



ACRES

American Council on Rural Special Education

2016 Conference Proceedings

The High Stakes Game: Improving Student Outcomes In Rural and Urban Schools



March 9-12, 2016
Las Vegas, Nevada

Proceedings Editor:
Carla Brigandi, West Virginia University

©American Council on Rural Special Education, Morgantown, West Virginia

Table of Contents

TWO FOR ONE: BLENDING RURAL ON-SITE COURSES IN SPECIAL EDUCATION AND CULTURAL DIVERSITY.....	4-9
DESIGNING A SUPPORT SYSTEM FOR COLLEGE STUDENTS WITH ADD/ADHD/EXECUTIVE FUNCTIONING DISORDERS.....	10-16
THE LONG TERM IMPLICATIONS OF LEAD POISONING.....	17-23
POSITIVE CONNECTIONS: BUILDING RELATIONSHIPS BETWEEN TEACHERS AND HIGH SCHOOL STUDENTS AT RISK FOR SCHOOL FAILURE.....	24-31
STRATEGIES FOR SUCCESSFUL TECHNOLOGY ADOPTION IN RURAL SCHOOLS	32-38
ENGAGING INCLUSIVE EDUCATORS: TEACHING CULTURALLY AND LINGUISTICALLY DIVERSE EXCEPTIONAL (CLDE) STUDENTS IN MIDDLE SCHOOL CLASSROOMS	49-46
POVERTY AND CHILDREN WITH SPECIAL NEEDS: IMPLICATIONS AND STRATEGIES FOR THE CLASSROOM.....	47-53
DESIGNING APPROPRIATE TRANSITION PLANS TO ADDRESS COLLEGE PREPARATION	54-62
PREPARING STUDENTS WITH AUTISM FOR COLLEGE: THE NEXT FRONTIER	63-67
USING YOUR HEART AS A COMPASS: REFLECTIVE PREPARATION AND PRACTICE IN TEACHING.....	68-76
SPECIAL EDUCATION TRANSITION: PERSPECTIVES IN MINORITY GROUPS	77-85
EFFICACY OF RURAL HIGH SCHOOL TEACHERS IN INDIANA.....	86-89
BREAKING DOWN GEOGRAPHICAL BARRIERS USING TWITTER TO BRIDGE UNDERSTANDING OF DEAF CULTURE.....	90-98
MAKING CONNECTIONS: BUILDING STRONG RELATIONSHIPS WITH FAMILIES OF YOUNG, RURAL STUDENTS.....	99-105
BUILDING A SUSTAINABLE PROFESSIONAL DEVELOPMENT MODEL IN MAINE: OBSERVATIONAL STRATEGIES AND REFLECTIVE COACHING IN ACTION	106-111
THE HIGH STAKES LITERACY GAME: IMPROVING LITERACY OF CHILDREN WITH DISABILITIES THROUGH SQUISHY BOOKS.....	112-117

Dr. Kathleen Magiera
 Dr. Ana Maria Klein
 The State University of New York at Fredonia
 Fredonia, NY 14063

TWO FOR ONE: BLENDING RURAL ON-SITE COURSES IN SPECIAL EDUCATION AND CULTURAL DIVERSITY

The contents of this article were developed under a grant from the U.S. Department of Education, Cooperative Agreement #H325T090014. However, these contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Dr. Sarah Allen.

Abstract

This case study focused on the collaboration between two university professors teaching two site-based courses linked by a common field experience. Set in rural, diverse elementary school, one undergraduate course focused on assessing and instructing students with disabilities and the other focused on cultural diversity.

Introduction

Salend, Gordon, and Lopez-Vona (2002) suggest that “cooperative teaching teams” in schools should periodically examine their practices to determine if they are working collaboratively. Two higher education colleagues, one with a multicultural education background, and one with a special education background blended their separate courses for four academic years and report their findings within these proceedings. To navigate the challenges confronting us as we taught separate courses with a shared field, the courses were viewed as a joint effort between the elementary school and the university. These efforts were assisted in large part by a 325T grant entitled Project RAISE-UP (Redesigning and Improving Special Education - Undergraduate Program) which is entering its sixth year. Fredonia has a long history in teacher preparation. The program resembles what Blanton, Pugach, and Florian (2011) called a “merged” model in which special education knowledge is integrated throughout the teacher education curriculum. With the additional certification in special education, an inclusive education course was added to our teacher preparation curriculum entitled “Assessing Students with Learning and Behavior Disorders” taught by the special education faculty. This special education course was linked to the course entitled “Cultural Diversity” taught by multicultural education faculty. These two courses would be joined by a common field experience and eventually moved from campus-based courses to on-site courses in a nearby rural elementary school. With these linked courses, it became even more important that we used common educational vocabulary within courses, developed a common lesson plan, and held consistent expectations in the field. This helped teacher candidates be better prepared for more rigorous performance in their professional certification exams. Previously, other faculty members had reflected on a common project embedded in two courses (Magiera & Ro, 2014) but linking two entire courses required us to find common ground and took us to the next level in teacher preparation.

The Project RAISE-UP (Redesigning and Improving Special Education – Undergraduate Program) grant provided a forum for discussing common ground among various orientations such as diversity and inclusion. This federally funded U.S. Department of Education Program Improvement Grant, helped faculty from different disciplines develop a common vocabulary leading to a common lesson plan format shared among earlier field experiences. The grant also provided the resources to assist faculty in enhancing their course syllabi with a more unified approach in our teacher preparation program. Through ongoing faculty development, a closer partnership was developed with our local rural schools including the elementary school where the on-site courses take place.

Once in the field with such details as scheduling, documentation, agreements, and all of the technical pieces in place, we began collaborating on these courses in the fall of 2012. We used our syllabi, a shared running glossary, and the idea of embedding and enhancing our assignments as part of our co-teaching endeavors. We shared conversations about finding common ground within our two areas of expertise and started calling ours a process of *blended instruction*. This idea met a bit of resistance from colleagues because diversity pedagogy and inclusion brought together did not seem like a good plan of action. Professionalization in the field and a common set of values and goals allowed us to further explore common ground across these two disciplines. Our students were performing well and even better on the professional certification requirements in both fields in their respective content specialty tests (Students with Disabilities Content Specialty Test and Educating All Students Test). They were also acquiring first-hand knowledge of the many new rules and regulations regarding bullying prevention and other aspects that touch upon cultural responsiveness and working with children. Our first attempt at blending our vocabulary and way of doing things in each of our disciplines also allowed us to coordinate our assignment deadlines. We felt that meeting the needs of our students was a very inclusive thing to do! We actually blended the ideas of cultural responsiveness and inclusion.

Specific Assignments

Similar to Magiera and Ro's (2014) ongoing collaboration with a single project, linking a special education course with a cultural diversity course required a constant exchange by both teacher educators about discipline-specific assignments, school culture, and the needs of particular teacher candidates. Both university professors shared syllabi, a running glossary of special education and diversity vocabulary, and the scheduling of assignments. We began coordinating our assignment deadlines taking advantage of shared areas of interest. In diversity pedagogy, we talk about an *ethnographic* analysis of demographics, families, and school settings. We also talked about drawing a portrait using *portraiture methodology* to understand what teaching in today's classrooms feels like. An assignment called an *ethnographic update* in the inclusion course mirrored the assignment in the diversity pedagogy course. Teacher-candidates were required to reflect upon their most recent special education field experience in light of their growing professional knowledge. The assignment required them to analyze what could have been done differently in their instruction and how this knowledge could expand into their current field experience.

We met informally throughout each semester and discussed coordination goals, gains, and challenges, but also our students' progress. We coordinated our instruction to ensure that our

students were challenged, treated professionally, and responding well to the demands of both of our courses. We ensured that we saw our students in action, and held informal conversations with their cooperating-teachers and the school principal. This is very much in tune with Salend, Gordon, and Lopez-Vona (2002). Supported by the literature on faculty reflection (Magiera & Ro, 2014), our weekly conversations were noted as our ongoing reflection to improve instruction. At the time, one of us was exploring a similar cooperation in the adoption of the Common Core Curriculum (Silver, Dewing & Perini, 2012). The literature within this entirely new realm suggests promoting discursive practices in the classroom and developing a running glossary so students enrich their repertoire and use discipline-specific terminology. We jumped upon this opportunity to enhance both of our courses with language and discourse. As we attempted to find common linguistic ground, we both agreed on the terminology that would work for both of our courses. As well, we used assistive instructional devices which found common ground with the Common Core Standards like graphic organizers to assist in reading instruction, Venn Diagrams, to assist in mathematical problem-solving and a key-word approach used in second-language instruction. These mnemonic devices found common ground in instruction towards inclusion, diversity, and language development.

Our blended courses required us to spend more time on site to build college instruction around the transition to all of these instructional changes. Our presence on site during this time period allowed us to find common ground within our practice and that of our colleagues on campus. Often, we would bring back reports about how these changes were affecting our teacher-candidates in their professional preparation. Our collaboration informed our instructional decision-making as we were not both in the classroom at the same time, but feeding on each other's perceptions of where we were going and where we wanted to be. We were also aware of the new professional certification requirements for our teacher-candidates. This indirectly implicated us in the lesson-plan development process that required changes. As we blended our assignments to give the teacher candidates a broader understanding of diversity and inclusion in an active and engaged elementary school, our lesson plans for the diversity course were enhanced for students with disabilities in the inclusion courses. This allowed teacher candidates to see how the general education curriculum provided the basis for learning for all students. However, we knew that we needed to adapt to the transitions and changes experienced on site.

Historic changes in education were happening in our second year (2013). These included not only implementing the Common Core Standards by January 2013, but other professional requirements for teachers. At the time, APPR (Annual Professional Performance Review) rubrics for teacher evaluation were mandated by our state. This meant more rigorous involvement in the teacher evaluation process by school-building leadership. New teacher-certification exit requirements (EdTPA) were also mandated in our state. Changes affecting our instruction and transitions to new evaluation and curriculum development were happening all at once. Again, in terms of managing these constraints, we used the co-teaching/co-planning model, blended ideas, and worked around these taking into account what we already knew about diversity and inclusion, (Salend, 2008). Using data-informed best practices (Bambrick-Santoyo, 2010) we continued our shared reflection and decision-making to assess where we had been and where we were going. In consultation with other colleagues, we met regularly to replicate the New York State edTPA exit lesson-plan format to our course assignments.

We also focused on the developmental learning stages of our teacher candidates ensuring that this common ground in lesson-planning was progressive and differentiated for the teacher candidates' instructional year. We now had a common exit assignment in both courses resembling the nature of the Common Core Standards as well as the New York State certification exit requirements for our students (edTPA). Compliant with all of the changes and transitional mandates for our teacher-candidates, we felt that our reflective process, our on-site presence, our shared perspectives with other colleagues, as well as the total cooperative/collaborative package were effective. As a result, we have now instituted a new lesson-plan format that builds upon teacher-candidates' competencies, mirrors the instructional modules within the Common Core Standards, and best prepares our teacher-candidates towards professional certification. New York State is and has always been assessment-oriented. Exit exams in high school (Regents Exams) determine the future of high school graduates. Professional teacher-certification requirements have also been based on exit criteria. Because of the newest exit requirements for teachers (edTPA) the state has also instituted a transitional process for adopting the new curriculum. EngageNY instructional modules are currently used in our area to assist in the transition to the nationally mandated Common Core Curriculum. Our teacher candidates are now familiar with all of these formats. Once employed as teachers, they will be evaluated under the APPR rubrics (Annual Professional Performance Review).

What Have They Learned?

We can safely say that we have provided evidence-based supports towards attaining these goals. Had we not been on-site during these two academic years, we would not have experienced these transitions in schools. We also managed to find common ground in many ways, through our shared courses, shared assignments, conversations with colleagues, and participation in area schools. We found that cooperation and collaboration through reflection works, and works best when seeking common ground and a shared perspective.

This collaboration informed both teacher educators' instructional decision-making based on real-time classroom instruction. A common lesson plan allowed for consistency in assignments and a bank of evidence-based practices for teacher candidates to practice in their placements. This encouraged teacher candidates to see how the general education curriculum provided the basis for learning for all students including students with disabilities. The on-site blended courses with a common field experience provided the teacher candidates with a "two for one" deal that helped them understand the influence of culture on students with disabilities. These four academic semesters helped us witness all the transitions in a rural but diverse elementary school. Although the partnerships between the university professors, the elementary school, and the Fredonia Office of Field Experience took planning and coordination, the teacher candidates benefited from the reflective teaching practices presented inside and outside the classroom walls. It was worth the extra time and effort it took to prepare teacher candidates to be more aligned with dynamics of real classroom instruction. As well, our students experienced firsthand the early adoption of the Common Core Standards and the implementation of Annual Professional Performance Review (APPR).

Dialogue among all parties assisted us in making friendly progress towards these difficult statewide transitions. Ongoing conversations provided us with depth and breadth of focus and new

ways to assist our teacher candidates in preparing for their future teaching careers in special education. One of the important aspects of the APPR was to establish a strong link between the home and the school. Teachers were expected to be actively engaged in their communities, participating in events in town, etc. At one point in time we noted how the grape-harvest festivities were turned into a data-analysis bulletin board for the entire class to enjoy. The same is true for sports and cultural events in town, as teachers participate fully they include details from these as their daily tasks. Experiencing this enthusiasm and close collaboration between the school and the town was exciting.

We can safely say that we have provided evidence-based supports towards attaining these goals. Had we not been on-site during these three academic years, we would not have experienced these transitions in schools. We also managed to find common ground in many ways, through our shared courses, shared assignments, conversations with colleagues, and participation in area schools. We found that cooperation and collaboration through reflection works, and works best when seeking common ground and a shared perspective. In terms of the many changes and transitions that we experienced, we were able to see how well willing principals and teachers, who are ready to challenge themselves are able to cope with almost anything. Clear dialogue, frequent communication and transparency among all parties involved channeled positive energy.

Finally . . .

The teachers that we talked to, who managed to “live in effective land” found the necessary tools and support to sustain their efforts without becoming discouraged. Our teacher candidates experienced this first hand as they would often hear their cooperating-teachers share the fact that they were trying out something for the first time.

Upon our return in 2015, we found that many happy teachers had taken true vacations and had also happily returned to the school setting for yet another year, even settling down in the community as opposed to living in suburbs and cities nearby. We would also like to share that upon our return in 2015, our teacher candidates were hired as substitute teachers within the school district. Several of our graduate students attained full positions in the school and the good relationship with this site-based venture continues.

References

- Bambrick-Santoyo, P. (2010). *Driven by data: A practical guide to improve instruction*. San Francisco, CA: Jossey-Bass.
- Blanton, L. P., Pugach, M. C., & Florian, L. (2011). *Preparing general education teachers to improve outcomes for students with disabilities*. Washington, DC: Prepared for American Association of Colleges for Teacher Education and National Center for Learning Disabilities. Available for download from www.aacte.org
- Hernandez-Sheets, R. (2004). *Diversity pedagogy: Explaining the role of culture in the teaching-learning process*. New York, NY: Pearson.
- Klein, A. M. (2011). *Raising multicultural awareness in higher education*. New York, NY: Rowman & Littlefield.
- Magiera, K. & Ro, J. M. (2014). Both sides of the street: Teacher educators' reflections on a collaborative project. *Excelsior: Leadership in teaching and learning*, 8(2), 1-10.
- Salend, S. (2008). *Creating inclusive classrooms: Effective and reflective practices*. (6th Ed.) Columbus, OH: Pearson.
- Salend, S. J., Gordon, J., & Lopez, K. L. (2002). Evaluating cooperative teaching teams. *Intervention in School and Clinic*, 37(4), 195-200.
- Silver, H., Dewing R. T., Perini, M. J. (2012). *Core six: Essential strategies for achieving excellence*. Alexandria, VA: ASCD.

Ms. Pamina A. Abkowitz
 Dr. Susan M. Schultz
 St. John Fisher College
 3690 East Avenue
 Rochester, NY 14618

DESIGNING A SUPPORT SYSTEM FOR COLLEGE STUDENTS WITH ADD/ADHD/EXECUTIVE FUNCTIONING DISORDERS

Abstract

The purpose of this paper is to describe ways to support college students with disabilities on a college campus through the lens of Bolman and Deal's (2013) Four Frames, and then identify potential strategies instructors can use to assist students in coping with the increasing demands made of him or her in a college setting.

Introduction

Colleges have seen an increase in the numbers of students with disabilities enrolling in post-secondary education programs. This could potentially be due to the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 2004. This law defined the purpose of special education as being in place to ultimately prepare students with disabilities for continuing education, employment, and independent living when they graduate (Leake, 2015). To facilitate this process, high school students with disabilities should be provided with transition plans, beginning at age 15, that provide for the development of skills that the student will need to be successful at living, learning, and earning in the community (Leake, 2015). The transition planning process and the special education services that are associated with that process may have ultimately led to an increase in the number of students with disabilities enrolling in college (Leake, 2015).

Mamiseishvili and Koch (2012) report that students with special needs are less successful in achieving college degree completion. For example, only 29.4% successfully complete their four-year programs of study within six years and 32.2% within an eight year time frame. Furthermore, students who transition from two year colleges to four year institutions have poor outcomes towards degree completion. Sixty percent of students with disabilities attend a two year college first, and then transition to a four year institution.

The disability population that this research focuses on is students with disabilities that are not visible. This includes students with Attention Deficit-Hyperactivity Disorder (ADHD) (Cory, 2011; Embry, Parker, McGuire, & Scott, 2005) and other disabilities such as Executive Function Disorder, Auditory Processing Disorders, and Learning Disabilities. Terms that have been used in the literature include "invisible disabilities" (Cawthon & Cole, 2010; Cory, 2011; Embry, Parker, McGuire, & Scott, 2005) or "hidden disabilities" (Dukes & Shaw, 2004; Leake, 2015; Murray, Flannery, & Wren, 2008), referring to the population of students that have disabilities that are not immediately apparent to a person unfamiliar with the student. Disability service providers have indicated that there is a need for institutions of higher education to comply with the federal mandates of the Americans with Disabilities Act (Cawthon & Cole, 2010). This act requires that colleges and universities provide reasonable accommodations for students with disabilities who self-disclose to the disabilities services office (Cory, 2011). At the small private college where this investigation was undertaken, there are approximately 4000 undergraduate and graduate students that attend the college. There are approximately 200 faculty and staff on campus and 180 college students who have formally identified as being a college student with a disability, although not all of them actively utilize services consistently. Additionally, for varied reasons, there are college students who have not formally identified themselves as having a disability.

In a world with increasing responsibility and diversity that requires more of college professors and instructors than ever before, it is critical that they have an understanding of multiple frames to view difficulties students with disabilities can have while developing the skills needed to manage all the tasks required of a college student. As issues arise within a classroom, having multiple frames to analyze and draw from in problem solving increases the likelihood that a useful solution will be found. Bolman and Deal (2013) have identified four frames that exist in organizations. These four frames are: Structural, Human Resource, Political and Symbolic. The purpose of this paper is to describe

ways to support students with disabilities in a college classroom through Bolman and Deal's Four Frames and then identify potential strategies instructors can use to assist students in coping with the increasing demands made of him or her in a college setting.

Framing the Organization

One can get a full picture of a college by examining the institution through four frames: Structural, Human Resource, Political, and Symbolic (Bolman & Deal, 2013). It can be helpful for leaders to be able to view his or her organization through multiple frames, as Bolman and Deal (2013) state:

Rather than portraying the field of organizational theory as fragmented, we present it as pluralistic. Seen this way, the field offers a rich assortment of mental models or lenses for viewing organizations. Each theoretical tradition is helpful. Each has blind spots. Each tells its own story about organizations. The ability to shift nimbly from one to another helps redefine situations so they become understandable and manageable. The ability to reframe is one of the most powerful capacities of great artists. It can be equally powerful for managers and leaders. (p. 39)

To best address the issue at hand, faculty can use questions to facilitate analysis of the situation in order to determine which frame best meets the need (See Table 1.1). By utilizing multiple lenses to frame a situation, leaders increase the possibility of successful resolution of the problem (Bolman & Deal, 2013), in this case, how to best meet the needs of students with disabilities on a college campus.

Table 1.1

Choosing a Frame

Question:	If Yes:	If No:
Are individuals' commitment and motivation essential to success?	Human Resource Symbolic	Structural Political
Is the technical quality of the decision important?	Structural	Human Resource Symbolic Political
Are there high levels of ambiguity and uncertainty?	Symbolic Political	Structural Human Resource
Are conflicts and scarce resources significant?	Symbolic Political	Structural Human Resource
Are you working from the bottom up?	Political	Structural Human Resource Symbolic

SOURCE: Adapted from "Reframing Organizations (5th ed.)" by L.G. Bolman, & T. E. Deal, 2013, San Francisco: John Wiley & Sons Inc.

The Structural Frame. Bolman and Deal (2013) discuss the Structural Frame as individual roles and responsibilities that when working together, create a logical, coordinated organization that achieves goals that have been established. Looking at the structure of our organization, services for college students with disabilities are provided through an office for students with disabilities, similar to other institutions of higher education. Students who come from supportive high school environments may have difficulty with the transition to a higher education institution, where when they arrive, they are expected to act more independently and self-advocate. Even high school students who practice these skills may become overwhelmed when expected to act on their own. Additionally, students who transfer from another institution may find this transition challenging, as they learned and assimilated to a set of procedures and support services specific to one college and then find these support mechanisms and processes vary from institution to institution (Hamblet, 2012). Students are also encouraged to use writing and math centers as supports. Additionally, these centers provide a series of workshops open to all students.

The Structural Frame by itself is not a sufficient support. According to Kurth and Mellard (2006), ineffective and inappropriate accommodations result from an accommodation process that focuses on disabilities rather than students' contextual and functioning needs (p. 81). Further, in a meta-analysis of studies on students with disabilities, researchers found that the relationship with faculty is critical for student success. A report by the National Symposium for Student Success (2006) indicates consistent support services and trusting relationships with faculty are crucial for the development of skills, including nonacademic, necessary for post-secondary success. Subsequently, the Human Frame is the most significant of the frameworks when supporting college students with disabilities (Kuh, Kinzie, & Buckley, 2006).

The Human Resource Frame. According to Bolman and Deal (2013), the Human Resource Frame explores the relationship that an individual has with the organization in which he or she works, and in this case, may attend as a college student. Faculty within the college have expressed a strong belief that helping students grow and learn is a rewarding career. Faculty reported that the work that is done as an educator is both meaningful and satisfying. The attributes that facilitate worker satisfaction and motivation are actively present in jobs within the college. The reward of seeing students achieve success and develop a love for and appreciation of learning in both the classroom and in the school community as a whole is a reward that makes working in an institution for higher education worthwhile.

While there is no reward system that is overtly in place to reward faculty and staff, there are opportunities for individuals to participate in leadership activities, such as department chairmanships, committee chairmanships and advising. Extra-curricular activities that build relationships with students in the school community are also available. Among these, there are many opportunities for faculty to support students with disabilities.

For example, through the health care center, a series of events for students diagnosed with attention deficit disorder were designed to gain an understanding of students' academic and social needs. This focus group resulted in several faculty across the college combining efforts and developing a closed group Facebook page that provided academic and organizational strategies for interested students who enrolled in the group. Students across the college also had the opportunity to support each other on the page, tell their stories, and discuss strategies that worked or did not work for them. Graduate students with disabilities were also involved and they could share their lived experiences with undergraduates.

Additionally, the department of education put a process in place to develop a student support plan when needed. Through a series of meetings with attendees consisting of the Director of Academic Advising, referring faculty member(s), and the student, a *Student Support Plan* is developed with a check in process put in place for problem solving and promoting student success. These plans are not developed to be punitive, but to provide supports to ensure student success. Faculty discuss the challenges and difficulties the student encountered, and in collaboration with the student, an Action Plan for Success is developed. Although "Structural" in nature, the human factor is what makes this program a success as the environment is meant to be nurturing and supportive to each student served.

The Political Frame. The Political Frame assumes that organizations have coalitions of individuals and interest groups that compete for resources (Bolman & Deal, 2013). Each group of stakeholders competes with other stakeholders to obtain resources. The groups can change depending upon the issue or interest in discussion, but it is important to recognize that the political frame at its roots is about allocation of resources and who has the power to decide where the resources will go (Bolman & Deal, 2013). Individuals can be part of many different interest groups, but ultimately decisions regarding allocation of resources come from the Board of Trustees, overseers of grants and college administration. There are opportunities for faculty to apply for a variety of resources. Assistance from the Office of Corporate, Foundation and Government Relations is available to seek outside grants. Internal mini grants are available for small projects. One such grant provided funding for a resource book, *Handling Your Adult ADHD* provided to interested students in both the School of Nursing and School of Education. As a combined effort, faculty members from both programs facilitated skill development activities on the Facebook page.

Time is a valuable resource and there are competing factors for student and faculty availability. Faculty summer Learning Circles, a competitive process (which did provide monetary compensation to a small group of interested faculty across the college), provided opportunities for discussing how to meet student need in both in seat and on-line classes. The faculty then presented their findings at the college professional development day. Additionally, a tool kit of resources was developed and posted for faculty use, allowing for sharing resources and disseminating information to a larger audience of faculty who could access the information at their point of need.

The Symbolic Frame. The Symbolic Frame from Bolman and Deal (2013) explores organizational culture through “rituals, storytelling, myths and theater” (Bolman & Deal, 2013, p. 16). We have the advantage of being a small community. Many of the teachers and administrators have grown up in the area and returned to work and raise their own families in the neighborhood.

There is a ritual of the college that dates back more than thirty years and is a source of great pride for the entire college community. Every Spring Semester, the college holds a dance marathon to raise money for a local camp for children who have serious illnesses as well as their siblings. The camp gives children an opportunity to participate in a typical camp setting. While there are medical and counseling staff on hand at the camp, children are able to be children and make new friends who understand the stress that he or she is under when at home. All college students have the opportunity to become involved with the fund raiser, which gets local publicity. To this date, students have raised over one million dollars. Involvement in activities like this provides opportunities for college students with special needs to become role models for others in need and to give back to the larger community. It also engages them in campus activities in ways that allows these them to show off their strengths.

Agarwal, Calvo, and Kumar (2014) note that limited opportunities for interacting with peers, both with and without disabilities, can impact graduating from college. They assert that “students need to feel socially integrated in the fabric of student organizations on campus” (p. 34), as student engagement in the college setting is related to persistence and academic success. They also state that psycho-social barriers are challenges to student engagement on the college campus and these barriers are often ignored by college faculty and staff and peers. When students with disabilities decide to drop out of college, they often report lack of social support. Institutions can purposely create a sense of belonging for students with disabilities.

Summary

The number of college students with disabilities has increased on college campuses. Examining support services for students with disabilities through Bolman and Deal’s four frames helps to assure we are supporting students in multiple ways. Within the context of each frame, various recommendations can be made in an effort to meet a variety of student needs. By examining the issue of support for students with disabilities through Bolman and Deals’ four frames, including Structural, Human Resources, Political, and Symbolic, we are able to better determine student need and provide appropriate supports than if we were to simply use one lens (Bolman & Deal, 2013). In viewing supports and services for students with invisible disabilities, we can, as a campus community, provide support for students through a multi-framed approach that better meets students’ needs.

References

- Agarwal, N., Calvo, B. A., & Kumar, V. (2014). Paving the road to success: A students with disabilities organization in a university setting. *College Student Journal*, 48(1), 34-44.
- Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations* (5th ed.). San Francisco, CA: John Wiley & Sons Inc.
- Cawthon, S., & Cole, E. (2010). Postsecondary students who have a learning disability: Student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and Disability*, 23(2), 112-128.
- Cory, R. (2011). Disability services offices for students with disabilities: A campus resource. *New Directions for Higher Education*, 154, 27-36. doi: 10.1002/he.431
- Dukes, L. L., & Shaw, S. (2004). Perceived personnel development needs of postsecondary disabilities service professionals. *Teacher Education and Special Education*, 27(2), 134-146.
- Embry, P. B., Parker, D. R., McGuire, J. M., & Scott, S. S. (2005). Postsecondary disability service providers' perceptions about implementing Universal Design for Instruction. *Journal of Postsecondary Education and Disability*, 18(1), 34-48.
- Hamblet, E. C. (2014, Jan/Feb). Nine strategies to improve college transition planning for students with disabilities. *Teaching Exceptional Children*, 46(3), 53-59.
- Kuh, G. D., Kinzie, J., & Buckley, J. A. (2006). What matters to student success: A review of the literature. *Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success*.
- Kurth, N., & Mellard, D. (2006). Student perceptions of the accommodation process in post-secondary education. *Journal of Postsecondary Education and Disability*, 19(1), 71-84.
- Leake, D. (2015). Problematic data on how many students in postsecondary education have a disability. *Journal of Postsecondary Education and Disability*, 28(1), 73-87.
- Mamiseishvili, K., & Koch, L. C. (2012, Oct). Students with disabilities at 2-year institutions in the United States: Factors related to success. *Community College Review*, 40(4), 320-339. doi:10.1177/0091552112456281
- Murray, C., Flannery, B. K., & Wren, C. (2008). University staff members' attitudes and knowledge about learning disabilities and disability support services. *Journal of Postsecondary Education and Disability*, 21(2), 73-90.

Dr. Susan M. Schultz
St. John Fisher College
3690 East Avenue
Rochester, NY 14618

THE LONG TERM IMPLICATIONS OF LEAD POISONING

Abstract

Despite efforts by the United States and the World Health Organization to decrease lead exposure in children, lead poisoning continues to exist in industrialized and developing countries. Any amount of lead can cause toxicity, and even low levels are associated with learning and behavioral problems. While Blood Lead Levels (BLLs) have continued to decrease in industrialized/developed countries, they continue to pose a major health hazard to marginalized populations, where 90% of children with elevated lead levels reside. Population-wide loss of IQ points leads to decreased productivity and loss of earning potential.

What is Lead Poisoning and What are the Effects?

Lead poisoning occurs by swallowing or inhaling a substance with lead in it. Lead gets into the blood stream and the body stores it in organs, tissues, bones, and teeth. Lead poisoning can occur suddenly when an individual is exposed to a large quantity of lead, but it usually builds up in the body slowly over months or even years when a child is exposed to small amounts of lead (Center for Disease Control and Prevention, 2015).

Despite initiatives by the United States to ban lead from paint in 1978 and from gasoline in 1996, lead poisoning still remains a problem in the nation today. Imported products such as candies, toys, children's jewelry, and products like mini blinds continue to expose consumers to lead. Drinking water can also be contaminated when lead leaches into the water as it flows through lead pipes, solder, valves or brass fixtures. The most common sources of children's lead exposure occur from paint chips or dust even when paint is not peeling, and contaminated soil. When paint becomes old or worn from activity like rubbing (such as doors, windowsills, painted cupboards or stairs), lead can get ground and scattered, and dust and soil can become contaminated. The same happens when paint is disturbed during remodeling or destruction (Center for Disease Control and Prevention, 2015). Children who play on porches can be exposed to porch dust containing lead (Wilson et al., 2015).

Parents may also bring home lead particles on their clothing, or bring scrap materials home from work environments (construction, repair shops) or hobbies (fishing weights, bullets, or stained glass). Exterior dust can be tracked in or blown in, contaminating floors and surfaces. Communities with high traffic areas and/or industrial pollution may have soil contaminated with lead (Center for Disease Control and Prevention, 2015).

Children under six are most at risk because they crawl on the floor, often put their hands in their mouths, and may eat non-edibles. Young children experience more significant effects of lead as growing bodies absorb lead at a higher rate, and children's brains are developing quickly throughout the time when they are most likely to be exposed (O'Malley & O'Malley, 2015).

Research shows that lead can also be transmitted prenatally (O'Malley & O'Malley, 2015; Ris, Dietrich, Succop, Berger, & Bornschein, 2004).

Wick (2013) reports lead exposure causes irreversible cognitive and neurobehavioral abnormalities that reduce IQ. Schwartz (1994) estimates a 2.6 point decrease in IQ for every 10 pg/dL. Even lower levels of 3-8 can cause mild IQ decreases and/or attention deficit disorder. Additional effects of lead exposure can be smaller size than same aged peers, lack of energy, lack of appetite, anemia, neuropathy, central nervous system damage, seizures, delayed development, learning problems, behavior problems, and/ or renal dysfunction (Center for Disease Control and Prevention, 2015).

What Are Acceptable Lead Levels?

Although the *guideline for concern* varies by country, any amount of lead can cause toxicity, and even low levels are associated with learning and behavioral problems. Subsequently, in June 2012, The Center for Disease Control (CDC) decreased the reference value from 10 micrograms to a marker of 5 micrograms per deciliter (5 pg/dL). Currently, over 450,000 children in the United States have blood lead levels greater than 5 micrograms per deciliter.

Evens (2012) posits that often the assigned level by the CDC is interpreted as an acceptable or safe level of lead, that does not warrant action or concern, unduly allowing children to continue to be exposed to lead. Additionally, not all countries follow the CDC guideline. Germany set a more aggressive guideline at 3.5 micrograms per deciliter (3.5 pg/dL).

In contrast, Canadian researchers O'Grady and Perron (2011) claim "Canadian public health discourse portrays this [lead] issue as a problem of the past or a US problem" thwarting public concern, however, they explain political power struggles resulted with Health Canada as the "dominant authority, thereby regulating important research initiatives to obscurity and also shaping a vastly weaker regulatory response to lead than occurred in the United States" leaving no legislative protection for Canadian children (p. S176). Canadian lead issues were thought to be a problem of the past since lead was removed from paint and gasoline, however, children are still living in lead contaminated environments. O'Grady and Perron assert Canada has "unfinished business with lead-based paint" (p. S182). Further, monitoring is inconsistent or non-existent across Canadian communities, and when monitoring does occur, higher guidance levels of 10 micrograms per deciliter identify less lead exposed children.

Taylor, Winder, and Lanphear (2014) assert policies that aim to keep lead below a particular bar are "obsolete and will inevitably fail to protect children from the toxic effects of lead" (p. 114). Taylor et al. (2014) also state that in Australia, there is overwhelming evidence that the lead level set (10 pg/dL) is too high, and "procrastination on this issue will be the thief of an equitable and healthy start to life for Australia's lead exposed children" (p. 116).

Why and Where Does Lead Poisoning Occur?

Industrialized Countries. Childhood lead exposure occurs in industrialized countries, where poor government decisions and environmental accidents have negatively affected or potentially affect the well-being of their children. Simply overlooking geographic pockets where there are residual high levels of lead is also problematic.

The Gold King Mine waste spill in 2015 created an environmental disaster near Silverton, Colorado when workers accidentally released three million gallons of mustard yellow colored toxic waste water from the mine into Cement Creek, a tributary of the Animas River. The acid mine waste water contained lead, and other metals and toxic elements. The Environmental Protection Agency (EPA), who took responsibility for the spill, was criticized for not letting the residents of Colorado and New Mexico know until the day after the spill. Local residents were warned not to drink, bathe in or fish in the waters. Environmental impact included contaminated wells in flood plains, and fishing, farming, and implications for animals including livestock until sedimentation dilutes the pollutants. Although the mustard color of the water disappeared, invisible toxins remained. The EPA continues to monitor the water, irrigation waterways have been flushed and water has returned to pre-spill levels. While short term consequences have been addressed, the long term effects are yet to be determined (Chief, Artiola, Wilkinson, Beamer, & Maier, 2015).

In April 2014 in Flint, Michigan, as a cost saving measure, the state switched the water supply for the city of Flint from Lake Huron to the Flint River. The decision proved dangerous and costly to the residents of Flint, exposing over 100,000 residents (over 9,000 children six and under) to lead and other contaminants when corrosive Flint River water caused lead to leach from pipes and fixtures into the water. Data collection indicated lead levels doubled and in some cases tripled in toddlers who were tested. The city of 100,000 no longer has a grocery store, which compounds access to clean bottled water. As exposure to lead has a long term effect, local pediatrician Hanna-Attisha (in Ganim and Tran, 2016) states:

If you were to put something in a population to keep them down for generation and generations to come, it would be lead. It's a well-known, potent neurotoxin. There's tons of evidence on what lead does to a child, and it is one of the most damning things that you can do to a population. It drops your IQ, it affects your behavior, it's been linked to criminality, it has multigenerational impacts. There is no safe level of lead in a child. (Long term health consequences, para. 2)

Currently, 1 in 38 children in the United States test positive for lead poisoning, with disproportionate numbers by income and race. This exposure is not due to environmental accidents but poor environmental living conditions where children are exposed to lead where properties in low income areas have been poorly maintained, and “inadequate attention to this issue may lead to the reemergence of this preventable environmental problem” (p. 72). They note that with the dwindling of public resources, lead poisoning is placed low on public health and education agendas. Evens (2010) states that children who were born outside the country or those who lived outside the country within six months before their blood tests showed particularly elevated risks for lead poisoning, in comparison to their U.S. born peers (p. 19). The CDC (2015) also reports that parents may rely on home remedies of medications from foreign countries that are not regulated for lead.

Developing Countries. While Blood Lead Levels (BLLs) have continued to decrease in industrialized/developed countries, they continue to pose a major health hazard to marginalized populations, where 90% of children with elevated lead levels reside. Population wide loss of IQ points leads to decreased productivity and loss of earning potential. Attina and Trasande (2013) report an estimated total cost of \$977 billion of international dollars lost by low and middle income countries based on the “relationship between lead exposure and dose-related decrements in IQ score, the latter in turn being associated with decreased lifetime earning power” (p. 1099). Public

awareness of the harmful effects of lead are low in many of these communities, and the rest of the world is not paying attention (Kessler, 2014). Sources of lead exposure can come from environmental circumstances such as living near lead mining, smelting, battery recycling, or gold-ore processing plants. Despite some mine closures, scavenging of metal scraps in abandoned mines and wastes continue to serve as sources of metal pollution.

In Kabwe, the capital of Zambia's central province, extensive soil contamination from lead-zinc mining poses a significant health hazard (Yabe et al., 2015). Yabe et al. (2015) also report that few studies investigating the impact of mining and processing plants in developing countries occur. Their study focused on identifying high lead levels in children under the age of seven who need medical intervention, in two towns where high BLLs were found. The townships were selected due to high levels of lead in the soil, likely due to vehicle traffic and mine dust. Of the 246 children tested, all had alarming BLLs of toxicity, eight children demonstrating levels of 150 through 427 micrograms per deciliter, well above the guidance level of 5 micrograms per deciliter (Yabe et al., 2015).

In Nigeria, more than 400 children died, and others were left with numerous long-term neurological impairments as a result of gold-ore mining and processing. Exposure to lead dust through ingestion and/ or inhalation caused widespread outbreaks of childhood lead poisoning in Nigeria villages where gold-ore processing occurs (Yo et al., 2012). As the world-wide demand for gold has increased, rural communities have adopted small scale gold ore processing. Yo et al. (2012) investigated an outbreak of lead poisoning in children in two rural Nigerian villages. In these villages, 25% of the children under the age of five died from confirmed lead poisoning in the previous 12 months, with 82% experiencing convulsions before death. In response, their "objective was to rapidly identify and prioritize villages with childhood lead poisoning for interventions" (p. 1451). They collected indoor environmental samples from household floor dust from areas in villages where children ate and slept, and outdoor environmental soil samples from public areas. One hundred thirty one villages were identified, and the team focused on 114 of them due to time and logistical restraints; however 40 of these villages were not visited due to poor road conditions that made them inaccessible. Yo et al. (2012) assert that the environmental impacts of small scale gold-ore processing are often overlooked, illustrating the need for monitoring and prevention. Even with interventions such as public education about ways to reduce lead exposure, recontamination can occur when exposure factors are not eliminated (p. 1454).

As awareness about the implications of lead poisoning is spread by the World Health Organization and other international health organizations, many countries are attempting to decrease lead exposure. Research in Pakistan demonstrates the need to further explore sources of lead, after lead in petrol has been eliminated, but other sources such as lead based paints, traditional health care remedies, occupational hazards, lead in water sources, and cosmetics continue to be a major source of elevated lead levels among children. Further, maintenance of houses is relatively poor (Kadir, Janjua, Kristensen, Fatmi, & Sathiakumar, 2008). Kadir et al. (2008) report that it is difficult to garner a complete picture of the status of lead exposure in Pakistan as most studies were a result of convenience sampling.

Attempts to decrease lead exposure occurred in China in 2011 with the implementation of strict lead control policies state Chen, Huang, Yan, Li, Sun and Bi (2014). China's childhood lead levels were significantly higher than developed countries, and Chen et al. (2014) assert still remain a common public health problem. Lead mines, lead processing plants, electronic waste recycling

centers, and wire rope factories were cited as potential causes of lead exposure for children living near these sources. Chen et al. followed 106 children, ages one through 14 years old, each with a median time of four years of residence near a wire rope factory in the Zhuhang subdistrict. Environmental sampling included dust and soil sampling, vegetable and rice sampling, and drinking water sampling to measure lead exposure before and after lead usage control policies were implemented. Chen et al. posit there is widespread “disregard for environmental control” in lead related industries “in pursuit of economic growth” leading to weak and limited control by some local governments in China. Chen et al. found that strict lead pollution controls on the wire rope industry demonstrated success in decreasing lead levels in area children, and “given the high childhood BLL in China, strict environmental control regulations in lead-related industries should be implemented to prevent lead poisoning in millions of Chinese children” (p. 12935). Li, Cao, Xu, Cai, Shen, and Yan (2014) agree that although the Chinese government has made strides in improving and preventing lead poisoning, “lead pollution and its adverse effects are still common in China” (p. 116).

Summary

Low levels of lead poisoning in early childhood can impede education in the elementary school years, contribute to the achievement gap, and affect behavior. According to Kessler (2014), public health workers in the United States, who have been working to decrease lead levels across the nation, simply assumed that the rest of the world had followed suit. However, lead based paints continue to be freely sold in at least 40 countries, and although lead in gasoline/petrol has been eliminated in many countries, the residual effects of leaded gasoline remain. The news is not all bad though. As evidenced by changing policies and research initiatives, momentum is building in the war against lead.

References

- Attina, T. M., & Trasande, L. (2013). Economic costs of childhood lead exposure in low- and middle-income countries. *Environmental Health Perspectives* 121(9), 1097-1102.
- Center for Disease Control and Prevention (2015). *National lead poisoning prevention week, 2014*. Retrieved from <http://www.cdc.gov/features/leadpoisoning/>
- Chen, A., Huang, L., Yan, B., Li, H., Sun, H., & Bi, J. (2014). Effect of lead pollution control on environmental and childhood blood lead level in Nantong, China: An interventional study. *Environmental Science and Technology*, 48, 12930-12936.
- Chief, K., Artiola, J. F., Wilkinson, S. T., Beamer, P., & Maier, R.M. (2015, November). Understanding the Gold King Mine Spill. Superfund Research Program. The University of Arizona. Retrieved from: http://www.superfund.pharmacy.arizona.edu/sites/default/files/u43/gold_king_mine_spill.pdf
- Evens, A. (2010). School performance and lead poisoning among Chicago public school children (Doctoral dissertation). Retrieved from ProQuest: Dissertations and Theses (AAT 3431359)
- Ganim, S. & Tran, L. (2016, January 13). How tap water became toxic in Flint, Michigan. CNN. Retrieved from <http://www.cnn.com/2016/01/11/health/toxic-tap-water-flint-michigan/>
- Kadir, M. M., Janjua, N. Z., Kristensen, S., Fatmi, N., & Sathiakumar, N. (2008). Status of children's blood lead levels in Pakistan: Implications for research and policy. *Journal of the Royal Institute of Public Health*, 122, 708-715.
- Kessler, R. (2014, April). Lead-Based Decorative Paints. *Environmental Health Perspectives*, 122(4), A96-A103.
- Li, M., Cao J., Xu, J., Cai, S., Shen, X., & Yan, C. (2014). The national trend of blood lead levels among Chinese children aged 0-18 years old, 1990-2012. *Environment International*, 71, 109-117.
- O'Grady, K., & Perron, A. (2011). Reformulating lead-based paint as a problem in Canada. Framing Health Matters. *American Journal of Public Health*, 101(S1), S176-S187.
- O'Malley, G., & O'Malley, R. (2015). Lead Poisoning (Plumbism). *Merck Manual Professional Version*. Retrieved from: <http://www.merckmanuals.com/professional/injuries;-poisoning/poisoning/lead-poisoning>
- Ris, M. D., Dietrich, K. M., Succop, P. A., Berger, O. G., & Bornschein, R. L. (2004). Early exposure to lead and neuropsychological outcome in adolescence. *Journal of the International Psychological Society*, 10(2), 261-270.
- Schwartz, J. (1994). Low-level lead exposure and children's IQ: A meta-analysis and search for a threshold. *Environmental Research*, 65, 42-55
- Taylor, M. P., Winder, C., & Lanphear, B. P. (2014). Australia's leading public health body delays action on the revision of the public health goal for blood lead exposures. *Environmental International*, 70, 113-117.
- Wick, J. Y. (2013). Lead poisoning. Why won't this problem go away? *Pharmacy Times*. Retrieved from <http://www.pharmacytimes.com/publications/issue/2013/March2013/Lead-Poisoning-Why-Wont-This-Problem-Go-Away>
- Wilson, J., Dixon, S., Jacobs, D. E., Akoto, J., Korfmacher, K. S., Breysse, J. (2015). An investigation into porch dust lead levels. *Environmental Research* 137, 129-135

- Yabe, J., Nakayama, S. M. M., Ikenaka, Y., Yohannes, Y. B., Bortey-Sam, N., Oroszlany, B., Muzandu, K., Choongo, K., Kabalo, A. N., Ntapisha, J., Mweene, A., Umemura, T., & Ishizuka, M. (2015). Lead poisoning in children from townships in the vicinity of a lead-zinc mine in Kabwe, Zambia. *Chemosphere*, 119, 941-947.
- Yo, Y. C., Dooyema, C. A., Neri, A., Durant, J., Jefferies, T., Medina-Marino, A., de Ravello, L., Thoroughman, D., Davis, L., Dankoli, R. S., Samson, M. Y., Ibrahim, L. M., Okechukwu, O., Umar-Tsafe, N. T., Dama, A. H., & Brown, M. J. (2012, October). Childhood lead poisoning associated with gold ore processing: A village-level investigation- Zamfara State, Nigeria, October-November 2010. *Environmental Health Perspectives* 120(10), 1450-1455.
- Zhang, N., Baker, H. W., Tufts, M., Raymond, R. E., Salihu, H., & Elliott, M. R. (2013). Early childhood lead exposure and academic achievement: Evidence from Detroit Public Schools, 2008-2010. *American Journal of Public Health*, 103(3), 72-77.

Sara Beth Hitt
 East Tennessee State University
 807 University Parkway
 Johnson City, TN 37614

Charles L. Wood
 Angela I. Preston
 University of North Carolina at Charlotte
 9201 University City Blvd
 Charlotte, NC 28223

POSITIVE CONNECTIONS: BUILDING RELATIONSHIPS BETWEEN TEACHERS AND HIGH SCHOOL STUDENTS AT RISK FOR SCHOOL FAILURE

Research has shown that students who have a positive relationship with a staff member are (a) more interested in school, (b) less likely to be truant, (c) less likely to become withdrawn from others, and (d) less likely to drop out of high school (Brinkley & Saarino, 2006; Shepard et al., 2012; Werner, 2012). As a result, educators need to place more emphasis on communication to strengthen the relationship between students and teachers (Gaughan, Cerio, Myers, 2001; Shepard et al., 2012). Research has shown a correlation between positive student and teacher relationships and a decrease in violence, truancy, and dropout rates (Brinkley & Saarino, 2006; Gaughan, Cerio, & Myers, 2001; Shepard et al., 2012; Werner, 2012). Educators need efficient and effective strategies to develop and maintain positive relationships with at-risk students. These strategies could be embedded into multi-tiered systems of support.

Multi-tiered Systems of Support

Federal legislation holds schools accountable for adequate yearly progress of all students, including students with disabilities (IDEA, 2004; NCLB, 2001; Simonsen et al., 2010), yet providing effective interventions for middle and high school students at risk for or with disabilities continues to be a challenge (Brozo, 2010; Fuchs, Fuchs, & Compton, 2012). Multi-tiered instructional and behavioral programs can be used to improve outcomes for a wide range of students across increasing levels of support (Brownell, Sindelar, Kiely, & Danielson, 2010; Fuchs, Fuchs, & Compton, 2010; Fuchs et al., 2012; Kennedy & Ihle, 2012; Simonsen et al., 2010). For example, research conducted over the past 15 years has shown that school-wide positive behavior support can help schools maintain students' appropriate social behavior, increase students' academic performance, reduce discipline referrals, and make schools safer (Simonsen et al., 2010; Sugai & Horner, 2009). Currently, there is a need to strengthen primary-level (i.e., Tier 1) supports in middle and high schools. One easy, low-cost intervention that can strengthen communication between teachers and students is Positive Connections.

Positive Connections

Positive Connections is a simple, efficient intervention that can serve as a Tier 1 intervention in a multi-tiered model. Positive Connections is designed to increase communication

between teacher and students. Teachers can use Positive Connections to quickly identify students who may need more attention and support to be successful in school. Positive Connections has several benefits: (a) it provides an immediate list of potentially at-risk students by grade level, (b) it prompts staff to interact with students in their classes, (c) it helps create support teams for students at risk, and (d) it provides opportunities for early for academic or behavioral intervention for students at risk. This paper describes how Positive Connections was used in a large southeastern high school.

Method

Setting

The intervention was conducted in a high school located in a rural area in the southeastern United States. In the 2012-2013 school year, the high school enrolled approximately 1,200 9th through 12th grade students and was designated a *School of Progress*, indicating that 80% of students scored at or above grade level on End-of-Course testing. During this school year the school's graduation rate was 84% and the average number of short-term suspensions (10 days or fewer) was 26.34 per 100 students. Fifty percent of students were eligible for free or reduced-priced meals, and minority students represented 48% of the student population. Figure 1 shows the school's demographic information.

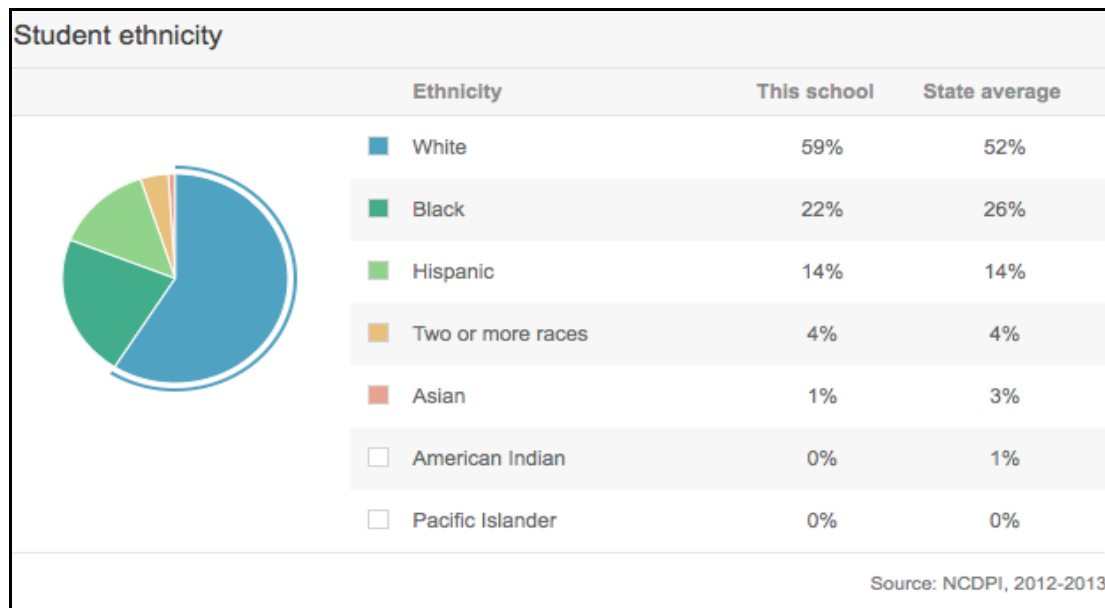


Figure 1. Participating high school demographics, 2012-2013.

Positive Connections Intervention

Over the course of several weeks, lists of students by grade level were posted one at a time in the teachers' workroom (i.e., Seniors first, then Juniors, etc.). Instructions for teachers and staff were posted next to the lists (see Figure 2).

Positive Connections

- Research has shown that students who have a positive relationship with a staff member show more interest in school, are less likely to be truant, and are less likely to become withdrawn from others, or drop out of high school.
- Below is a list of _____ currently enrolled at our high school.
- Please take a moment and place a check or star next to any student that you have a **good** relationship with or have had some form of **positive** communication with while enrolled at our school.
- This list will be posted until _____. More information will follow after compiling the results.

Figure 2. Staff instructions for positive connections intervention.

Data Collection

Beginning in November of 2013, directions for the project, along with the senior class list, were posted in the teacher workroom. The list of 250 seniors was posted for two weeks, during which time teachers placed checks or stars next to students' names for whom they felt they had a positive connection or relationship. Following data collection on the senior class, the junior class list was posted for two weeks, followed by the sophomore class list. In addition to student data collection, a survey (see appendix) was sent out to all staff via SurveyShare, to assess their opinions of Positive Connections and its effects on the students and school.

Results

After teachers had responded to the lists, the senior list showed 22% of students had two or fewer checks beside their name. Based on these results, the graduation coach accessed the records of those students, investigated their credits earned and GPAs, and encouraged contact between staff and the newly targeted students. The junior list showed over half the students with two or fewer checks, but data for the sophomore class were incomplete. Additionally, the freshman class was not included in the intervention because several activities were already in place (e.g., freshman academy; freshman mentor program) to promote interaction with 9th grade students.

Finally, a small sample of teachers ($n = 11$) responded to the survey on the potential effects of the intervention. Using a Likert scale, (e.g., strongly disagree, disagree, undecided, agree, strongly agree) the teachers responded to five scaled-questions and one open-ended question. Three

teachers (27%) responded as *undecided* to question 4, “This intervention made a difference with our students and staff.” The remainder of responses was positive, with most of the responses being *agree* or *strongly agree* to all questions. Results of the survey are listed in the table below.

Table 1

Percentage of Teacher Responses on Positive Connection Survey

	Agree	Strongly Agree
This intervention was beneficial for staff.	36	64
This intervention was beneficial for students.	45	55
When I saw one of my students without a check by his or her name, I made an effort to connect with that student.	82	18
This intervention made a difference with our students and staff.	55	18
This intervention had an effect on my relationship with students.	73	27

One teacher’s response to the open-ended question was as follows: “This intervention made me more aware of my interactions with my students in class. I even rearranged my seating chart.”

Discussion

When analyzing the data, it is difficult to determine why the junior class had substantially fewer checks when compared to other classes. One explanation may be that the teachers grew tired of the intervention; another possibility is that they simply did not know the juniors as well as the seniors. Despite this limitation, the intervention was successful for several reasons. First, the high school staff (including the graduation coach) was pleased with the Positive Connections intervention. Second, the graduation coach was able to use the information from the lists to contact students who were at risk for failure or not graduating. For example, one student had stopped attending school with only one credit left to graduate. She was contacted and convinced to return to

school. Finally, the graduation coach stated that the intervention was valuable and planned to implement it each year. She noted, “I will continue to post our Junior and Senior list each fall and ask teachers to checkmark students that they have had interaction and communication with because it prompted me to check on students who we may have missed at being at risk. It has become a definite part of our Drop Out Prevention Program at our high school.” Figure 3 shows an example list with notes from the graduation coach.

Student Name	Checkmark 1	Checkmark 2	Checkmark 3	Checkmark 4	Checkmark 5	Checkmark 6	Checkmark 7	Checkmark 8	Checkmark 9	Checkmark 10	Notes
Matthew	✓	✓		✓							1.3 GPA only 18 credits
Jonathan	✓	✓									2.9 / 29 credits
Dao	✓	✓									1.9 / 33 credits
Antonio	✓	✓									3.0 / 24
Rasheid	✓	✓									1.8 / 24
Salvador	✓										3.0 / 24
Cindy	✓	✓									3.0 / 24
Devan	✓	✓	✓	✓							
Alen	✓	✓	✓	✓							
Christopher	✓	✓	✓	✓							
Jarah	✓	✓									
Julio	✓	✓	✓	✓	✓						
Trayhan	✓	✓	✓	✓	✓						
Dallas	✓	✓	✓	✓	✓						
Cameron	✓	✓	✓	✓	✓						
Jayla	✓	✓									3.3 / 39
YeYondra	✓										2.1 / 24
Monserrat	✓	✓	✓	✓							3.0 / 24
William	✓	✓	✓	✓	✓						
Curra	✓	✓	✓	✓							
Shara	✓	✓	✓	✓							
Leah	✓	✓	✓	✓	✓						
Rannon	✓	✓									2.1 / 32

Figure 3. Completed senior checklist with notes.

Conclusion

In this case study, teachers and staff reported that Positive Connections was beneficial. This intervention allowed teachers and staff to easily see which students they already knew well and which students would benefit from more interaction with teachers. This brief study offers several implications for future research and practice. First, experimental research is needed to determine the potential impact of Positive Connections on the quality of teacher-student interactions and positive school outcomes such as decreased discipline referrals, fewer drop outs, increased academic achievement, and increased graduation rates. Furthermore, research is needed to determine the intervention's effectiveness in a multi-tiered system of support.

Teachers could use Positive Connections as a Tier 1 support or a screening tool to determine students who may benefit from increased interaction with teachers. Positive Connections could also be used to identify students in need of more intensive and focused support at a Tier 2 level such as Check-in Check-Out (Filter et al., 2008; Simonsen, Myers, Briere, 2011). Due to its ease of use and low cost, Positive Connections could benefit teachers in rural or urban middle and high schools with limited resources.

References

- Brownell, M. T., Sindelar, P. T., Kiely, M., & Danielson, L. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Exceptional Children*, 76(3), 357–378.
- Brinkley, C., & Saarino, D. (2006). Involving students in school violence prevention: Are they willing to help? *Journal of School Violence*, 5, 93-106.
- Currier, S., Shields, J., Chesman, J., Langsam, F., Langsam, J., & Strauss, H. (2012). RAP coaching with teachers. *Reclaiming Children and Youth*, 20(4), 28-30.
- Filter, K. J., McKenna, M. K., Benedict, E. A., Horner, R. H., Todd, A. W., Watson, J. (2007). Check in/check out: A post-hoc evaluation of an efficient secondary-level targeted intervention for reducing problem behaviors in schools. *Education and Treatment of Children*, 30(1), 69-84.
- Fuchs, L., Fuchs, D., & Compton, D. (2010). Rethinking response to intervention at middle and high school. *School Psychology*, 39, 22-28.
- Fuchs, D., Fuchs, L., & Compton, D. (2012). Smart RTI: A next generation approach to multilevel prevention. *Exceptional Children*, 78, 263-279.
- Gaughan, E., Cerio, J.D., & Myers, R.A. (2001). *Lethal violence in schools: A national survey final report*. Alfred, NY: Alfred University.
- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et seq. (2004)(Reauthorization of the Individuals with Disabilities Education Act of 1990)
- Kennedy, M., & Ihle, F.M. (2012). The old man and the sea: Navigating the gulf between special educators and the content area classroom. *Learning Disabilities Research & Practice*, 27(1), 44-54.
- No Child Left Behind Act of 2001, 20 U.S.C. 70 § 6301 et seq. (2002).
- Shepard, J., Salina, C., Girtz, S., Cox, J., Davenport, N., & Hillard, T. (2012). Student success: Stories that inform high school change. *Reclaiming Children and Youth*, 21(2), 48-53.
- Simonsen, B., Myers, D., & Briere, D. E. (2011). Comparing a behavioral check- in/check-out (CICO) intervention to standard practice in an urban middle school setting using an experimental group design. *Journal of Positive Behavior Interventions*, 13, 31–48.
- Simonsen, B., Shaw, S. F., Faggella-Luby, M., Sugai, G., Coyne, M. D., Rhein, B., Madaus, J. W., & Alfano, M. (2010). A school-wide model for service delivery: Redefining special educators as interventionists. *Remedial and Special Education*, 31, 17-23.
- Alfano, M. (2010). A schoolwide model for service delivery: Redefining special educators as interventionists. *Remedial and Special Education*, 31(1), 17-23.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered approaches. *Exceptionality*, 17, 223-237.
- Vare, J. W., & Miller, K. S. (2000). Integrating caring across the curriculum. *ERS Spectrum*, 18(1), 27-35.
- Werner, E. (2012). Risk, resilience, and recovery. *Reclaiming Children and Youth*, 21(1), 18-24.

Appendix A

Positive Connections Survey

Positive Connections Survey	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree
This intervention was beneficial for staff.					
This intervention was beneficial for students.					
When I saw one of my students without a check by his or her name, I made an effort to connect with that student.					
This intervention made a difference with our students and staff.					
This intervention had an effect on my relationship with students.					
Is there anything you would add, or change about this intervention?					

Jennifer Bessette
 Rethink
 19 W. 21st St, Ste. 403
 New York, NY 10010

STRATEGIES FOR SUCCESSFUL TECHNOLOGY ADOPTION IN RURAL SCHOOLS

In an effort to aide student achievement, many rural school districts are turning towards online technology solutions. This paper will review three main challenges associated with technology adoption, and will demonstrate how districts nationwide have successfully adopted a special education technology platform to improve student outcomes.

Background

School districts nationwide are using technology as a means to improve both staff and student performance. Rural school districts specifically struggle with the in-district ability to provide professional development and access to specialists, and many are looking to online technology as a means to solve these challenges (Sundeen & Wienke, 2009). Access to professional development and access to specialists are associated with higher rates of student achievement (Yoon et al., 2007). However, there are challenges associated with technology adoption in rural school districts. One challenge is the lack of appropriate infrastructure to support new technologies. Many rural schools do not have the budget to hire a technology leader (Hawkes, Halverson, & Brockmueller, 2002). Without this leader, many district administrators are left to take on this role themselves. With limited time and experience with such technologies, many struggle to get new programs off the ground. A second challenge associated with implementing a new technology is the time needed for staff training on the functionality of new technologies. A one-time training is typically not sufficient for teachers to fully master a new program (Christensen, 2002). However, there are associated costs of providing additional training to staff (i.e. hiring substitutes and paying for a technology trainer to visit the district). A third challenge many districts face involves the development of an appropriate technology adoption plan (Moser, 2007). Strategies have been developed to address these challenges including virtual coaches, professional learning communities, and access to virtual technology training (Ermeling, Tatsui, & Young, 2014). Unfortunately, these strategies are not yet pervasively implemented across all districts, resulting in continued challenges.

Rethink is an award-winning program model for supporting students with disabilities in classroom settings. It offers an integrated and dynamic online solution, developed by nationally recognized experts in the field, providing teachers and staff the tools they need to improve student outcomes and gives school leaders the ability to evaluate program effectiveness and student outcomes. In July 2014, Rethink launched the Small School Support Program, offering customized virtual supports to small and rural school districts nationwide. This paper details some of the challenges Rethink's partner districts have faced, and some of the solutions established through the development of the Small School Support Program.

Challenges

One of the major challenges rural school districts face is lower rates of teacher recruitment and retention, particularly for special education positions (Elfers & Plecki, 2006). Decreased access to professional development as a contributing factor to this particular challenge (Elfers, Plecki, & Knapp, 2009). Professional development is often limited in rural areas due to a lack of specialists in the area and the cost of bringing an expert into the district to provide training (Ludlow, Conner, & Schechter, 2005). To combat this challenge, school districts have begun to turn towards professional development via online technologies.

The adoption of technology and online learning platforms does not come without challenges (Beggs, 2000). Learning a new technology can be daunting even when a trainer is sitting next to the learner. For districts in rural and remote areas, it is cost prohibitive to have a trainer visit a district to provide in-person training. While a larger suburban or urban district may turn to a technology lead for assistance in training staff, many rural districts are unable to hire or secure such a position.

Lack of Technology Lead. Many districts lack the budget for a true technology lead (Hawkes, Halverson, & Brockmueller, 2002). This tasks other professionals within a district, typically district administrators, with the responsibility of learning about new technology initiatives so they may serve in this role. Administrators likely have limited time to devote to new projects, and may have limited experience with technology. This results in overwhelmed and inexperienced administrators leading the charge.

Lack of Time for Professional Development. The research has shown one-time trainings are not sufficient for teachers to learn to successfully implement new technology (Christensen, 2002). Multiple training sessions can be costly. Districts may need to send staff to geographically distant locations to attend training or bring a technology trainer to the district. If a district does not have room in the existing professional development calendar, administration may need to hire substitutes for teachers to attend the training. Depending on the number of teachers a district needs to train, this could become quite costly; especially when it needs to occur across multiple training days.

Lack of Technology Adoption Plan. Technology adoption plans are crucial in determining the success of any new technology initiative. Overtaxed administrators do not have time to develop a detailed plan. Many times, they bring new technology in as a solution to a problem, but do not strategically think about how to implement this solution. In instances where an adoption plan does exist, it may not be realistic. Administrators may lay out a plan expecting teachers to implement a new program with fidelity without understanding the implementation lifecycle; not building in enough time and support for a successful implementation. When staff are unable to implement the technology according to the adoption plan, busy district administrators cannot address these difficulties and develop appropriate solutions.

Solutions

As Rethink became familiar with the unique challenges rural districts face in adopting new technology, we began to strategize with districts on easy-to-implement solutions to address these barriers.

Virtual Coaching. Virtual coaching is a great solution in districts when no technology lead is available. Virtual coaches can provide support to overwhelmed administrators burdened with filling the role of technology lead. Webinar technology has extended the reach of virtual coaches. Educators may access training online with a coach through a webinar, replacing an expensive or, more likely, an inaccessible on-site trainer. This model works well for any computer-based program teachers are learning to use. The coach demonstrates how to use the technology, and learners can try out the technology with the coach's guidance. Rethink's Small School Support Program relies heavily on virtual coaching through a webinar technology called GoToTraining (www.citrix.com). Through this technology, a virtual coach is able to demonstrate the technology. The educators have the opportunity to use the Rethink program with guidance from the coach. Through the technology, the virtual coach can view the onscreen actions of the educator. If an educator has a question, the virtual coach is easily able to view the educator's screen and provide further instruction. A virtual coach decreases costs for districts. The virtual training replaces those on-site training needs. Educators are also able to attend training from their own classrooms, potentially eliminating the need for substitute coverage, and again, decreasing training costs. The ability to attend training within their classroom also eliminates all travel time for the educators.

Video conferencing is another great tool deployed by virtual coaches (Rock et al., 2011). The conferencing is accomplished with a web-cam on a computer or mobile device, or through a more advanced video conferencing system, with cameras placed strategically around the classroom. Video conferencing can also be used in conjunction with bug-in-ear technology, in which the virtual coach speaks to the educator through an ear-piece as the educator is teaching or using the technology. The benefit of video conferencing is the coach is able to see the educator actively using the technology in the classroom, and can provide guidance on how to implement with fidelity.

Virtual coaches also connect with educators by phone. As staff learn how to use technology, they may opt to use phone support to troubleshoot issues. The virtual coach can answer questions quickly through brief conversations. A simple phone connection is accessible to educators at all levels of technology proficiency. This support encourages the educator to work hands-on with the technology, and not merely rely on the coach completing the task for them. It is important to note phone consultations should not be the primary vehicle of virtual coaching, but is an excellent added support.

Train the Trainer. While virtual coaches are an excellent resource, in-house training contributes to technology adoption. As previously discussed, school districts do not always have a designated technology lead in the district (Hawkes, Halverson, & Brockmueller, 2002). Even when a technology lead does exist, this individual may not be proficient in each new piece of technology a district implements. A train the trainer model distributes responsibilities; the task of becoming an expert in each technology tool does not fall on one person, it is shared across multiple personnel. In addition, train the trainer can also target those most interested in learning about a particular technology. Specific educators can be supported to develop knowledge and fluency on a

technology that directly impacts their work. One-time trainings are not effective for teachers to adopt new technologies in their classrooms (Christensen, 2002). An in-house trainer increases opportunities for training, coaching, and mentoring. Train the trainer also provides leadership opportunities for staff. Stepping into a training role for a district technology affords an educator interested in leadership a meaningful opportunity to learn and demonstrate their leadership skills. By providing opportunities for growth and leadership, rural school districts can attract and retain highly-qualified educators. Rethink has built on this concept by establishing a robust train the trainer course. The structure of this course can easily be replicated, establishing an in-house trainer on a variety of technology tools.

When implementing a train-the-trainer model, districts must first identify who the trainer(s) will be. Ideal trainers are early technology adopters, technologically savvy, possess leadership skills, and demonstrate excellent interpersonal skills. Once the trainer has been selected, it is then crucial to identify the responsibilities of the trainer. Trainers must be provided with the proper tools and resources to fulfill their duties. This might include a checklist on what to look for in the classroom or a list of questions/topics to discuss when meeting with educators. Trainers should also be provided with proper support and time to become proficient in the new technology. Ideally, districts will develop a support plan detailing how the trainer will develop proficiency in the technology, and a timeline for mastery. It is also crucial to assess the trainer's skill level and provide feedback on knowledge of the tool and competency as a mentor. If it is not possible to accomplish these tasks in-house, the train the trainer model can be implemented through the use of a virtual technology coach.

Professional Learning Communities. Professional Learning Communities (PLCs) are a cost-effective strategy for staff development. PLCs build a culture of collaboration, place a focus on student learning, allow teachers leadership opportunities, and help teachers feel they have increased authority. They also promote continuous teacher learning (Vescio, Ross, & Adams, 2008). As such, PLCs can promote teacher independence in learning new technology, and aid teacher dedication to technology. A lack of PLC and PD opportunities is a barrier to teacher recruitment and retention in rural areas (Sundeen & Wienke, 2009). A variety of PLC options exist, many of which have few hard costs to district to establish. Group webinars are a great way for educators to learn from their peers. The webinar can focus on utilizing technology or the benefits they have personally experienced using the technology. Hearing others' questions, comments, and ideas promotes a culture of collaboration. Rethink's Small School Support Program offers a monthly calendar of group webinars. Some of these webinars focus on how to use the technology, while others explore broader concepts in special education. Attendees are encouraged to engage verbally with their microphones or type into a chat box to discuss a variety of topics. Some educators also exchange email addresses and connect outside of the webinar environment as well.

Output and outcome discussions take the focus off of how to use technology, and focus instead on the result of the technology usage. If the technology has been brought into district to improve student performance through progress monitoring, a data chat can provide an excellent output (data collected) and outcome (student progress) discussion. By focusing on the outcomes, many educators develop a deeper understanding of the benefits of using the tool, and thus a stronger

dedication to implementing the technology. These discussions can be explored in district at a staff meeting or online through webinars, forums, and social media.

Peer support forums offer educators an independent strategy to learn to use technology. Most technology companies offer a forum allowing users to connect and ask each other questions. Additionally, websites such as EdWeb host forums for educators around implementing various technology tools in the classroom (www.edweb.net).

Social media is another great PLC outlet. Joining a PLC is a no-cost endeavor for educators. Educators can connect on Twitter (www.twitter.com) for discussions around technology utilizing specific hashtags (i.e. #edtech). This allows educators to connect and collaborate with others from outside of their own district, and deepen their understanding and dedication to using technology in the classroom. YouTube (www.YouTube.com) is great for accessing how-to videos from both technology companies and other educators. Pinterest (www.pinterest.com) allows educators to browse ideas and tips on implementing technology in the classroom. Educators can “pin” these ideas and save the resource to be viewed at a later time. These commercially available resources are often used by educators outside of their professional lives, ergo, they are easily adopted for professional purposes.

Technology Adoption Plan. Many barriers exist in technology adoption, including lack of time to learn new technology and the fear of new technology (Beggs, 2000). A technology adoption plan helps a district anticipate such obstacles and ensure a return on investment. Rethink assists districts in developing an adoption plan, and proactively reviews the plan on a quarterly basis with participating districts.

When establishing a technology adoption plan, it is important to set realistic goals. While it may be ideal for every teacher to implement the technology with every student, it might not be realistic to achieve that in the first month or even the first year. The plan is used to measure the success of the initiative. Have the goals been met? If not, why? Is the goal still important? If yes, what needs to be done to achieve the desired level of success? This plan should be the guiding document as a district rolls out new technology.

In developing the technology adoption plan, districts should start with “wh” questions:

- Who will be using the technology?
- When during the teaching day will they be using it? When will they be trained? When should educators begin implementing the technology?
- Why was the technology brought into the district?
- Where in the district will educators be accessing the tool?

District administrators also identify goals for the new technology. The goals should look beyond usage of the technology, and address the reason for using the technology. While output is important (merely using the technology), outcome (the result of using the technology) determines whether a district is seeing a true return on investment.

The next step is to explore expectations around the technology. Will this tool be a requirement or a resource? If it is not a job requirement, what will motivate staff to explore this tool? District

administrators must also determine how they will provide oversight. It is important to consider who will provide oversight, how will this person oversee the initiative, and when will oversight be provided. Without support, the initiative is not likely to succeed. The plan should also include a timeline for training and achieving all outlined goals. Importantly, progress on plan goals must be monitored throughout the year, and staff should be provided with feedback on their progress. It is important to proactively review the plan on a regular basis in order to identify any areas of in-need of attention early on.

Discussion

Technology can be a vehicle to improve both staff and student performance. Barriers to successfully implementing new technology exist and must be proactively addressed. In rural communities, many districts struggle with the lack of a technology lead, lack of time and resources to train staff, and the lack of a technology adoption plan. In an effort to combat these challenges, districts may turn to virtual coaches, in-house trainers, Professional Learning Communities (PLCs), and developing a technology adoption plan. Virtual coaches can save districts time (administrators do not need to master the tool themselves) and money (districts do not need to send staff away or bring an expert into the district). In-house trainers can be created through a train the trainer model. This model saves money on hiring an outside trainer while providing leadership opportunities for district professionals. PLCs offer educators a way to connect and learn from their peers in a cost-effective manner. Engagement in PLCs may also increase staff independence in using technology, and increase their dedication to using the tool. And finally, technology adoption plans help districts ensure new initiatives are successful and that districts see a return on investment. Rural school districts may benefit from implementing these strategies to ensure successful technology adoption.

References

- Beggs, T. A. (2000). Influences and barriers to the adoption of instructional technology. Proceedings of the Mid-South Instructional Technologies Conference (Murphreesboro, TN April 9-11, 2000). Retrieved from: <http://files.eric.ed.gov/fulltext/ED446764.pdf>
- Berry, A. B. (2012). The relationship of perceived support to satisfaction and commitment for special education teachers in rural areas. *Rural Special Education Quarterly*, 31(1), 3-14.
- Christiansen, R. (2002). Effects of technology integration education on the attitudes of teachers and students. *Journal of Research on Technology in Education*, 34(4), 411-433.
- Elfers, A. M., Plecki, M. L., & Knapp, M. S. (2006). Teacher Mobility: Looking More Closely at "The Movers" Within a State System. *Peabody Journal of Education*, 81(3), 94-127.
- Ermeling, B.A., Tatsui, T.T., Young, K.R. (2015). Virtual coaching for instructional leaders: A multi-method investigation of technology-enabled external assistance. *Teachers College Record*, 117(11).
- Gruenhagen, K., McCracken, T., & True, J. (1999). Using distance education technologies for the supervision of student teachers in remote rural schools. *Rural Special Education Quarterly*, 18(3-4), 58-65.
- Hawkes, M., Halverson, P., & Brockmueller, B. (2002). Technology facilitation in the rural school: An analysis of options. *Journal of Research in Rural Education*, 17 (3), 162-170.
- Hew, K. F., & Hara, N. (2007). Empirical study of motivators and barriers of teacher online knowledge sharing. *Educational Technology Research and Development*, 55(6), 573-595.
- Moser, F. Z. (2007). Faculty adoption of educational technology. *Educause Quarterly*, 1, 66-69.
- Rock, M. L., Zigmond, N. P., Gregg, M. & Gable, R. A. (2011). The power of virtual coaching. *Educational Leadership*, 69(2), 42-48.
- Scheeler, M. K., Congdon, M. & Stansberry, S. (2010). Providing immediate feedback to co-teachers through bug-in-ear technology: An effective method of peer coaching in inclusion classrooms. Teacher Education and Special Education: *The Journal of the Teacher Education Division of the Council for Exceptional Children*, 33(1), 83-96.
doi:10.1177/0888406409357013
- Sundeen, T. H., & Wienke, W. D. (2009). A model for recruiting and preparing new rural special educators: Mining untapped potential. *Rural Special Education Quarterly*, 28(4), 3-10.
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24(1), 80-91.
- Williams, J. M., Martin, S. M., & Hess, R. K. (2002). Personnel preparation and service delivery issues in rural areas: The state of the art. *Rural Special Education Quarterly*, 21(4), 31-39.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>

Suzanne B. O’Keeffe
 Catherine M. Medina
 Northern Arizona University
 15451 N. 28th Avenue
 Phoenix, AZ 85053

ENGAGING INCLUSIVE EDUCATORS: TEACHING CULTURALLY AND LINGUISTICALLY DIVERSE EXCEPTIONAL (CLDE) STUDENTS IN MIDDLE SCHOOL CLASSROOMS

Over the last 55 years, there have been a number of judicial cases and legislative actions that have changed the way in which students with disabilities are educated within the United States. Perhaps the most controversial is the least restrictive environment (LRE) initiative under the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA). Although many special needs advocates determined the LRE to be a large human rights victory for students with disabilities, many lawmakers are now discovering that the challenges associated with this law are far greater than the benefits. An increase in school litigation since the original 1997 Individuals with Disabilities Education Act has alerted researchers and educators that the least restrictive environment still holds many limitations for students with special needs (Etscheidt, 2006).

Least Restrictive Environment, Demographics, and Achievement

Inclusive Education is the process of educating students with disabilities alongside their typically developing peers. The general education environment within the continuum of special education services is referred to as an inclusion classroom. Inclusion education is defined as partial or full inclusion of students with disabilities into regular education classrooms with the level of additional support, if any, dependent on the severity and number of students with disabilities included in this setting (McNally, Cole, & Waugh, 2001). Level of support can refer to a one on one paraprofessional, special education teacher, collaborative partners, or no additional support, depending on the severity and number of students with disabilities within the inclusion setting.

Although many researchers have hailed inclusion a victory, it is still unclear as to how achievement is being measured and what factors determine a successful inclusion classroom. To further complicate the issue of inclusion and achievement, there are an increasing number of students entering American schools labeled as culturally and linguistically diverse (CLD) with, or at risk for, disabilities (Lynch & Hanson, 1998; Obiakor & Utley, 1997). The 1970 Census reported that approximately 12% of the U.S. population was labeled as non-White. Yet, the 2000 Census reported the same population as having grown to 30%. Additionally, Asian and Hispanic populations were reported to have made the greatest population growth between 1970 and 2000, while White, non-Hispanics made the least amount of growth (Lynch & Hanson, 1998). The 2010 United States Census report indicates that Hispanic or Latino populations increased by 43% since 2000. Additionally, 27.4% of the United States is labeled as Non-White (United States Census Report, 2010), compared to 12% of the population in 1970 (Lynch & Hanson, 1998). As this trend continues, it is estimated that by the year 2050, half of the United States population will be of

African American, Hispanic, Native American, or Asian/Pacific descent (Cartledge, Kea, & Simmons-Reed, 2002; Gollnick & Chinn, 2002).

While school demographics continue to shift and teachers are educating a variety of learners in inclusive settings, there is still very little research that measures academic achievement for students with special needs in integrated settings (Farrell, Dyson, Polat, Hutcheson, & Gallannaugh, 2007). Research indicates CLDE students with, and at risk for, disabilities hold the greatest need for quality instruction. Cartledge and Kourea (2008) report that a lack of evidence-based, culturally responsive instruction is a contributing factor for low educational achievement in CLDE learners. CLDE learners are often taught using Eurocentric instructional strategies, which has an adverse effect on their ability to demonstrate mastery of classroom instruction (Obiakor & McCollin, 2010) and curricular assessments (Abedi, 2006). Instructional practices which focus on narrowed curriculum (Rosenbusch, 2005) and strict and repetitive test preparation strategies are becoming increasingly present in general education classrooms, making content that recognizes a student's culture, diversity, history, and personal experience obsolete (Au, 2009). As a result, students from culturally and linguistically diverse backgrounds may not see a curriculum that is compatible to them or for them. Many CLDE students learn early to disengage from an unfamiliar and non-motivating curriculum which, in turn, leads to low academic achievement in a general education setting (Harry & Klingner, 2006).

Culturally Responsive Inclusive Practices

In response to challenges associated with educating students who are both diverse and exceptional, it is recommended that all teachers learn effective research-based teaching practices that accommodate for both diversity and disability. Both culturally responsive pedagogy and inclusive instructional practices can be used to maximize the opportunity for CLD/E students to engage with the general education curriculum.

Culturally Responsive Pedagogy

Culturally responsive pedagogy (CRP) is a vibrant exchange between the culture of a school and the culture within a community. Student language, prior knowledge, and cultural experiences are used as a springboard for new learning in the classroom (Utley, Obiakor, & Bakken, 2011). According to Gay (2000), some of the facets of CRP include classroom climate, students to teacher relationships, instructional techniques, learning content, curriculum context, and performance assessments. There are multiple ways that teachers can support academic achievement of English language learners in a general education setting. One way is to recognize and accept one's own culture (Irvine & Armento, 2001; Knight & Wiseman, 2005). Recognizing one's own culture promotes self-acceptance and cultural pride for students from diverse backgrounds. Another way to support a culturally responsive classroom environment is by maintaining high academic expectations for all learners (Irvine & Armento, 2001; Knight & Wiseman, 2005; Schmidt & Ma, 2006). Teachers also show cultural acceptance by demonstrating equality for all students (Knight & Wiseman, 2005) and by believing that all students are capable of learning (Ladson-Billings, 2001). Additionally, teachers should be very explicit about what achievement looks like in classrooms that support a culturally responsive pedagogy (Ladson-Billings, 2001). This gives each learner a clear indication of how s/he can succeed in the class. Next, teachers can involve parents

and the community in the classroom (Irvine & Armento, 2001; Knight & Wiseman, 2005) by asking them to share information about their native languages and cultures (Karathanos, 2010). Finally, teachers can support a culturally responsive classroom culture by recognizing socio-political issues in the community that affect student achievement (Knight & Wiseman, 2005), and by preparing students to make changes in their society (Irvine & Armento, 2001).

Universal Design Curriculum

On the other hand, inclusive practices are used to differentiate instruction so that each student is challenged at his/her individual learning level. A common approach to meeting the cognitive needs of students with special needs is universally designed curriculum (Villa, Thousand, Nevin & Liston, 2005). “Using universal design, general and special educators can rely on both technological and non-technological strategies and methods to differentiate the curriculum and instruction for students who typically struggle to acquire and synthesize information using traditional reading and writing activities” (Michael & Trezek, 2006, p. 313). In other words, the teacher is responsible for implementing curriculum adaptations such as accommodations, modifications, and in some cases, assistive technology for students who require these supports to access the general education curriculum. There are nine principles that support universal design for learning (UDL) in the classroom (Salend, 2011) which include: (a) equitable use, (b) flexible use, (c) simple and intuitive use, (d) perceptible information, (e) tolerance for error, (f) low physical effort, (g) size and space for approach and use, (h) community of learners, and (i) inclusive environment. UDL can be effectively applied to an inclusive setting by multiple means of representation, expression, and engagement. Essentially, UDL allows all students access to the general education curriculum through careful planning of inclusive instructional techniques. Educators who use this strategy must have a firm understanding of his or her students’ specific strengths and abilities when planning for future lessons.

Strategies to Support CLDE Learners

There are four specific proficiencies and skills that educators must be able to demonstrate an understanding of when educating CLDE students. They include (a) knowledge of each student’s language proficiency and needs to assist with development of speech and language (Ortiz & García, 1990), (b) an understanding of cultural factors that affect educational planning and delivery (Cartledge & Kourea, 2008), (c) knowledge of culturally and linguistically appropriate materials and instructional strategies to support learning (Cartledge & Kourea, 2008), and (d) an understanding of the characteristics of a learning environment that promotes success for all students. Instructional strategies that are widely used to educate CLDE students can be organized into categories such as: instructional supports, peer supports, language acquisition, active and applied learning, targeted teaching, instructional scaffolding, and reciprocal teaching.

Instructional Aids

Instructional supports such as accommodations and modifications are useful for supporting CLDE learners in inclusive settings. Accommodations can be used to meet the needs of a variety of learning styles, which include: perceptual styles (e.g., kinesthetic vs. auditory learning), cognitive styles (e.g., deductive vs. inductive), and preferred style of participation (e.g., student-directed vs.

teacher-directed learning) (García & Malkin, 1993). Additionally, teachers can modify assignments to capitalize on skills that are commonly used within native cultures, such as oral traditions and print/picture combinations (Peterson & Montfort, 2004).

Peer Supports

Peer supports such as cooperative learning (García & Malkin, 1993; Gersten & Baker, 2000) and class wide peer tutoring are beneficial because these strategies increase independence for CLDE students in the classroom while allowing students to engage with the curriculum (Hart, 2009). Cooperative learning is an instructional strategy that groups students in heterogeneous working communities to collaborate and cooperate on an instructional task. Peer tutoring is a strategy that pairs students based on strengths and needs. When native English speakers are paired with English language learners, peer tutoring creates opportunities to practice speaking in authentic, conversational situations. Students have the opportunity to practice conversing, listening, and sharing ideas, while receiving immediate clarification and feedback from group members (Allison & Rehm, 2007). Additionally, peer tutoring motivates students to learn, encourages communication, increases achievement, and promotes friendships between students from different cultural backgrounds (Snowman & Biehler, 2003).

Language Acquisition

The language experience approach is an instructional strategy that utilized a student's prior experience with language as a foundation to build oral language (Perez, 2000). For this approach, teachers transcribe a student's thoughts verbatim and then the student shares his or her written ideas with classmates (Hart, 2009). This technique serves as a pathway to activate a student's prior knowledge (Dorr, 2006), while assisting students with the understanding that print can act as a form of personal communication (Hart, 2009). Culturally diverse exceptional students benefit from multiple opportunities to learn new vocabulary words in an academic setting (Gersten & Baker, 2000). Additionally, a diverse student with special needs would benefit from informal and formal opportunities to use English in the classroom. This allows the students to learn both basic conversational English and instructional vocabulary (Gersten & Baker, 2000).

Active and Applied Learning

Active learning is when a teacher engages the student to be a part of the learning process. Some examples of active learning include kinesthetic activities, making the lesson relevant to the learner (Cartledge & Kourea, 2008), and engaging in genuine dialogue with students (García & Malkin, 1993). In addition, Peterson and Montfort (2004) suggest combining scholastic material with visual-kinesthetic-tactile activities. This type of instruction is appealing and allows the students to connect physical movements with cognitive concepts. It also engages students in higher-level thinking activities (Obiakor & McCollin, 2010). In addition, CLDE students benefit from having sufficient practice of a specific skill or task to achieve mastery (García & Malkin, 1993). Next, delivery feedback allows the student to hear explicit instructional feedback to help guide their future learning (Gersten & Baker, 2000). This could be done by error correcting or by using explicit praise strategies (Cartledge & Kourea, 2008).

Targeted Teaching

Instructional pacing is also important because it allows an educator to adjust the pace of instruction to accommodate for the specific needs of the learners. This includes building in extra wait time for answering questions when working with CLDE students (Cartledge & Kourea, 2008). This strategy gives the student time to process the question or task, ask clarifying questions, or use code switching. Priming is an instructional support that a teacher can provide for a CLDE student by exposing the student to a skill or activity prior to engaging the learner in a whole group lesson (Hart, 2009). This strategy takes the pressure off of the student to perform an unfamiliar skill in front of peers by allowing him or her prior exposure to the task. This instructional technique promotes active engagement and allows the student to then assume the role of an expert when working in a whole group context (Werner, Vismara, Koegel, & Koegel, 2006).

Instructional Scaffolding

Total physical response is when the teacher puts words and phrases together with physical movements to assist students in internalizing the concept (Hart, 2009). This strategy is useful for students with a variety of language and learning needs, and has been particularly effective with students who have little to no use of the target language (Asher, 2000). Total physical response is a good instructional fit for CLDE students because of its high level of student engagement, participatory approach, and ability to provide a variety of opportunities for students to access content.

Reciprocal Teaching

Reciprocal teaching is a technique used to increase reading comprehension for students who struggle with understanding text (Palinscar & Herrenkohl, 2002). In reciprocal teaching, students are taught four strategies: prediction, summarization, question generation, and clarification (Hart, 2009). The teacher models these strategies for the students and gradually decreases instructional support as students gain proficiency. The end result is to have the students become the facilitators by leading discussions about a given text (Hart, 2009).

Final Thoughts

Best practices are relevant to all learners, both typical and atypical, and in both rural and urban settings. Educating middle school students can be a complex process, considering the social and emotional changes that adolescents are experiencing during this time. The addition of diversity and disability turn best instructional practice for this population of students into a multifaceted consideration. Inclusive educators can overcome these educational challenges by incorporating engaging and diversified instruction into their classrooms using active, collaborative, and targeted strategies. Incorporating new and engaging instructional strategies may help bridge the inclusive educational divide between CLD/E learners and their typically developing colleagues.

References

- Abedi, J. (2006). Psychometric issues in the ELL assessment and special education eligibility. *Teachers College Record*, 108, 2282-2303.
- Asher, J. (2000). *Learning another language through actions: The complete teacher's guidebook* (6th ed.). Gatos, CA: Sky.
- Au, W. W. (2009). High-stakes testing and discursive control: The triple bind for nonstandard student identities. *Multicultural Perspectives*, 11, 65-71.
- Cartledge, G., Kea, C., & Simmons-Reed, E. (2002). Serving culturally diverse children with serious emotional disturbance and their families. *Journal of Child and Family Studies*, 11, 113-126.
- Cartledge, G., & Kourea, L. (2008). Culturally responsive classrooms for culturally diverse students with and at risk for disabilities. *Exceptional Children*, 74, 351-371.
- Dorr, R. E. (2006). Something old is new again: Revisiting language experience. *Reading Teacher*, 60, 138-146.
- Etscheidt, S. (2006). Least restrictive and natural environments for young children with disabilities: A legal analysis of issues. *Topics in Early Childhood Special Education*, 26(3), 167-178.
- Farrell, P., Dyson, A., Polat, F., Hutcheson, G., & Gallannaugh, F. (2007). The relationship between inclusion and academic achievement in English mainstream schools. *School Effectiveness and School Improvement*, 18, 335-35.
- García, S. B., & Malkin, D. H. (1993). Toward defining programs and services for culturally and linguistically diverse learners in special education. *Teaching Exceptional Children*, 26, 52-58.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Gersten, R., & Baker, S. (2000). What we know about effective instructional practices for English-language learners. *Exceptional Children*, 66, 454-470.
- Gollnick, D. M., & Chinn, P. C. (2002). *Multicultural education in a pluralistic society*. Upper Saddle River, NJ: Merrill Prentice-Hall.
- Harrower, J. K., & Dunlap, G. (2001). Including children with autism in general education classrooms. *Behavior Modification*, 25, 762-784.
- Harry, B., & Klingner, J. (2006). *Why are there so many minority students in special education? Understanding race and disability in schools*. New York, NY: Teachers College Press.
- Hart, J. E. (2009). Strategies for culturally and linguistically diverse students with special needs. *Preventing School Failure*, 53, 197-206.
- Irvine, J. J., & Armento, B. (2001). *Culturally responsive teaching: Lesson planning for elementary and middle grades*. Boston, MA: McGraw-Hill.
- Karathanos, K. A. (2010). Teaching English language learner students in U.S. mainstream schools: Intersections of language, pedagogy, and power. *International Journal of Inclusive Education*, 14, 49-65.
- Knight, S. L., & Wiseman, D. L. (2005). Professional development for teachers of diverse students: A summary of the research. *Journal of Education for Students Placed at Risk*, 10, 387-405.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32, 465-491.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco, CA: Jossey-Bass.

- Lynch, E., & Hanson, M. (1998). *Developing cross-cultural competence: A guide for working with children and their families*. Baltimore, MD: Brookes.
- McNally, R. D., Cole, P. G., & Waugh, R. F. (2001). Regular teachers' attitudes to the need for additional classroom support for the inclusion of students with intellectual disability. *Journal of Intellectual & Developmental Disability*, 26, 257-273.
- Michael, M., & Trezek, B. (2006). Universal design and multiple literacies: Creating access and ownership for students with disabilities. *Theory Into Practice*, 45, 311-318.
- Obiakor, F. E., & McCollin, M. J. (2010). Using the comprehensive support model to work with culturally and linguistically diverse students with learning disabilities. *Learning Disabilities: A Contemporary Journal*, 9, 19-32.
- Obiakor, F. E., & Utley, C. A. (1997). Rethinking preservice preparation for teachers in the learning disabilities field: Workable multicultural strategies. *Learning Disabilities Research and Practice*, 12, 100-106.
- Ortiz, A. A., & García, S. B. (1990). Using language assessment data for language and instructional planning for exceptional bilingual students. In A. L. Carrasquillo & R. E. Baecher (Eds.), *Teaching the bilingual special education student* (pp. 25-47). Norwood, NJ: Ablex.
- Palinscar, A. S., & Herrenkohl, L. R. (2002). Designing collaborative learning contexts. *Theory Into Practice*, 41, 26-32.
- Perez, S. A. (2000). Teaching second language learners in the regular classroom. *Reading Improvement*, 37, 45-48.
- Peterson, P. J., & Montfort, L. (2004). Creating culturally dynamic materials for rural culturally and linguistically diverse exceptional students. *Rural Special Education Quarterly*, 23, 25-29.
- Rosenbusch, M. H. (2005). The No Child Left Behind Act and teaching and learning languages in U.S. schools. *The Modern Language Journal*, 89, 250-261.
- Salend, S. J. (2011). *Creating inclusive classrooms: Effective and reflective strategies* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Schmidt, P. R., & Ma, W. (2006). *50 literacy strategies for culturally responsive teaching, K-8*. Thousand Oaks, CA: Corwin Press.
- United States Census (2010). Retrieved from: <http://2010.census.gov/2010census/data/>
- Utley, C. A., Obiakor, F. E., Bakken, J. P. (2011). Culturally responsive practices for culturally and linguistically diverse students with learning disabilities. *Learning Disabilities: A Contemporary Journal*, 9, 5-18.
- Villa, R. A., Thousand, J. S., Nevin, A., & Liston, A. (2005). Successful inclusive practices in middle and secondary schools. *American Secondary Education*, 33, 33-50.
- Werner, G. A., Vismara, L. A., Koegel, R. L., & Koegel, L. K. (2006). Play dates, social interactions, and friendships. In R. L. Koegel & L. K. Koegel (Eds.), *Pivotal response treatments for autism: Communication, social, and academic development* (pp. 199-216). Baltimore, MD: Brookes.

Dr. Susan M. Schultz
St. John Fisher College
3690 East Avenue
Rochester, NY 14618

POVERTY AND CHILDREN WITH SPECIAL NEEDS: IMPLICATIONS AND STRATEGIES FOR THE CLASSROOM

Abstract

The rate of poverty has steadily increased across the nation. Living in poverty affects health, academic growth, social-emotional development and classroom engagement. Many preservice teachers in our program come from suburban environments and have little experience working and interacting with diverse populations. Therefore, using service learning and civic engagement as a framework for understanding poverty as a whole, and students with special needs within that context, will help prepare Inclusive Education preservice teachers to address student needs.

Poverty

More than 16 million children residing in the United States live in families with incomes below the poverty level. According to the National Center for Children in Poverty (NCCP; 2014), in economic terms, a standard of \$23,550 for a family of four is benchmark for poverty and 45% of US children live in families at or below that level. Additionally, the NCCP (2014) reports that research shows families need about twice that just to cover basic expenses. "Poverty can impede children's ability to learn and contribute to social, emotional, and behavioral problems" (para. 2) and can also lead to poor health. The NCCP also stresses that "research is clear that poverty is the single greatest threat to children's well-being" (para. 3). Families with children with disabilities face additional financial challenges such as the cost of additional care for their disabled child and barriers to entering and maintaining employment. The Every Child Matters campaign (2007) asserts that it costs three times as much to raise a child with a disability as it does to raise a nondisabled child.

Types of Poverty

Poverty for some families is situational, occurring when a lack of resources due to an event such as chronic illness, job loss, or divorce transpires. Generational poverty, however, occurs when two generations have been born into poverty. People living in urban poverty deal with "a complex aggregate of chronic and acute stressors (including crowding, violence, and noise) and are dependent on often inadequate large city services," notes Jensen (2009, p. 6). Rural poverty is growing at a rate exceeding the growth of urban poverty. In areas with rural poverty there are equity and access issues regarding services. Job opportunities are fewer (Jensen, 2009). It is valuable for preservice teachers to recognize that the implications can be different for students in their respective situations. Most schools and businesses operate using middle class rules "stressing

authority, time, work, achievement, and order” (LeCompte, 1978, p. 22), often implicitly; rules foreign to, or at the very least not always embraced by those living in poverty.

Poverty and Students with Special Needs

Children in poverty are likely to live in substandard housing, where homes are more likely to be poorly maintained, and possibly exposing children to lead based paint and/or molds and dusts that cause asthma. Other risk factors include poor nutrition, lack of quality health care, and lack of transportation. People who live in chronic poverty are socially devalued, where they are mistreated and denied social opportunities, and have less access to resources on an ongoing basis (Lustig & Strauser, 2007). When children with special needs live in poverty, the problems they face become more complex and multidimensional.

The Poverty Disability Model demonstrates that the likelihood of disability increases when children are born into poverty. Mothers living in poverty have about a 40% higher risk of having a child (or children) with a disability. They are less likely to get prenatal care, more likely to have preterm births, and to give birth to children with fetal alcoholism (Lustig & Strauser, 2007).

Additionally, many parents are unable to work because of the lack of, or cost of, appropriate child care. The stress of caring for a child with a disability can place strain on family relationships (Every Child Matters, 2007).

Culturally Responsive Teaching: Learning Through Experiences

Preservice teachers often have little experience understanding and interacting with others outside of their own socio-economic status. To gain an understanding of what is happening in their own communities, preservice teachers reviewed statistics for their communities, surrounding counties, their home state, and the nation. Our home community in Rochester, New York currently has more people living at less than half the poverty level than any other similarly sized U.S. city, and the most extreme poverty (family of four with income less than \$11,925) in the nation. Concentrated poverty levels are getting worse, rising from 31 to 32.9% over the last year, with statistics being high for all racial and ethnic groups. Rochester is the 5th poorest city among the nation’s top 75 metro areas (Detroit, Cleveland, Dayton, Hartford, Rochester), and the second poorest city compared to similarly sized cities (Hartford, Rochester). It is the only U.S. city where over half the children live in poverty, and Rochester has the highest rate of extreme poverty at 16.2 %. Further, there are 14,000 people living in conditions just above the federal poverty guideline (Rochester Area Community Foundation and ACT Rochester, 2015). Clearly, this is a contest city residents do not want to “win.”

Using Milner and Laughter’s (2015) misconceptions and mindsets, discussions held with preservice teachers focuses on three of the five mindsets to help them reframe their concepts of race, culture and ethnicity: Mindset 1, *If I acknowledge the racial backgrounds of my students or myself, then I may be considered a racist*, Mindset 2, *I treat all of my students the same, regardless*

of their racial or ethnic backgrounds, and Mindset 3, I focus on teaching children and ignore the race of my students because race is irrelevant. We address these mindsets and misconceptions and move from discussion to understanding lived realities by using strategies for culturally responsive teaching.

In field placement settings, preservice teachers were able to address misconceptions held by students. During one field placement, when careers were being discussed, a teacher candidate noticed no one wanted to become a teacher. When she brought this up, one of the students said “Black people don’t become no teachers, Miss.” When she challenged this assumption, the student said, “Look around.” This teacher candidate was comfortable in this interaction to promote teaching as a future possibility as a career choice for the students. She challenged the students to become future role models for others. One preservice teacher wrote in her reflection assignment that her most memorable moment was when a student ran up to her, hugged her and said she wanted to be like her when she was older. The students in her class were thinking about college, careers and their futures beyond their immediate situations.

Preservice teachers also gained a better understanding of themselves. Hidden biases were brought to attention through participating in activities like Project Implicit. Hidden bias tests/implicit association tests can measure unconscious bias that teacher candidates are unaware they have. Teaching tolerance (2016) reports: “bias thought to be absent or extinguished remain as ‘mental residue’ in most of us. Studies show people can be consciously committed to egalitarianism, and deliberately work to behave without prejudice, yet still possess hidden negative prejudices or stereotype” (<http://www.tolerance.org/Hidden-bias>). There are several dozen variations of hidden bias tests developed by researchers at Harvard University, the University of Virginia, and the University of Washington. You can take Project Implicit tests here: <https://implicit.harvard.edu/implicit/>

Service Learning

Service learning experiences are one way to provide a reciprocal relationship that links academics to the service in ways that both the students and partners benefit. Integrating service learning into a teacher education preparation program helped preservice teachers learn to develop cross-cultural awareness and understanding of others who were, in some way, different from themselves, while learning their course content. Service learning differs from community service in several ways: it includes reflection, is sustainable, it extends the curriculum, and it benefits all partners.

Hildenbrand and Schultz (2015) assert service learning experiences can “provide for pre-service teachers to become engaged with individuals who have different life experiences from their own and potentially shift principles of multicultural education from an abstraction to reality” (2015, p. 263). This helped preservice teachers move from volunteer status to social change agents. At first the concept can seem overwhelming to teacher candidates. One noted, “At first I was overwhelmed when I found out that (service learning) was on top of field placement hours,” but she

went on to report her group ended up completing more hours than they were required to because “we were going to (service site) every week, even twice a week when we were all able to... The fact they looked up to us like that made us want to keep going back.”

Service learning projects at the college helped preservice teachers better understand the economic, cultural, and language diversity present in our schools. One service project, in conjunction with a local charter school for adolescent girls focused on building a “Thanksgiving Tree” where each girl had the opportunity to write what or who they were thankful for, or an encouraging message to other girls at the school. The school indicated the project helped the girls to reflect on the positive aspects of their lives, and provided a symbol of hope for brighter futures. This was a simple, low cost activity with a high impact factor. Jensen (2009) asserts that given family stressors, students living in poverty are more likely to need and less likely to get caring, dependable adults in their lives, and they often look to teachers for such support.

In a different course, preservice teachers worked with a local children’s center that housed Universal Preschool classrooms, Head Start classrooms, a community day care, and an afterschool program. Preservice teachers were assigned to classrooms in groups of two, where they interacted with children and also completed lessons that focused on language development and literacy. The preservice teachers had opportunities to interact one on one with the children who lived in poverty. These one on one interactions dispelled stereotypes and assumptions, and created new realities for the preservice teachers who became trusted adults in the lives of the children. One teacher candidate said “I enjoyed reading countless of stories.” And another notes “Every time we walked through the door and sat down, someone was on our lap wanted to be read to!” Engle and Black (2008) note that poverty affects a child’s developmental and educational outcomes beginning in the second year of life, and risks that occur in the early years have long-lasting consequences. The ability to “use and profit from school has been recognized as playing a unique role in escape from poverty in the United States” (p.243). Subsequently, school readiness plays an important part and the children that preservice teachers worked with benefited from education opportunities and helped to place them on the trajectory towards school success.

Reality Tour

Participating in a reality tour anti-poverty movement is another activity that encourages preservice teachers to look more closely at their students’ lived experiences. In Rochester, New York, the *Reality Tour* takes a ride through town, stopping to hear from people who live in poverty every day, from the homeless to the working poor. Participants also get to interact with organizations that support individuals and families living in poverty (Kasper, Affronti, & Sydor, 2009). Many communities conduct organized reality tours. Bennett (2008), who is an assistant professor in Georgia, also supports including a reality tour to help students become more aware of socioeconomic differences. Her students complete a self-guided driving tour. She states “preservice teachers realized many students only have access to their course content during the school day: they have limited outside resources with which to learn about content” (p. 253). Tours like these encourage teacher candidates to think about the diverse backgrounds of their students beyond the typical exposure of facts and figures, and personalized the experience, leaving students to take ownership of the needs of their students, and empathize with those living in poverty.

As a result of the activities above, preservice teachers can gain a deep understanding how limited outside resources can impact what happens in the classroom. Wexler (2014) posits that while it is not the only cause, effects of poverty like access to health care, toxic environments, drugs, and violence, are factors that contribute to learning and other disabilities and inevitably, low performance on standardized tests, noting that “longitudinal studies indicate that the lowest test scores on standardized tests are largely clustered in the poorest school districts” (p. 54).

Promoting Good Nutrition

Proper nutrition is important for all children, however, when it comes to children with disabilities, “timely and cost-effective nutrition interventions can promote health maintenance and reduce the risk of comorbidities and complications” (Ptomey & Wittenbrook, 2015, p. 593). Additionally, children in poor environmental living conditions are more apt to be exposed to lead because properties have been poorly maintained. Reduction of risk to children can be addressed through nutritional factors by providing diets rich in calcium, iron, and vitamins D and C, as a secondary prevention method after removing exposure to lead (Gallicchio, Scherer, & Sexton, 2002), increasing the long term impact of a good diet.

Poverty and obesity are also linked as individuals from low socioeconomic groups tend to have less access to healthy foods. Nutrient rich high quality foods cost more, while fats and sweets cost less notes Drewnowski (2009), who also reports that low-income neighborhoods also attract more fast food restaurants. Strecker (2011) asserts that it is important to educate children, including those with disabilities on the importance of physical activity and healthy eating to address the obesity epidemic. She points out that optimally, children receive half their daily calories at school, so it is important for schools to provide healthy choices, and for children to make them. Children with disabilities are at greater risk for obesity since it is often more difficult for them to be healthy and/or be active.

One of our service learning projects included developing lesson plans for local early childhood program P-2. This gave our preservice teachers the opportunity to practice differentiation in lesson planning as well as promote good nutrition and healthy choices. Additionally, preservice teachers wrote and received a grant to create nutrition kits (totes with materials appropriate for each lesson plan). Lessons also focused on healthy habits, like washing hands before eating.

Literacy Development Strategies

Preservice teachers addressed literacy inequities they discovered locally through several methods. The student chapter of Council for Exceptional Children initiated a pen pals program to get students in area classrooms writing by choice. Service learning classes completed “Classroom Makeovers” where they painted classrooms, provided classroom libraries and school supplies. These programs created renewed energy and engagement for students and teachers.

In another project, they created take home activity bags to encourage parent/child interactions around literacy activities.

It is not uncommon to find one college group or another conducting a book drive. When preservice teachers heard that many of the students did not own their very own book, they created an action plan, wrote a grant for books, and then conducted a reading pen pals program around books selected by partnering classroom teachers (Grade 1- Pete the Cat- I Love My White Shoes, Grade 3- More than Anything Else, Grade 5- A View from the Cherry Tree). It was a striking comparison for these preservice teachers who lived their childhood surrounded by a multitude of books and who were frequently read to.

In a different service project, preservice teachers worked with an area library program that acts as a neighborhood hub for families who recently immigrated to the United States. Of the families that regularly attend, 90% are a refugee population, representing 14 different nationalities and languages. On a daily basis, 40-50 children attend. Through the creation of word walls, personalized books and take home activities, preservice teachers set up opportunities for English Language Learners to improve language and literacy. Preservice teachers also assisted at the after school tutoring center. One stated she learned first- hand that when you “build positive student-teacher relationships the students are more likely to engage fully” and another stated, “I learned how important it is to have a connection with your students... I knew them and how they learned.” The value of the experience was summed up by a preservice teacher who said “I never would have thought that working in a library would change my perspective.”

Summary: Preservice teachers making a difference.

Living in poverty can affect a child’s ability to learn and impact his or her long term academic progress. Students with disabilities face additional barriers, and living in poverty creates a more complex and multidimensional set of risk factors that can impede academic success. Through a combination of service learning and community engagement activities, preservice teachers were able to make a difference in their community while gaining essential conceptual skills. Preservice teachers also gained a deeper understanding of educational inequities and the needs of their communities while making theory to practice connections. They know they are making a difference now, but the potential for the long term impact by preservice teachers on the futures of students they work with is immeasurable.

References

- Bennett, M. M. (2008, July/August). Understanding the students we teach: Poverty in the Classroom. *Journal of Educational Strategies, Issues and Ideas*, 81(6), 251-256.
- Drewnowski, A. (2009). Obesity, diets, and social inequalities. *Nutrition Reviews*, 67(Suppl. 1), 56-539.
- Engle, P. L., & Black, M. M. (2008). The effect of poverty on child development and educational outcomes. In *Reducing the Impact of Poverty on Health and Human Development: Scientific Approaches*, (pp. 243-256). Oxford, UK: Blackwell Publishing
- Every Child Matters (2007). Disabled children and child poverty. Council for Disabled Children. Retrieved from: http://www.edcm.org.uk/media/5611/disabled_children_and_child_poverty.pdf
- Gallicchio, L., Scherer, R. W., & Sexton, M. (2002). Influence of nutrient intake on blood lead levels of young children at risk for lead poisoning. *Environmental Health Perspectives* 110(12), 767-772.
- Jensen, E. (2009). *Teaching with poverty in mind: What being poor does to kids' brains and what schools can do about it*. Alexandria, VA: ASCD
- Kasper, B., Affronti, M., & Sydor, M. (2009). The reality tour model: Crossing boundaries in the movement to end poverty. *Journal of Poverty*, 13(4), 462-479.
- LeCompte, M. (1978). Learning to work: The hidden curriculum of the classroom. *Council on Anthropology and Education*, 9(1), 22-37.
- Lustig, D. C., & Strauser, D. R. (2007, Summer). Causal relationships between poverty and disability. *Rehabilitation Counseling Bulletin* 50(4), 194-202.
- Milner, R. H., & Laughter, J. C. (2015). But good intentions are NOT enough: Preparing teachers to center race and poverty. *Urban Review*, 47, 341-363. doi: 10.1007/s11256-014-0295-4
- National Center for Children in Poverty (2014). *Child Poverty*. Columbia University. Mailman School of Public Health. Department of Health Policy & Management. Retrieved from: <http://www.nccp.org/topics/childpoverty.html>
- Ptomey, L. T., & Wittenbrook, W. (2015). Position of the Academy of Nutrition and Dietetics: Nutrition services for individuals with intellectual and developmental disabilities with special health care needs. *Journal of the Academy of Nutrition and Dietetics*, 115(4), 593-608.
- Rochester Area Community Foundation and ACT Rochester (2015). *Benchmarking Rochester's Poverty*. A 2015 Update and Deeper Analysis of Poverty in the City of Rochester.
- Rochester-Monroe Anti-Poverty Initiative (2015, September). *Progress report: A roadmap for change*. Retrieved from: www.endingpovertynow.org
- Strecker, L. E. (2011). School nutrition: Addressing obesity among children with disabilities. *Palaestra*, 25(3), 26-28
- Teaching Tolerance (2015). Test yourself for hidden bias. *Southern Poverty Law Center*. Retrieved from: <http://www.tolerance.org/Hidden-bias>
- Wexler, A. (2014). Reaching higher? The impact of the common core state standards on the visual arts, poverty, and disabilities. *Arts Education Policy Review*, 115, 52-61.

Margaret M. Cramer, Ph. D.
 Northcentral University
 10000 E. University Drive
 Prescott Valley, AZ 86314
 Kendall College
 900 N. Northbranch Street
 Chicago, IL 60642

Dorea Bonneau, Ed. D.
 University of North Carolina,
 Pembroke
 136 Education Center
 Pembroke, NC 28372-1510

DESIGNING APPROPRIATE TRANSITION PLANS TO ADDRESS COLLEGE PREPARATION

Although special education services have been addressed in public schools since 1975 for students with disabilities, limited attention has been given to the provision of these services to post-secondary students (Herbert, 2014). The Individuals with Disabilities Education Act Amendment of 1990 emphasized that transition planning needs to be included in individualized education programs (Cease-Cook, Test, & Scroggins, 2013; Gragoudas, 2014). Transition planning was added to address the high number of students with disabilities with unfavorable post-secondary outcomes (Gragoudas, 2014). In 1997, students became more active participants in meetings and transition planning to partially address the issue of poor outcomes (Hughes, Cosgriff, Agran, & Washington, 2013). The IDEA (2004) included a requirement of transition services by age 16 with “appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, independent living skills, and the transition services (including courses of study) needed to assist the child in reaching those goals” (Madaus & Shaw, 2006, p. 279). Transition planning should be addressed during the annual individualized education program meeting when the student with a disability reaches the age of 16 or as early as 14 years of age (Kochhar-Bryant & Greene, 2009).

The current question is whether transition services should begin at an earlier age. The argument now exists that the provision of services should extend throughout a student’s life or at least during their academic career. Even with the new provision of services under the Americans with Disabilities Amendments Act of 2008 (P.L. 110-325), extended time is often the only accommodation given to students through the Office of Disability Services at a college or university (Lewandowski, Cohen, & Lovett, 2012). In public schools, students usually receive instructional modifications to assignments and specific programs of study delivered by educators with special training. These services, provided in elementary, middle, and high school, are often denied at the post-secondary level. College students may request, for example, a reduction of written assignments, oral lessons, assistance for loss or reduced vision or hearing, use of technological devices, oral exams, one-to-one instruction, small group instruction, social skills training, or technical assistance. Of specific concern is the lack of trained personnel in the Office of Disability Services at each college with background in the area of special education services to students with not only educational but also intellectual, emotional, social, physical, and health needs. Those

individuals providing services are often under trained and required to serve in dual roles which negatively impacts the quality of services provided to students (Li, Bassett, & Hutchinson, 2009).

Research Project: Transition Planning

In order to determine what services are provided at colleges or universities for students with disabilities, a study was conducted to identify areas of concern. The four identified needs determined by the study were proper design of transition plans at the secondary level, proper course design for distance delivery of instruction at the post-secondary level, improved services from the Office of Disability Services at the post-secondary level, and the need for trained personnel in the Office of University Services at the post-secondary level.

For this paper, emphasis was placed on the proper design of transition plans at the secondary level to improve service delivery by trained personnel from the Office of Disability Services at any college or university. The Office of Disability Services at each college or university was contacted for information on support provided to students with disabilities. One compliance manager indicated that due to university policy no educational requirements could be altered to accommodate students. Help was provided through writing programs and weekly conferences with students. Eight week courses could be extended to twelve or sixteen weeks as needed, but no other accommodations or modifications were allowed. Another compliance officer was reluctant to share information, but she did indicate that some accommodations were allowed. At one college information was easy to attain, but no specific person was assigned to assist students.

Of specific concern was the lack of collaboration between the researchers and the Office of Disability Services at each college or university. Interagency collaboration must take place when a student transitions from high school to a college or university setting, but a lack of trust may limit that interaction. It is important to build trust with the disability office personnel and college or university faculty teaching the courses of study. Since the Americans with Disabilities Act (1990) was designed to provide a legal status for educational services to the students, support may need to be obtained at a higher administrative level to ensure that students have received the appropriate accommodations and modifications. This could be accomplished by hiring a designated special educator to work with the compliance monitor.

Ideas of special interest, utilized by College A in Florida and University B in Arizona, were identified for use in the study. University B offers a Strategic Alternative Learning Techniques (SALT) Center, use of learning specialists, and design of individual development plans (IDPs) to promote the achievement of individuals with learning and attention challenges. College A serves students with different types of disabilities by assigning life coaches to students. The college also offers small class sizes that cater to individual learning styles and unique needs as well as providing personalized attention, developmental courses, academic mentoring, and use of advanced technology. Students meet with life coaches weekly for 10 weeks to receive assistance and support to set goals, brainstorm and plan, and reflect on individual progress.

Student Identification

Before a transition plan can be designed, all students qualifying for services must be properly identified. With use of the Discrepancy Model for identification purposes, multiple assessments are

conducted, including an intelligence test and at least one achievement test. The intelligence test is useful for the determination of intellectual ability or existence of cognitive challenges. Although use of an intelligence test is now often discouraged, without this test cognitive issues are hard to identify. Additionally, a behavior rating scale needed to determine intellectual functioning and adaptive skill levels is not included in the RTI Model assessments that focus mainly on academic skills.

Since the Response to Intervention (RTI) Model is now being utilized for identification purposes instead of the Discrepancy Model, an intelligence score is often not obtained. Students with giftedness are also not being properly identified for services. McKenzie (2010) identified this issue, stating that teachers must be aware of the “diagnostic limitations inherent in the RTI measurement” (p. 166) for students with dual exceptionalities. If the Discrepancy Model is utilized for identification purposes, students with an intellectual disability or a gifted student can be more easily identified. Although it is an option under the law, some states are mandating use of the RTI Model, creating identification issues that must be revisited.

Service Delivery

After identification for services is determined, practical application must take place through the design of the individualized transition plan. Service options must address academic challenges, functional skill levels, social and emotional needs, health and medical concerns, and any other individual needs stated in the individualized education plan. Specially trained personnel at the college or university must plan a meeting to review any previous plans and to prepare to provide the proper services to the student.

With use of the Response to Intervention (RTI) Model of service delivery in public schools for approximately ten years to support students with learning needs, concerns have recently been raised regarding this model and the possibility that it may lead to “the blurring of special education in a new continuum of general education placements and services” (Fuchs, Fuchs, & Stecker, 2010, pp. 301-323). Students with learning disabilities are not always receiving the services stated in the individualized education plan. The actual services needed by a student may not be properly provided in the primary or secondary levels. If these services are not properly addressed, they will also be absent from any post-secondary transition plans. It is important to ensure that placement in the general education classroom is conducive to learning without being restrictive for the student. While students may be included in a general education classroom with peers, if they are incapable of interrelating suitably it cannot be said that they are fully included (Turnbull, Turnbull, Wehmeyer, & Shrogen, 2013).

Two basic models for transition service delivery have emerged to properly serve students: program-based and individual support. The program-based model is usually utilized for students with disabilities attending a college or community-based program. This model provides students with the opportunity to attend college courses with same-age peers, participate in employment training activities, and receive individualized instruction on socialization and self-determination skills (Grigal, Dwyre, & Davis, 2006). The blending of both models would provide the most support to students needing more extensive services.

Functional Skill Levels

The proper development of functional or daily living skills cannot be overlooked. These skills must be evaluated and any needed training must be provided to ensure student success. Adreon and Durocher (2007) stated that daily living skills that may be problematic at the post-secondary level include waking up, mastering daily hygiene, getting dressed, getting to class or work on time, shopping, understanding rules, finding public restrooms, utilizing public transportation, solving problems, and making decisions. A student needs to demonstrate the ability to attend to these health, safety, and social needs before involvement in any post-secondary program.

Academic Challenges

Assessment of academic performance must be addressed at the college or university as part of the entrance exams. Most students identified with a disability at the elementary level receive academic services in the area of reading. Many schools use the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to assess the success of reading programs. DIBELS is a comprehensive reading assessment system that is widely used in elementary schools across the country (Hoffman, Jenkins, Dunlap, & Carroll, 2009). Ardoin and Christ (2009) suggested that consideration should be given to using other tests in place of, for example the DIBELS reading assessment instrument, particularly in the case of students with disabilities because they may have a higher measure of validity for individual student monitoring. Of further concern is the lack of additional Curriculum Based Measures (CBM) used to make instructional and placement decisions for individual students. CBM progress monitoring was not originally designed for use with students with disabilities and should only be used in conjunction with other measures. Measurement of academic growth through the Response to Intervention Model is currently a major issue since the IDEA is structured for individual development of students instead of the No Child Left Behind subgroup focus. Hulett (2009) mentioned NCLB rules fail to include assessment protocols that measure status and growth. He stated that “NCLB focuses on achievement for subgroups of students in a given school, whereas the IDEA is structured for the individual development of each student” (p. 196).

Social and Emotional Needs

Szidon, Ruppard, and Smith (2015) stated that college students with disabilities not only struggle academically, but they often have challenges with social and adaptive skills; therefore, the transition team must develop clear links between high school goals and career development options as well as college requirements. Additionally, Luecking (2013) mentioned that well-planned, quality work experiences with clear career goals are a necessity for a smooth transition. An effective transition plan must include the following: proper evaluation and transfer of student records, well-developed individual education programs, technical support, collaboration among educators, use of research-based interventions, use of reliable assessment tools, proper support to culturally and linguistically diverse students, and facilities that are accessible to all students (Daley et al., 2013; Diliberto & Brewer, 2014; Harn et al., 2013; Zirkel, 2009).

According to Turnbull et al. (2013) “emotional or behavioral disorders include one or more of the following characteristics: inability to learn that cannot be explained by intellectual, sensory, or health factors; inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general,

pervasive mood of unhappiness or depression; and a tendency to develop physical symptoms or fears associated with personal or school problems” (pp.150-171). Most transition plans do not address interpersonal relationships, mood disorders, or fears associated with school problems. For success at the post-secondary level, these issues must also be addressed in primary and secondary programs. If not addressed, they may be completely ignored at the post-secondary level.

A specific section must be included in the individualized education plan to address such emotional issues as depression and school phobia. Students working in an online environment will be especially vulnerable to failure. If one goal of the college or university is to increase successful course completion, this must be addressed before the student begins any program of study. Part of this planning must include oral and written interviews to begin the evaluation of the student’s present skills and the need for any remedial courses. After successful completion of remedial courses, assignment must be made to specifically trained instructors or facilitators to ensure student success. Another way to address these issues is to employ a special educator to assist the officers in the Office of Disability Services at colleges or universities.

Health and Medical Concerns

Students with medical needs should receive accommodations if they are eligible and if they are necessary to receive educational benefits (Turnbull et al., 2013). In public schools, the health needs of students are usually provided by a nurse or other trained personnel. Also, services for medically fragile and chronically ill students are made available to provide an access to an education. Although most colleges and universities do provide limited health services to students, they are usually not equipped to handle services included in most individualized education programs. At the post-secondary level, some students will need assistance to access education buildings or information in a face-to-face or online environment. Assignment of an assistant or trained paraprofessional may be appropriate. If not addressed in the transition plan, these services will usually not be provided.

Practical Applications

One way to provide the needed accommodations and modifications by college or university professors involves the redesign of courses and provision of special services. Course modifications should include lectures, discussions, written assignments, quizzes, and field experiences. Audio clips should be added to assignments when appropriate, live virtual chats included, and paper submissions reduced or resubmissions allowed when required. From the collected data, recommendations were developed to provide information to colleges and universities preparing to modify courses for students with special needs.

An analysis form was also designed to be utilized for evaluation and instructor assignment. The form was designed to address students needing minimal accommodations, students needing special assistance, or students needing assignment to a special instructor. Most students would be assigned to an instructor with only needed accommodations provided. Students needing special assistance would be assigned to a university instructor, but a special educator would help monitor progress. A special educator would be assigned to students needing extra assistance and specific instruction. Continuing services would involve changes to accommodations and modifications, changes to instructor assignment, or a move to monitoring status.

Redesigning Transition Plans for the Office of Disability Services

Since students with disabilities are at a disadvantage entering college, strong transition plans are needed that focus on the specific interests of each student (Bernard-Brak et al., 2013). Collaboration and service coordination are the most important components of postsecondary planning, employment, and education (Kochhar-Bryant, 2016). The student must also be involved at the secondary level in activities that will support chosen goals and enhance future success. Turnbull et al. (2013) stated that students need to understand their own disabilities by recognizing their strengths and weaknesses, identifying needed accommodations, setting personal goals, and developing self-management skills before entering a post-secondary institution. They also need to be taught how to seek assistance and develop working relationships in different settings.

According to Hulett (2009), designing a transition plan should be a coordinated effort involving all agencies, including post-secondary institutions. A review of transition plans must be done to ensure that students have a legal document to present to the Office of Disability Services at the college of their choice. The analysis and redesign of a comprehensive, long-term transition plan for a student with a disability, utilizing a pathway selection guide, is essential to the determination of the appropriate instructional setting at a college, university, community college, or vocational school. The transition plan should also address the intensity of supports needed as well as providing appropriate accommodations and modifications. Shaw (2009) also suggested that high schools and colleges should develop bridge programs to support students with special needs. These programs would typically be provided in community colleges so students would have the option of taking only a few courses, under the direction of an advisor, without earning actual course credit in order to experience college life before entering a full program of study. Under this plan, if the student was not successful, specific needs would be identified and supports provided to increase the likelihood of successful program completion.

After the student has been accepted to a college or university, an appointment should be made with an officer at the Office of Disability Services. A copy of the transition plan should be made available to all parties involved in service provision to the student. If a college or university, for example, is not the appropriate pathway for the student, this must be determined immediately to ensure student success. It is recommended that the complete transition plan be reviewed with the officer and appointments planned with each instructor or professor serving the student. The transition plan should be reviewed and preparation for implementation should be documented and signed by all participants. If changes are needed, these procedures must be included in the documents. If medical assistance is required, it must also be documented in written format. Review of services should take place at least on an annual basis if not after each completed course.

Further Research

More research is needed on how to establish better communication and collaboration between the student and family with the Office of Disability Services at each college or university. This must be supported by the administrative leadership at the college or university to ensure that student evaluation is conducted and that accommodations or modifications are properly provided. Also, further research is needed to determine whether the recommended accommodations and modifications will lead to student success and completion of programs of study. Of specific

concern is the determination of whether a student has a history of a disability in high school that requires attention upon entry into college or university programs. The availability of specially trained personnel to evaluate and monitor students with special needs and provide support to university teachers and facilitators must be documented. Institutional assignment of students, with monitoring, or assignment to a special educator should be documented and reviewed. Also, changes to accommodations, modifications, and instructional approaches must be provided to individual students as needed on a continuing basis. Changes to instructor assignments must be made as needed when reevaluation occurs or successful students should be moved to a monitoring status.

References

- Ardoin, S. P., & Christ, T. J. (2009). Curriculum-based measurement of oral reading: Standard errors associated with progress monitoring outcomes from DIBELS, AIMSweb, and an experimental passage set. *School Psychology Review, 38* (2), 266-283.
- Adreon, D., & Durocher, J. (2007). Evaluating the college transition needs of individuals with high-functioning autism spectrum disorders. *Intervention in School and Clinic, 42*(5), 271-279.
- Americans with Disabilities Amendments Act of 2008 (P.L. 110-325).
- Bernard-Brak, L., Schmidt, M., Tianian, W., Hodges, T., & Robinson, E. L. (2013). Providing postsecondary transition services to youth with disabilities: Results of a pilot program. *Journal of Postsecondary Education & Disability, 26*(2), 135-144.
- Cease-Cook, J., Test, D. W., & Scroggins, L. (2013). Effects of the CD-Rom version of the self-advocacy strategy on quality of contributions in IEP meetings of high school students with intellectual disability. *Education and Training in Autism and Developmental Disabilities, 48*(2), 258-268.
- Daley, T. C., Fiore, T. A., Bollmer, J., Nimkoff, T., & Lysy, C. (2013). National evaluation of the IDEA technical assistance & dissemination program. *National Center for Education Evaluation and Regional Assistance, 220*. Abstract retrieved from <http://eric.ed.gov/?id=ED544221>
- Diliberto, J. A., & Brewer, D. (2014). Six tips for successful IEP meetings. *Teaching Exceptional Children, 47*(2), 128-135. doi:10.1177/0040059914553205
- Fuchs, D., Fuchs, L.S., & Stecker, P.M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional Children, 76*(3), 301-323.
- Gragoudas, S. (2014). Preparing students with disabilities to transition from school to work through self-determination training. *Work, 48*(3), 407-411. doi:10.323/WOR-131782
- Grigal, M., Dwyre, A., & Davis, H. (2006). Transition services for students aged 18-21 with intellectual disabilities in college and community settings: Models and implications of success. *National Center on Secondary Education and Transition, 5*(5). Retrieved from <http://www.ncset.org/publications/viewdesc.asp?id=3395>
- Harn, B., Parisi, D., & Stoolmiller, M. (2013). Balancing fidelity with flexibility and fit: What do we really know about fidelity of implementation in schools? *Exceptional Children, 79*(2), 181-193. doi:10.1177/001440291307900204
- Herbert, J. T. (2014). Persistence and graduation of college students seeking disability support services. *Journal of Rehabilitation, 80*(1), 22-32.
- Hoffman, A. R., Jenkins, J. E., Dunlap, S. K., & Carroll, J. (2009). Using DIBELS: A survey of purposes and practices. *Reading Psychology, 30*, 1-16.
- Hughes, C., Cosgriff, J. C., Agran, M., & Washington, B. H. (2013). Student self-determination: A preliminary investigation of the role of participation in inclusive settings. *Education and Training in Autism and Developmental Disabilities, 48*(1), 3-17.
- Hulett, K. E. (2009). *Legal aspects of special education*. Upper Saddle River, NJ: Pearson Education, Inc.
- Kochhar-Bryant, C. A., & Greene, G. (2009). *Pathways to successful transition for youth with disabilities* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

- Lewandowski, L., Cohen, J., & Lovett, B. J. (2012). Effects of extended time allotments on reading comprehension performance of college students with and without learning disabilities. *Journal of Psychoeducational Assessment*, 31(3) 326–336. doi:10.1177/0734282912462693
- Li, J., Bassett, D., & Hutchinson, S. (2009). Secondary special educators' transition involvement. *Journal of Intellectual & Developmental Disability*, 34(2), 163-172. doi:10.1080/13668250902849113
- Luecking, R. (2013). Seamless transition from school to employment. *Voice*, 21(14). Retrieved from http://transcen.org/index.php?option=com_content&view=article&id=243:voice-article-2013&catid=48:latest&Itemid=29
- Madaus, J., & Shaw, S. (2006). The impact of the IDEA 2004 on transition to college for students with learning disabilities. *Learning Disabilities Research and Practice*, 21(4), 273-281.
- McKenzie, R. (2010). The insufficiency of response to intervention in identifying gifted students with learning disabilities. *Learning Disabilities Research and Practice*, 25(3), 161-168.
- Kochhar-Bryant, C. A. (2016). *The engaged community: School collaboration for developing the whole child*. Retrieved from https://www.nea.org/assets/docs/NEA_WHOLE_CHILD_Collaboration_chapter.pdf
- Shaw, S. F. (2009). Transition to postsecondary education. *Focus on Exceptional Children*, 42(2), 2-16. doi:10.1177/2165143413476881
- Szidon, K., Ruppert, A., & Smith, L. (2015). Five steps for developing effective transition plans for high school students with autism spectrum disorder. *Teaching Exceptional Children*, 47(3), 147-152. doi:10.1177/0040059914559780
- Turnbull, A., Turnbull, R., Wehmeyer, M.L., & Shogren, K.A. (2013). *Exceptional lives: Special education in today's schools* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Zirkel, P. A. (2009). What does the law say? *Teaching Exceptional Children*, 41(4), 68-71. Retrieved from <http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=d660d031-8fdd-44fb-ac6d-abf3cba033d0%40sessionmgr4001&vid=1&hid=4203>

PO Box 13019
Nacogdoches, TX 75962

PREPARING STUDENTS WITH AUTISM FOR COLLEGE: THE NEXT FRONTIER

According to the Center for Disease Control and Prevention (CDC) the prevalence of autism spectrum disorders (ASD) continues to grow (Center for Disease Control and Prevention, 2014). The latest data collected through the Autism and Developmental Disabilities Monitoring Network shows that the prevalence of autism during the 2010 data collection period was 1 in 68 children. This is an increase from the previous data reported by the CDC of 1 in 110 children during the 2006 collection period.

In addition to the overall changes in the prevalence of ASD over time, there has been one notable change in the demographics of children identified with an ASD. The proportion of individuals with average or above average IQ who are diagnosed with an ASD continues to grow. In 2002, only 32% of children with an ASD had an average or above average IQ. This proportion has grown to 46% in 2010. With nearly half of the children diagnosed with an ASD within the average or above average range of intelligence, it is likely that a growing number of individuals with ASD will choose to attend college after high school.

Shogren and Plotner (2012) analyzed data from the National Longitudinal Transition Study-2. Data provided through the Parent Telephone Interview and the School Program Survey show that nearly 23% of students with autism had a primary goal of attending college following high school. However, it is difficult to determine how many individuals with ASD actually attend college. While the education of students with disabilities in the K-12 school system is governed by the Individuals with Disabilities Education Act of 2004, this law does not apply to the postsecondary educational institutions. Instead, colleges and universities are subject to the Americans with Disabilities Act as well as the Rehabilitation Act of 1973. These laws require students to self-identify as having an ASD and to self-advocate. It is likely that a portion of individuals with ASD choose not to self-identify during college. According to a survey by Gelbar, Shefcyk and Reichow (2015), 80% of the individuals completing an online survey about their college experiences indicated that they disclosed their disability to a disability service coordinator at the college.

College Experiences for Students with ASD

Despite the growing number of individuals with ASD who choose to pursue higher education as a postsecondary goal, there is little empirical research documenting methods to improve the success of these students. A growing number of articles are available from experts in the field of autism that include recommendations for success in higher education. Such recommendations include focusing on choosing a college, academic and social supports (Adreon & Durocher, 2007; VanBergeijk, Klin, & Volkmar, 2008), independent living skills and self-advocacy (Adreon & Durocher), counseling (VanBergeijk et al.), appropriate classroom accommodations (Hart, Grigal & Weir, 2010), and time management (Roberts, 2010). However, few studies have focused on documenting areas of difficulty for individuals with ASD attending college.

Two recent studies summarized reports of individuals with ASD during their college experiences using interviews and questionnaires. Van Hees, Moyson, and Roeyers (2015) interviewed 23 college students with ASD. Some of the themes that emerged from these interviews included struggling with new situations and unexpected changes, difficulties with social demands, difficulties processing information and managing time, as well as doubts about disclosure of disability. Students also reported mental health concerns such as anxiety and depression. These same students also noted some of their strengths in college such as strong memory and attention to detail as well as impartiality. They recommended supports such as individualized coaching, sufficient planning time, clear communication, and leisure time.

Gelbar et al. (2015) gathered responses about types of disability accommodations used in postsecondary education from individuals with ASD through an online survey. Respondents identified several disability accommodations. However, the most commonly used accommodations were extended time on tests, regular meetings with the disability counselor, distraction-free environments for test taking, and note-takers. Respondents also noted social and emotional difficulties such as anxiety and depression.

Transition Programs for Students with ASD

In addition to interview and survey data, a small number of transition programs have been documented. One focused on students already attending college. Pugliese and White (2014) evaluated the effect of group-based cognitive-behavior therapy targeting problem solving abilities in five college students. This intervention was referred to as problem solving therapy or PST. PST focuses on a student's problem orientation and teaches effective decision making skills. Following intervention, two out of five participants showed improvement in problem solving and subjective distress.

Two studies focused on transition programs for high school students who plan to attend college in the future. Gardner, Mulry, and Chalik (2012) evaluated a two-day program in which high school students attended activities and classes on campus while paired with a mentor. Mentors were current college students. This program resulted in positive feedback from parents/guardians of the high school students, college mentors, as well as the high school students who participated.

Zager and Alpern (2010) evaluated another transition program for high school students. In this program, called Campus-Based Inclusion Model (CBIM), high school students attended college classes, participated in vocational training, and attended weekly sessions focused on social and vocational communication. Students were also assisted in setting transition goals through standardized testing, observations, and self-assessments. However, neither of these studies (Gardner et al., 2012; Zager & Alpern, 2010) included any direct measures of skills or knowledge gained through participation in these programs.

Rural Applications

There is an obvious and growing need for evidence-based transition programs for students with ASD entering higher education environments. However, the lack of research to support the use of existing transition programs is problematic. This is especially true for students from rural

areas. These students may face additional challenges given the differences in college educational experiences as compared to high school routines and expectations. In contrast to a rural high school environment, colleges have larger numbers of students on campus and in classes. Students must navigate large campuses and many buildings to attend classes and engage in social activities. Students may have many different professors over the course of the year and may not receive the individual attention from teachers or staff available in rural high schools. The college may be located at a distance from the hometown of the students and may require the student to live on campus. Students from rural locations may experience more difficulties during the transition period for these reasons. It is critical that effective transition programs be identified to increase the likelihood of successful entrance and completion of the college experience.

Future Directions

Future researchers should examine existing transition practices such as campus visits, attendance in college courses, social skills training, classroom accommodations, and self-advocacy training to determine whether these practices produce positive results for students in college. But, before this can be accomplished, there are several decisions that must be made. For example, it is unclear what outcome variables are most important to determine whether a student has successfully transitioned to college. The act of applying, getting accepted and enrolling in an institution of higher education is not sufficient evidence of a successful transition. What other measures should also be documented? Measures such as college retention and grade point averages are important, but these are also not sufficient given the social and emotional difficulties described by many students. It must be decided whether a student has to engage in the social aspects of college to be considered successful. Measures of satisfaction with the college experience may be useful measures as well.

After appropriate outcomes are determined, then existing and innovative transition services should be evaluated. In order to do this, a longitudinal research approach is needed. Transition services begin while a student is in the K-12 system. But, postsecondary outcomes need to be measured for several years after a student transitions to the college environment.

Recommendations for Teachers

Based on the need for transition programs for students with ASD who plan to attend college and the lack of research supporting a well-defined transition program, teachers and school personnel must rely on recommendations from experts for transition planning. While these recommendations are often based on logical assumptions and research showing the effects of interventions in areas other than college, there is no guarantee that these services are effective for college transition.

In conclusion, professionals in the field of education as it relates to ASD are at a critical juncture in which new methods and programs must be evaluated to improve the success of these students. Teachers and professors have to adjust their teaching and accommodations for students who are attending college at higher rates than ever before. And due to the recentness of these shifts, there are no evidence-based practices to rely on for teachers preparing students for this transition.

Therefore, it is essential to document programs as well as track student outcomes to determine which transition program features are critical to student success.

References

- Adreon, D., & Durocher, J. S. (2007). Evaluating the college transition needs of individuals with high-functioning autism spectrum disorders. *Intervention in School and Clinic*, 42(5), 271-279.
- Center for Disease Control and Prevention. (2014). Prevalence of autism spectrum disorder among children aged 8 years – autism and developmental disabilities monitoring network, 11 sites, United States, 2010. *Surveillance Summaries* 63(2), 1-21.
- Gardner, J., Mulry, C. M., & Chalick, S. (2012). Considering college?: Adolescents with autism and learning disorders participate in an on-campus service-learning program. *Occupational Therapy in Health Care*, 26(4), 257-269.
- Gelbar, N. W., Shefyck, A., & Reichow, B. (2015). A Comprehensive Survey of Current and Former College Students with Autism Spectrum Disorders. *The Yale Journal of Biology and Medicine*, 88(1), 45.
- Hart, D., Grigal, M., & Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. *Focus on Autism and Other Developmental Disabilities*, 25(3), 134-150.
- Pugliese, C. E., & White, S. W. (2014). Brief report: Problem solving therapy in college students with autism spectrum disorders: Feasibility and preliminary efficacy. *Journal of Autism and Developmental Disorders*, 44(3), 719-729.
- Roberts, K. D. (2010). Topic areas to consider when planning transition from high school to postsecondary education for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 25(3), 158-162.
- Shogren, K. A., & Plotner, A. J. (2012). Transition planning for students with intellectual disability, autism, or other disabilities: Data from the National Longitudinal Transition Study-2. *Intellectual and developmental disabilities*, 50(1), 16-30.
- VanBergeijk, E., Klin, A., & Volkmar, F. (2008). Supporting more able students on the autism spectrum: College and beyond. *Journal of autism and developmental disorders*, 38(7), 1359-1370.
- Van Hees, V., Moyson, T., & Roeyers, H. (2015). Higher education experiences of students with autism spectrum disorder: challenges, benefits and support needs. *Journal of Autism and Developmental Disorders*, 5(6):1673-1688. doi:10.1007/s10803-014-2324-2
- Zager, D., & Alpern, C. S. (2010). College-based inclusion programming for transition-age students with autism. *Focus on Autism & Other Developmental Disabilities*, 25(3), 151-157. doi:10.1177/1088357610371331

Peter Kopriva, Ed.D.
 School of Education
 Fresno Pacific University
 1717 S. Chestnut Avenue
 Fresno, CA 93702

Sijmontje Renema-Kopriva, M.A.
 Edith Storey Elementary School
 Fresno Unified School District
 5250 E. Church Avenue
 Fresno, CA 93725

USING YOUR HEART AS A COMPASS: REFLECTIVE PREPARATION AND PRACTICE IN TEACHING

Like the Preparation of a Garden...All Human Beings Require Loving Care

In a garden each plant is placed in an environment in which it will thrive. Gardeners prepare the soil, protect each plant from pests, and make sure all receive the food, water, and sunlight they need. The result is a beautiful and colorful place for people to enjoy. What if this ideal garden were to instead be stricken by a violent and deadly blizzard? Would those gardeners who so loved and cared for all the plants have the ability to save them from the ravages of the elements?

Today we live in a blizzard of a different kind. It blows and swirls around us in the form of economic injustice, ecological ruin, physical and spiritual violence, and their inevitable outcome, war. It swirls within us as fear and frenzy, greed and deceit, and indifference to the suffering of others. We all know stories of people who have wandered off into this madness and been separated from their own souls, losing their moral bearings and even their mortal lives: they make headlines because they take so many innocents down with them (Palmer, 2004).

Those lost come from every walk of life: clergy and corporate executives, politicians and people on the street, celebrities and school children. Some of us fear that we, or those we love, will become lost in the storm. Some are lost at this moment and are trying to find their way home once again. Some are lost without knowing that they are lost. And some are using the blizzard as a means to exploit chaos for their own private gain (Palmer, 2004).

Parker Palmer in his book titled: *A Hidden Wholeness* (2004) states that, "this book brings together four themes I have been musing on since my mid-twenties: the shape of an integral life, the meaning of community, teaching and learning for transformation, and nonviolent social change" (p. ix) Parker's search both in his life and his career resonates with many of us who entered a career of teaching to share with others skills we might bring to the process of education. In this process we may have experienced a blizzard and believed ourselves to be lost in life. Palmer suggests otherwise:

So it is easy to believe the poet's claim that the blizzard of the world has overturned the order of the soul, easy to believe that the soul—that life-giving core of the human self, with its hunger for truth and justice, love and forgiveness—has lost all power to guide our lives. (p. 2)

Admitting to his own experience of being lost, Palmer continues:

But my own experience of the blizzard, which includes getting lost in it more often than I like to admit, tells me that it is not so. The soul's order can never be destroyed. It may be obscured by the whiteout. We may forget, or deny, that it's guidance is close at hand. And yet we are still in the soul's backyard, with chance after chance to regain our bearings. (p. 2)

Palmer gives hope to so many of us in what can be a confusing world for educators when demand upon demand is put upon us where we practice. Influences that detract from the real reasons that we entered education in the first place come into play that undermine our best efforts to stay steady and hold our lives in a manner that feels right for us. Like finding our way home in a storm, by recognizing and catching sight of our soul we can survive the blizzard without losing our hope or our way. When we catch sight of the soul, we can become healers in a wounded world—in the family, in the neighborhood, in the workplace, and in political life—as we are called back to our “hidden wholeness” amid the violence of the storm (Palmer, 2004).

Teachers choose their vocation for reasons of the heart, because they care deeply about their students and about their subject. But the demands of teaching cause too many educators to lose heart. Is it possible to take heart in teaching once more so that we can continue to do what good teachers always do—give heart to our students (Palmer, 1998)? Parker suggests that whatever self-knowledge we attain as teachers will serve our students and our scholarship well. Good teaching requires self-knowledge: it is a secret hidden in plain sight.

As educators it is the understanding of ourselves that is critical to yielding any important insights into teaching and learning. Where are we within our own inner landscape of the teaching self?

In his thought provoking book: *The Courage to Teach* (Palmer, 1998) indicates:

To chart that landscape fully, three important paths must be taken—intellectual, emotional, and spiritual—and none can be ignored. Reduce teaching to intellect, and it becomes a cold abstraction; reduce it to emotions, and it becomes narcissistic; reduce it to the spiritual, and it loses its anchor to the world. Intellect, emotion, and spirit depend on one another for wholeness. They are interwoven in the human self and in education at its best. (p. 4)

Teaching faculty, whether it be classroom teachers with responsibilities for educating children or higher education faculty teaching and working with adults, carry among their responsibilities an ethic of caring. Preparing teachers for entry into classrooms that serve students living in the United States requires much more than skill in teaching methods, classroom management strategies, assessment, lesson planning, and design. Students arrive for school in this country with a great variety of needs that include intellectual, language, health, social, emotional,

and behavioral disorders, and perhaps, disadvantaged in life in ways that sabotage their ability to learn and prosper in school as compared to peers. Goleman (1995) captured the attention of many with his explanation that clarified the importance of emotional intelligence in one's life and how such intelligence added to both intellectual understanding, as well as the human traits that promote significant understanding and appreciation for others. His understanding of the importance of emotional intelligence in navigating critical areas of life that include family, school, work, and community living presents a watershed of appreciation for the inherent value of emotional understanding and practice of such understanding in daily living. In the educational area of early childhood education authors Butterfield, Martin, and Prairie (2004) in their book: *Emotional Connections: How Relationships Guide Early Learning*, discuss the importance of responsive relationships in early childhood settings. The book is designed to teach students about emotional development, about the ways in which relationships enhance learning, and about how caregivers can meet the emotional needs of the children in their care. Such caring is illustrated in the responses of college teaching faculty to nationally normed surveys. The overwhelming majority of college and university faculty across different types of institutions consider it "essential" or "very important" to be a good teacher (Lindholm, 2014). Irrespective of whether faculty members' spiritual lives are intertwined with particular religious faiths, their descriptions of the meaning spirituality has to them often included undertones of an ethic of caring.

Among the common references reported in Lindholm's national study we find the following sentiments: "having love and compassion for others and ourselves," "being nonjudgmental," "living life with deep empathy for others," and "using love (compassion, caring, attentiveness) as the springboard for actions." In some cases, these descriptors were coupled with notions of "limiting selfishness and self-delusion," "developing readiness to help others," and "showing resistance where necessary to uphold human dignity."

When quarrels and disagreements occur, we can often diffuse them by giving up our right to be right. Humility calls us to show grace and gentleness when we would rather insist on our own way. Selfishness and superiority can divide people, but humility unites us, if we will only allow ourselves to practice it and let its spirit prevail in our work and in our lives.

Reflecting on the connections between their spiritual and professional paths, Lindholm (2014) allowed study respondents to share teaching-related perspectives that illustrate ethic of caring. One respondent shared this response:

The connection between my spiritual life and my professional life is reflected through: trying to teach people how to take care of themselves and help others do the same. We are given free will to make choices and with education a person may make informed decisions. The choices impact more than we may ever know. (p. 94)

Another respondent shared this wonderful response:

Who I bring to the classroom, myself, is completely integrated with spiritual beliefs. It is who I am. It guides the ethical principles I work within such as to help, not harm; guide, not berate; encourage, not destroy; facilitate, not dictate—all while maintaining a challenging, thought-filled learning/research/service environment. (p. 94)

The Necessity of Understanding the Importance of Dispositions in Teacher Education Preparation Programs...Why is it a Critical Element in the Process?

David Purpel (1989) in his book titled: *The Moral & Spiritual Crisis in Education*, takes up the challenge presented by poststructuralism and postmodernism and the threat to democracy and schooling currently posed by the New Right. The challenge begins with the assumption that educational reform cannot be debated or understood outside of the space of politics and social power and that central to the language of reform is the need to rethink and remake our social meanings and social relations as part of our efforts as public intellectuals. He rails against the attempt to undermine the democratic and moral dimensions of schooling and argues brilliantly for the rebirth of a moral culture from which to reconstruct and reconnect the spheres of politics, ethics, and education. Purpel seeks to recover the notion of the public good and make it a central aspect of teaching and education. Personal experiences in education and a number of years to gain perspective in reading and considering his thinking about educational reform convinces this writer that he is not merely content to deepen our understanding of the importance of ethical and social responsibility; he also desires to link critical understanding to forms of teaching and social relations that ground our ideologies and visions in emotional attachments and spiritual concerns.

Educator preparation programs in the United States reflect a significant level of expectations for professional teacher candidates in the area of disposition. The National Council for Accreditation of Teacher Education (NCATE), as well as other organizations responsible for the accreditation of institutions that provide teacher education preparation programs, highlights an individuals' disposition and suitability for teaching as being one critical personal element leading to the likelihood of a successful teaching career. Both public and private institutions implement and rely on their particular programs to determine the disposition of a candidate and the probability he or she will acquire those necessary skills deemed essential for success as a teacher. Still more thought might be given to those individuals considering a teaching career in special education or early childhood education, where individual personal traits appear to be critical not only to the individual who is in possession of them but, importantly, to the students who come into daily contact with that individual. What needs to happen in order for those students to be prepared for school and life?

Stacie Goffin (2015) in her recent book: *Personalizing Early Childhood Education as a Field of Practice: A Guide to the Next Era*, provides a persuasive argument that leadership is needed within the field of early childhood education to transform it into a coherent, competent, and accountable profession. Within this book, Goffin highlights the necessity of leadership to not find satisfaction with the status quo. She compels all of us who have found careers teaching and working with young children (or those preparing for such work) to face the reality of the ECE profession. She cautions us that sitting on the sidelines does little but allow the status quo to continue. All of us must be "all in" and thoughtfully engaged in 'conversations with intent' if our intention to professionalize ECE is to become a reality. She encourages us to engage in personal reflection and initiate or participate in conversations with the intent to develop a shared understanding and evolved direction. The notion of one's "intent" for the pursuit of a career in education and being "intentional" in their practice of teaching and being with students and others is a most important aspect of a teacher's practice. When considering what is shared in Purpel's

(1989) and Goffin's (2015) written work we really do see fleeting images of the compassion and pedagogies of Gandhi, Jesus, Martin Luther King, Rosa Luxembourg, and others who lived out their beliefs—and in some cases died defending them—as part of a political and pedagogical struggle that refused to separate learning and justice from compassion and hope.

The Transformation of Self in the Hope of Transforming the Lives of Others...Can This Be One Call for Those Who Teach?

For nearly forty years the education of students living with disabilities has been governed by the Individuals with Disabilities Education Act (IDEA) enacted by the United States Congress in 1975 and reauthorized in 2004. Congress intended to open schools to all students with disabilities to make certain this population received appropriate educational opportunities. At its inception, IDEA benefited students ages six to eighteen; Congress has since expanded the group of students who have a right to special education. The law now applies to infants and toddlers from birth to age two, young children ages three through five, and older students through age twenty-one (Turnbull, Turnbull, Wehmeyer, & Shogren, 2013). Preparation of well-trained teachers to instruct and be with these students on a daily basis is a huge endeavor. Even more challenging is to retain such teachers following their preparation and baptism into the expectations held for special education teachers in our nation's schools. Retention statistics in the U.S. indicate that one-half of those individuals entering special education teaching will no longer be teaching after five years (Turnbull et al., 2013). It is safe to say that most (possibly all) find it to be extremely challenging to teach students who live with disabilities. Challenges exist for teachers in rural, suburban, and urban schools from their first days of employment and continue while they attempt meet those demands, either with support and mentoring by others or with little and no help whatever.

While there are numerous challenges involved, the goal of special education is to provide those students who benefit from modifications and/or accommodations with instruction that is accessible and equal to that received by non-disabled peers. It is commonly accepted that special education is an explicitly outcome-driven enterprise. According to Turnbull et al. (2013), four main outcomes are:

- equality of opportunity
- full participation
- independent living
- economic self-sufficiency

Efforts to attain these student outcomes often comes with a struggle by an individual teacher who, sometimes, is one who believes in teaching using child-initiated learning (passive teacher) and rails against adult-directed instruction (scripted lessons). Given the intensity of people's beliefs, and having students caught in the middle, finding a balanced position is in everyone's best interests. Teachers have wonderful theorists to turn to for advice and inspiration. Carol Garhart Mooney (2000) has authored a book titled: *Theories of Childhood* that gives wonderful illustrations of five distinct and noted educational theorists and how each theorist's work reveals how children learn and grow in healthy ways if they are provided the opportunity. She shows how John Dewey examined the qualities that make curriculum meaningful; Maria Montessori, the distinct need for carefully preparing classroom environments; Erik Erikson, an approach to making children healthy

and comfortable; Jean Piaget, our knowledge of children's thought processes; and Lev Vygotsky, the importance of teachers and peers in learning. Above all, teachers want to interact with children in ways that respect the children's different personalities, levels of development, diverse cultural and linguistic backgrounds, and individual modes of inquiry and learning (Epstein, 2014). It is the hope of teacher educators that their students preparing for a career in the teaching profession will develop self-confidence and a strong, but not overdeveloped, ego. It may sound alarmist but a larger-than-life ego that may swell unchecked could very well stand in the way of an individual's success in the workplace. Instead, humility is the trait worth nurturing and advocating. It is one of those most likely to guarantee success in today's world.

Are we capable of putting away our electronic devices and remaining present with our family members and friends? Do we really need to speak the last word in a disagreement with someone? Can we unclutter our lives from the constant distractions that face us in our work and social activities to simply be present to ourselves and to others? Today's human skill sets for employment opportunities require higher-order cognitive and emotional skills that technology cannot replicate. These include critical thinking, innovation, creativity, and emotional engagement with other humans. What do these skills have in common? They all are enabled by humility.

Each of us has the opportunity to seek, find, and live a contemplative life that gives us reassurance of ourselves...our very selves that give clear indication that we are a creation worthy of being here on earth. In all his writings, Thomas Merton characterizes the contemplative life as a life of relationships informed by love in search of freedom (Montaldo, 2008). Merton (1915-1968) was a monk of the Abbey of Gethsemani in Nelson County, Kentucky, for twenty-seven years and unlike many in his Trappist Order of Monastics (Monks) he embraced world-engaging actions: he prayed, wrote books, and, as a mature monk, publicly protested any perspective that threatened the unity of all human beings. This belief of unity was at the heart of what he believed "real" in human experience (Montaldo, 2008). Merton states that we are the primary actors in the formation of our own identities. We create networks of nurturing relationships with our fellow human beings. We affect and are affected by the matrix of nature's evolution within which we move and have our being. Further, he states that through this trinity of relationships, we experience communion with the Source that underwrites our being in time, the Logos that energizes our becoming "one with everything in that hidden ground of love for which there can be no explanations" (p. iv). Contemplation, as explained by Merton, is a deepening awareness of and attention to all our relationships; it is the deciphering in real time of the essential unity of all beings; it is an active consciousness that knows with certitude that the world is ours and that we are God's. Merton taught that contemplation is for everyone and that the context for seeking God's presence is always our everyday lives (Montaldo, 2008).

One interesting aspect of transformation in the life of a human is that transformational change does not come without some kind of pain. Endurance and desire may lead us to face such difficulties if we believe that such change is necessary. Do we need such transformation to live (survive)? Such desire may indicate a calling for spiritual transformation and in answering the call an individual may find life-altering events unfolding in his/her life that they never imagined.

One example of this is the real life story of Henri Nouwen, a Dutch Catholic Priest and the pastor of the L'Arche Daybreak Community in Toronto, Canada. Daybreak is an intentional

residential living community for individuals with intellectual, physical, and health disabilities and those non-disabled individuals who elect to live and to serve in the community. In the final year before his death in 1996, Henri Nouwen had planned to write a book about the Apostle's Creed. However, the death of his friend, Adam, a young man with severe disabilities who Nouwen gave morning care (awakening from sleep, bathroom needs, and grooming, dressing, etc.) changed his mind regarding his writing project. Instead he found that reflecting on the story of Adam gave him a way of describing his own understanding of the Gospel message.

Adam was gripped by frequent seizures, was unable to speak or to even move without assistance. Perhaps the world and everyone in it saw him as a nobody. Nouwen, famed author of countless books and articles, psychologist, sought-after speaker and retreat leader, priest, saw Adam as a friend, a teacher, and guide in life. Adam led Nouwen to a totally new and revolutionary understanding of his Christian faith and what it means to be beloved by God. This book and the sharing of it with dozens of classes taught with students in teacher credentialing programs for both special education and general education teaching by this writer has deeply touched countless students. In turn, because of being so moved by Nouwen's story of his experience with Adam and others living at L'Arche Daybreak Community, these very teachers have placed their careers and work with students under the guise of their own spiritual life. They understand that in sharing their lives with their students and others that they are fulfilling the request to live out their lives in relationship and love with others in the world.

Each individual considering teaching as a career or is presently entrenched in a career is in a different place within their lives. One commonality shared among all of us is that the fast pace we are expected to live and work in and the multitude of distractions we encounter daily in society. Do we desire or have the means to somehow slow down and be mindful of what we are doing and how we are living life? As a Christian those of us who follow Christ are asked to make the effort to know God better by carefully seeking a heart of understanding. When we read the Bible carefully and invest time in it we absorb its truths more deeply. We come to know God and His wisdom when we search for it with our whole heart. Other faith traditions have their wisdom teachings that include sacred readings and practices of prayer that may be particular to them. What if an individual follows no belief or faith practice within their life? Are they outside the realm of practicing and living a contemplative life? Not at all!

Mindful living and a desire to live a life that expresses compassion, love, and understanding towards all living things is possible for all of us if we desire to investigate avenues of knowledge and practice in living such a life. This may include a faith practice or it may not. We may be surprised that mindfulness can be encountered and enjoyed in sitting quietly somewhere and listening to the sounds of our breathing or our heartbeat. It may be practiced in walking and being aware of our steps and our bodies in movement and, perhaps, the beauty we may see while enjoying the walk! In family life or our work with children it likely comes to us in the relationships we treasure with loved ones or those that we teach. We can be filled with gratitude for these gifts of being with these individuals in our lives. A common element among all these opportunities is that they can be simply attained and simply practiced if one desires to make the commitment to discover them and practice them faithfully daily. It requires a commitment to gift ourselves with time devoted to practice and in believing that each of us is so precious that we deserve the gifts found in such practice. Do you think you might be ready?

Sites and Authors to Explore Spiritual Practice, Mindfulness, and Wholeness in Living

The World Community for Christian Meditation USA

Self-Realization Fellowship

Lion's Roar—Buddhist Wisdom for Your Life

Buddhadharma: The Practitioner's Quarterly

John Main

Thomas Merton

Thich Nhat Hanh

M. Basil Pennington

Henri Nouwen

Paramahansa Yogananda

Background on the Authors

Peter Kopriva, Ed.D., and Sijmontje Renema-Kopriva, M.A., are a married couple who have been involved with the education of students for decades at all levels and in urban, suburban, and rural settings, the great majority in special education. Both live and work in Fresno, in California's Central Valley of California, whose population is becoming ever more diverse in ethnicities, cultures, belief systems, and languages. Renema-Kopriva is an elementary teacher of the physically and health impaired in the Fresno Unified School District, which has an enrollment of over 80,000 students. Kopriva is a faculty member in the School of Education at Fresno Pacific University, a Christian university serving approximately 3,600 undergraduate and graduate students. The desire to share the benefits they have enjoyed in their daily practice of contemplative living, meditation and prayer led to this presentation.

References

- Butterfield, P., Martin, C., & Prairie, A. (2004). *Emotional connections: How relationships guide early learning*. Washington, DC: Zero to Three Press.
- Epstein, A. (2004). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children. Ypsilanti, MI: HighScope Press.
- Goffin, S. (2015). *Professionalizing early childhood education as a field of practice: A guide to the next era*. Washington, DC: National Association for the Education of Young Children. St. Paul, MN: Redleaf Press.
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.
- Kessler, R. (2000). *The soul of education: Helping students find connection, compassion, and character at school*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Lindholm, J. (2004). *The quest for meaning and wholeness: Spiritual and religious connections in the lives of college faculty*. San Francisco, CA: Jossey-Bass.
- Merton, T. (2008). *Choosing to love the world*. Boulder, CO: Sounds True.
- Mooney, C. (2000). *Theories of childhood: An introduction to Dewey, Montessori, Erikson, Piaget & Vygotsky*. St. Paul, MN: Redleaf Press.
- NCATE 2000 Standards. Washington, DC: National Council for Accreditation of Teacher Education.
- Nouwen, H. (1997). *Adam: God's beloved*. Maryknoll, NY: Orbis Books.
- Palmer, P. (2004). *A hidden wholeness: The journey toward an undivided life*. San Francisco, CA: Jossey-Bass.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Purpel, D. (1989). *The moral and spiritual crisis in education: A curriculum for justice & compassion in education*. New York, NY: Borgin & Garvey.
- Turnbull, A., Turnbull, R., Wehmeyer, M., & Shogen, K. (2013). *Exceptional lives* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Julie M. Lane
Fresno Pacific University
1717 S. Chestnut Ave.
Fresno, CA 93702

SPECIAL EDUCATION TRANSITION: PERSPECTIVES IN MINORITY GROUPS

The Individuals with Disabilities Education Act (IDEA) was composed through the lens of middle class white Americans, and its authors lacked the forethought of the laws inability to meet the cultural values of minority groups. Nelson-Barber and Trumbull (2015) state educational policies are presented as if they are culturally neutral. Therefore, to meet the needs of children with disabilities, special education professionals must take into consideration the cultural values of children. This includes the appropriate assessment tools to identify an area of disability, the development of educational goals and objectives, the development of effective family partnerships, and culturally responsive post-secondary transition plans. As reported by Hasnain and Balcazar (2009) and Nelson-Barber and Trumbull (2015), the standardization and progress of our assessment systems are not conducive to minority groups. Due to the lack of cultural sensitivity, families have stopped seeking transitional services from agencies and public institutions (Geenen, Powers, Lopez-Vasquez, & Bersani, 2003). Educators are too focused on closing the achievement gap (Nelson-Barber & Trumbull, 2015) resulting in overlooked transition goals.

Transition

Transition is a coordinated set of activities designed for students with special needs. These activities are designed with an outcome-oriented process that will promote the student's progress through school to post-school opportunities. Post-secondary education, vocational training, integrated employment, continuing and adult education, adult services for independent living, and community participation are all hallmark components of an effective transition plan. The determination of the set of activities is to be conducted via an Individualized Transition Plan (ITP) meeting comprised of special education professionals, the parent(s), the student, agencies, e.g. vocational rehabilitation, job coach training, and other related service providers. Goals and objectives in the ITP reflect the area of disability (Cooney, 2002), the individual student needs, and realistic student preferences and interests. ITP services should include instruction, community experiences, development for employment, post-school adult living, and when appropriate, acquisition of daily living skills and functional vocational evaluation (IDEA, 2004).

The purpose for an ITP is to (a) provide a smooth uninterrupted movement from high school to adulthood (Cooney, 2002), (b) infuse a longer range perspective in the educational process, (c) assist each student in making a meaningful transition from school setting to a post-secondary setting, and (d) help students better reach their potential as adults (Rucker & Goldstein, 1992 & Way, 2002 as cited in Yell, 2012). The ITP contains measureable goals with services to support the identified goals (Osborne & Russo, 2014). Goals and objectives must be developed by the ITP team members who work in partnership to meet the needs of students.

Culture and Disability

More than 90% of children with special needs now reach adulthood (Blomquist, Brown, Peersen, & Presler, 1998) with formal support mechanisms tailored towards middle class white American (Hasnain & Balcazar, 2009). From infancy, parents begin to develop and express expectations for their child (Blomquist et al., 1998). These expectations reflect their cultural values and norms. An assumption is made that interventions and adaptations will occur as the child does not meet anticipated developmental stages (Allen & Affleck, 1985 & Blacher, 1984 as cited in Bennet, DeLuca, & Allen, 1996). As children do not meet these milestones it is also assumed that all cultures react in the same manner perceiving the child has a disability (Kalyanpur & Harry, 2012).

Since the IDEA was composed through the lens of middle class White America, Western culture dictates the benchmarks of typical development and identifies the qualifications of a disability (Amatea, 2013; Harry, 2002). Western culture also perceives disability as a deficit that should be diagnosed, treated, and corrected. And, if correction is not possible, then adaptations to meet the child's needs are to be identified and implemented. Trumbull and Trumbull (1990) state that there are four stages of transition or change during a child's lifetime:

1. 0 to 5 years of age known as early childhood,
2. 6 – 12 years of age known as childhood,
3. 12 to 21 years of age known as adolescence, and
4. 21+ years of age known as adulthood.

Yet, some minority groups perceive a child as being complete at birth with a focus on the developmental stages of a child rather than the expected transitional milestones identified by Western culture (Everett, Proctor, & Cartmell, 1983; Kalyanpur & Harry, 2012).

Native American families in particular may see the child with disabilities as a special gift with a specific purpose (Nichols & Keltner, 2005). Keltner, Crowell, and Taylor (2005) found that a disability in an undisclosed southeastern tribe was perceived as a functional limitation and not as a physical limitation. As long as the child can contribute to the daily needs of the family and tribe, the family does not perceive their child's disability as problematic. This is supported by Kalyanpur and Harry (2012) who state that Down syndrome may not be perceived as a disability as the child can function in the home and contribute to the family. As long as the child can contribute to the tribe, then the child has a purpose (Harry, 1992; Kalyanpur & Harry 2012; Nicholas & Keltner, 2005).

Special Education is a Culture

One must also take into consideration that special education, in and of itself, is a culture (Cooney, 2002; Harry, 1992; Kalyanpur & Harry, 2012). Special education has its own language, its own values, and community expectations. Diagnosis and expectations for appropriate progress and care is driven by (a) documentation regulation, (b) timelines, (c) parent meetings, (d) standardized development milestones – academic, behavior, social, and physical - and (e) partnerships with special education professionals, agencies, and parents. Special education

professionals need to be cognizant that standardized assessments, goals and objectives, milestones, and transitional expectations often reflect middle class White American and not cultural values of minorities. Under the IDEA, special education professionals are to intentionally focus on the individual needs of the child and move them towards independence. This is counterintuitive as multi-generational family units are valued within some minority groups including Native Americans. For Native Americans, the worth of self should not be greater than any other individual and competition for individual success contradicts cultural values (Nelson-Barber & Trumbull, 2015). The “I” in the IDEA and in the mandated individualized plans required for special education services further demonstrates the lack of cultural design of the IDEA.

Cultural Competency

Kalyanpur and Harry (2012) and Pewewardy and Fitzpatrick (2009) note that the awareness of one’s own culture and the culture of others is the first step in becoming culturally competent. Learning to understand and respect the values of other cultures, knowing one’s self, understanding the families with whom we work, and establishing mutual goals provides an avenue of collaboration between professionals and families (Amatea, 2013; Halley & Trujillo, 2013). Pewewardy and Fitzpatrick (2009) indicate the best framework in which to work with Native Americans is in becoming culturally competent for when we understand the value of culture then we can clearly see how schools and home “clash” (p. 93).

Educational policies are presented as if they are culturally neutral (Nelson-Barber & Trumbull, 2015). Wiechelt and Gryczynski (2012) indicate that when the overbearing culture sets the norm then the dominance of that culture sets not only a precedence in which other cultures may not know how to react but also how they fit within the norm. As a result, Native American children feel they must then choose between their cultural identity and success in US schools (Nelson-Barber & Trumbull, 2015). As a result, minority groups stop seeking support from agencies and public institutions due to the lack of regard for cultural values (Geenen, Powers, Lopez-Vasquez, & Bersani, 2003). Since individuals and systems rely on cultural norms (Wiechelt & Gryczynski, 2012), special education professionals and agencies must work in partnership with parents and the community to provide services that support cultural values. One of the greatest assumptions that educators make about minority groups is that the ethnic/race label itself defines the culture. However, Native American tribes are uniquely different, and generalizing the cultural values of Native Americas at-large would be detrimental in serving the needs of their students (Harry 1992; Marcynyszyn et al., 2011; Wilder, Jackson, & Smith, 2001).

Parent and Community Involvement

Effective transition planning can occur when families have a voice and ITP goals and objectives reflect cultural values. Parent involvement in transition planning guide ITP team members to compose goals and objectives that reflect cultural values and that are appropriate for the home environment. Parents feel more involved in the special education transition process when they can fulfill goals within the home rather than on the school site (Landmark, Zhang, & Montoya, 2007). Trust must be developed by taking the time to develop relationships with parents prior to required completion of special education documents and fulfilling time line mandates (J. Wiley, personal communication, January 15, 2016; Pewewardy & Fitzpatrick, 2009). Open discussion and

consultation between family, friends, and professionals provides a sense of reciprocity and inclusion.

Special education professionals must also learn to value the extended family and community. In minority groups, the extended family and community become an avenue of support and instruction. Grandparents and extended family members are far more involved in raising children than in typical American homes (Bennett, DeLuca, & Allen 1996). Extended family and community members take an active role in discipline, teaching cultural values and traditions, and serving as role models (Amatea, 2013; Greene et al., 2014; Wilder et al., 2001). This is also applicable to Native Americans who now live in urban areas. Educators cannot assume that Native Americans who live in urban communities have assimilated to White American, rather urban Native Americans may feel more isolated as they lack the community support of living on a Rancheria or reservations (Nelson-Barber & Trumbull, 2015). Therefore, special education professionals must have a family-centered approach when meeting the needs of Native American students (Pewewardy & Fitzpatrick, 2009). Wilder et al. (2001) and Oesterreich and Knight (2008) found that when community and family members had positive post-secondary opportunities, their children did as well. Conversely, when experiences had been negative, children reflected this perspective. This supports the concept that the community is the source of role models who are essential for successful transition (Wilder et al., 2001).

Another barrier to successful transition is a lack of services and employment for Native Americans at-large. The desire to live on Rancherias and reservations may come in conflict with the ability to be employed. For Native American students, post-high school education, employment, and vocational training options are few and far between when Rancherias and reservations are in remote areas. Couple this with the high poverty rate among many Native American communities, and the inability to travel to and from employment and vocational training programs becomes inaccessible. Balcazar, Oberoi, & Keel (2013), Cooney (2002), Rangasamy (1993 & 1996), and Wilder et al. (2001) state there is a concern for Native American students in accessing mainstream services.

Special Education Professionals

Harry (2002) indicates there are six areas of difficulty in providing special education services that are in contrast to minority norms:

1. Cultural difference with what constitutes a disability.
2. Cultural differences in a family's response to a disability.
3. Cultural difference in parental interaction, participate, and advocacy in the special education process.
4. Access to disability and special education information.
5. Negative professional attitudes in regarding parents, perceptions, and attitudes as it relates to parents' role in the process.
6. Cultural fit to special education programing.

As with all cultures, disability is based upon cultural norms. Most Native American languages do not have a word for disability (J. Wiley, personal communication, January 15, 2016;

Kalyanpur & Harry, 2012). Since the spirit inhabits the body, therefore the disability reflects the spirit, and there is a sense of peace and harmony within the family and the individual (Loust, 1988; Nichols & Keltner, 2005). Harry (1992) reflects upon the “sense of pride of heritage belief in the interrelatedness of body and spirit culturally distinctive communication style that is reliance on the extended community and kinship networks” (p. 40) within the tribe. She goes on to state that Native American’s see every child as their own person at birth, has the right to make their own decisions, and is not better or worse than any other child (Harry, 1992). Harry (1992, 2002), Kalyanpur and Harry (2012), Keltner et al. (2005), and Wiechelt and Gryczynski (2012) state the values of cultural self-determination vary between ethnic groups. The value of an individual is also weighted within a culture since not all cultures view disability in the same light. Consequently, we find ourselves at odds with this as Western culture.

Native American families may seek healing through cultural traditions prior to seeking assistance or diagnosis through western methods (Braveheart, Elkins, Tafoya, Bird, & Salvador, 2012). A culture can be seen in and of itself as its own medicine for healing and therapy (Cavalieri, 2013). In addition, a Native American cultural value is that Native American parents will not put their young people where failure could occur. Native American parents wait until their children indicate they are ready to perform a task (Nelson-Barber & Trumbull, 2015). Pressuring a child to perform skills before they are ready may or may not denote an area of disability. Special education professionals need to be culturally responsive, by understanding values, attitudes, priorities, and self-determination within the cultural contexts of the students they serve (Kim & Morningstar, 2007; King et al., 2005; Pang, 2011).

There is substantial research that reflects upon the mistreatment of Native American’s as children were forced into boarding schools to be acculturated into Western ways have left Native American’s rightfully suspect of formal educational systems. The primary focus of special education teachers should be to develop relationships of trust that reflect a respect of the cultural values. “Whatever our situation, we need to get good at establishing, extending, and restoring trust...as the most effective way of relating to and work with others” (Covey, 2006, p. 29). Special education professionals also need to be comfortable with silence. Native Americans take more time to reflect prior to responding to questions and requests (Greene, 2014; Nelson-Barber & Trumbull 2015; Scollan & Scollan, 1981), and therefore special education professionals need to reflect upon this as they strive to meet deadlines. We must take the time to understand cultural and linguistical differences (Greene, 2014), as collaboration and cooperation between professionals and families without competition reflects cultural responsiveness (Ingalls, Hammond, Dupoux & Beaza, 2006).

Several studies reflect professional bias and attitudes towards Native Americans and other culturally and linguistically different minority groups. Nelson-Barber and Trumbull (2015) state that educators assume that students’ personal values and behaviors are the cause of an inability to perform in the classroom and reach students rather than their own lack of cultural understanding. Therefore, professionals need to be aware of how families adjust to having a child with disability and the role that community and culture plays in that adjustment (Nichols & Keltner, 2005). To assist in becoming culturally competent, professionals need to identify their own cultural biases and gain an awareness of their assumptions and differences. Yet, Pewewardy and Fitzgerald (2004) state that teachers are biased as they view Native American students as problem students. Consequently, Oesterreich and Knight (2008) note that special education teachers are overwhelmed

and more focused on graduation requirements rather than meeting the individual needs of their students. As a result, educators are not adjusting their instructional approach to align with cultural values (Valenzuela, 2007). If multidisciplinary teams are to develop effective ITPs, ITPs must reflect a family-centered approach, cultural values, and take into account the isolation of most Rancherías and reservations.

The cultural fit into special education programming must reflect an interdependence vs. an independence model (Halley & Trujillo, 2013). Educators should include extended family in the process of ITP development. Composing goals and objectives so that the transition includes learning traditions and values of the tribe, e.g. POW-WOWs may be seen irrelevant (Geenen et al., 2003), however, highly relevant to a Native American family and its community. Transition planning must also value the person and not the process. Parents and students must feel valued and have a voice. Values must be placed on what the parent does in the home (Landmark et al., 2007) so that the parents feel they are part of raising their child. Providing culturally appropriate training (Bowsley et al., 2000; Hetherington et al., 2010; Oesterreich & Knight, 2008) that embraces the values of the community and provides the opportunity to socialize and develop relationships are key (J. Wiley, personal communication, January 15, 2016).

References

- Amatea, E.S. (2013). *Building culturally responsive family-school relationships* (2nd ed.). Boston, MA: Pearson Inc.
- Balcazar, F. E., Oberoi, A., & Keel, J. M. (2013). Predictors of employment and college attendance outcomes for youth in transition: Implications for policy and practice. *Journal of Applied Rehabilitation Counseling, 44*(1), 38-45.
- Bennet, T., DeLuca, D. A., & Allen, R. W. (1996). Families of children with disabilities: Positive adaptation across the life cycle. *Social Work in Education, 18*(1), 31-44.
- Bowsley, V., Dugi, A., Gonnig, P., Heimbecker, C., Jennings, M., Medina, C., Sorgnit, H., Watt, C., & Prater, G. (2000). Transition of Navajo special education students in a rural environment. *American Council on Rural Special Education*. 2000 Conference Proceedings. Retrieved from <http://www.aei.org/eric/>
- Blomquist, K. B., Brown, G., Peersen, A., & Presler, E. P. (1998, May/June). Transitioning to independence: Challenges for young people with disabilities and their caregivers. *Orthopedic Nursing, 27*-35.
- Brave Heart, M. Y. H., Elkins, J., Tafoya, G., Bird, D., Salvador, M. (2012). Wicasa Was'aka: Restoring the traditional strength of American Indian boys and men. *American Journal of Public Health, 120*(52).
- Cavalieri, C. E. (2013). Situating psychotherapy with tribal peoples in a sovereignty paradigm. *Journal of Social Action in Counseling and Psychology, 5*(3).
- Cooney, B. F. (2002). Exploring perspectives on transition of youth with disabilities: Voices of young adults, parents, and professionals. *Mental Retardation, 40*(6), 425-435.
- Covey, S. M. R. (2006). *The speed of trust: The one thing that changes everything*. New York, NY: Free Press.
- Everett, F., Proctor, N., & Cartmell, B. (1983). Situating psychotherapy with tribal peoples in a sovereignty paradigm. *Journal for Social Action in Counseling and Psychology, 5*(3), 25-43.
- Geenen, S., Powers, L., Lopez-Vasquez, A., & Bersani, H. (2003). Understanding and promoting transition of minority adolescents. *Career Development for Exceptional Individuals, 26*(1), 46.
- Greene, G. (2014). Transition of culturally and linguistically diverse youth with disabilities: Challenges and opportunities. *Journal of Vocational Rehabilitation, 40*, 239-245. doi:10.3233/JVR-140689
- Halley, K. F., & Trujillo, M. T. (2013). Breaking down barriers: Successful transition planning for culturally and linguistically diverse exceptional students. *Journal of Educational Research and Innovation, 2*(1), 1 – 14.
- Harry, B. (1992). Developing cultural self-awareness: The first step I values clarification for early interventionists. *Topics in Early Childhood Special Education, 12*(3), 333-350.
- Harry, B. (2002). Trends and issues in serving culturally diverse families of children with disabilities. *Journal of Special Education, 36*(3), 131-138.
- Hasnain, R., & Balcazar, F. (2009). Predicting community-versus facility-based employment for transition-aged young adults with disabilities: The role of race, ethnicity, and support systems. *Journal of Vocational Rehabilitation, 31*, 175-188. doi:10.3233/JVR-20090487
- Heiman, T. (2002). Parents of children with disabilities: Resilience, coping, and future expectations. *Journal of Developmental and Physical Disabilities, 14*(2), 159-171.

- Hetherington, S. A., Durant-Jones, L., Johnson, K., Nolan, K., Smith, E., Taylor-Brown, S., Tuttle, J. (2010). The lived experiences of adolescents with disabilities and their parents in transition planning. *Focus on Autism and Other Developmental Disabilities*, 25(3), 163-172.
- Ingalls L., Hammond, H., Dupoux, E., & Baeza, R. (2006). Teachers' cultural knowledge and understanding of American Indian students and their families: Impact of culture on a child's learning. *Rural special Education Quarterly*, 25(1), 16-24.
- Kalyanpur, M., & Harry, B. (2012). *Cultural reciprocity in special education: Building family professional relationships*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Keltner, B. R., Crowell, N.A., & Taylor, W. (2005). Attitudes about disabilities in a southeastern American Indian tribe. *American Indian Culture and Research Journal*, 29(2), 57-74.
- Kim, K. H., & Morningstar, M. E. (2007). Enhancing secondary special education teachers' knowledge and competencies in work with culturally and linguistically diverse families through online training. *Career Development for Exceptional Individuals*, 3(2), 116-128.
- King, G. A., Zwaigenbaum, L., King, S., Baxter, D., Rosenbaum, P., & Bates, A. (2005). A qualitative investigation of changes in the belief systems of families of children with autism or Down syndrome. *Child: Care, Health & Development*, 32(3), 353-369.
- Landmark, L. J., Zhang, D. D., Montoya, L. (2007). Culturally diverse parents' experiences in their children's transition: Knowledge and involvement. *Career Development for Exceptional Individuals*, 30(2), 68-79.
- Marcynyszyn, L. A., Small Bear, P., Conti, R., Pecora, P. J., Day, P. A., & Wilson, S. T. (2011). Family group decision making (FGDM) with Lakota families in two tribal communities: Tools to facilitate FGDM implementation and evaluation. *Child Welfare*, 91(3), 113-134.
- Nelson-Barber, S. & Trumbull, E. (2015). The common core initiative, educational outcomes and American Indian/Alaska native students: Observations and recommendations. *The on Standards & Assessment Implementation*.
- Nichols, L. A., & Keltner, B. (2005). Indian family adjustment to children with disabilities. *American Indian & Alaska Native Mental Health Research: The Journal of the National Center* 12(1), 22-48.
- Oesterreich, H. A., & Knight, M. G. (2008). Facilitating transitions to college for students with disabilities from culturally and linguistically diverse backgrounds. *Intervention in School and Clinic*, 43(5), 300-304.
- Osborne, Jr., A. G., & Russo, C. J. (2014). *Special education and the law: A guide for practitioners* (3rd ed.). Thousand Oaks, CA: Corwin: A Sage Company.
- Pang, Y. (2011/Spring). Barriers and solutions in involving culturally linguistically diverse families in the IFSP/IEP process. *Making Connections: Interdisciplinary Approaches to Cultural Diversity*, 42-51.
- Pewewardy, C., & Fitzpatrick, M. (2009). Working with American Indian students and families. Disabilities, issues, and interventions. *Intervention in School and Clinic*, 45(2), 91-98. doi:10.1177/1053451209340223
- Rangasamy, R. (1996). Post-high school employment: A follow-up of Apache Native American youth. *Journal of Learning Disabilities*, 29(2), 174-179.
- Turnbull, A. P., & Turnbull, H. R. (1990). Family life cycles. In A. P. Turnbull, & Turnbull, H.R. (Eds.) *Families, professionals, and exceptionality: A special partnership*, (pp. 102-142). New York, NY: Merrill.
- United States Office of Special Education. (2004). *Individuals with disabilities education act*. Washington, DC: U.S. Government Printing Office.

- Valenzuela, R. L. (2007). Culturally responsive self-determination IEPs: Biculturalism, collectivism, individualism and career transitions. *International Association of Special Education*, 172.
- Wiechelt, S. A., & Gryczynski, J. (2012). Cultural and historical trauma among Native Americans. In S. Ringel, & J. R. Brandell, *Trauma: Contemporary Directions in Theory, Practice, and Research* (1910222). Los Angeles, CA: Sage.
- Wilder, L. K., Jackson, A. P., & Smith, T. B. (2001). Secondary transition of multicultural learners: Lessons from the Navajo Native American experience. *Preventing school failure*, 45(3), 119 – 125.

Tori Shoulders
University of Southern Indiana
8600 University Blvd.
Evansville, IN 47712

EFFICACY OF RURAL HIGH SCHOOL TEACHERS IN INDIANA

Teacher efficacy is a teacher's belief in how well one controls behavior (Bandura, 1997). Goodard, Hoy, and Hoy (2000) concluded that teacher efficacy increases as an individual teacher develops self-assurance. Previous research in teacher efficacy has been linked to teacher effectiveness (Bandura, 1997; Dembo & Gibson, 1985; Gibbs & Powell, 2011; Ross, 1992). However, much is still to be learned about the specific characteristics and experiences that contribute to these teacher beliefs.

Review of Related Literature

Few studies of teacher self-efficacy have focused specifically on rural teachers working at the high school level. Moreover, little is known about the characteristics and behavior of highly efficacious teachers in these settings. Rural school districts often face scarce school funding and a limited labor base, resulting in substantial difficulty with recruitment and retention of highly qualified teachers (Arfstrom, 2010; Berry, Petrin, Gravelle, & Farmer, 2011). Since investments in good teaching are widely considered fundamental to enhancing learning opportunities and promoting student success, identifying characteristics that contribute to teacher efficacy, and thus to highly effective teaching, can be especially important in rural areas.

The purpose of this study was to examine rural secondary teachers' self-efficacy perceptions when teaching students with disabilities in the general classroom. Specifically, this research sought to identify the differences in perceptions of general and special education teachers in the areas of student engagement, instructional practices, and classroom management.

Study

The instrument, often referred to as the Ohio State Teacher Efficacy Scale (OSTES), was developed at Ohio State University by Tschannen-Moran and Hoy (2001). The researchers prefer to have the scale referred to as Teachers' Sense of Efficacy Scale (TSES). The purpose of the TSES is to measure teacher attitudes towards working with students and covers the areas of engagement, instruction, and management (Tschannen-Moran & Hoy, 2001).

The participants in this study were general and special education teachers from rural secondary schools in Indiana. Convenience and purposive sampling was used to select the school districts and teachers used in this study. Only 40% ($N = 6$) of the 15 schools identified elected to participate in the study. Of the 6 school districts that participated, approximately 180 teachers were sent the link to the TSES. The potential sample had a response rate of approximately 37% of general education teachers ($N = 57$) and 54% ($N = 13$) of special education teachers. The sample of

the population of teachers included in this study is made up of 81% general education teachers and 19% special education teachers.

Results

Two statistical techniques were used to analyze these data, an independent- samples t test and multiple regression. The independent-samples t tests showed no significant difference between general education and special education teachers in their efficacy in student engagement ($t(68) = -.108, p = .91$), instructional practices ($t(68) = .173, p = .90$), and classroom management ($t(68) = .210, p = .83$).

A multiple regression analyses were used to evaluate how well a teacher's gender, level of education, years of teaching experience, number of college courses in special education, and hours of professional development in teaching students with disabilities in a coteaching setting predicted efficacy in student engagement, instructional practices, and classroom management. First, the linear combination of the teacher characteristics was significantly related to the efficacy in student engagement, $F(6, 58) = 2.76, p = .02$. The sample multiple correlation was .47, indicating that approximately 22% of the variance of the efficacy in student engagement can be accounted for by the linear combinations of characteristics of teachers. All bivariate correlations between efficacy in student engagement and teacher characteristics were negative except for level of education and hours of professional development in teaching students with disabilities in a coteaching setting.

Next, a multiple regression analysis was used to predict efficacy in instructional practices. Results significantly indicated a relationship between teacher characteristics and efficacy in instructional practices, $F(6, 57) = 2.86, p = .02$. Efficacy in instructional practices were mainly predicted by gender and hours of professional development in teaching students with disabilities in a coteaching setting. The sample multiple correlation was .48, indicating that approximately 23% of the variance of the efficacy in instructional practices can be accounted for by the linear combinations of characteristics of teachers. All bivariate correlations between efficacy in instructional practices and teacher characteristics were negative except for gender, and hours of professional development in teaching students with disabilities in a coteaching setting.

Finally, a multiple regression analysis was used to predict efficacy in classroom management. Results did not indicate an overall relationship between teacher characteristics and efficacy in classroom management, $F(6, 58) = 1.94, p = .09$. However, bivariate correlations indicated there was a correlation between the years of experience and efficacy in classroom management.

Discussion

Teacher efficacy is often overlooked when you consider how well teachers engage students, implement instructional strategies, and their classroom management. Furthermore, teacher characteristics such as gender, level of education, years of teaching experience, number of college courses in special education, and hours of professional development in teaching students with disabilities in a coteaching setting are not currently associated with teacher effectiveness. Currently, the trend in education is to associate teacher effectiveness with student evaluation results

along with overall achievement scores of schools, perception surveys, and administrative evaluations.

Data within this study revealed teachers' efficacy is associated with a teachers' level of education, number of professional development hours in teaching students with disabilities in a coteaching setting, and gender. Furthermore, school leaders could use this information to tailor specific professional development opportunities for teachers to increase their efficacy in instructional practices and student engagement. Placing teachers with more years of experience with teachers who have a lower sense of efficacy in classroom management could be used to help increase an overall sense of efficacy especially in classroom management. Additionally, providing teachers with more opportunities to obtain advanced degrees, especially in rural areas, could increase teacher efficacy in student engagement.

There are some limitations to this study. The limited sample size could skew the results and should only be used to represent schools within this study. Additionally, only rural high schools in Indiana were used for this study. Expanding the population area to include other rural high schools from other states could yield more promising results and a larger sample size. More research is needed in rural areas regarding teacher efficacy. Moreover, additional rural high schools in Indiana should be given identical surveys in order to collect more data and make informed recommendations about teacher efficacy in Indiana.

References

- Arfstrom, K. M. (2010). Perspective: Some future trends and needs of rural schools and communities. *Rural Special Education Quarterly*, 29, 14-15.
- Bandura, A. (1997). *Self-efficacy: The exercise of Control*. New York, NY: Freeman.
- Berry, A. B., Petrin, R. A., Gravelle, M. L., & Farmer, T. W. (2011). Issues in special education teacher recruitment, retention, and professional development: Considerations in supporting rural teachers. *Rural Special Education Quarterly*, 30(4), 3.
- Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*, 173-184.
- Gibbs, S., & Powell, B. (2011). Teacher efficacy and pupil behavior: The structure of teachers' individual and collective beliefs and their relationship with numbers of pupils excluded from school. *British Journal of Educational Psychology*, 82(4), 564-584.
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37, 479-507. doi:10.3102/00028312037002479
- Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education*, 17(1), 51-65.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.

Rikki E. Lowe
 Lincoln County Schools
 10 Maryland Ave.
 Hamlin, WV 25523

John M. Milliman
 West Virginia Schools for the Deaf and the Blind
 301 East Main Street
 Romney, WV 26757

BREAKING DOWN GEOGRAPHICAL BARRIERS USING TWITTER TO BRIDGE UNDERSTANDING OF DEAF CULTURE

Twitter continues to grow as one of the most used social-networking platforms; as of 2015, it is the world's largest microblogging platform. Twitter allows for concise interaction among users, no matter the geographical location or social status. What does this mean, however, for rural special education networking and service provision? In a state like West Virginia with a population of 1.85 million (2014) dispersed over 24,230 square miles, developing collaborative environments and professional learning communities amongst teachers of low incidence disabilities, i.e. deaf and hard of hearing, becomes a challenge because of the low number of professionals in the area and the scarcity with which the teachers are found. Thus, turning to social media sites like LinkedIn, Facebook, and Twitter becomes an opportune way for professionals to develop on-line professional learning communities. Currently, Twitter has more than 289 million active users creating an average of 58 million tweets per day; 135,000 new Twitter users are signing up each month (Statistic Brain Research Institute, 2015). With such a prolific network, Twitter becomes a very powerful tool to connect beyond the local educational community, beyond the state educational community, and expand nationally and globally to identify resources and allowing collaboration between professionals to create online professional learning communities.

The United Nations' unanimously passed a resolution declaring internet access as a basic human right (2012) and is described as a basic human resource comparable to food and water. Rural communities do face unique challenges such as access to the internet and reliable bandwidth. In Pocahontas County, West Virginia, the home of the Green Bank Radio Observatory, additional challenges are faced through the limitation of Wi-Fi due to the interference with radio waves. In Tucker County, West Virginia, some parts of the county find that dial-up internet is still the only viable option for accessing the online world. This lack of a meaningful digital infrastructure also hinders the access for students who are deaf or hard of hearing because many services related to access for these students are dependent on reliable speeds and bandwidth. Services like FaceTime, a video chat service provided through Apple, Skype, through Microsoft, Google Hangouts, through Google, and Sorenson, a video relay phone system, all require consistent bandwidth and a reliable internet connection for use. By not having access to these basic resources, these children are denied basic accessibility to basic communication needs in the classroom, school, and eventually the workforce.

Rural special education has historically been limited due to geographical constraints in accessibility, development, and human resources. Because of the rural nature the development of infrastructure through the laying of wires for high speed data access, accessibility through roads, and development of new businesses, it becomes difficult to entice recent graduates to work in these areas, which in turn hinders the growth of educational resources. The mountains make reliable service for internet costly and slow to improve. And, because of the difficulty of accessibility, many of the younger teachers, who rely on a steady diet of data, are reluctant to move to these locations. This makes it difficult to develop the human resources needed to improve the schools.

Twitter, however, has been and can continue to be instrumental in breaking down those barriers to allow for profitable professional development, personal learning networks (PLNs), and instructional strategies to be implemented seamlessly. Twitter is able to be run on multiple platforms, including desktops and mobile devices. Using digital resources like Twitter allows teachers to access these online services to enhance instruction of the educational environment. The geographical barriers such as the need to travel 80 miles to go to a grocery store, missing six weeks of school due to snow, lack of paved roads or reliable transportation, the isolation felt by these students and educators becomes even greater. Using online resources allows students and educators to feel a greater sense of connection to each other and to the world beyond the holler. In connecting our teachers of the D/deaf¹, Twitter can provide the tie that binds.

Background Research

Social networking changed the way the world interacts. The first site that brought social networking to the forefront of the American culture was Myspace created in 2003. This opened the door for many others to follow suit: Facebook was created in 2004 by Mark Zuckerberg; Twitter was created in 2006 by Jack Dorsey, current CEO, along with Noah Glass, Biz Stone, and Evan Williams; LinkedIn, a professional social network, was launched in 2003; Tumblr, a social network focusing on images, was started by David Karp in 2007; and Snapchat, a video messaging network began in 2011. Where the other sites allowed you to post a variety of media of varying lengths, Twitter established itself as a micro-blogging platform limiting users to 140 characters for each post.

Chickering and Ehrmann (1996) in *Implementing the Seven Principles: Technology as Lever* view *The Seven Principles for Good Practice in Undergraduate Education* (Chickering & Gamson, 1987) through the lens of technology as a whole. As their research predates the creation of social networking as it is known today, their view was not intended to be examined through the lens of social networking; however, each principle can be examined utilizing social media, particularly that of Twitter. Using this lens one can examine how Twitter can be used to implement each principle (Dunlap & Lowenthal, 2009a; Junco et al., 2010). Using the Seven Principles as a guide, Junco et al. (2013) proposed the following activities for using Twitter in the classroom: continuous class discussions, asking questions in a low-stress manner, book discussion, class reminders, campus event reminders, academic and personal support, connecting with other students and faculty, organizing service-learning projects, organizing study groups, and using Twitter as a platform for optional and required assignments. By examining these activities as outlined by Junco and

¹ D/deaf: encompasses Deaf culture as well as those deaf and hard-of-hearing that do not view themselves as part of Deaf culture.

correlating them to the Seven Principles, it is then possible to use Chickering and Ehrmann's (1996) explanations of best practice using technology to examine the uses of Twitter in the creation of profession learning communities.

Twitter and the Seven Principles.

1. **Good Practice Encourages Contacts between Students and Faculty.** As technology has evolved so have the ways of interaction between professionals. Once only formal face-to-face discussions were considered acceptable forms of collaboration and dissemination of ideas; then the advent of email came and with it almost instant response to ideas from miles away. Today, through social media, even the once speedy email has become too slow and cumbersome of a way to immediately pursue discussion. Facebook and Twitter offer near instant, real-time collaboration amongst professionals allowing notices to be sent through email or to their cellular phones through text message notifications. With the mobile application offered on all platforms (Android, iOS, and Microsoft) it is no longer necessary to seek out a computer but responses can be composed and sent anywhere from the backseat of a car to the grocery store. Mazor, Murphy, and Simonds (2007) found that teachers/professors on social networking sites (specifically Facebook in this study) may encourage greater communication by creating a more comfortable classroom climate.
2. **Good Practice Develops Reciprocity and Cooperation Among Students.** "Study groups, collaborative learning, group problem solving, and discussion of assignments can all be dramatically strengthened through communication tools" (Chickering & Ehrman, 1996, p. 10). The open nature of Twitter allows for a fluid means of communication. By defining a specific hashtag (the '#' symbol following by a specific set of letters and/or numbers; Twitter, 2014b), classmates can communicate with each other without having to allow access to their private or personal information. Twitter encourages collaboration between professionals and allows other professionals to search for specific hashtags to examine meaningful topics and participate in those conversations without having to be allowed into the group. By participating in these groups, professionals are able to grow their PLNs which then facilitates further growth.
3. **Good Practice Uses Active Learning Techniques.** According to Chickering and Ehrmann (1996), active learning can fall into one of three categories: Learning by doing, time-delayed exchange, and real-time conversation. Although Twitter is more commonly known for its immediate feedback and succinct tweets, it is not limited to real-time conversations through Twitter chats or the built in messenger function. One has the ability to search in Twitter for hashtags, unique sets of letters used to connect similar thoughts and ideas; the author includes a hashtag into their tweet and that can later be searched. The author is not limited to only a single hashtag either. Using this search option, professionals can search for information posted previously and utilize Twitter in the time-delayed aspect of active learning. Finally, the aforementioned Twitter chats are also used in the 'learning by doing' category of active learning. Through active chats the professional can collaborate on ideas, lessons, and research new materials for their students or to create a PLN.
4. **Good Practice Gives Prompt Feedback.** Formative assessment is vital to instructional growth. Formative assessment allows professionals the ability to assess the effectiveness of

their instruction, methodologies, and the pedagogies being used. Twitter allows us, as professionals, to seek feedback from our PLNs to assist in difficult situations in class and to enrich the instruction being provided in the classroom. When one is a teacher of low incidence disabilities, the physical PLN is very limited, it could only be a single person in a district. Through social media, like Twitter, the PLN grows exponentially and allows for resources to be explored to further a classroom environment. Furthermore, the immediateness of the social network allows for the needed prompt feedback so the suggestions can be implemented before they become irrelevant.

5. **Good Practice Emphasizes Time on Task.** Social media, like Twitter promotes time on task through the immediate nature of the feedback provided. Time on task is improved because of the instant feedback and numerous feedback allows for more time implementing the ideas and evaluating the effectiveness of the suggestions. Being a reflective practitioner, rather than waiting to a point where suggestions may no longer be relevant, allows for growth. By using Twitter as a venue for communication, geographical barriers are removed without impacting the quality of the information or the application of the information in the classroom and in PLNs (Lowe & Heaton, 2012).
6. **Good Practice Communicates High Expectations.** Professionals need to understand that “once information is released into cyberspace, it becomes part of a global network” (Huffman, n.d., p. 155). Because of this public, unfiltered nature of Twitter, there is an inherent expectation that high professional standards will be met during these interactions. PLNs are self-regulatory, and this idea of an idea out there for the world to access at any time lends itself to meeting these expectations. All tweets are in the public domain. Anyone can access them at any time and with it one is forever associated via a username; because of this, many professionals have taken to using two different Twitter handles, a personal one and a professional one to keep their personal and professional lives separate. By having two separate usernames, the fear of the blurring the lines between professional and personal diminishes, and as a result, empowers educators to connect, not only with other educators, but with parents and students as well. Additionally, seeing real-life problems and situations in real-time, reading and participating in conflicting points of view are all forces of motivation to improve comprehension, analysis, and synthesis of information.
7. **Good Practice Respects Diverse Talents and Ways of Learning.** Social media, like Twitter, promotes a multitude of learning styles. It is not bound by resources other than a reliable internet connection and a device to access the site. This minimalistic set of needs promotes all learners from all walks of life to participate. It doesn’t discriminate based on race, creed, or socio-economic status. Also, because it can be linked to other social media sites like Facebook, Vine, and Instagram, the Twitter account becomes more than just a multimedia hub for sharing instructional ideas, and expands to encompass the learner holistically.

Current Applications

An effective model in the way social media can be used in developing a PLN can be seen by examining how Kanawha Valley Community and Technical College² uses Twitter in its American Sign Language Interpreting Program (KVCTC-ASLI). Although the population of Deaf is not large in the Kanawha Valley (Charleston-Huntington area), it is larger than in many other counties in the state (Appendix A) but being accepted into Deaf culture is an integral part of being an interpreter and a professional working with the Deaf culture. Since there is not a large group in which to immerse the students, the students are instead immersed into Deaf culture through Twitter.

Besides being able to access the educational aspect of their PLNs, instructors have seen interaction between their students and Keith Wann, Deaf Politics Blog, and ABC Family (sponsor of *Switched at Birth*, a show that revolves heavily around Deaf culture). The students and professionals are tweeting with members of Deaf culture across the United States (Lowe & Heaton, 2012).

Following the model set forth in the case study, as well as the current application of Twitter through monthly educational chats with the West Virginia Department of Education (WVDE), the West Virginia Schools for the Deaf and the Blind (WVSDB) decided to start bi-weekly Twitter chats to engage the teachers of the blind, low vision, deaf, hard-of-hearing, and deafblind in the state. Using the hashtag #wvsdbchat and the twitter account @wvsdb_ed the WVSDB attempted to initiate these monthly chat sessions.

Information was advertised through two routes: First, the WVSDB shared a flyer with the deaf/hard of hearing educator listserv (see Appendix B) that is maintained, and second, the Office of Special Education through the WVDE shared the flyer with the listserv of special education directors throughout the state to disseminate with their staff. Although the information was shared through the WVSDB listserv, the WVDE listserv did not share the information until the Monday following the first chat.

John Milliman, Director of Special Education at WVSDB, was the moderator for this first chat. Despite the advertisement to the listserv, there were no participants for this chat. Milliman attempted to expand the PLN of the chat by including the hashtag #deafed. This did result in the growth of the WVSDB PLN by gaining additional followers and including their PLN in the WVSDB advertisement of chats. Unfortunately, the PLN of the moderator was insufficient to generate the needed buzz to initiate the chat sessions for real-time discussion.

Lowe's dissertation (unpublished) shows professional development and PLNs are interconnected rather than separate entities when using digital resources such as Twitter. Interacting through other Twitter chats (#wvedchat and #deafed) will grow the PLN of the WVSDB and thereby provide a jumping off point for the #wvsdbchat. In addition, the moderator made the assumption that the teachers he was trying to reach already participated in Twitter, and that may not be the case. In order to grow the #wvsdbchat, PLNs of the moderator and @wvsdb_ed need to grow, as well as support Twitter use of teachers and administrators of low-incidence disabilities.

Conclusion

² KVCTC has since merged with Bridgemont Community and Technical College and is now known as BridgeValley Community and Technical College.

The earliest attempts to implement the #wvsdbchat was an unmitigated failure. On two separate occasions the moderator attempted to initiate chat sessions on Twitter and no one participated. What was discovered through this process is that without a robust and viable PLN that it is impossible to start a new Twitter chat session. In an attempt to build the PLN of the WVSDB, the school will participate in other chat sessions including #wvedchat, a pre-established monthly chat amongst educators statewide, to gain interest in the #wvsdbchat sessions. Once the PLN of the school is grown, the moderator will again attempt to initiate the chat sessions.

Twitter continues to show itself as a viable option for the implementation and development of PLNs and professional development (PD). It is imperative though that if an organization chooses to utilize Twitter as a meaningful means of disseminating information that the audience base be identified as active Twitter users; it cannot be assumed that all people actively participate in social media nor are fluent in the ways of fully utilizing the tools that are embedded in many of the social media sites.

In order for #wvsdbchat to be successful, as would be the case for any new chat session, the primary focus must be on an organization developing a robust PLN not just associated with the microcosm of their organization, but associated with a broader spectrum of participants. Twitter has shown, even in West Virginia, at the heart of Appalachia, to provide valuable resources to educators. As with all new endeavors, failure must not be considered as the end, but a crossroads to determine a better way. With a plan to grow PLNs and participate in already established #edchats, it is hoped that the #wvsdbchat will soon be another established resource for teachers of low-incidence disabilities.

References

- Chickering, A., & Gamson, Z. (1987, March). Seven principles for good practice in undergraduate education. *AAHE Bulletin*.
- Chickering, A., & Ehrmann, S. (1996). Implementing the Seven Principles: Technology as lever. *AAHE Bulletin*, 49(2).
- Dunlap, J., & Lowenthal, P. (2009a). Horton hears a tweet. Retrieved from <http://www.educause.edu/ero/article/horton-hears-tweet>
- Huffman, S. (n.d.). Benefits and pitfalls: Simple guidelines for the use of social networking tools in K-12 education. *Education*, 134(2), pp. 154-160.
- Junco, R., Heiberger, G. & Loken, E. (2010). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*. doi:10.1111/j.1365-2729.2010.00387.x
- Junco, R., Elavsky, M. & Heiberger, G. (2013). Putting Twitter to the test: Assessing student outcomes for student collaboration, engagement and success. *British Journal of Educational Technology*, 44(2), pp. 273-287.
- Lowe, R., & Heaton, L. (2012). Are you Tweeting: A brief look at microblogging with Twitter in education. In T. Amiel & B. Wilson (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia, and Telecommunications 2012* (pp. 2729-2733). Chesapeake, VA: AACE.
- Mazer, J., Murphy, R., & Simonda, C. (2007). I'll see you on "Facebook": The effects of computer-mediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), pp. 1-17.
- Statistic Brain Research Institute. (2015). Retrieved from <http://www.statisticbrain.com/twitter-statistics/>
- Twitter. (2014b). *The Story of a Tweet*. Retrieved October 15, 2014, from Twitter: <https://about.twitter.com/what-is-twitter/story-of-a-tweet>

Appendix A: Number of students identified, by county, as either Deaf, Hard of Hearing, or Deafblind in West Virginia as per the December 1, 2014 Child Count

County	Number of Deaf/HH/DB	County	Number of Deaf/HH/DB	County	Number of Deaf/HH/DB
02	4	39	70	72	13
04	27	41	2	74	15
06	8	43	12	75	3
08	1	45	13	77	1
10	1	47	13	79	2
12	16	48	5	81	5
16	1	49	6	84	1
20	14	51	13	85	1
24	3	53	3	87	8
26	7	54	2	89	10
28	3	56	18	92	6
29	9	57	2	94	2
31	4	60	1	96	13
33	8	62	2	97	58
34	1	64	5	98	2
35	10	66	1	Grand Total	448
37	16	70	7		

Appendix B: Twitter Chat Flyer disseminated on listserv.



When: Saturdays at 7:00 pm
starting November 14, 2015

Hashtag: #wvsdbchat

We, the West Virginia Schools for the Deaf and the Blind, would like to welcome you to the first in a series of Twitter chats focusing on the education of students who are Deaf, Hard of Hearing, Low Vision, Blind, or Deafblind.

These chats will take place every two weeks on Saturdays, 7:00 pm, beginning on November 14, 2015. These chats will focus on a variety of topics designed to promote a collaborative learning and teaching environment among Deaf/Hard of Hearing and Low Vision/Blind teaching professionals throughout the state.

Initial Topic: How are services being provided?

Michelle Novelli
Sherry Markel, Ph.D.
Northern Arizona University
Flagstaff, Arizona

MAKING CONNECTIONS: BUILDING STRONG RELATIONSHIPS WITH FAMILIES OF YOUNG, RURAL STUDENTS

Transition to school (or between school settings), is commonly considered to be a process and not a single occurrence. While registration or the important first day of school has undeniable significance, the series of activities leading up to the first day of school can benefit students, parents, and teachers. Developing relationships prior to the first day of school and continuing throughout the school year can be facilitated by simple, ongoing transition activities.

Bronfenbrenner's ecological approach can be applied to transition with a focus on both physical places, (including preschools, home, kindergarten or first grade) and on individuals, including the interaction of individuals in physical settings. Referring to physical places in a child's life as microsystems, Bronfenbrenner (1986) stressed the importance of strong links between them, including inter-relationships between school and home. With the child at the center of overlapping systems, everyone benefits when the systems work in conjunction with each other: most notably, the child.

Similarly, McGettigan and Gray (2012) cite social constructivist theory, noting the importance of the individual to construct meaning from their interactions and institutions. Regarding young children transitioning to or between schools, the ability of the child to make sense of his or her environment, (or school setting), directly impacts the ability to make sense of the environment and relationships within that setting. If a young child is acclimated to a school setting, he or she will better communicate with peers and develop knowledge.

In addition to a child's awareness of his or her environments, culture factors into successful transitions among school environments. Specifically, cultural socialization, including "practices aimed at teaching children about and instilling pride in their cultural heritage" (Caughey & Owen, 2014, p. 391) benefits ethnic minority children as they begin school. Caughey and Owen (2014) found that children who experienced greater cultural socialization "displayed greater pre-academic skills, better receptive language, and fewer behavior problems" (p. 396) as they began to prepare for kindergarten. In this way, young children with a stronger sense of cultural identity and pride reaped the benefits of academic readiness, increased self-control and behavior, as well as improved language ability—important areas to experience advantages.

Looking at the ongoing process of transitioning between school settings, a sense of teamwork among early childhood and school settings resulted in benefits for children, families and teachers (Schischka, Rawlinson, & Hamilton, 2012). Communication and mutual interest, with focus on successful transitions for young children, help drive interactions. Unfortunately, this cohesion among school settings serving young children is notably uncommon and truly the exception, rather than the rule (Schischka et al., 2012).

Some communities that are dedicated to promoting early childhood education and supporting young children and their families as school begins, have developed toolkits to promote quality relationships among participants in the transition process (Kennedy, Cameron, & Greene,

2012). While “contents” of such toolkits would vary among different communities and contexts, some notable components might be developing a community transition council (Laverick, 2007) and making community efforts to promote registration for programs including Head Start and local kindergarten programs.

Focusing on school and ways that schools can promote successful transitions, offering multiple school visits for young children as they explore a new school setting well in advance of the actual beginning of the new school year is one of the most important processes for young children, especially those with disabilities (Schischka et al., 2012). While young children with Individualized Education Plans (IEPs) traditionally have a transition meeting between preschool and kindergarten, a process that goes well beyond the one mandatory meeting will result in significant benefits. It is permissible to host transition meetings at the preschool (or current) school setting of a young child, but hosting the transition meeting in the new school setting provides the opportunity for a child and his or her family to spend some time in the new school environment while experiencing the comfort and familiarity of current early childhood personnel and related service providers, including speech pathologists and physical and occupational therapists, among other team members. Respectful, cooperative interaction among all adults participating in the transition meeting is critical.

The transition meeting is an essential component of a young child’s progression between school settings, hosting multiple school visits to new educational settings is incredibly helpful for children and their families. Intentionally hosting visits over a period of time, with varying, increasing lengths of time, will slowly acclimate young students to increasing time in the new school environment. If these visits are scheduled so that a few students and families can attend at a time, the possibility for students to make friends even before school begins is promoted. Having a friend to look forward to seeing positively impacts the extent to which young children anticipate starting at a new school (Danby, Thompson, Theobald, & Thorpe, 2012).

While relationships can be promoted among students and families within a class, connections between the child, family, and teacher can also begin well in advance of the upcoming school year. One powerful and meaningful activity that can begin early is the implementation of home visits between the teacher and school staff and future students’ families. For safety, teachers should travel in groups or pairs to visit children and families. Dates and times should be decided upon by families and school staff, focusing on making the home visit as comfortable and convenient as possible for families.

During home visits, teachers can ask questions to learn more about children and families while enjoying such delightful occurrences as home-baked treats and invitations to view toy demonstrations, for instance. The symbolic gesture of school personnel taking time to meet children and families at their homes lets families know that teachers are truly interested in building meaningful relationships. During these visits, family members often enjoy sharing stories about their children and will frequently disclose information that will be helpful as school begins. In the context of a young child’s home, relationships are built and teamwork is stressed.

This groundwork well in advance of the first day of school sets conditions in place to support young children in new academic environments. Planning, teamwork, and time is required, but the benefits of such advanced planning will be enjoyed by families, teachers, and most importantly, young children. As teams to support young children develop, focus begins to shift to

young children's development and structures to put in place to facilitate behaviors that impact children's success.

The ability of young children to manage their emotions and behaviors and to make meaningful interpersonal relationships is a requisite for school readiness and academic success. (Hartas, 2011). Those first years of formal schooling have proved to be a critical window for setting up patterns of behavior concerning social interaction, emotional regulation and attitudes about learning and school, as well as self-images of competency. This is a time when children are developing and changing rapidly and are expected to build intellectual skills of literacy and numeracy while adapting to the complex school environment. A child's thinking moves from preoperational to concrete modes of logic (Piaget & Inhelder, 1964) to an abstract understanding of objects and relations and from a self-preoccupation (egocentrism) to an awareness and understanding of others and their point of view.

The transition into formal schooling brings a new context to young children with a larger setting, more children, fewer adults, and a set of rules and regulations that systematize the socialization into the school community. The more structured tasks to afford learning in the classroom are often a new experience as more "work" and less "play" becomes the norm. There is a much more increased demand on children's ability to self-regulate their behavior to participate successfully in this environment. Paying attention (attending) and keeping quiet during specified times, putting things in their correct places and interacting "nicely" with others are all demands that escalate in the school environment (Perry & Weinstein, 1998). A further new element of evaluation is added in which the child's performance is evaluated and the child and parents receive feedback. How a child manages this major transition into school lays a critical foundation for future academic, social-emotional and behavioral development.

Prosocial behavior is a perceived set of behaviors that include being helpful, kind, considerate, and co-operative (Hartas, 2011). This along with the capacity to regulate behavior is linked to school readiness and success. The inverse has also been found to be true that limited social competence, an outgrowth of prosocial behavior, is a strong predictor of academic difficulties and behavioral difficulties. Interestingly, there is a link between language and behavioral, social, and emotional difficulties as supported by two large bodies of research (Beitchman et. al, 2001). This relationship of behavioral and language difficulties persists over time. There are ambiguous findings about gendered differences in this area with different studies reaching very different findings.

Another key factor for the successful transition into the school environment includes a concept labeled trustworthiness. This is a prosocial set of behaviors that is only possible with a child's ability for self-control. Trustworthy behaviors include being able to keep secrets, which develops intimacy with peers and being able to make promises and following through on those promises. These behaviors are important for the development of friendships and children who engage in trustworthy behavior are more likely to become involved in social activities with their peers and gain greater acceptance (Betts & Rotenberg, 2007). A child's ability to follow through on promises and to keep secrets is directly linked to their ability to plan and exert control over their own behavior. The child with positive peer relationships has a better school adjustment relative to a child with lower self-control who is not able to engage in trustworthy behaviors. Sex differences have been found by Rotenberg et al. (2004). Girls have higher peer-reported trustworthiness than

boys. This finding has been attributed to the socialization of girls towards the development of closer peer relationships than is the case with boy.

Emotional competence is another factor that is closely related to trustworthiness. Emotional competence is the young child's ability to express healthy emotions and to regulate them for appropriate times and to understand emotions in others. Children learn that positive emotions can be very inviting to others. Parents and teachers play a large role as socializers of emotional competence through modeling, scaffolding, and direct teaching of emotions as well as reactions to children's emotions (Denham, Bassett, & Zinsser, 2012). Combined, trustworthiness and emotional competence factors are very important to a child's successful transition to school. Findings seem to indicate that those children who demonstrate trustworthy behaviors and emotional competence have social competence and tend to have more friends and tend to participate more in activities in the classroom. Active engagement is a high predictor of learning so this becomes an extremely important variable within the classroom environment.

Prosocial behaviors, trustworthiness, emotional competence, and language development are all factors that can be modeled, taught, and scaffolded by providing rich opportunities for learning and practice by teachers and parents. Key is developing a safe environment, one which supports the child's development in a caring and respectful way. Classrooms that become a community of learners who respect and care for one another's feelings and self-esteem with models of communication that reflect this provide enriched environments for this development. Parents are powerful role models who can draw on their intimate knowledge of the child and provide a safe environment to talk about their emotions and responses to situations. Teachers extend this parental socialization of emotion into the classroom environment. Many children's books such as *Sam Bangs and Moonshine* as well as *Chrysanthemum* have predominant themes that teach all of these factors and help develop rich language and shared experiences to talk about these factors explicitly with young children. This partnership with home and school is especially potent for insuring school success. Teachers often provide opportunities for each child to shine within the classroom environment and these experiences help the child to be perceived by peers as competent as well. Having a Student of the Week in class, highlighting a job well done, providing wall space to display art work, assigning class work roles, and using drama within a reading program (Adomat, 2012) helps students to see themselves in a positive way. School transition is a complex task. Young children can be helped by informed and aware parents and teachers.

When the first day of school arrives, ideally the transition activities initiated much earlier will alleviate nerves and replace them instead with an anticipation to see the classroom, the teacher, and even some friends. Since transitioning to school is such a complicated process, however, it is inevitable even in the best of circumstances to have an occasional child who is overwhelmed with emotion at the thought of his or her parent or primary caregiver leaving. If tears develop, teachers can help young children label how they feel, honoring the child's feelings and assuring that a family member will always be back to pick them up later that day (Tours & Dennis, 2015). This can be especially helpful for young children with language delays or emotional challenges, who may lack the ability to put labels on feelings even when calm. In this way, a challenging moment is a supported learning opportunity.

At the same time, parents and teachers can model how to manage emotions in appropriate places, demonstrating and perhaps quietly verbalizing that it is okay to feel sad when a parent leaves, and again gaining reassurance that someone will definitely return to pick up the child at the

end of the day. Helping support appropriate transitions, momentary tears, for instance, as opposed to running to the door and clinging to parents, is an opportunity for teamwork between parents and teachers. Taking a moment during the meetings that occur in the months prior to the first day of school to discuss a brief plan to help support children during tearful first “goodbyes” will provide not only a plan for parents and teachers, but it reinforces the important message that as teachers, we respect that families are the experts on their young children. As teachers, we value the opportunity to share from parents’ knowledge of their children.

The importance of parents and teachers working together to define appropriate behaviors for young children in specific situations ties into the critical skill of behavior regulation. As children continue to develop their understanding of how to behave in specific situations and gain practice with their emotions, even young children with developmental delays can make progress in behavior regulation. In those critical first days and weeks of school, it is common to see a marked progression from emotional outbursts at the moment of separation to quiet tears, and eventually, with teamwork and support from teachers and parents, confident, joyful transitions from parents to school.

Another added benefit from the supportive team efforts in encouraging behavior regulation is the developing friendships among young children. Ideally, these friendships began back in those before-school meeting days to help acclimate students to their new school setting. As a consistent daily routine is developed, with teamwork between teachers and families, children will gain confidence in their new school environment. Friendships will develop, with ongoing support, modeling, and encouragement from teachers and parents. Just as early academic development is a gradual process, learning to make friends occurs over time, particularly with young children with special needs. Friendships and social competency become invaluable to the educational process, as we see young children anticipating both the events of the school day—and moments to enjoy interactions with friends and teachers.

A natural offshoot of blossoming friendships is increased language development. Hartas (2011) recommends that children should be viewed as active participants in their language and behavior development. A child’s desire to interact with a valued friend provides intrinsic motivation to initiate conversations and increase language skills. This can be evidenced in inclusive early childhood settings, as children can be frequently heard explaining to adults, “No, she is saying...” Friendships and peer interactions provide increased context and more opportunities for language development. As young children continue to build classroom-based language skills, teachers’ perceptions of their behavior change (Hartas, 2011), and higher expectations develop. In this sense, the language developed in school with peers and teachers positively impacts children not only in terms of their friendships, but the benefits extend to behavior and academics as well.

Efforts between parents and teachers in establishing early and effective collaboration to support young learners result in meaningful, lasting benefits. While time and care may be required in the process leading up to the first day of school, the results of a successful transition can be felt by students, parents, and teachers far beyond the first days of school.

References

- Adomat, D. S. (2012). Drama's potential for deepening young children's understanding of stories. *Early Childhood Education Journal*, 40, 343-350.
- Beitchman, J. H., Wilson, B., Johnson, C. J., Atkinson, L., Young, A., Adlaf, E., Escobar, M., & Douglas, L. (2001). Fourteen-year follow-up of speech/language impaired children and control children: Psychiatric outcome. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, 75-82.
- Betts, L. & Rotenberg, K. (2007). Trustworthiness, friendships and self-control: Factors that contribute to young children's school and adjustment. *Infant and Child Development*, 16, 491-508.
- Bridges, M., Cohen, S. R., Scott, L., Fuller, B., Anguiano, R., Figueroa, A. M., & Livas-Dlott, A. (2015). Home activities of Mexican American children: Structuring early socialization and cognitive engagement. *Cultural Diversity and Ethnic Minority Psychology*, 21(2), 181-190. doi:10.1037/a0037927
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742.
- Caughy, M. O., & Owen, M. T. (2015). Cultural socialization and school readiness of African American and Latino preschoolers. *Cultural Diversity and Ethnic Minority Psychology*, 21(3), 391-399. doi:10.1037/a0037928
- Danby, S., Thompson, C., Theobald, M., & Thorpe, K. (2012). Children's strategies for making friends when starting school. *Australasian Journal of Early Childhood*, 37(2), 63-71.
- Denham, S., Bassett, H., & Zinsler, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education*, 40, 137-143.
- Grant, Anne (2013) Young gifted children transitioning into preschool and school: What matters? *Australian Journal of Early Childhood*, 38, 23-31.
- Hartas, D. (2011). Children's language and behavioral, social and emotional difficulties and prosocial behavior during the toddler years and at school entry. *British Journal of Special Education*, 38, 83-91.
- Holen, S., Waaktaar, T., Lervag, A., & Ystgaard, M. (2013). Implementing a universal stress management program for young school children: Are there classroom climate or academic effects? *Scandinavian Journal of Educational Research*, 57, 420-444.
- Johnson, A., Baker, A. & Bruer, L. (2007). Interdependence, garbage dumping, feral dogs: Exploring three lifeworld resources of young children in a rural school. *Early Childhood Education Journal*, 34, 371-377.
- Kennedy, E. K., Cameron, S. and Greene, J. (2012) Transitions in the early years: Educational and child psychologists working to reduce the impact of school culture shock. *Educational & Child Psychology*, 29, 19-31.
- Laverick, D. (2008). Starting school: Welcoming young children and families into early school experiences. *Early Childhood Education Journal*, 35, 321-326.
- Law, P. C., Cuskelly, M., & Carroll, A. (2013). Young people's perceptions of family, peer, and school connectedness and their impact on adjustment. *Australian Journal of Guidance and Counselling*, 23, 115-140.
- Laverick, D. (2007). Starting school: Welcoming young children and families into early school experiences. *Early Childhood Education Journal*, 35, 321-326.

- McGettigan, L., & Gray, C. (2012). Perspectives on school readiness in rural Ireland: The experiences of parents and children. *International Journal of Early Years Education*, 20, 15-29.
- Perry, K., & Weinstein, R. (1998). The social context of early schooling and children's school adjustment. *Educational Psychologist*, 33, 174-194.
- Pillinger, C., & Wood, C. (2014). Pilot study evaluating the impact of dialogic reading and shared reading at transition to primary school: Early literacy skills and parental attitudes. *Literacy*, 48, 155-163.
- Purpura, D., Reid, E., Eiland, M., & Baroody, A. (2015). Using a brief preschool early numeracy skills screener to identify young children with mathematics difficulties. *School Psychology Review*, 44, 41-59.
- Roberts-Gray, C., Briley, M. E., Ranjit, N., Byrd-Williams, C. E., Sweitzer, S. J., Sharma, S. V., ... Hoelscher, D. M. (2016). Efficacy of the *Lunch is in the Bag* intervention to increase parents' packing of healthy bag lunches for young children: A cluster-randomized trial in early care and education centers. *The International Journal of Behavioral Nutrition and Physical Activity*, 13, 3. doi:10.1186/s12966-015-0326-x
- Schischka, J., Rawlinson, C., & Hamilton, R. (2012). Factors affecting the transition to school for young children with disabilities. *Australasian Journal of Early Childhood*, 37(4), 15-23.
- Tours, S. & Dennis, L. (2013) Easing First Day Jitters: Strategies for Successful Home-to-School Transitions. *Young Children*, 70, 84-89.

Deborah L Rooks-Ellis, Ph.D.
 Assistant Professor Special Education
 University of Maine
 College of Education and Human Development
 5766 Shibbes Hall
 Orono, ME 04469

BUILDING A SUSTAINABLE PROFESSIONAL DEVELOPMENT MODEL IN MAINE: OBSERVATIONAL STRATEGIES AND REFLECTIVE COACHING IN ACTION

Given limited resources within a state deemed to be the most rural state in the 2010 census, it was essential that Maine provide evidence-based practice professional development that was equitable, accessible and effective statewide. Maine is the largest state in New England, greater in size than the five other New England states combined. In recent years, the Maine economy lagged behind, and Maine's median income was the lowest of all New England states. Maine has been identified as a state with high poverty (U.S. Census Bureau, 2012) and high disability (Erickson, Lee, & von Schrader, 2012). These factors directly impact planning of statewide efforts to provide professional development. The purpose of this paper is to describe the Maine Supporting All Teachers For All Students (SATFAS-PD) Professional Development model, providing equal access to high quality, evidence-based professional development to teachers statewide.

Theoretical Background

A system of professional development that builds on the principles of implementation science is most likely to lead to the adoption and use of innovations necessary to improve the quality of special education services and use of evidence-based practices (Fixsen, Blase, Metz, & Van Dyke, 2013; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; National Implementation Research Network, n.d.). Significant attention from the fields of early childhood and autism spectrum disorders has been focused on characterizing the features of professional development necessary to achieve measureable change in teacher practice and related child outcomes (Desimone, 2009; Diamond et al., 2013; Pianta et al., 2005; Snyder et al., 2011). Features identified include the following: PD is sustained over time rather than provided as one-shot experiences; PD is focused on a specific curriculum or set of explicit practices rather than general teaching methods; and PD includes the provision of job-embedded supports, using systematic approaches that involve teachers' implementation of practices in the classroom and reflection, as well as providing specific feedback about practice implementation from a coach, mentor or peers. In their meta-analysis, Joyce and Showers (2002) suggested that features of PD associated with what they termed 'executive implementation' of practices in classrooms included a combination of pedagogical strategies such as theory and discussion, plus explicit demonstrations of practices in training, plus practice with feedback in training, plus coaching in the classroom. The authors noted that PD including all of these features would achieve fidelity of implementation as high as 95%.

Maine's Professional Development Model

The following factors were considered necessary in building a sustainable professional development (PD) model for Maine:

- partnership driven;
- evidence-based;
- definitive roles and responsibilities;
- statewide access;
- local, state, and federal resources leveraged; and
- the ability to meet the PD needs of educators and related service providers at the local, regional, and state level.

SATFAS-PD was designed as a bi-directional model of implementation that would build from the top down (e.g., a team of state-level organization leaders) and the bottom up (e.g., training teachers and other service providers), and included these active implementation stages: (a) exploration, (b) installation, (c) initial implementation, and (d) full implementation.

The SATFAS-PD model created partnerships between the Maine Department of Education, School Administrative Units (SAUs), family support organizations, several institutions of higher education (IHE), and community-based organizations. This State Partnership Team (SPT) was accountable for insuring that the teams chosen to participate in the SATFAS-PD would be provided a nurturing environment using adult learning principles (Dunst, Trivette, & Hamby, 2010) to support change in personal practice, leading to improved student outcomes. Prior to involvement in the SATFAS-PD, SAUs determined their “readiness for change” as recommended by Fixsen et al. (2008), and completed an application process to identify their strengths and needs. Eligible teams were comprised of general educators, special educators, administrators, related service providers, and paraprofessionals and family members as applicable.

The first stage of exploration occurred in Year 1 of the SPDG. The SPT developed a four-year strategic plan outlining goals for the five SPDG initiatives for a comprehensive PD process, including coaching, to support the implementation of evidence-based practice (EBP). The plan included statewide goals for a sustainable system that would promote change and continue beyond the end of the SPDG. The SPT highlighted statewide resources, and developed action plans that included intentional data collection and progress monitoring.

In Year 2, the SPT moved forward with installation of the SATFAS-PD and secured the resources needed to do the work ahead and prepare educators for the EBP. This included identifying local technical assistance providers who would serve as coaches to the site level implementation teams.

By Year 3, SATFAS-PD was in the initial implementation stage for three of five statewide SPDG initiatives, and five of five initiatives by Year 4. Activities included multiple on-site statewide professional development opportunities by expert trainers, duplicated around the state and grouped by region; a dedicated SPDG website to house the recorded trainings, handouts, and resources offered by the trainer and shared resources developed by statewide implementation teams; and coaching support to each implementation team for a minimum of 10 on-site hours during the academic year. In the active implementation science framework, coaching has been described as an

important competency “driver” to ensure evidence-based practices are implemented as intended (Metz & Bartley 2012; Snyder et al., 2011, 2012). Coaching components within the SATFAS-PD included the use of a team self-assessment tool to determine shared goals, the development of an action plan that included systematic and cyclical processes of collaborative goal-setting related to practice implementation, observational strategies (e.g., classroom observation, videos or practice), guided reflection, and a feedback loop to ensure continuous conversation.

Planning will continue in Year 5 for the final phase of full implementation to ensure 50% or more of the intended educators, staff, or team members are using evidence-based practices with fidelity and achieving good outcomes. For more information about the active implementation stages, refer to the NIRN’s active implementation hub: <http://implementation.fpg.unc.edu/module-4>

The SATFAS-PD provides a mechanism for sustained practice. The SPT followed this process to provide meaningful professional development and ongoing coaching support, and to ensure equity of access to PD to all teachers for all students. We cannot yet determine a participant’s ongoing and meaningful implementation with fidelity of the evidence-based practices learned as a result of targeted PD. A process to determine fidelity of implementation and impact on student outcomes is outlined in year 5 of the SPT plan, with the intent to share the results at that time.

Discussion

Our current data on the SATFAS-PD is still anecdotal in nature, comprised of PD post surveys with participant feedback. However, the information collected to date provides important feedback for other states considering a similar model of statewide professional development and for determining next steps.

Participants of SATFAS-PD offerings, regardless of the SPDG initiative, responded very favorably to the regionally offered PD, which allowed for participants to attend PD within their district rather than requiring participants to travel long distances. Participants also responded favorably to the dedicated SPDG website, stating that access to recorded trainings meant that they could review information again, and also share information with other staff who were not in attendance. Many participants reported using the recorded trainings to provide staff development at the site level.

The majority of participants reported increased knowledge and understanding of how evidence-based practices were identified nationally. Participants acknowledged the importance of learning to implement these within their personal practice, and 85% of participants agreed that implementation fidelity was equally important. Participants noted that fidelity checklists outlining the key elements of an EBP were especially helpful in guiding their practice (e.g., Autism Internet Modules and the National Professional Development Center on Autism Spectrum Disorders, n.d.).

Based on survey data, educators are supportive of additional professional development opportunities using the SATFAS-PD model. Participants indicated specific practices in which they wish to be supported, and requested that PD offerings be more frequent with less time in between

(e.g., 3 days of ongoing training rather than 3 days spread throughout the year), paired with immediate coaching.

Lessons Learned

Coaching

The coaching component was unlikely to succeed unless district and building level administrators recognized the importance of coaching as an effective, job-embedded professional development approach that directly impacts student outcomes. Administrative support was essential and validated the PD as a valuable use of participant time. Support was received in many ways including release time to attend professional development opportunities, release time to focus on action plan steps, and professional support to try new strategies and engage in guided reflection with the coach.

Complexity of Implementation

An additional lesson learned was what the SPT defined as “complexity of implementation.” If the trainer was not able to fully explain the concept, define the practice, or engage the participants to demonstrate and model the practice, then participants were not able to do the same within their classrooms. This was reported by participants and observed by coaches.

Building Capacity

A common concern addressed in the literature is how much coaching is needed for teachers to reach implementation fidelity of evidence-based practices. In the SATFAS-PD model, the amount of on-site coaching prescribed was 10 hours, and implementation teams determined how the hours were used with the understanding that additional coaching sessions could be requested. We learned that different amounts of coaching were needed depending on the SPDG initiative. For example, our Maine Autism Leader Teams often requested additional coaching time to focus on a specific EBP or to provide targeted assistance with a student. However, our Post-Secondary Leader Teams reported that 10 hours of coaching was sufficient to meet the goals outlined in the action plan.

Future Directions

Although anecdotal in nature, the findings presented have implications for future directions in Maine and other states concerned about providing equitable access to professional development. Maine’s Supporting All Teachers for All Students Professional Development model of evidence-based practice takes into consideration a state’s demographics and resources; and promotes sustainability through leader teams at site and regional levels. In Year 5, we will begin to examine the quality of implementation of evidence-based practices that will improve student outcomes, and will seek to better understand the extent to which educators feel confident implementing these practices.

References

- Desimone, L. M., 2009. Improving impact studies of teachers' professional development: toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199.
- Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P. A. (2013). Synthesis of IES Research on Early Intervention and Early Childhood Education. (NCSER 2013-3001). Washington, DC: National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education. This report is available on the IES website at <http://ies.ed.gov/>.
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2010). Meta-analysis of the effectiveness of four adult learning methods and strategies. *International Journal of Continuing Education and Lifelong Learning*, 3(1), 91-112.
- Erickson, W., Lee, C., & von Schrader, S. (2014). *2012 Disability Status Report: United States*. Ithaca, NY: Cornell University Employment and Disability Institute (EDI).
- Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Exceptional Children*. [Special Issue], 79, 213–230.
- Fixsen, D. L., Panzano, P., Naoom, S., & Blase, K. (2008). *Measures of implementation components of the national implementation research network frameworks*. Chapel Hill, NC: National Implementation Research Network.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network (FMHI Publication No. 231). Retrieved from http://www.fpg.unc.edu/_nirn/resources/publications/Monograph/, January 20, 2014.
- Joyce, B. R., & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Metz, A., & Bartley, L. (2012). Active implementation frameworks for program success. *Zero to Three*, 32(4), 11–18.
- National Implementation Research Network, n.d.; <http://implementation.fpg.unc.edu/module-4>
- Pianta, R. C., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9(3), 144–159. doi:10.1207/s1532480xads0903_2
- Snyder, P., Hemmeter, M. L., & McLaughlin, T. (2011). Professional development in early childhood intervention: Where we stand on the silver anniversary of PL 99-457. *Journal of Early Intervention*, 33(4), 357–370.
- Snyder, P., Hemmeter, M. L., Artman-Meeker, K., Kinder, K., Pasia, C., & McLaughlin, T. (2012). Characterizing key features of the early childhood professional development literature. *Infants and Young Children*, 25, 188-212.
- U.S. Census Bureau. (2010). *Growth in Urban Population Outpaces Rest of Nation*, *Census Bureau Reports*. Washington, D.C.: Government Printing Office. Retrieved from http://www.census.gov/newsroom/releases/archives/2010_census/cb12-50.html, October 21, 2015.
- U.S. Census Bureau. *Poverty: Poverty Thresholds by Size of Family and Number of Children*. Retrieved from <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>, May 22, 2012.

Cathy Galyon Keramidas, Ed. D.
 Kimberly Hale, Ph. D.
 Angie Dugan, M.S.W.
 Jordan King, B.S.
 East Tennessee State University
 Clemmer College of Education
 PO Box 70548
 Johnson City, TN 37615

**THE HIGH STAKES LITERACY GAME:
 IMPROVING LITERACY OF CHILDREN WITH DISABILITIES
 THROUGH SQUISHY BOOKS**

Research has provided ample evidence supporting the notion that interaction with books during early childhood enhances the development of reading skills (Bus, van IJzendor, & Pellegrini, 1995; Dickinson & Smith, 1994; McKeown & Beck, 2004; Sénéchal & LeFevre, 2002). Additionally, we know there are substantial disparities in children's experiences with language, vocabulary, and early literacy prior to entering kindergarten. These disparities have a lasting effect on later academic success (Catts, Hogan, & Fey, 2003; Hart & Risley, 1995; Snow, Burns, & Griffin, 1998). Children at greatest risk for poor language and literacy skills are young children who live in poverty and young children identified at-risk for developmental delays and disabilities.

To diminish the effects of poverty and the risk for developing significant delays in language and literacy development, the National Association for the Education of Young Children (NAEYC) called for evidence based interventions for infants, toddlers, and preschoolers (NAEYC, 2009). In answer to this call, pediatric and education faculty and students at our university embarked on a project funded by the U.S. Department of Health and Human Services Health Resources and Services Administration that focused on improving the early experiences of young children and strengthening parents' knowledge and practice across our rural Appalachian region. Titled *ReadNPlay for a Bright Future in Appalachia Tennessee*, university faculty and students collaborated to organize and host family interactive events highlighting nutrition, physical activity, and evidence based strategies to promote language and literacy development in young children. Regional family events included family fun runs (e.g. Scarecrow Skedaddle 5k), Daddy-Daughter Celebration, Night at the Museum with Your Pediatrician, Once Upon a Time Celebration (e.g., fairy tale related activities at a local park), Tea for Expectant and Nursing Mothers, Daddy Day Camp, and Mommy and Me (e.g., bi-monthly breastfeeding support groups for new mothers). This presentation spotlights on our work with the mothers and young children at bi-monthly *Mommy and Me Breastfeeding Support Group* meetings.

Mommy and Me Breastfeeding Support Group meets twice a month for 2 hours. During these meetings, new moms met with a lactation consultant and medical residence to learn about breastfeeding, healthy nutrition for moms and children, safety in the home and neighborhood, physical activity for young families, and a variety of other general child development topics. Simultaneously, university Early Childhood Education students and Special Education students implemented activities to promote oral language development, early literacy skills, and motor skill development while caring for infants, toddlers, and preschoolers who accompanied the new moms

to the support group meeting. The goal of all activities was to make explicit connections between the words and concepts presented in the activities and the child's background and prior experiences. An additional goal of the activities was to inspire parent engagement in shared book reading and literacy activities and make more time for books at home. At the conclusion of each support group meeting, new moms were invited to take part in the activities and were given consumables to replicate activities and book reading at home.

Literacy Backpacks

Research has identified shared book reading as a primary method for improving oral language development and vocabulary in young children (Ezell & Justice, 2005; Hargrave & Sénéchal, 2000; Whitehurst & Lonigan, 1998). Shared book reading is a highly interactive practice of reading a book with a child using a variety of techniques, including open-ended questioning, to prompt discussion with the child about the characters, settings, and events of the story. Thus, books and shared reading activities were a focal point of the interactive activities at *Mommy and Me* meetings. Early Childhood and Special Education students designed literacy backpacks as a tool to facilitate family participation involving reading using developmentally- and culturally appropriate books, and creating activities related to the characters, settings, and events presented in each children's book.

Literacy backpacks are self-contained bags or backpacks that include books and related activities designed to enhance learning. The common purpose of each backpack was to strategically and actively engage children in telling (and re-telling) the story, discussing the characters, events, and using a variety of vocabulary words. Programs using literacy backpacks to improve educational outcomes for young children are becoming increasingly popular. Many classroom educators use literacy bags to strengthen family involvement and to impact the home literacy environment by sharing the activities with children and families to use at home (Brand, Marchand, Lilly, & Child, 2013; Bright, 2006; Richgels & Wold, 1998; Zeece & Wallace, 2009). Once we decided to create literacy backpacks, we recognized a need to be more inclusive of children with delays and disabilities and sought to adapt books.

Adapted Children's Literature

Developing literacy skills with young children with disabilities can be difficult. Dunst, Bruder, Trivette, & Hamby (2006) found that children with disabilities learned more concepts and gained more language skills when their interests were considered when choosing toys and books. For example, a child with an interest in cars and trucks learned more language when the books a parent chose to read included cars and trucks. However, finding an appropriate book for a child with a disability can be a challenge. A child with visual and hearing impairments might have difficulties understanding a book due to not having the pictorial and or visual cues that typical children have. Children with physical disabilities may not be able to turn pages to access a book independently and/or may not have access to technology like e-books, and children with autism might have an aversion to books or may use them in ways that does not promote literacy skills. Further, children with other disabilities may not relate to printed material and have no interest in looking at books either alone or with others.

Lack of access and/or lack of interest in books is exacerbated by the lack of accessible books for young children (e.g., children's books, picture books, etc.). A search using the key words "adapted children's books," "accessible children's books," "adapted books AND young children,"

“adapted books AND preschoolers”, and adapted books and infants and toddlers yielded few articles. Of those articles found, most focused on making books larger and/or using Boardmaker™ to create line drawing symbols (La Plume, 2011). Other materials used to enhance the themes of a book and types of books to use, such as books with repetition and books that used the child’s name (Boen, 2006), include use of technology such as Big Mack™ switches, picture symbols, adapted keyboards, software to enhance literacy (Beck, 2002), and the use of adult and child led e-books (Moody, Justice, & Cabell, 2010). Regrettably, most of these adaptations are expensive and time consuming. Additionally, they are not effective when used with infants and toddlers.

Squishy Books

Squishy books are an adaptation or creation of children’s books that are low cost, easy to make, and engage infants, toddlers, and preschoolers. The following materials are typically used to make squishy books: small figurines, nontoxic hair gel, soap or cooking oil, water, food coloring, confetti, glitter, foam numbers, letters, small dolls, sand, pudding- wet or dry, and plastic sealed bags (e.g., Ziplock™). “Squishy books” cannot be found when searching scholarly journal databases, but when the term is searched using Google™, a number of websites from institutes of higher education (i.e., University of North Carolina-Chapel Hill, University of Nevada-Reno), and early intervention organizations (e.g., North Carolina Office of Early Learning, Nevada Dual Sensory Impairment Project, Wyoming Department of Education, Accessible Instructional Materials-Virginia [AIM VA]), and one learning module on autism (i.e., Connect Modules) that define and describe how to create squishy books. One unpublished research study conducted with squishy books found that children with severe disabilities were equally engaged with squishy books as they were actual children’s books (Cohen & Demchak, 2012; Demchak & Cohen, 2015).

Lessons Learned on How to Make Durable Squishy Books

After viewing tutorials on how to create squishy books, we created an example so the students could create squishy books for an assignment for college courses. The students paired up, selected children’s books to adapt, and followed the squishy book guidelines. The first semester netted 13 and a half leaky squishy books, and half a book that a student asked special permission to seal with a food vacuum sealer (with the vacuum option off). As it turned out, this partial book was the best one created. After examining the pages, we noted that the book pages created with the food vacuum sealer were thicker than those created using Ziplock™ bags. The food vacuum sealer created a more durable seal that was less likely to leak. We decided to purchase a food sealer (around \$100 at a local large box store) and reseal all of the created squishy books. This worked well and all books were sealed with this process. Then a few leaked. Upon closer inspection, we determined that all of the books that leaked were created from hand sanitizer or soap. We theorized the hand sanitizer and soap was dissolving the seal. These substances were discontinued and the leaking ceased. Another issue that occurred was substances degrading even though sealed. This lead to items such as real leaves, painted toys, and grass to be discontinued. Below is a nonexhaustive list of items that created good squishy books.

Table 1

Some Items that Create a Good Squishy Book

variety of materials	Easter grass	shredded paper	Oil
----------------------	--------------	----------------	-----

water	food coloring	glitter	hair gel
items with sound	clay/play dough	counter animals, etc.	Pudding
mud	letter magnets	Scrabble™ letters	gift bag filler
ribbon	Lotion	coffee grounds	Small figurines

Squishy Books in the Community

Although there is a lack of research on Squishy books, we decided to include them in the *ReadNPlay for a Bright Future in Appalachia Tennessee events* and the *Mommy and Me* sessions. To date, anecdotal research shows the books to be popular at both events. The Squishy books have drawn infants, toddlers, and preschoolers of all ability and socio-economic level. Children have enjoyed having the “real” book read to them while “playing” with the squishy book. Additionally, they have been used for shared reading activities as well as other activities (e.g., find the lion in the grass, can you see the worms hiding in the mud). In the future, research should focus on preferences of types of adapted books of young children, comparing the length of time spent interacting with books versus squishy books, and comparing the language elicited from regular books versus squishy books.

References

- Beck, J. (2002). Emerging literacy through assistive technology. *Teaching Exceptional Children*, 35(2), 44-48.
- Boen, J. (2006). Special toys for special kids: They're designed specifically for children with disabilities. *McClatchy - Tribune Business News*, 1.
- Brand, S. T., Marchand, J., Lilly, E., & Child, M. (2014). Home-school literacy bags for twenty-first century preschoolers. *Early Childhood Education Journal*, 42, 163-170.
- Bus, A. G., Van IJzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Catts, H. W., Hogan, T. P., & Fey, M. E. (2003). Subgrouping poor readers on the basis of individual differences in reading-related abilities. *Journal of Learning Disabilities*, 36(2), 151-164.
- Cohen, A., & Demchak, M. A. (2012, November). *Shared reading with squishy books- An analysis with young children with severe disabilities*. Paper presented at the meeting of TASH 37th Annual Conference, Long Beach, California.
- Demchak, M. A. & Cohen, A. (2015, March). *An analysis of shared reading using squishy Books*. Paper presented at the meeting of American Council for Rural Special Education (ACRES) 33rd Annual Conference, Tucson, AZ.
- Dickinson, D. K., & Smith, M. W. (1994). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly*, 29, 104-122.
- Dunst, C. J., Bruder, M. B., Trivette, C. M., and Hamby, D. W. (2006). Everyday Activity Settings, Natural Learning Environments, and Early Intervention Practices. *Journal of Policy and Practice in Intellectual Disabilities*, 3, 3-10.
- Ezell, H. K., & Justice, L. M. (2005). *Shared storybook reading: Building young children's language and emergent literacy skills*. Baltimore, MD: Paul H. Brookes.
- Hargrave, A. C., & Sénéchal, M. (2000). Book reading interventions with language-delayed preschool children: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly*, 15, 75-90.
- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Paul H. Brookes.
- La Plume, C. (2011): Adapting picture books for students with disabilities. *School Talk*, 16(2) 5.
- McKeown, M. G., & Beck, I. L. (2004). Direct and rich vocabulary instruction. In J. F. Baumann & E. J. Kame'enui (Eds.) *Vocabulary instruction* (pp. 13-27). New York: Guilford Press.
- Moody, A. K., Justice, L. M., & Cabell, S. Q. (2010). Electronic versus traditional storybooks: Relative influence on preschool children's engagement and communication. *Journal of Early Childhood Literacy*, 10(3), 294-313.
- National Association for the Education of Young Children. (2009). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Retrieved from <http://www.naeyc.org/>.
- Richgels D. J. & Wold, L. S. (1998). Literacy on the road: Backpacking partnerships between school and home. *The Reading Teacher*, 52(1), 18-29.

- Sénéchal, M. & LeFevre, J. A. (2002). Parental Involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, 73, 445–460.
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Whitehurst, G. J. & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848-872.
- Zeece, P. D. & Wallace B. M. (2009). Books and good stuff: A strategy for building school to home literacy connections. *Early Childhood Education Journal*, 37, 35-42.