learning from mistakes, without actually having to suffer the consequences of those mistakes (Pajares, 2002). Using self-regulation provides individuals the opportunity to change their behavior, and through self-reflection people can learn from their experiences, make sense of their world and define their beliefs and values.

Confidence is such an important part of learning that Bandura (1993) explained, “Children with the same level of cognitive skill development differ in their intellectual performance depending on the strength of the perceived self-efficacy.” (p. 136). Bandura (1993) argues that ability is an attribute that people have control over. This control is in the form of confidence. Self-directed mastery experiences strengthen and generalize personal efficacy (Bandura, 1993). A form of self-directed mastery experience includes field experiences.

Without Bandura’s (1993) capabilities for self-efficacy, students do not have self-efficacy, and without self-efficacy, students cannot become independent. Each of the capabilities can be practiced and established in the community setting though job related field experiences. With a careful plan teachers can lead their students through symbolism, forethought, vicarious learning, self-regulation, and self-reflection through
community activities that relate to real-world jobs and experiences. Bandura concluded that strong self-efficacy enhances personal achievement in many ways (Bandura, 1993). One of these ways can be independent performance of job related skills.

Bandura is not the only researcher to understand the importance of confidence in students with disabilities. Carter et al. (2010), explained the study by Wehmeyer and Schwartz that concluded that students who scored higher on self-determination assessments were more likely to be employed after high school. Another study explored by Carter et al. (2010), revealed that students who can demonstrate more ability and knowledge in work related skills can more readily obtain employment. While the research seems to describe what most would assume to be true, there is not yet any evidence to provide best practices in improving student confidence.

Benefits of Employment

All students are prepared, through twelve years of school, to work. Some students go on to further education, and others go immediately into the world of work. However, students with disabilities are 57% to 66% less likely than their peers to be employed after leaving school (Kellems, 2010). All people, regardless of intellectual ability, need a purpose. This purpose comes from contributing to others, and their community. Providing work related field experiences to students with disabilities improves the employment outcomes by developing employment skills and identifying a career direction (Luecking, 2002). In addition to providing positive outcomes for students, getting them out in the community in job related field experiences also improves the attitudes of community employers about hiring students with disabilities. When business leaders were asked what they would recommend to improve the negative attitudes in hiring people with disabilities through a survey by Wilson Resources, training was the key factor (Wittmer, 2010). A primary way that training is accomplished through job related field experiences.

When students participate in job related field experiences they can gain confidence, training, and improve their likelihood of obtaining a job after high school. Having a job after high school provides a sense of accomplishment and feeling of being needed by students with disabilities. In addition to the benefits for the student to have a job, there are also benefits to society. When people with disabilities work they decrease their reliance on Social Security Income, pay taxes, and provide diversity to the workforce. When people with disabilities have jobs, everyone wins. Young adults with disabilities have a better chance of securing employment after being exposed to job related field experiences in their secondary transition program.

Method

The purpose of this study is to determine if job related field experiences help to improve the job readiness of secondary transition students so that they can perform job and social activities independently. Six secondary transition students will be given a survey (Appendix A) asking about their confidence to independently complete job related tasks.
in the community by January 10, 2011. After completing the survey, the students will be involved in community experiences and then be observed in independent activities in the community focused around vocational skills. Observations from the instructional field experiences and the independent field experiences will be compared for accurate participation and level of job readiness. These experiences will occur during the school day between January 11 and February 10. Following the field experiences, the students will be given the same survey as before to rate their level of confidence in performing the job related skills independently within five days of completing their independent observed field experience. Similarities and differences in confidence levels will be recorded. In addition, the case manager of each student will also be given a pre- and post-survey (Appendix B) that will include the same questions as the student survey. Transition coordinators and teachers from the area will also be interviewed about their experiences and practices in regard to job related field experiences and their affect on job readiness (Appendix C). All participants will be sign an Informed Consent form before participating in the research (Appendices D and E).

One of the participating students is diagnosed as learning disabled, four are diagnosed as cognitively disabled, and one is diagnosed with emotional disabilities. Environments that students will practice their skills in include small businesses, chain businesses, and other community agencies. The students will practice asking for an application, filling it out, and turning it. Students will also participate in community activities to find resources in the community and will then be able to independently access the resource.

The questions that will guide this study are as follows:

1. Do field experiences improve job readiness in secondary transition students?
2. Do field experiences to practice job seeking skills lead to independent job seeking in secondary transition students?
3. Do field experiences in the community lead to independent utilization of community resources in secondary transition students?

Data Analysis

Data from all sources (pre- and post-surveys from case managers and students, transition teacher interviews, and observation notes) will be compiled and examined using a constant comparative method. The triangulation will assist in providing validity of the research. Each new piece of data will be compared to existing data, looking for similarities and differences which will create data categories. Analysis will be ongoing throughout the study and will drive subsequent data collection processes. Once the study is completed, all data will be reviewed and compared, and conclusions will be drawn. The conclusions will be submitted to a review board to also aid in validity of the findings. Results of the study will drive instructional planning for the future. The final report will include detailed methods and data analysis techniques to provide reliability to the results. In addition, the results will be shared with all participants of the study, the River Falls School District, the Wisconsin Statewide Transition Initiative board, and the National Association of Special Education Teachers.
Results

This research explored the affect that job related field experiences have on the confidence of transition students. The students were asked to take a pre- and post-survey to rate their level of independence in job seeking skills. The students participated in job related field experiences between the two surveys. In addition, the case managers of the students were also given the pre-and post-surveys to gage the student’s level of independence in performing job seeking tasks.

At the beginning of the study when students were given the pre-survey the results were as expected. The students rated themselves at an average of 18.8 out of a possible 35. The case managers rated them at an average of 18.8 out of a possible 35.

![Figure 1: Student vs Case Manager Pre-Survey Ratings](image)

After the students and case managers completed the pre-survey the students participated in job related field experiences. During the field experiences the students first practiced and were taught skills, and then were asked to do the task by themselves. The first activity was to ask for a job application. Role play was done at school and then students practiced in the community. During the role play the students did not know how to ask, and needed to be reminded to use eye contact. During the community field experience the students did complete all of the steps to ask for an application. Some students needed to be reminded to say thank you or to use eye contact (Field notes January 18, 2011). Three weeks later the students had to ask for an application with no cues or reminders. The students were nervous about the task, but all completed it and only one student forgot
to use eye contact (Field notes February 8, 2011). After obtaining an application students were instructed about each section of the application. They were also given vocabulary such as negotiable, and upon hire to use on the application. When given an application to complete independently the students accurately completed the demographic section. All students, except one, were also able to completely and accurately complete all other sections, except the work history. Four of the six students struggled to complete the work history section of the application (Appendix F). After instruction to do so, all students completed the application to save as a master application. They were then able to transfer the data to an online application.

After a paper application is completed, it is important to return it to the manager at the business. Students were instructed on this, and role played at school. They then went into the community and dropped off an application to the manager of a business. One student forgot to introduce himself. They all remembered to ask for the manager and shook their hand.

The next task the students practiced was finding a job. The students were given instruction in how to find a job using a newspaper and the internet. The sites the students were instructed to go to were www.indeed.com, and www.wisconsinjobcenter.com. The practice began at school. After practicing at school the students were given the task of going to the public library to find a job in the newspaper and online by using the resources available at the public library. Some students walked in and immediately got to work on the task. One student thought he needed help, but I reminded him to do what he could on his own. After that redirection, he completed the task (Field notes January 25, 2011). The primary difficulty that students had was finding a recent newspaper. There was one aisle with many old newspapers. The recent one was in the next aisle. They needed a game of hot and cold to find it. One student was easily able to find the resources, but could not choose a local job to write down (Field notes January 25, 2011). The student with emotional and behavioral disabilities refused to do the assigned tasks at all. After writing down the location of a business with a job opening all, but one student accurately and quickly found the proper street on a city map.

In Wisconsin most counties have a job center, or Workforce Resource location. This agency was discussed with students and then the students were brought there for a tour and informational session. Two weeks later the students were asked how to get there and what services they offer. All, but one student was able to correctly respond.

After participating in job related field experiences the students and case managers again took the same survey to rate their level of independence in performing job seeking skills. The students rated themselves at an average of 22.1 out of a possible 35. The case managers rated them at an average of 26.8 out of a possible 35. This is an increase of 3.3 percent for students self assessment and an increase of 8 percent on the case manager assessment.
Transition Teacher Survey

Transition teachers in the Western Wisconsin area were also given survey about their field experience practices and attitudes. Four of the eight teachers returned the surveys. All four teachers felt that community based field experiences have a significant positive effect on students. The teachers stated that community based field experiences were real world practice and created supports for the students. The most common experiences provided to students by teachers are job related.

Discussion

The close relation of the student’s ratings to that of the case managers in the pre-survey showed that the students did an honest evaluation of themselves, and have a good understanding of their strengths and weaknesses. This is a self-advocacy skill that is important to gain confidence. The difference in the ratings in the post surveys was surprising. While the confidence level rose, students rated their levels lower than did the case managers on average. This alone, still shows lack of confidence. While their confidence was still lacking, it had improved by the field experiences.

Some of the difficulty in performing the job skills may have been contributed to low reading and comprehension ability. The student classified with emotional behavioral disorders refused to try the library job search task. His coping mechanism is to give up, instead of try and fail. This is a mechanism employed by many people with disabilities, especially emotional and behavioral. To combat this coping strategy, students need more self advocacy training, encouragement to try new tasks, and opportunities to succeed.
The transition teacher survey provided teacher input on the importance of job related field experience for transition students. Most teachers that work with transition students do take the students out in the community because of the positive effect they see from the experience.

While gas prices rise, budgets are cut, and teachers get larger case loads this research has shown the importance and benefit of bringing students out into the community for job related field experiences. With the increase in confidence and job readiness skills in this small sample, and short amount of time, it is reasonable to predict that with more field experience, would come more confidence and job readiness.

**Limitations**

As with any research there were limitations in answering the question of how do job related field experience affect job readiness in secondary transition students. Being that this research was done as part of a graduate program requirement, there were deadlines assigned to the project, which limited the amount of time that could be spent on field observations. In addition, the sample size was small in regard to students and the amount of transition teachers that returned the survey. Ideally, there would be more students involved, or two groups of students. Also, a larger sampling of transition teachers would provide more information.

**Reflection**

The hypothesis of the researcher was that field experiences would increase job readiness. While this is the result that occurred, it was surprising to see the discrepancies in the student and case manager post-surveys. It appeared that another benefit of the field experiences was making the students more aware of the skills they needed for job readiness and their perceived level of functioning in those skills. It would have been beneficial to have more time for the field experiences. It could have led to greater improvement. It would also be intriguing to do the same research with a control group staying in the school and an experimental group participating in the field experiences. Further research would be necessary. After completing this research the researcher will use even more field experiences with students, share this data with others, and encourage other teachers to do field experiences.

**References**


Student Survey

Circle the number that best describes your ability to do each task.

Find available jobs online and in the newspaper.

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help

Locate a job site from information in the help wanted ad.

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help

Go to a business and ask for an application.

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help
**Completely fill out an application.**

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help

**Drop off a completed application to a manager and introduce yourself.**

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help

**Set up an interview, arrive on time and answer the questions.**

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help

**Locate and visit the job center.**

1. Can not do at all
2. Can do with a lot of help
3. Can do with some help
4. Can do confidently with reminders
5. Can do confidently by myself with no help
**Appendix B**

Please mark the level of confidence you feel your student exhibits at this time in ability to do each task.

<table>
<thead>
<tr>
<th>Task</th>
<th>1 Cannot do at all</th>
<th>2 Can do with a lot of help</th>
<th>3 Can do with some help</th>
<th>4 Can do confidently with reminders</th>
<th>5 Can do confidently on their own with no help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find available jobs online and in the newspaper.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Locate a job site from information in the help wanted ad.</td>
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<tr>
<td>Go to a business and ask for an application.</td>
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<tr>
<td>Completely fill out an application.</td>
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</tr>
<tr>
<td>Drop off a completed application to a manager and introduce them self.</td>
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</tr>
<tr>
<td>Set up an interview, arrive on time and answer the questions.</td>
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</tr>
<tr>
<td>Locate and visit the job center.</td>
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</tbody>
</table>
Appendix C

Survey for Transition Teachers

*Please read and sign the consent form attached. If you are receiving this via e-mail, you may type your name and date to serve as your signature.*

1. What is your position?

2. How much of your day do you spend working with transition students on transition topics?

3. Do you bring transition students into the community? If so, why?
   a. If you do not, why?

4. On average, how many times per week do you take transition students out into the community?
   a. Of these, how many are job-related experiences?

5. Please give examples of community experiences that you take students out to do.

6. What affect do you feel community experiences have on the confidence of transition students to perform work-related tasks independently?
   
   1= None – it does not help, only creates anxiety
   
   2 = A small negative affect
   
   3 =Neutral – no benefit or harm
   
   4 = A small positive affect
   
   5 = A significant positive affect

   Please explain your answer.
Appendix D  
Informed Consent Document  
Student

Project Title: **How do job related field experiences affect job readiness in secondary transition students?**  
Researcher or Research Team: Michelle Uetz

**WHAT IS THE PURPOSE OF THIS STUDY?**  
This is a research study. I am inviting your child/you to participate in this research study because your child/you is/are a secondary transition student. The purpose of this research is to determine if job related field experiences help to increase job readiness of secondary transition students so that they can perform job and social activities independently.

**HOW LONG WILL I BE IN THIS STUDY?**  
If you give permission for your child/you to take part in this study, the involvement will last for terms two and three (January 2011 – April 2011).

**WHAT WILL HAPPEN DURING THIS STUDY?**  
Students will fill out a survey about their confidence level in independently performing job related transition skills. These skills include picking up an application, filling out an application, turning an application in, using community resources, and other items as determined. After at least two job related work experiences in the community, the students will take the survey again. This will take place during normal school hours. Your student will continue to receive other transition services from myself and will receive their regular academic instruction.

**WHAT ARE THE RISKS OF THIS STUDY?**  
At this time there are no foreseeable risks to participating in this study. During any study, there is a possible risk for the possible loss of confidentiality. All efforts will be made to ensure that this does not occur.

**WHAT ARE THE BENEFITS OF THIS STUDY?**  
All students may not benefit personally from being in this study. However, this study may help your student gain confidence in independently performing job related transition tasks. In addition, it is the hope that this study will help future transition students, by determining best practices to use in instruction.

**WHAT ABOUT CONFIDENTIALITY?**  
I will keep your student’s participation in this research study confidential to the extent permitted by law. If I write a report or article about this study, I will describe the study results in a summarized manner so that your student cannot be identified.
IS BEING IN THIS STUDY VOLUNTARY?
Taking part in this research study is completely voluntary. You may choose for your student not to take part at all. If you decide your student will participate in this study, you reserve the right for your student to stop participating at any time. If you decide your student will not be in this study, or if your student stops participating at any time, your student won’t be penalized or lose any benefits for which your student otherwise qualifies.

WHAT IF I HAVE QUESTIONS?
I encourage you to ask questions. If you have any questions about the research study itself, please contact my professor, Shelly Leialoha-Hartstack at srleialo@graceland.edu. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree for your student to take part in this study.

Subject's Name (printed):_______________________________________________

Parent/Guardian or Legally Authorized Representative’s Name and Relationship to Subject:

________________________________________________________________________

(Name - printed) (Relationship to Subject - printed)

_______________________________________ (Signature of Parent/Guardian or Legally Authorized Representative) (Date)
Appendix E

Informed Consent Document
Teacher

Project Title: **How do job related field experiences affect job readiness in secondary transition students?**
Researcher or Research Team: Michelle Uetz

WHAT IS THE PURPOSE OF THIS STUDY?
This is a research study. I am inviting you to participate in this research study because you are the case manager of, or you teach secondary transition students. The purpose of this research is to determine if job related field experiences help to increase job readiness of secondary transition students so that they can perform job and social activities independently.

HOW LONG WILL I BE IN THIS STUDY?
If you give permission to take part in this study, your involvement will last for terms two and three (January 2011 – April 2011).

WHAT WILL HAPPEN DURING THIS STUDY?
As the case manager of a student in this study you will be asked to take a survey in regard to the confidence level of your students performing certain job related tasks independently. After the students participate in at least two job related field experiences you will be asked to take the same survey again.

As a transition teacher I will ask for a little of your time to answer some questions about your teaching practices in regard to the use of job related field experiences and the result they have on student’s job readiness.

Students will fill out a survey about their confidence level in independently performing job related transition skills. These skills include picking up an application, filling out an application, turning an application in, using community resources, and other items as determined. After at least two job related field experiences in the community, the students will take the survey again.

This will take place during normal school hours. Students will continue to receive other transition services from myself and will receive their regular academic instruction.

WHAT ARE THE RISKS OF THIS STUDY?
At this time there are no foreseeable risks to participating in this study. During any study, there is a possible risk for the possible loss of confidentiality. All efforts will be made to ensure that this does not occur.

WHAT ARE THE BENEFITS OF THIS STUDY?
All students may not benefit personally from being in this study. However, this study may help your student gain confidence in independently performing job related transition
tasks. In addition, it is the hope that this study will help future transition students, by determining best practices to use in instruction.

WHAT ABOUT CONFIDENTIALITY?
I will keep your student’s participation in this research study confidential to the extent permitted by law. If I write a report or article about this study, I will describe the study results in a summarized manner so that your student cannot be identified.

IS BEING IN THIS STUDY VOLUNTARY?
Taking part in this research study is completely voluntary. You may choose for your student not to take part at all. If you decide your student will participate in this study, you reserve the right for your student to stop participating at any time. If you decide your student will not be in this study, or if your student stops participating at any time, your student won’t be penalized or lose any benefits for which your student otherwise qualifies.

WHAT IF I HAVE QUESTIONS?
I encourage you to ask questions. If you have any questions about the research study itself, please contact my professor, Shelly Leialoha-Hartstack at srleialo@graceland.edu. Your signature indicates that this research study has been explained to you, that your questions have been answered, and that you agree for your student to take part in this study.

Subject's Name (printed):__________________________________________________

Parent/Guardian or Legally Authorized Representative’s Name and Relationship to Subject:

_______________________________________________________________

(Name - printed) (Relationship to Subject - printed)

(Signature of Parent/Guardian or Legally Authorized Representative) (Date)
Appendix F

## Work History

<table>
<thead>
<tr>
<th>Mo/Yr Began</th>
<th>Mo/Yr Left</th>
<th>Wage</th>
<th>Employer</th>
<th>Job Title</th>
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</thead>
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<td>05-10</td>
<td>$5.35</td>
<td>River Falls High School</td>
<td>Towel Folder</td>
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</tbody>
</table>

**Duties Performed**

**Supervisor's Name**

**Reason for Leaving**

<table>
<thead>
<tr>
<th>Mo/Yr Began</th>
<th>Mo/Yr Left</th>
<th>Wage</th>
<th>Employer</th>
<th>Job Title</th>
</tr>
</thead>
</table>

**Address, City, State, Zip**

**Duties Performed**

**Supervisor's Name**

**Reason for Leaving**

## Education

**School**

River Falls High School

818 Cemetery Rd., River Falls, WI

<table>
<thead>
<tr>
<th>Program</th>
<th>Years Completed</th>
<th>Date Awarded</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Address, City, State, Zip</th>
<th>Years Completed</th>
<th>Date Awarded</th>
</tr>
</thead>
</table>

**Please give any additional information you feel may be helpful when considering your application:**

---

## Please Read Carefully Before Signing

I understand that this application for employment will be given every consideration, but its receipt does not constitute a contract of employment, nor does it imply that I will be hired.

I certify that all answers given on this employment application are true and complete to the best of my knowledge and that any misrepresentation or omission is sufficient cause for immediate termination of employment by the employer without incurring any liability or obligation.

I hereby acknowledge that I have read and understand this agreement.
Appendix G

#1 University Place
Lamoni, Iowa 50140

Michelle Uetz
michelle.uetz@rfsd.k12.wi.us
751-505-5342
RE: How do job related field experiences influence job readiness in secondary transition students?

Dear Ms. Uetz,
Congratulations! This is to inform you that your project proposal was reviewed through Graceland University’s Institutional Review Board’s exempt review process and has been accepted as an approved topic of study. You have agreed to comply with the conditions set forth in the signed General Agreement that discuss the pursuit of research involving human subjects. You may therefore proceed with your study.
If we can be of further assistance, please do not hesitate to contact us at the number below. Best wishes for a successful study.
Sincere Regards,

Francisco Brizuela, Ed.D.
IRB Chair
1-800-859-1215

cc. Dr. Shelly Leialoha
Using Music to Increase Math Skill Retention
Catherine Yoho

Abstract
Discussions with math teachers, of various grade levels, brought out one consistent observation. Each year, students need to be retaught math concepts that they have been previously taught but have forgotten. With the ever-expanding curriculum of material that teachers need to cover over the course of a school year continually growing, it becomes plausible that not enough time is spent on material for it to be internalized and truly learned, for the long term. The amount of material to be covered will not likely decrease, so what can be done to help the instruction that does take place be more effective? What can be done to help students retain information and be able to recall and use it when needed? My Action Research project evolved to answer the question: Would using music improve math skill acquisition and retention?

Review of Literature Review

Introduction
A common complaint among math teachers is that students do not know, remember or have sufficient mastery of material they have previously been taught. The solution to the lack of skill, knowledge and retention becomes time consuming due to re-teaching or remedial teaching that needs to take place before the current curricular material can be taught. Traditional instructional methods of reading a textbook and solving problems solely through paper and pencil prove insufficient for many students to learn and retain mathematical concepts. As Gardner (2004) states, “for the auditory or kinesthetic learner, the textbook explanation does not match their learning style” (p. 26). The need for alternative instructional methods and learning strategies is necessary to increase the learning of those students who have not been successful when previous instructional methodologies have been used. Traditionally, students are taught in a more mathematically linguistic fashion that overlooks other types of intelligences in which they may be stronger (Özdemir, Güneyusu, & Tekkaya, 2006). This literature review examines research regarding math skill levels, the need for instruction to match learning styles, how music impacts learning, and using music in the math classroom.

Math Skill Levels
Witzel (2007) states that according to the National Assessment of Educational Progress (NAEP National Center for Education Statistics, 2005), only 2% of US students reached the advanced achievement level in mathematics by 12th grade. In the 2003 report, almost one third of 8th grade students scored below the basic level. This information indicates there is a problem in learning retention in the area of mathematics. “It is clear that there is a need to develop more effective mathematics instructional procedures, curricula and materials for low performing students with and without disabilities” (Witzel, 2007, p.14). Students receive instruction and assessment in mathematics; however, the internalization of the material is questionable (Singer, 2008). Internalization is what enables the continuum of growth to continue, building upon prior knowledge. Özdemir (2006) notes
that students prefer math in the early elementary grades, but skills decline after 4th grade. There is a need to find ways to improve mathematical retention. Lock (2006) found that music strengthens connections among neurons because it is processed in both hemispheres of the brain and it stimulates cognitive functioning. According to Moreno (2009), scientists have found that music can change the brain physically and how it performs.

Instruction and Learning Styles

Traditionally, as stated by Özdemir et al (2006) verbal-linguistic and logical-mathematical intelligences were the primary intelligences addressed in education. Multiple Intelligence theory used to develop instruction to match teaching methodology to student learning styles encouraged development of multiple intelligences and embraced student diversity. The utilization of only one or two intelligences in teaching disadvantaged the students whose strengths were in other intelligences. The learning needs of all students in the classroom and the utilization of approaches, which enabled diversification, needed to be addressed by the teacher. However, Olson (2006) stated that students taught by a preferred learning style became overconfident in their ability and performed at a lower level on assessments taught in a format they didn’t prefer. When the format was perceived as easier, less effort was used to try and learn the material. When the format was perceived as more difficult, the students put forth more effort to learn the material and there was a higher degree of success on assessments.

Moroye (2009) pointed out that teachers should try to create the best classroom learning experiences they can in order to provide the best type of education. The utilization of multiple senses may increase engagement in the classroom. He also continued the discussion with conclusions that when students cared about their education, they learned more. This was accomplished by connections developed between the material taught and students’ life experiences. The connections built meaning. Constructivist teachers “create an environment in which learners can construct, develop, and extend students’ mathematical view of the world” (Duatepe-Paksa, 2009, p.272). The author continued to explain that students, who learned mathematics with an infusion approach, utilized a variety of methods and mediums and went on to have better achievement scores immediately after instruction in delayed assessments than those in groups who had participated in more traditional instruction.

Using Music to Support Instruction

Evidence is clear that there are many benefits of using music as well as many means of incorporating it into instruction. In a Curriculum Review article (2007) “A Little Bit of Rhythm & ‘Rithmatic”, references are made to studies of music education on a variety of areas including math skills and spatial sense, among others. Results are not concrete but do indicate music helps memory. According to Singer (2008) music increased the chance students had to learn, with music having been a strategy to assist in the recall of information. In early grades, especial kindergarten, music was an integral part of the
classroom environment. It was a means for teaching, as with the alphabet, which welcomed students to the classroom, assisted with transitions between activities, and created an atmosphere of fun, relaxation, and readiness. Barker (2008) discussed how music brought more to learning. Lyrics make the lessons seem cool and fun. Lyrics were also able to deliver a positive message about doing well in school. According to Binkiewicz (2006) “Songs are powerful pedagogical tools that enliven a classroom and enhance student learning in an enjoyable manner” (p. 515). Binkiewicz (2006) continued discussing the idea that the creation of a positive and enjoyable atmosphere helped develop a feeling of inclusion for students and had learning value for them. The words and tunes the teachers used were a good way to assist students in the recollection of material they had been taught. When students utilized music in learning, positive results occurred in achievement. Music showed positive impacts on achievement. The connection between music and cognitive benefits, especially in math skills, was generally traced to the ancient Greek, Pythagoras, who in the fifth century B.C.E. suggested that mathematical relationships were integral to physical properties, including those in music (Southgate and Roscigno. 2009). Aside from a teaching tool, music benefitted students in other ways. Paquette and Rieg (2008) stated, “music can also improve listening and oral language development, improve attention and memory, and enhance abstract thinking” (p. 228). Increases in attention and listening brought the benefits of music to every subject, as well as helped improve classroom behavior. These authors also recognized the environmental transformation of classrooms, which supported students’ academic, social, and emotional success. There were many ways to incorporate music in math instruction. Singer (2008) suggested having students write songs and music for them to remember information. The author also suggested that students write math facts in poetry form. Facts written in poetry form made it easier to create a song with the words. Pariakian and Lerner (2010) observed that patterns could be practiced with music. Students built stronger life connections, increased knowledge retention and their understanding of numbers through pattern recognition.

Conclusion to Review of Literature

The literature showed the positive impact music had on student learning. There were also distinct findings, in which math skills were an area that needed fortification in order for achievement skills to be above the basic level for a greater number of students. The literature supported the use of music in math instruction to increase knowledge retention in order to have a positive impact on student achievement on immediate and future assessments. The findings provided encouragement for the creation of positive learning environments which utilize music in multiple ways to develop learners; actively engaged in their math instruction, having created lyrics and music, to make connections between the music, their learning and lives. Another insight the literature illustrated was the positive effect of music, increased attention and listening, that generalized into other areas of learning, which resulted in a more positive school experience for students. With these results, the use of music is a natural and welcoming medium in which to present and enhance mathematical instruction.
Methodology

My targeted audience is a class of 18 fourth graders. Included in this group are 7 students with specific learning disabilities and 2 students with a primary language of Spanish. Out of 4 fourth grade classes, the lowest students have been placed in this classroom. I am team-teaching math to these students with their regular education teacher. The math class is being taught during a one-hour period, right after a specials class (gym, music, art). It is the first core academic class of the day for the class and takes place from 8:50 -9:50 in the morning. When a new unit is being prepared for instruction, a few key concepts, definitions and/or formulas are chosen to be developed into a short, melodic song that will be taught to the students. It is important to choose a few items to teach with songs because of time constraints and with the understanding that students learn in different ways. Only utilizing music would exclude this understanding and possibly make learning more difficult for some students. The song(s) are taught to the students right after the concept, etc. are introduced. The students will practice the song(s) regularly, during the course of the unit. Prior to taking the assessment for the unit, the songs will be sung.

Before the first math unit of the year began (Sept 8.), a survey was conducted to see if students liked math, felt they could use more help during math, and if their teachers had used music in the classroom. On a daily basis, the regular education classroom teacher and I reflect on the lesson previously taught, the lesson that is prepared for that day, and the receptivity the class and individuals are demonstrating with the material. The students sing the songs I have taught them 2-3 times a week. Several of the students regularly ask to sing the songs. It was a student suggestion to march around the classroom singing the first song that they were taught, “Math Rules!” When a new song is taught, I have the words displayed on the classroom SmartBoard. I sing it first (1-2 times) and then teach the students. The song is then practiced daily for about a week, as we progress through the unit. After the first week, the song is practiced, as a class, once a week. It is then reviewed and sung again before the unit test.

Results

Data was collected from observations, a pre-test and unit test. As the unit was taught during cycle 2, my team-teacher and I had daily conversations about how the class was progressing in their demonstration of understanding the material through assignments, class work and class activities. Only two new songs were taught because it was a shorter unit, but the previously learned songs continued to be utilized to reinforce the material. It made sense to follow this pattern due to the cyclical format that the math curriculum follows. The students in my class increased their assessment scores from an average of 21% on the unit pre-test to an average of 81% on the unit test. This showed an average increase of 57.7%. The comparison class scored and average of 40% on the pre-test and an average of 87% on the unit test, showing an increase of 47%. The gains of the students in my group were 10.7 percentage points higher than the comparison class. This is an increase from the 6 percentage points higher gain than was shown in cycle 1, showing a continuation of the trend.
Conclusion

My Action Research Project results showed positive results, reflecting what the literature showed, helping me to conclude that the use of music in math instruction produces greater gains than instruction without music. However, as my research has ended for this cycle, I have had to reflect on a distinct difference between the class I worked with and the comparison classroom. My group was taught using music to teach formulas and rules as a memory helper. Two teachers, as opposed to a single classroom teacher, also taught them. As much as we strove to act as a single teacher in methodology and style, there were still two teachers in the room at all times. So my results are inconclusive, to some extent, because of that difference, in addition to the music, when compared to other classrooms. I might try to conduct another cycle with instruction by one teacher so that I can more distinctly determine if it was the success factor, or the music.

References


Research Complete database.
Author Guidelines for Submission to JAASEP

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Authors will be notified of the receipt of their manuscripts within 14 business days of their arrival and can expect to receive the results of the review process within 30 days.

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