

CITE

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The purposes of the publication of CITE are to:

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Integrating Modeling of High-Leverage Practices and Culturally Responsive Practice in the Preparation of Preservice Special Education Teachers

by
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Abstract

Educator preparation programs have largely focused their attention on teaching the skills that prospective teachers might need in the classroom rather than providing the explicit modeling that demonstrates those skills. At the same time, as P-12 classrooms become increasingly diverse, a teaching workforce is needed that understands how to plan, implement, and assess instruction and assessment that is relevant not only for students who learn differently, but for those who are linguistically and culturally diverse. The purpose of this paper is to present and discuss how integrating high-leverage practices, culturally relevant practice, and intentional modeling in teacher preparation addresses the needs of all learners. The authors argue that high-leverage practices and culturally relevant pedagogy are no longer academic frills, but rather the critically important way all students can benefit academically. Implications for practice, policy, and research are provided.

Focusing on what counts

Teacher education and teacher education research was largely known by a traditional, “recipe” approach in the 1970’s, commonly known as process-product research. Process-product research provided a prescriptive format for preservice teachers, including special education teachers, to follow (Brophy & Good, 1984; Gage & Needles, 1989; Shulman, 1986) for those learning to teach. From curriculum-based assessment to behavior tally sheets, special education preservice teachers were barraged with pedagogical and content knowledge that was designed to help them teach all subjects and expect particular student outcomes for students with exceptionalities (Brophy & Good, 1986). Teacher preparation in all contexts and content areas were largely delivered directly to teachers by education preparation providers who often assumed that pre-service teachers had enough support, time, and opportunity to transform their teaching practice while they practice-taught. Preservice special education teachers had a singular mandate, and that was to design specially designed instruction that would not only provide access to learners with exceptionalities, but would bring them to higher levels of learning, regardless of their socioeconomic status and/or cultural and linguistic diversity.

What teacher education and teacher research *was*, and *could be*, has been widely debated in the past several decades (Cochran-Smith & Zeichner, 2005), marking a trend in teacher education and teacher preparation research that goes beyond asking *what* works, to include *why* and *how* certain practices work. In the field of special education, in particular, despite an agreed-upon set of standards published by the Council for Exceptional Children (CEC), preparation programs have seemed to lack a codified and coherent set of practices that professors could use to model to preservice teachers just how such standards might be achieved.

What educators, and those who prepare educators, currently tend to agree upon is that knowing content and caring about students was – and is - not sufficient for effective teaching (Nieto, 2003). Although scholars such as Marzano (2007) and McTighe and Wiggins (1999) wrote about what actually “worked” in classrooms (answering the *what* and *why*), there continues to be gaps regarding *how*. Effective principles of teaching, it turned out, does not always lead to effective teaching

practices. As Rhim, Sutter, and Campbell (2017) purport, delivering effective special education services presents significant challenges, and the data bears this out. The National Center for Learning Disabilities reports that more than 90% of students with specific learning disabilities (SLD) scored below proficient on the 2013 NAEP, often regarded as “the Nation’s Report Card.” It provides an important comparison across states by assessing both reading and mathematics skills of a large, nationally representative sample of fourth and eighth graders every two years. Further, the 2015 NAEP indicate that “more than 80% of students with all types of disabilities scored below proficient” (p.3). This is concerning given the enormity of resources dedicated to increasing the academic outcomes of students with disabilities and diverse learners. Even more alarming are data from NCLD that suggest that “nationwide, 7 out of 10 students with SLD and OHI spend 80% or more of their day in general education classrooms—where teachers may not be prepared to support them effectively,” adding that “...despite increasing rates of inclusion, many teacher preparation programs don’t require all candidates to demonstrate the skills needed to effectively instruct diverse learners” (p.4). We aver that a different vision for special education must begin with a new vision for teacher preparation.

New vision for teacher education

Focusing on a clear vision of effective teaching for beginning and early career teachers is what McLeskey & Brownell (2015) describe as a “new vision of teacher preparation” (p. 4). They outline the foundational practices needed for creating “day 1 ready” practitioners who are able to successfully work with all children, regardless of their academic, behavioral, or social differences. Supporting McLeskey and Brownell’s call for improved clinical teacher practice are those from both general and special education who see the need as pervasive within U. S. schools (Forzani, 2013; Leko et al., 2015; McDonald, Kazemi, & Kavanaugh, 2013). Conceptualized as “practices that can be used to leverage student learning,” or *high-leverage practices* (HLPs), these dimensions of instruction can be used to teach evidence-based practices (EBPs), such as explicit instruction (p. 9) across different content areas, grade levels, and student abilities and disabilities.

A relatively large corpus of literature examining the quality of teacher education provides a strong rationalization for the emergence of a practice-based approach for pre-service preparation that utilizes High-Leverage Practices, or HLPs (Cochran-Smith & Zeichner, 2005; Burns & Ysseldyke, 2008; Cook, Tankersley, & Landrum, 2009; McLeskey & Billingsley, 2008). Practitioners have long found the gap between practice and theory a complicated and complex issue (Cochran-Smith, 2009). Demonstrating the impact of different pedagogical approaches and field experiences on helping special education teachers learn to implement evidence-based practices (EBPs) in the classroom, however, has proven largely elusive (Spear-Swerling, 2009), adding to the appeal of building a core curriculum around HLPs.

High-Leverage Practices

High-leverage practices are practices that can be used to leverage student learning across different content areas, grade levels, and student abilities and disabilities (McLeskey et al., 2017, 9). High-leverage practices, or HLPs, can “become the foundation of a cohesive, practice-based teacher education curriculum that incorporates repeated, scaffolded, effective opportunities for special education teacher candidates to practice” (p. 9). They are frequently targeted as “must-haves” in inclusive classrooms where evidence-based practices, differentiation, and culturally relevant instruction is employed.

Also known as overarching practices, HLPs are ideally used to leverage effective, research-based practices, such as evidence-based practices (EBPs), to be used in all classrooms. As McLeskey and Brownell (2015) point out, “HLPs do not directly address instructional practices, but they include practices that teachers frequently use to support sound instructional practice” (p. 18). For example, teachers might use explicit instruction (HLP) and multiple opportunities for feedback (HLP) to teach *summarization* (EBP) skills. In this way, HLPs illustrate their ability to buttress and facilitate evidence-based instruction. Most significantly, McLeskey et al. (2017) assert that high-leverage practices work best when pre-service special education teachers are linked with cooperating teachers and university supervisors who can be relied upon to provide real-time modeling of highly effective instructional practices in inclusive classrooms. For this to happen, a professional practice curriculum that focuses on high-leverage practices is essential for responsible beginning practices and on the knowledge and orientations that support them. Pre-service teachers need repeated opportunities to practice specific teaching skills, with close supervision, in settings that support professional learning. In addition, novices’ developing competence – in reference to agreed-upon standards – need to be measured periodically. Finally, high-leverage practices are used as a means of heightening pre-service special education teachers’ mindfulness toward the interplay between curriculum and instruction, facilitating highly effective instructional practices in inclusive classrooms, and compliance with federal and state education standards. As Grossman, Hammerness, and McDonald (2009) contend,

The development and use of HLPs reflect an effort by teacher educators to move away from an emphasis on standards and a curriculum for teacher preparation that focuses on what teachers need to know *about* effective core practices to an emphasis on ensuring that preservice teachers learn to *use* practices in classroom settings. (p. 17)

Garcia and Shaughnessy (2015) provide ample justification for the development and use of high-leverage practices, noting a need for better teacher quality, the domination of higher education preparation programs, and ongoing teacher shortages (p. 3). The authors remind us that implementing HLPs begins with identifying teaching practices essential for beginners, and then developing a common curriculum of teacher training focused on them (p. 4). They suggest that teacher preparation programs in states with common standards for novice practice and common assessments of performance should be required to address these standards, as well as develop the capacity within their programs for the teaching of high-leverage practices in tandem with face-to-face mentoring, supervision, and shared professional knowledge (p. 4). Lastly, and most crucially, mentoring should involve continuous cycles of improvement for beginning and early career practitioners. As conceptualized by Garcia and Shaughnessy, Riccomini, Morano, and Hughes (2017), high-leverage practices are a set of professional practices that teachers need to master in order to provide specially designed instruction, the very basis for special education. They link instruction (Archer & Hughes, 2011) and intensive instruction to this goal, demonstrating how HLPs can be used as conduits for using evidence-based strategies (EBPs) to teach concepts in the classroom.

Forzani (2013) provides two propositions undergirding high-leverage practices, namely, (1) that knowing content and caring about children is not sufficient for teaching effectively, (i.e., what teachers are able to do with they know and care about is what matters); and (2) that competencies are different from principles that guide instruction or standards that provide general benchmarks for good practice,

and to be effective in teacher training, they should be specific and assessable (p. 2). Thus, the authors profess that HLPs are what teachers actually *do* in the classroom and make use of in terms of what they know about academic content and students' needs, while "attending to the ethical obligations of the profession" (p. 3).

Sayeski (2018) focuses our attention on the aim of high-leverage practices, suggesting that the goal of HLPs initially was to "sharpen the focus on the 'practice' of effective special educators" (p. 169). The author avers that the task of teacher educators and professional development providers is to "take these practices and create meaningful opportunities for learning how to master these skills within the context of teaching students with exceptionalities" (p. 169). Like other areas of practice, the author posits that "learning requires not only opportunities for practice but also modeling, feedback, and adjustment" (p. 169). Those who prepare teachers can attest to the relevance of this statement.

There are four domains generally associated with high-leverage practices, within which are found the specific skills for professional teaching to occur. They help us categorize the major contexts within which HLPs can be identified. Moreover, they provide guidance for teacher educators who *teach* preservice teachers. They include *Collaboration, Assessment, Social/Emotional/Behavioral, and Instructional* domains.

Teachers who engage in collaboration with other professionals increase the success of students with exceptionalities. Rossetti, Sauer, Bui, and Ou (2017) stress the concept of developing collaborative partnerships with culturally and linguistically diverse family members in the IEP (Individual Education Program) process. It is within this domain that HLPs gain their most critical foothold, one that is consistent with culturally relevant practice. Supporting the organization and facilitation of effective meetings with both professionals and families is a key element of culturally relevant pedagogy (Ladson-Billings, 2014). Chai and Lieberman-Betz (2016) highlight the importance of collaboration with families and securing needed services by providing strategies for helping parents of young children address challenging behavior in home environments. Here, too, high-leverage practices bridge to the major tenets of culturally relevant pedagogy.

Using multiple sources of information to develop a comprehensive understanding of a student's strengths and needs is a staple of educating the whole child and foundational to high-leverage practices and culturally relevant practices. Teachers must interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs. Further, using student assessment data, analyzing instructional practices, and making necessary adjustments that improve student outcomes is essential to providing all students with the opportunity for academic achievement and growth. Promoting and facilitating academic growth is a cornerstone of special education, which is manifested in classrooms that honor learner differences, unique learner talents, and gifts specific to each child. An example of overlap between high-leverage and culturally relevant practices in this domain is the use of learning inventories, where students are encouraged to reflect upon their personal growth in areas meaningful to them.

Consistent with standards for effective teaching, establishing a safe, positive, consistent, organized, and respectful learning environment is key, which is what makes this dimension so critical. Teachers must provide positive and specific feedback to guide students' learning and behavior, not just in the present, but to build students' metacognitive skills for future learning. Classroom practices, such as cooperative learning, have been successfully incorporated into curricula to teach and sustain social behaviors, effective work habits, and functional work skills. Here again, HLPs are utilized to produce the type of learning environment that is conducive to learning. In some cases, teachers are required to conduct functional behavioral

assessments to develop individual student behavior support plans or Behavioral Intervention Plans (BIPs) in order to help students who need assistance in becoming available for academics.

The instructional dimension is identified by prioritizing the long- and short-term learning goals teachers have for their students. In addition to systematically designing instruction toward specific learning goals, teachers are required to adapt curriculum tasks and materials for learners with specific learning needs and teach cognitive and metacognitive strategies to support student learning and independence. This is accomplished through providing scaffolded supports, varying grouping (flexible), employing explicit instruction, implementing strategies to promote active student engagement, and using assistive and instructional technologies as appropriate. Of all the HLPs, teaching students to maintain and generalize new learning across time and settings and providing positive, specific, and constructive feedback to guide students' future learning and behavior are among the most crucial. Teachers must be focused on creating *educable*, as well as, educated students.

Culturally Responsive Teaching

As recently as the beginning of the current decade, students with exceptionalities continue to achieve far below desirable levels, and compare unfavorably with their typical peers (Sanford, Newman, Wagner, Cameto, Knokey, & Shaver, 2011). Students with disabilities who are culturally and/or linguistically diverse are further impacted typically by conditions (i.e, poverty) that do not help teachers close the achievement gap (Ladson-Billings, 2014). Further, studies have found that high need settings are often staffed with our least-prepared teachers (Garcia & Shaughnessy, 2001), which sets our most vulnerable students even further behind.

We assert that integrating high-leverage practices, culturally relevant practice, and intentional modeling in teacher preparation is a natural and organic process given the properties of HLPs and CRT. Thus, we invoke the definition of culturally responsive teaching (CRT) from Azziz (2009) as “specific educational practices, instructional strategies, team processes, and curricula content which have been established by research to increase the achievement of culturally diverse students” (p. 1). Today’s schools demand that teachers purposefully and intentionally adjust how they teach to the needs and experiences of their diverse learners, in order to demonstrate cultural responsiveness, or responsivity. This foundation for cultural responsivity begins with cultural competence – the process by which people learn to value and respond respectfully to people of all cultures (Bennett, 1993). Most significantly, culturally relevant teaching (CRT) benefits exist despite systemic inequitable academic opportunities when evidence-based practices are utilized in the classroom. CRT targets historically disadvantaged, marginalized, and underserved learners and when combined with evidence-based practices – as embodied in high-leverage contexts – promotes students’ cultural & linguistic resources as valued assets (Ladson-Billings, 1995). Culturally relevant teaching provides for student development that can be assessed in multiple ways. It highlights importance of strong working relationships and collaboration between teachers, parents, and administrators. It helps students and families bridge borders between home and school cultures. Unfortunately, teacher preparation programs often “gloss over” culturally relevant pedagogy – an egregious mistake, especially given our understanding that all teachers need experience with diverse learners and integrating CRT into instruction.

Despite the relevance of employing evidence-based practices (EPBs) in classrooms where diverse students are served, EBPs are not synonymous with

culturally relevant teaching. The goals associated with HLPs (which are content or subgroup specific) and culturally responsive teaching (CRT), however, are wholly consonant by taking the whole child into consideration. These goals include building connections between academic learning and student's backgrounds and interests; implementing strategies to motivate and develop interdependence among all learners; setting high expectations; utilizing tiered and differentiated instruction, ensuring that students feel empowered; providing activities that activate higher order thinking; and utilizing cooperative and collaborative learning activities (Aceves & Orosco, 2014; Azziz, 2009; Banks & Banks, 2004; Marzano, Pickering, & Pollock, 2001; Putnam, 1998; Nieto, 2003; Villegas & Lucas, 2002). High-leverage practice #18, *using strategies to promote active student engagement*, is consistent with culturally relevant practice as revealed in the following example:

Teachers use a variety of instructional strategies that result in active student responding. Active student engagement is critical to academic success. Teachers must initially build positive student–teacher relationships to foster engagement and motivate reluctant learners. They promote engagement by connecting learning to students' lives (e. g., knowing students' academic and cultural backgrounds) and using a variety of teacher-led (e.g., choral responding and response cards), peer-assisted (e. g., cooperative learning and peer tutoring), student-regulated (e.g., self-management), and technology-supported strategies shown empirically to increase student engagement. They monitor student engagement and provide positive and constructive feedback to sustain performance (McLeskey et al, 2017, p. 22).

Effective classrooms that work for *all students* are in need of teachers who know and simultaneously use HLPs and CRT. Take, for example, a classroom context in which HLPs, as represented by *collaborative teaching*, are manifested in the form of instruction that utilizes a problem-solving approach (which represents an EBP). A problem-solving approach is encompassed within inclusive instructional engagement, responsiveness to cultural language and racial identity, multicultural awareness, and maintaining high expectations, all of which are emblematic of culturally relevant teaching. Other HLPs which educators routinely use and can significantly enhance a CRT context, may include responsive feedback (in the form of child-centered instruction, an evidence-based practice), modeling, instructional scaffolding, and cognitive and higher order (e.g., jurisprudence) learning. These strategies are consistent with both HLP and CLT themes that value critical thinking and social justice.

Implications for Practice, Policy, and Research

A curriculum that integrates HLPs with CRPs benefits all students in all educational settings (Davin & Troyan, 2015). Recognizing the overlap first between HLPs and EBPs, and then between HLPs and CRT, is important for teacher preparation providers who strive to demonstrate how those practices can be realized within all classrooms for culturally and linguistically diverse students, as well as students with exceptionalities. Whether using active learning strategies to empower students in a child-centered environment, creating experiential learning activities to develop student voice and confidence, or facilitating project-based learning which builds problem-solving skills across differently-gifted individuals, high-leverage practices work in tandem with culturally-responsive teaching strategies to bring diverse learners to higher levels of achievement. Given the number of alternate

pathways available to prospective teaching candidates, it would be wise for institutions of higher education with teacher preparation programs (particularly those producing special and inclusive education practitioners) to re-envision and revise their curriculum to reflect an HLP/CRT approach. The Council for Exceptional Children's (CEC) Division for Culturally and Linguistically Diverse Exceptional Learners (DDEL), which offers preservice and in-service teachers webinars, literature, and videos designed to highlight top practices for reaching learners in all educational settings and helping their families, has produced research that favors the integration of HLPs and culturally relevant teaching. CEC also provides policy updates (as does the Teacher Education Division of CEC, or TED), allowing new, early-career, and veteran teachers to follow the political and financial trends for the field and what they might mean for districts, schools, and classrooms. State and local municipalities and their constituents would be well-served to collaborate with teacher preparation programs that endorse integration of high-leverage practices with culturally relevant teaching to improve educational outcomes for their P-12 learners.

Finally, in the area of research, organizations such as the Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR), an OSEP-funded technical assistance center, are leading the way in working with a number of national organizations, technical assistance centers, and stakeholders across the country to insure greater educational equity for students and families from diverse backgrounds. Central to their mission is teacher development and leader development through teacher preparation and program improvement. Their extensive collaboration with educator preparation programs is evidenced by their professional development course enhancement modules (CEM), one of the latest of which is grounded in the work of Aronson and Laughter (2016) on culturally responsive education (p. 6), grounded in the work of Ladson-Billings (1995) and facilitated through high-leverage practices. Currently, empirical research is needed to examine the results of teaching practice that incorporates high-leverage practices within a CRT context. This could easily be facilitated by university supervisors and supervisees in the field during practicum and student teaching clinical experiences.

Conclusion

There is abundant opportunity for practitioners, preservice teachers, and EPPs to examine the influence of HLPs on culturally relevant practice, namely in terms of the ways in which schools of education can proactively affect the P-12 learning environment as they address state and national standards of excellence. Educator preparation programs that have focused their attention on teaching the skills that prospective special education teachers might need in the classroom rather than providing the explicit modeling that demonstrates those skills, need to re-examine their teacher preparation ideology and curricula – namely, what they want prospective special education teachers to know and be able to do in the classroom, and *why*. Pedagogy that reflects our teachers' best efforts to provide equity and promise to all learners should be wholly consistent with our own efforts as teacher educators to produce the types of special educators who will provide the kinds of classrooms that all children need and deserve.

References

Aceves, T. C., & Orosco, M. J. (2014). *Culturally responsive teaching* (Document No. IC-2). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: <http://cedar.education.ufl.edu/tools/innovation-configurations/>

- Archer, A. L., & Hughes, C. A. (2011). *Explicit Instruction*. New York, NY: Guilford Press.
- Aronson, B., & Laughter, J. (2016). The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas. *Review of Educational Research*, 86 (1), 163–206 DOI: 10.3102/0034654315582066 © 2015 AERA. <http://rer.aera.net> 163.
- Azziz, R. (2009). *Strategies for Working with Culturally Diverse Students*. Virtuoso Education Consulting. Email: razziz@virtuosod.com.
- Banks, J. A., & Banks, C. A. M. (Eds.). (2004). *Handbook of research on multicultural education* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Bennett, M. J. (1993). Towards Ethnorelativism: A developmental model of intercultural sensitivity. In R.M. Paige (Ed.) *Education for the intercultural experience*. Yarmouth, ME: Intercultural Press.
- Brophy, J. & Good, T.L. (1984). Teacher Behavior and Student Achievement. Occasional Paper. Michigan State University, East Lansing, MI.
- Burns, M. K., & Ysseldyke, J. (2008). Reported Prevalence of Evidence-Based Instructional Practices in Special Education. *Journal of Special Education*, 43(1), 3-11.
- CEEDAR Center (Collaboration for Effective Educator, Development, Accountability and Reform), cooperative grant supported by the Office of Special Education Programs (OSEP) of the U.S. Department of Education (H325A120003).
- Chai, Z., & Lieberman-Betz, R. (2016). Strategies for helping parents of young children address challenging behaviors in the home. *TEACHING Exceptional Children*, 48, 186-194. doi: 10.1177/0040059915621754.
- Cochran-Smith, M. (2009). "Re-Culturing" Teacher Education: Inquiry, Evidence, and Action. *Journal of Teacher Education*. doi.org/10.1177/0022487109347206.
- Cochran-Smith, M., & Zeichner, K. (Eds.) (2005). *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Cook, B. G., Tankersley, M., & Landrum, T. J. (2009). Determining Evidence-Based Practices in Special Education, *Exceptional Children*. doi.org/10.1177/001440290907500306.
- Davin, K. J., & Troyan, F. J. (2015). The Implementation of High-Leverage Teaching Practices: From the University Classroom to the Field Site. *Foreign Language Annals*. 124-142. <https://doi.org/10.1111/flan.12124>.
- Forzani, F. (2013). High-Leverage Practices for Competent Beginning Teaching. Presentation to the Connecticut Educator Preparation Advisory Committee January 15, 2013, Hartford, CT. Ann Arbor, MI: Teaching Works, University of Michigan.
- Gage, N.L., & Needles, M.C. (1989). Process-Product Research on Teaching: A Review of Criticisms. *The Elementary School Journal*, 89(3): 253-300.
- Garcia, N., & Shaughnessy, M. (2015). High-Leverage Teaching Practices: What, Why, and How? Ohio Confederation of Teacher Education Organizations. Teaching Works, Ann Arbor, MI: Teaching Works, University of Michigan.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching*, 15(2), 273-289.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review*, 84(1), 74–84.

- Leko, M., Brownell, M., Sindelar, P., & Kiely, M. T. (2015). Envisioning the Future of Special Education Personnel Preparation in a Standards-Based Era. *Exceptional children*, 82(1), 25-43.
- Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Alexandria, VA: ASCD.
- Marzano, R. J., Pickering, D.J., & Pollock, J.E. (2001). *Classroom Instruction That Works*. Alexandria, VA: ASCD.
- McDonald, M., Kazemi, E, & Kavanagh, S. (2013). Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education*, 20(10), 1-9.
- McLeskey, J., & Billingsley, B. (2008). How Does the Quality and Stability of the Teaching Force Influence the Research-to-Practice Gap?: A Perspective on the Teacher Shortage in Special Education. *Remedial and Special Education*, 29(5), 293-305.
- McLeskey, J., & Brownell, M. (2015). *High-leverage practices and teacher preparation in special education* (Document No. PR-1). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: <http://cedar.education.ufl.edu/tools/best-practice-review/>
- McLeskey, J., Barringer, M-D., Billingsley, B., Brownell, M., Jackson, D., Kennedy, M., Lewis, T., Maheady, L., Rodriguez, J., Scheeler, M. C., Winn, J., & Ziegler, D. (2017, January). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children & CEEDAR Center.
- McTighe, J., & Wiggins, G. (1999). *Understanding by design: Handbook*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Nieto, S. (2002/2003). Profoundly multicultural questions. *Educational Leadership*, 60(4), 6-10.
- Putnam, J. (Ed.). (1998). *Cooperative Learning and strategies for inclusion: Celebrating diversity in the classroom* (2nd ed.). Baltimore, MD: Brookes.
- Riccomini, P. J., Morano, S., & Hughes, C. A. (2017). Big Ideas in Education: Specially Designed Instruction, High-Leverage Practices, Explicit Instruction, and Intensive Instruction. *Exceptional Children*, 50(1), 20-27.
- “Developing Collaborative Partnerships With Rossetti, Z., Sauer, J. S., Bui, O., & Ou, S. (2017). Culturally and Linguistically Diverse Families During the IEP Process. *TEACHING Exceptional Children*, 49, 328-338. doi: 0040059916680103.
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A.-M., and Shaver, D. (2011). The Post-High School Outcomes of Young Adults With Disabilities up to 6 Years After High School. Key Findings From the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3004). Menlo Park, CA: SRI International.
- Sayeski, K. L. (2018). Putting High-Leverage Practices into Practice. *Teaching Exceptional Children*. 50(4), 169-171. <https://doi.org/10.1177/0040059918755021>.
- Shulman, L. (1986). Those Who Understand: Knowledge Growth in Teaching. *Educational Researcher*, 15(2), 4-14.
- Spear-Swerling, L. (2009). A Literacy Tutoring Experience for Prospective Special Educators and Struggling Second Graders, *Journal of Learning Disabilities*, doi.org/10.1177/0022219409338738.
- Villegas, A. M., & Lucas, T (2002). Preparing Culturally Responsive Teachers: Rethinking the Curriculum, *Journal of Teacher Education*, 53(1), 20-32.

Secondary Teacher Candidates' Perceptions of Multisensory Teaching in the Content Areas

by
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Abstract

Multisensory teaching has found a place in researched-based teaching of reading. As such, can the strategies used in multisensory teaching be applied to teaching all learners in various content areas? This investigation looks to secondary teacher candidates' perception of teaching content material through the lens of multisensory teaching and the role educational preparation programs have in preparing future teachers in multisensory teaching.

"Everybody is a Genius. But If You Judge a Fish by Its Ability to Climb a Tree, It Will Live Its Whole Life Believing that It is Stupid. " - Albert Einstein

In an educational world that is requiring more from its "fish", teachers of those fish must find new ways to educate, so these student-fish do not spend years in school feeling stupid. The necessity to reform approaches to teaching students is evident by the ever-increasing demands of standardized testing outcomes. Perhaps, teachers and the teachers of teachers should revisit the goals of education and emphasize how to teach so students can learn. If students are to learn, they must be actively engaged in the learning process. Such engagement should take place in a multisensory environment where students learn via all their sensory modalities. The use of sensory modalities is not limited to the K-12 classroom. It should begin with those who teach students in the K-12 classrooms. Utilizing multisensory teaching strategies begin in teacher education programs to learn about, practice with, and eventually apply sensory modality experiences in their future classrooms. But how do teacher candidates perceive multisensory education as a vehicle for teaching and learning in their own professional development? This paper recognizes the need to educate students using multisensory approaches to teaching and learning in an effort to meet national and state standardized testing demands on public school children. What is not known is how teacher candidates view the use of multisensory teaching and learning.

Literature Review

The brain is hard-wired to learn through the senses. Almost 80% of information that the brain takes in is completed visually (Wilmes, Harrington, Kohler-Evans & Sumpter, 2008). Babies learn auditory language via listening to adults speak. Learning kinesthetically is linked to academic success. Teachers should create a learning environment that incorporates all the elements of the senses in their lessons as a means of promoting the cognitive, emotional, academic, and physical development of their students (Jensen, 1998). The practice of using multisensory education (MSE) in the classroom has produced some encouraging results. In a study completed by Kast, Meyer, Vogeli, Gross, & Jancke (2007), they found that utilizing the multiple senses in a writing training program that students with characteristics of dyslexia as well as those without improved their writing skills. The key is teaching future teachers to incorporate instructional strategies that may not be familiar to them.

Multi-sensory education (MSE) is a hands-on approach to learning that offers multi-sensory opportunities for learning. The Orton-Gillingham was the first approach for struggling readers and used to support learning and specifically for dyslexic learners. Multi-sensory instruction combines auditory, visual and tactile/kinesthetic elements to support learning. The Multi-sensory teaching approach as an instructional model for students with dyslexia has been investigated with general positive results to improve reading skills. More recent research supports a multi-sensory approach to improve recall ability in the content area. Research about the multi-sensory brain indicates that multi-sensory brain interactions are the rule rather than the exception of processing sensory stimuli to increase recall abilities (Shams and Seitz, 2008).

Knowing the brain uses all five senses to make sense of the world, it is not surprising that using a multisensory approach to teaching increases the likelihood of information absorption (Christie, 2000). Therefore, educators who successfully target more than one of the senses in every lesson would likely have a higher percentage of student understanding than those educators who do not rely on the inclusion of the senses in teaching. A study conducted by the University of Texas found that information is internalized best by utilizing multiple senses. People remember 10 percent of what they read; 20 percent of what they hear; 30 percent of what they see; 50 percent of what they see and hear; 70 percent of what they say; and 90 percent of what they do and say (Metcalf, 1997).

More recently have such strategies been examined to observe their effects on recall ability. The hypothesis is that the more senses are used during learning instruction would increase recall ability (Cox, 2017). Specifically, even the use of two senses would sufficiently increase recall ability (Cox, 2017). Furthermore, research supports significant pre and post test scores of students who have participated in a multi-sensory approach increased mathematical achievement (Obaid, 2013). The key to multisensory learning is preparing teachers to understand its significance in the actual teaching process. An important aspect of multisensory teaching and learning is the sense of touch. MSE began with the work of Samuel Orton and Anna Gillingham. Originally designed to assist children with reading difficulties, the approach of MSE is considered to be highly effective. In essence, this approach utilizes multiple learning pathways (the various senses) to assist kids in their reading (Institute for Multisensory Education, 2018). It is significant to address that very little research has been conducted on using the MSE theory of multiple learning pathways with areas other than reading difficulties. For example, how using one's senses might influence his/her learning in social studies or science instead of limiting it to literacy. An enormous amount of research exists on the value of MSE when teaching literacy skills to students with reading difficulties. So, can transference take place from literacy to other core subject areas? If so, how do teacher candidates view this approach?

Current research discusses how dyslexics process information and the role that their visual-spatial abilities play in that process. If students with reading difficulties and dyslexics use their visual-spatial abilities (multiple senses) to think, they may be better able to think in three dimensional terms (3D). As such, they should be taught in 3D. If people live in a three-dimensional world, we should be taught in a three-dimensional manner (Scholtens & Frierson, 2017). Teaching and learning in this manner include using objects that students can hold, investigate, and connect understanding. According to IEEE (2002), an object used for learning is "any entity, digital or non-digital, that may be used for learning, education or training" (pg. 6). With application of this explanation, examples of 3D objects used in a social studies classroom learning about the various religions of the world might be a small

wooden cross, a Star of David, and others that students can hold in their hands while discussing information related to each one. The object can serve as a spark for new learning as well as a memory aid for previous learning. As such, these 3D objects serve as a vehicle for MSE because it addresses the need for kinesthetic and visual learning. From an educator perspective, 3D learning objects are useful when they are accessible and transferable (Agostinho & others, 2003). These 3D objects must have application to the content which is to be taught.

Pedagogical consideration for what to use, when to use it, and how to apply it to the knowledge and skills in the teacher's lesson is significant. According to Longmire (2000), attention must be given to the learning and the design of the object. It must be noted that the use of 3D objects is used as an application of the Orton-Gillingham method of multisensory education (Scholtens and Frierson, 2017). As such, if a classroom teacher is to utilize 3D objects in the teaching and learning process, he/she needs experience with the objects.

This experience sets the tone for how one responds to learning with a nod to how they were taught. The same is true for teacher candidates. The teaching methods used to prepare them for teaching children in a classroom are the very same methods that should be used when preparing these candidates. If children relate to information for solving problems or sharing their understandings, the information becomes their experience with learning in their individual manner. The same should be true for teacher candidates and their learning experiences. Understanding of the content, such as core subject areas in which teaching and learning take place, contributes significantly to the capability of teaching (Pavlou, 2015). Capable teachers are not born, but rather prepared in educator training programs. It is in these preparation programs where exposure to various researched-based teaching and learning practices are experienced.

Teacher Candidate Willingness to Try New Teaching Strategies

One's knowledge is seen not as stagnant or simply information, but as dynamic progression rooted in some learning foundation (Cochran, DeRuiter, & King, 1993). A common research finding for recent graduates of teacher educator programs is the disconnect in what was learned versus what actually happens in their own classrooms (Cliff & Brady, 2005; Zeichner & Tabachnick, 1981). In our educator preparation program, graduates are failing to make the connection between theory and real-world application. The question of why recent teacher candidates fails to apply instructional strategies that relevant research indicates is effective and important to student learning is asked by most teachers of teachers. Instead these new educators revert back to the teaching strategies they observed by their own school experiences. In other words, these new teachers have already decided what are good educational practices regardless of what they have been taught in educator preparation programs (Lortie, 2002). Naturally, brand-new teachers are reluctant to try new teaching strategies because they are scared, they might fail (Richardson, 1996). One suggestion to reduce this fear of trying new approaches to teaching strategies is to form a better partnership between educator preparation programs and the schools that hire their graduates (Riley & Sakimura, 2018). If teacher educators want to encourage teacher candidates to tackle new teaching strategies, such as the incorporation of MSE, then opportunities to observe experts utilizing the strategy. In other words, MSE strategies in the educator preparation program must be taught and used. Also important is the ability to practice the new strategy in a variety of environments (Riley & Sakimura, 2018). Once the teacher candidate had opportunities to practice the new strategy, they should receive specific, meaningful feedback. On the same line of thinking, school districts must allow the same type of

learning opportunities to their brand- new teachers that they experienced in the preparation program. Without the safety net of school encouragement to apply the new teaching strategies, new graduates from preparation programs are not going to transfer their learning of these new strategies. While in their preparation programs, teacher candidates should have the necessary exposure to new teaching strategies from the people who are conducting research and writing about new instructional practices (Donne, 2016). In other words, if classroom teachers are to utilize MSE, then the educator preparation programs need to teach what it is and how to apply it in the classroom.

The purpose of this exploratory investigation is to determine how teacher candidates perceive their professional learning experience with multisensory education as well as how it is relevant to use their future content area classrooms. Results from this investigation will increase the body of knowledge about how educator preparation programs at universities and other programs inside and outside of the United States are preparing teachers to feel equipped to use multisensory education strategies in their future classrooms.

Participants and Research Design

Seventy-one secondary teacher candidates participated in this investigation. They were all in the process of student teaching in their certification area in public schools. The program is based at a public university based in Texas that mainly produces teachers in the EC-6 certification area, however, teacher candidates in 4-8, and 7-12 were also enrolled in the course. For this investigation, only secondary student teachers were included. Every content area the university teacher education program offered is represented within this group (English/Language Arts, Mathematics, Science areas, Social studies, computer science, and Spanish as a Language other than English). These students were currently enrolled in the student teaching portion of the education program. Students were in the spring student teaching program.

The program is delivered at two locations. One in a smaller- town setting, which is the main campus, while the other is a satellite campus in an urban setting. These teacher candidates were enrolled in a capstone course that takes place during the student teaching experience. The students meet once a month in the capstone course to debrief the student teaching experience. The presentation of this capstone course is completed face to face.

This investigation relied on an exploratory case study (Yin, 2003) approach to examine the perceptions of teacher candidates' preparedness and efficacy for instructional use of multisensory teaching and learning. An empirical inquiry was necessary as the investigation was completed as a snapshot within its real-life context of teacher candidate preparation for using multisensory teaching and learning in their future content area classrooms.

Research Questions

With the goal of exploring how prepared and knowledgeable teacher candidates were in utilizing multisensory teaching and learning in their future classrooms, so that our educator preparation program could address the preparedness and knowledge, the following research questions were developed:

RQ1: How do teacher candidates view the role and use of multisensory teaching and learning in their future classroom?

RQ2: How prepared do teacher candidates feel to utilize multisensory teaching and learning in their future classrooms?

RQ3: What role do educator preparation programs play in teacher candidate preparedness for using multisensory teaching and learning in their future classrooms?

As researchers seek to gather and address research in how to best prepare future teachers, it is important for educator preparation programs to establish a snapshot of its programs' ability to move teacher candidates forward in preparing them include multisensory teaching and learning experiences. This investigation seeks information in how our educator preparation program can best meet the needs of our teacher candidates, so they not only feel prepared to utilize multisensory experiences in their classrooms, but these future teachers believe they have the knowledge, ability, and efficacy to do so.

In order to address the research questions previously articulated, the following data sources were used: (1) a post-course self-assessment inventory regarding knowledge and preparedness for utilizing multisensory teaching and learning in their future classrooms, (2) course-required discussion of content-related object that connects with his/her understanding of multisensory learning, (3) student discussion regarding use of multisensory teaching and learning in their future classrooms, and (4) a sample social studies and ELAR multisensory teaching lesson demonstration using 3-D objects. These lessons were designed for seventh-grade Texas history and secondary English-Language Arts courses.

Data Results

The extensive body of data was analyzed using a qualitative process driven by a grounded theory approach (Strauss & Corbin, 1988). This data was significant in addressing the research questions described earlier. All examples of the self-assessment inventory, discussion postings and student discussions were presented solely by the teacher candidates. No spelling or content changes were made by the investigators.

RQ1: How do teacher candidates view the role and use of multisensory teaching and learning in their future classroom?

In order to determine how or even if multisensory strategies will be used in future classrooms, it must be determined if teacher candidates have any knowledge of these strategies. As such, in a post-course survey, participants were asked if prior to the course they had knowledge of multisensory teaching and learning. Of the seventy-one participants enrolled in the course, fifty stated they had heard of multisensory strategies while fourteen had not. Seven of the participants did not provide a response. This question had a forced response set of "yes" or "no". Only those answer choices were used by the participants. No one wrote any other type of answer.

RQ2: How prepared do teacher candidates feel to utilize multisensory teaching and learning in their future classrooms?

The next two questions on the survey were also forced answers of "yes" or "no". These questions asked if the students understood the description of multisensory teaching. As the survey was given at the conclusion of the student teaching course where multisensory teaching was described and shared, forty-four students stated "yes" they believed they knew all about multisensory teaching. Only one participant stated "no" he/she did not understand it. Important to note, twenty-six students did not provide any response.

The second question asked if they would use multisensory teaching strategies in their future classrooms. For the response to this question, the students provided two additional responses to the two that were provided. Forty-nine students stated they would use multisensory teaching strategies in their future

classrooms. One participant said, "I will try! It's fun." Seven students stated "no" they would not. Four "maybe" responses were added, and one person said only when it was applicable to do so. One of the participants who provided a maybe response stated, "Feels a little childish". A total of sixty-one students responded to these two questions on the survey.

RQ3: What role do educator preparation programs play in teacher candidate preparedness for using multisensory teaching and learning in their future classrooms?

The final question posed to each participant was an open-ended one. The use of an open-ended question/statement allows for the student to share his/her thoughts without the constriction of a given answer choice. Of the seventy-one students in this course, nine students did not provide any type of response even though they responded to other questions. Two responses were "sure", and one was "n/a", while one gave a response of "maybe". Two responses were "I don't know" and one gave the single word response of "yes" and one of "ok.". The rest of the responses, forty-four, twenty-two of the responses were statements and the remaining twenty-two posed questions they wanted answered regarding using multisensory teaching.

The final question provided the most information regarding student understanding of multisensory teaching. After reviewing each response, several response categories emerged: Student quest for more knowledge, student desire for application, and student criticisms.

Findings

After coding the responses, the following patterns emerged: (1) quest for knowledge, (2) application of multisensory teaching strategies, and finally (3) negativity. The first pattern discussed is the quest for knowledge. While the majority of the teacher candidates who responded to the survey stated they had heard of multisensory education prior to student teaching, those who added to the open-ended question wanted more information on it. The following are comments posed by the teacher candidates:

- Which senses are most beneficial?
- At what point is it too much?
- How many teachers use it?
- How would music affect it?
- Resources for where to see more cool lessons!
- How to keep it high level?
- How often do you use?

While it is a positive that six of the teacher candidates wanted more information on the idea of multisensory teaching, it seems that three of them are still on the fence about its purposefulness in teaching and learning; At what point is it too much? And How many teachers use it? These statements, while asking for information, seem to put a negative spin on the idea of multisensory teaching. If a true understanding of multisensory teaching existed, the students would determine that it is already beneficial and at a higher level of thinking. Perhaps, these statements portray these students' lack of understanding.

The next pattern that emerged was the number of responses to the open-ended statement at the completion of student teaching and the survey. While similar to the pattern of a quest for more knowledge, this pattern showed the respondents wanted specific application information. Only four respondents stated that they had never heard of multisensory teaching. The rest responded in the affirmative. The following statements were taken directly from the survey:

How to use in ELAR with concepts relating to grammar?
How can I use it in an English secondary classroom?
How to apply it to meta concepts?
How to incorporate it for summative assessments?
How to implement on less tangible subjects in the higher levels?
More specific examples for AP seniors
Supporting students without putting financial burden on instructors
Teaching verb conjugations
Ideas applicable to high school
Give more abstract examples

Each of the statements or questions provided in this portion of the survey demonstrates the desire to apply the multisensory teaching to secondary classrooms, but a lack of how to bring it to fruition. As with many teacher candidates, a lack of confidence exists. It is not uncommon for them to have the knowledge for implementation, but a lack of knowledge for the steps to implementation. In this case, these students want a guidebook to tell them “how to” rather than make the transference for themselves.

The third pattern to emerge is the pessimism category. While this pattern is not a large one, it is worth mentioning. All responses from this pattern did indicate everyone understood the idea of multisensory teaching, but some indicated negative feelings toward it and/or its implementation in their future classroom. The following are some of the statements provided in the survey.

Not appropriate for my grade level
More uses for high school - this was great, but I'm not an elementary teacher
More mature, age appropriate for high school
More mature lesson ideas
When applicable

Whenever a new concept, idea or opportunity is offered to someone, a tendency toward pessimism can be expected. Exposure to something new can be scary. The students who responded in such a manner can either be truly pessimistic or they do not fully understand the concept.

Discussion and Implications for Teacher Education

RQ1: How do teacher candidates view the role and use of multisensory teaching and learning in their future classroom?

Overall, the students in this student teaching seminar believed they understood the purpose and rationale for utilizing multisensory teaching. However, based upon the types of open-ended responses they provided, it appears they do not fully understand how and when to implement it. In the definition provided earlier, multisensory education is using all the senses when teaching a new concept. As such, there is no magic time when it should or should not be applied. While little no research exists on the use of MSE in the content areas, this lack of research does not equate the limited use. With no application of MSE, there can be no research developed.

What is the most concerning with this self-acknowledged understanding is the inability or unwillingness to transfer that understanding. In other words, if MSE is truly understood, then it can be applied in other content areas as well as other grade levels. The student responses regarding AP or Advanced Placement classes implies that MSE is too “juvenile” or “low-level” for any students other than elementary ones. That is not the case. MSE is used for the teaching of reading to students of all ages and abilities (Kast, Meyer, Vogeli, Gross, & Jancke, 2007).

RQ2: How prepared do teacher candidates feel to utilize multisensory teaching and learning in their future classrooms?

Based on the survey results, these students feel confident to use multisensory teaching in their future classrooms. At this time, there is no evidence to support or contradict this claim. MSE does require that the teacher take the idea of MSE and apply it to the content areas. As no research exists yet to see if MSE can be purposeful in a content-based classroom, the teacher will have to develop his or her own teaching ideas to apply such teaching. This application means the creation of materials and lesson plans which takes time and possibly resources. Further research investigations will need to be done to determine if content area teachers are success at transferring their understanding of MSE into the teaching of the content areas.

RQ3: What role do educator preparation programs play in teacher candidate preparedness for using multisensory teaching and learning in their future classrooms?

Educator preparation programs (EPP) have the unique position to prepare future teachers. As such, this preparation comes with immense responsibility. The EEP in this investigation has provided exposure to multisensory teaching as established by the significant positive survey responses. Exposure, according to Online Merriam-Webster Dictionary, is defined as "the condition of being presented to view or made known". Is exposure to MSE enough? As many in-service teachers can attest, exposure is not the equivalent of knowing. Future research investigations in this area must deepen the understanding of exposing future teachers to MSE as well as how does these future teachers apply that understanding. MSE is how science states to teach people to read. The role of multisensory education in the content areas is still yet to be determined.

References

- Agostinho, S., Bennett, S., Lockyer, L. & Harper, B. (2003). Integrating learning objects with learning designs. In G. Crisp, D. Thiele, I. Scholten, S. Baker, and J. Baron (Eds), *Interact, Integrate, Impact: Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning and Tertiary Education*. Adelaide, December 7-10, 2003.
- Christie, S. (2000). The brain: Utilizing multi-sensory approaches for individual learning styles. *Education*, 121(2), 327-330.
- Clift, R. & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. M. Zecher (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 309-424). Washington, D.C.: American Educational Research Association.
- Cochran, K., DE Ruiter, J. & King, R. (1993). Pedagogical content knowing: an integrative model for teacher preparation, *Journal of Teacher Education*, Vol. 44, No. 4, pp. 263-72.
- Cox, Michelle (2017). *Effects of multi-sensory instruction techniques on memory and earning in a sixth- grade population*. Doctoral Dissertation.
- Donne, V. (2016). Young adult books: Helping to prepare teachers for augmentative Alternative communication. *International Journal of Special Education*, 31 (2), pp. 161-168.
- Exposure. 2019. In *Merriam-Webster.com*. Retrieved October 7, 2019, from <https://www.merriam-webster.com/dictionary/exposure>
- IEEE. (2002). Draft *Standard for Learning Objects Metadata*. Learning Technology Standards Committee of the IEEE. [Online]. from <http://tsc.ieee.org/doc/wg12/> (PDF) *Integrating learning objects with*

- learning designs*. Available from:
https://www.researchgate.net/publication/228864664_Integrating_learning_objects_with_learning_designs [accessed Sep 30 2018].
- Institute for Multisensory Education. (2018). Retrieved from
<https://journal.orton-gillingham.com/what-is-orton-gillingham/>. On September 30, 2018.
- Jensen, E. (1998). *Teaching with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kast, M., Meyer, M., Vogeli, C., Gross, M., & Jancke, L. (2007). Computer-based multisensory learning in children with developmental dyslexia. *Restorative Neurology and Neuroscience*, 25,355-369.
- Ladan, S Seitz, A. (2008). Benefits of Multisensory Learning *Cell Press*,TICS 721, 1 – 7.
- Leonard, J. (2003). *Reading, Design, and Comprehension: Improving Text Accessibility for People with Dyslexia Through Interaction Design*. Pittsburgh, PA.
- Longmire, W. (2000). A primer on learning objects. Learning Circuits Webzine. [Online]. Retrieved September 20, 2018 from
<http://www.learningcircuits.com/mar2000/primer.html>
- Lortie, D.C. (2002). *Schoolteacher: A sociological study, with a new preface*. Chicago: The University of Chicago Press.
- Majeda, Obaid (2003). The impact of using multi-sensory approach for teaching students with learning disabilities. *Journal of International Research*. 9(1), 75 – 82.
- Metcalf, T. (1997). Listening to your clients. *Life Association News*, 92(7), 16-18. Retrieved from
<http://www.stfrancis.edu/content/ba/ghkickul/stuwebs/btopics/work/listening.htm>
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, T.J. Buttery, & E. Guyton (Eds.). *Handbook of research on teacher education* (2nd ed., pp. 905-947). New York: Simon & Schuster Macmillan.
- Riley, B., & Sakimura, V. (2018). Alignment: The cornerstone of teacher prep stronger Coordination between teacher-educator programs and school districts can solidify The knowledge and skills that novice teachers need. *Educational Leadership*. 75 (8), P32-37.
- Scholten, M. & Frierson, C. (2017). *Connections: OG in 3D*. The APPLE Group. Jonesboro, AR.
- Shams, L., & Seitz, A.R. (2008). Benefits of multisensory learning. *Trends in Cognitive Science*, 12 (11). 411-417.
- Strauss, A., & Corbin, J. (1998) *Basics of Qualitative Research: Grounded theory procedures and techniques*, 2nd ed. London: Sage.
- Wilmes,B., Harrington, L., Kohler-Evans, P., & Sumpter, D. (2008). Coming to our senses: Incorporating brain research findings into classroom instruction. *Education*, 128(4), 659-666.
- Yin, Robert.K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.
- Zeichner, K.M., & Tabachnick, R. (1981). Are the effects of university teacher education “washed out” by school experience. *Journal of Teacher Education*, 32 (3), 7-11.

Formative Assessment: The Developmental Shaping of Future Teachers

by

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Abstract

This paper describes a research study that sought to determine whether preservice teachers' memories of their developmental experiences relates to their perceptions of classroom community. It observes that developmental memories may indicate emotional dispositions that teacher education programs should recognize in their preservice teachers. Qualitative analysis interpreted patterns of student reflections about family dynamics and about their professional practice. Emerging themes found relationships between preservice teachers' affective patterns with their views of classroom community that offer grounding for future research and reconsideration of teacher education approaches.

This paper describes a research study that sought to determine whether preservice teachers' memories of their developmental experiences relates to their perceptions of classroom community. The preservice teachers responded to prompts that prompted reflection about their families of origin and about their philosophies of classroom community.

Research into development of mind indicates that decision-making relates to affective predispositions that develop from childhood memories to create a sense of identity (Narvaez, 2014; Panksepp & Biven, 2012). The patterns of these emotional groupings relate to responses to developmental environments. In these settings, the brain develops an emotional habit that influences interpretations of one's surroundings. For example, a child that develops in an insecure environment may develop an emotional predisposition of fear.

These emotion impulses do not represent conscious influences, but rather manifest themselves in the patterns of reasoning expressed. As Jordan (2013) puts it, our decisions are

Rather, like an open system such as a bird in flight, whose wing dynamics absorb and resist the multi-scale wind patterns it encounters in real time, not because it has to control its flight, but because controlling flight is what it is. (Section 4, Para. 1)

Interactions with the environment define the emotional patterns that influence one's identity. The self-control of human behavior relates to the nature of the emotions that guide the process. While to an extent, humans are responsible for their psychological processes they also represent the biological products of this planet and its elements. In short, the human activity in control represents an exercise in dealing with the emotions from the environment that one is provided. One's experience represents a process of choices developed through the nature of one's origins. (Narvaez, 2014)

If we apply these relationships to current events, we may perceive the current corona virus pandemic as the natural result of a marketplace happenstance of which unanticipated repercussions occurred. Much like rats on ships brought the 14th century Black Plague to Europe and the European invaders transmitted the 16th century smallpox to the indigenous American peoples. Social interaction undergirds the nature of human existence. As with the black plague, smallpox, and corona virus transmissions, social interactions have emotional consequences that shape interpretations of such events, controlled or uncontrolled.

Bronfenbrenner's (1979) observation of developmental interactions with social systems may be posited to have longitudinal outcomes. In other words, how a preservice teacher perceives his or her childhood experiences may relate to the vision for professional practice – specifically classroom community.

This research would suggest that the standards for practice imposed upon preservice teachers within a teacher education program may inform, but not align with, the emotional underpinnings. Because preservice teachers originate from a variety of family dynamics, their emotional profiles prompt them to view these standards in different ways.

The influences of these standards on preservice teacher behaviors relate to the extent to which the standards affirm or disturb preservice teacher memories and the emotions that guide the interpretations of their memories. If a sense of professional identity draws much from the emotions cultivated through developmental experiences, then the degree to which preservice teacher experiences align with that background may contribute to their classroom communities.

Preservice teachers' perceptions of their family dynamics and relationships may bear greatly on their views of themselves, thereby shaping their sense of professional identity. Learning how preservice teachers perceive themselves and the environments that influence their senses of identity offers the potential to inform whether teacher education programs affirm or challenge these emotional imprints. Such knowledge may also inform how preservice teachers' view classroom community and their strategies for its development.

Methods

The research took place at a public institution for higher learning in the Midwest. Data consisted of reflections developed by two sections of preservice teachers. The reflections were completed within an elementary social studies methods course during the spring of 2019. There were 46 students enrolled and all gave consent for analysis of their reflections. The preservice teachers previously completed several courses, which required their study of aspects of classroom community and learning environment development. Developing classroom community and creating a democratic classroom represented the chief topics covered and assessed in these courses.

The course in which students enrolled was a component of a block of three courses that students took as a cohort. The other two courses related to methods of teaching elementary science and to teaching and learning principles. Instructors tend to plan and teach these courses independently from each other.

The clinical portion of this coursework occurred on alternate days of the week from the coursework. For example, when courses met on Mondays and Wednesdays, clinical experiences occurred on Tuesdays and Thursdays. Course instructors' professional assignments were limited to the university classroom. Supervision specialists oversaw the preservice teachers' clinical experiences.

Students completed assigned weekly reflections that related to various facets and topics of the social studies methods course. At the conclusion of the first and third weeks, and at the conclusion of the 13th and 15th weeks, the preservice teachers developed reflections that provided the data analyzed for this paper. The reflection for the first and 13th weeks responded to the following prompt: "How would you describe the dynamic of relationships within your family? In what ways do you view this dynamic as shaping who you are?" The reflection for the second and 15th weeks responded to the following prompt: "What is your vision of your professional classroom community after graduation? How do you view your role in this environment?"

The second author conducted qualitative analysis to interpret changes in the patterns of student reflection between the beginning and end of the coursework. Analysis determined no patterns of difference between beginning and end course reflections. Qualitative analysis sought themes in relationships between student interpretations of their families and views about classroom community. In the following section, we describe the themes that emerged from this analysis.

Findings

Of the 46 participants in this study, 32 answered the prompt about their future classroom environments with very simple responses that appeared conversational and pat, rather than professional introspections of substantial depth. These responses were very similar to one another and mirrored the descriptions of classroom environments discussed in a previous course. These responses were very short and used the same few descriptive words: safe, comfortable, respectful, and community. As a result of this mimicking of a course definition of classroom community, the analysis was unable to determine if/how these participants' family dynamics may have influenced their descriptions of future classroom environments. These findings are not unexpected. To generate authentic patterns of reflection, the instruction employed an organic reflection assessment that did not assign a word count and assigned full credit to all participating students for their writing.

Responses of the remaining 14 participants offered much more detail and connections among the way they described their family dynamics and descriptions of future classroom environments they plan to create. We observed the following patterns of relationships between family experiences and classroom community within the reflections of these 14 participants. Six of the participants who described adverse developmental circumstances advocated a student empowering approach to the classroom, six of the respondents related environments of openness and conversation to a similar classroom approach and two of the participants focused on authority and power.

The following sections provide detailed explanations and examples to illustrate these themes. Pseudonyms are provided for all examples. Six of the 14 participants described growing up in adverse conditions and advocated for student development in their classroom community. Examples of the conditions in which they were raised included divorce and tangled relationships. For example, Leslie wrote "My parents got a divorce when I was in second grade. When they got divorced, my parents decided to take custody of only one child."

This participant described an environment that she could not control, and which frustrated her "My father decided to fight for custody of me...I didn't want to leave my mom. I wanted to live with both parents, but I knew it would never happen again." If one views divorce as a process rather than an event, Leslie experienced a difficult environment in which she may have been a victim.

Leslie's classroom expectations offered a sense of resolve for her experiences. Classroom: co-create rules with students, give students a say, offer opportunities to build relationships, and set the foundation of trust. My role in the environment is to give students a chance to take initiative, have faith in me, and trust me that my classroom is safe and professional environment.

Kim commented "For me with the relationships with my parents, I reject a lot of what they've brought to me. It's personal and complicated. From those relationships, however, I've grown into a very resilient and strong person."

Kim resists attempting to explain key elements from her upbringing. Her experiences are such that she has rebelled against her parents' teaching and

conflict. Her view of the classroom provides a solution to the adverse circumstances in her family.

Similarly, Kim expresses a desire for students to experience a sense of harmonious community of mutual appreciation.

It's also really important to me that my classroom have a sense of community in that everyone has a role, and each is just as important as the next. It encourages student desire to be present in the classroom and work together and understand that everyone has a role that others depend on.

Both participants described circumstances of insecurity and distrust. They described or avoided exploration of their developmental contexts. Their views of classroom community may seem to represent a need for a peaceful environment of cooperation and valuing.

Open Environments to Open Classrooms

Six of 14 students experienced developmental environments that involve trust and conversation. For example, Chris wrote

My parents are amazing people that have allowed me to make my own decisions and supported me each step of the way even if they did not think it was the best idea... they would never abandon me or leave me to deal with the consequences on my own that I could not handle, which makes taking risks not as scary.

Chris wrote about an emotionally supporting environment that affirms her sense of identity in all circumstances. Rather than a behaviorist context, Chris described a peaceful environment of unconditional acceptance. Her appreciation of this experience evidences itself in her view of the classroom. Chris commented

I guess I envision my professional classroom community as a family; a community that cares for each other and checks in while also caring immensely for the students. My role as a teacher in this community is not only to teach the student, but to make sure they feel safe in my classroom or any other...

Chris valued her parents as role models who treated her as she wants to treat her students. Her vision of family related to the compassionate nature or relationship of support and affirmation as she experienced.

Sam observed

[My mom] was a single mother. She always made sure I knew she was in my corner but did correct me if I needed it. She never tried to push conversations under the rug and we always had open communication in our home.... She also respected me and my opinions...It has helped me in my community since I was always taught to be open.

Sam describes an environment of support and openness that she seeks to extend to the classroom. Further, Sam commented. "There is nothing more powerful than when students feel respected by teachers by being listened to and allowed to have ownership over their learning... I want to give them respect and be mindful of their interests and their ideas."

Both Chris and Sam represent examples of students who experienced supportive developmental contexts in which parents supported and respectfully communicated with them. Valuing these contexts, they seek to extend them to their classrooms.

Two of fourteen participants were concerned with issues of power. Phoebe commented "I would describe my parents as authoritative. They set rules and expectations but explained why they did what they did." This concise expression of the family offers no attempt to make meaning of her developmental environments. This abrupt description of her experiences translated to her classroom vision. Phoebe claimed "I view my role in this environment as being authoritative. I want to

be a teacher who sets high expectations while still maintaining a caring and inclusive classroom.”

This desire for control relates back to the upbringing by parents who followed an authoritarian model. Note that little reasoning is present. The model lacks justification for its outcomes, only for its presence.

Kyle observed “I feel like there are many dynamics that make up my family. One that I think of first is power. Growing up, my parents had all of the power in our family...” Yet Kyle also describes elements of openness “My family believes that everyone’s opinion matters and it’s important to be heard.”

Kyle observed the empowering nature of student decision-making, commenting “I think it is important to let the students decide what rules they think are appropriate for them to follow. It gives them some sense of authority and control over their learning in the classroom.”

Discussion and Limitations

In this section, we relate observations with regard to the findings and relevant literature. The analysis found that reflections contained three themes. First, student experiences in authority-focused environments yielded either a teacher- or student-focused approach. The literature (Panksepp & Biven, 2012) would appear to indicate that patterns of emotional experiences may relate to one’s developmental contexts. Other factors besides developmental environment could affect classroom perspectives. For example, predispositions toward a need to control or to tolerate may override possible environmental influences. Other factors may relate to students’ status as an only child or their position in sibling sequence. Finally, student reflections may convey their perception of parental authority, not necessarily the degree of authority exercised.

Jordon’s (2013) wing analogy may prove relevant here. His observation that wing processes are why they are may extend to dispositional processes. The views expressed by these 14 preservice teachers’ reflections about their developmental contexts to some degree represent affective impulses stimulated by memories that guide their professional visions. How unempathetic or uncaring would it be to impose a standardized approach to classroom community without appreciating the experiences that guide their professional visions? Noddings’s (2008) approach to caring would indicate that providing individuals with opportunities for compassion may shape their dispositions.

Second, students raised in adverse climates may have developed feelings of powerlessness, causing a need to project their wishes for empowerment on future students. This approach to teaching provides opportunity to benefit from opportunities that they did not. This sense of compassion or need to nurture may represent a subconscious project of need onto children.

Finally, this paper informs about the risks that may occur through the screening of applicants for admission to elementary teacher education programs (e.g., Fallona & Cannif, 2013). Rather than seeking candidates who fit a model to conform to a volume of prescribed standards, teacher education may revise its identity to one of openness that invites meaning making of personal identity. Such processes could foster sense of self-appreciation among candidates that translate into their classroom communities.

The patterns presented in this paper describe findings of a small percentage (29.78%) of the study participants. Rather than exploring the assignment parameters and the thin consequences of their permissiveness, findings may represent an authentic interpretation of preservice teachers’ willingness and courage to independently examine their backgrounds in depth and the resulting professional

outcomes. The unwillingness of participants to examine these issues in depth may signify backgrounds and environments that require their examination; however, the conditions for this reflection derive from safe environments that nurture a sense of trust. To what extent are these patterns accurate representations of their family history? (Lucey & Lorschbach, 2015). Details provided in the accounts would present their perspective; however, accounts of other family members may inform a holistic interpretation of the dynamic.

Conclusions

Our study found three patterns of preservice teachers' perceptions about developmental experiences that related to perceptions of classroom community. Additional studies with larger samples that offer more guidance for preservice teacher reflections may confirm these findings. Existing frameworks provide standards for teaching and teacher education to which candidates and institutions should conform. Lucey (2019) argues that standards for teaching and learning fit within a context for learning defined by the privileged yet lack individual dimension. Thus, programs such as that described by Fallona and Cannif (2013), which screen applicants for desired beliefs/behaviors may create for the teaching of a particular value set that perpetuates patterns of social hierarchies reinforced through educational systems. Much as authoritarian contexts described by the preservice teachers within this paper lead to authoritarian classrooms.

We conclude with an anecdote about a teacher who spent most of the time in the classroom engaged in trying to get the students' respect (which they had); however, the lack of learning and lack of consequences for poor behavior affected her effectiveness. Outside of the classroom, this teacher almost pathologically sought affirmation from adults for everything she did – which others thought of as off-putting. Eventually, it was discovered that the teacher grew up in horrendous conditions (including abuse). While it is easy to look with sadness on this teacher's struggles, the unfortunate consequence was that students learned very little in this teacher's classroom. How could a compassionate experience in teacher preparation have empowered her to face her experiences and draw strength from them? After many years of teaching, the emotional trauma from this person's personal life history still influences their classroom decisions – and not necessarily for the wellness of the students' learning.

This study suggests that preservice teachers derive from a variety of developmental contexts and possess a variety of dispositional patterns. We would encourage teacher education's reexamination of its system of standards to provide for a system of professional development that offers flexibility for the range of preservice teacher experiences.

References

- Bronfenbrenner, U. (1979). *The ecology of human development. Experiments by nature and design*. Harvard.
- Fallona, C., & Cannif, J. (2013). Nurturing a moral stance in teacher education. In M. N. Sanger & R. D. Osguthorpe (eds.), *The moral work of teaching and teacher education: Preparing and supporting practitioners* (pp. 74 – 91). Teachers College Press.
- Jordan, J. S. (2013, September 03). The wild ways of conscious will: What we do, how we do it, and why it has meaning. *Frontiers in Psychology*, <https://doi.org/10.3389/fpsyg.2013.00574>

- Lorsbach, A. W., & Lucey, T. A. (2015). The myths of who we are: Meritocracy, teachers, and perceptions of working-class family histories. *Education and Society*, 33(2), 65-83. <https://doi.org/10.7459/es/33.2.05>
- Lucey, T. A., (2019). *Intersections of financial literacy, citizenship, and spirituality: Examining a forbidden frontier of social education*. Emerald Points.
- Narvaez, D. (2014). *Neurobiology and the development of human morality. Evolution, culture, and wisdom*. W. W. Norton.
- Noddings, N. (2008). Caring and moral education. In L. P. Nucci & D. Narvaez (eds.), *Handbook of moral and character education* (pp. 161-174). Routledge.
- Panksepp, J., & Biven, L. (2012). *The archeology of mind. Neuroevolutionary origins of human emotions*. W. W. Norton.

Teacher Educators Move Literacy Instruction Beyond the University Classroom: A Community Partnership During a Pandemic

by
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Abstract

Due to the current pandemic the summer/Covid slide is of utmost concern. Similar to the summer slide when low socio-economic students demonstrate a greater loss in reading skills than more affluent students, the newly emerging Covid slide will likely increase this achievement gap. This article describes a summer literacy intervention created by two university professors in partnership with a large metropolitan city. The purpose of this program was to provide students attending summer camp with an opportunity to remediate any summer reading losses due to school closings during the pandemic.

Many large cities offer summer camps for children when school is not in session. Some of these children are regular attendees to after-school city programs during the school year and in the summer participate in these day-long camps. Normally, these camps are focused in sports programs, field trips and crafts, giving participants opportunity to engage in social and fun activities. Others include some level of academic components. This article describes a summer camp partnership between university professors and summer camp staff in a major city. The purpose of the partnership was to create a program with literacy opportunities for summer camp students and to empower summer camp staff to deliver it effectively.

Summer slide refers to the loss of reading skills experienced during the summer when school is not in session (Goldberg, 2018). Many studies demonstrate that the summer slide is an actual occurrence. Cooper, Nye, Charlton, Lindsay and Greathouse (1996) maintain that during summer breaks the achievement gap is widened by three months between low and high socioeconomic students. They assert that this effect is cumulative and by the end of sixth grade, disadvantaged students can be 2 to 3 years behind students in higher socioeconomic brackets. Allington and McGill-Franzen (2018) consider the summer slide as the main explanation for the reading gap between low and high socioeconomic status. The summer reading slide contributes to the widening of the achievement gap between the affluent and the disadvantaged families (Albee, Smith, Arnold & Dennis, 2019). Allington, McGill-Franzen, Camilli, Williams, Graff, Zeig, Zmach, & Nowak (2010) conducted a study where students from 17 high poverty schools were randomly assigned to a treatment group. The treatment group received a self-selected supply of trade books for the summer over a period of three years. The others (control group) did not. No other reading intervention was implemented. Results indicated a statistically significant effect on the state reading assessment for students who received the books. This is further indication of the importance of students continuing to read throughout the summer.

With the current challenges in education because of Covid-19, a new type of regression slide is emerging. The so-called Covid slide has been estimated to potentially cause the loss of about 30 percent of students' annual progress in reading, although finding ways to measure this loss is still in progress (Gewertz, 2020). The Covid slide may be particularly challenging for English Learners who could fall behind due to limited access to technology and the lack of language

support during the pandemic; these learners could also experience loss of speaking abilities during the time away from school (Godsey, 2020).

More information will emerge as studies are conducted regarding the lasting effect of the Covid slide over time. One can only assume that the effect will be at least similar to that of the summer slide, except that in the case of the Covid slide, the time spent away from instruction is greater than just summer, and therefore this duration may have a more severe impact. The NWEA projects a Covid slide where students will emerge with only 70 percent of reading retention, as compared to a typical school year. Retention in mathematics is projected even lower, at a 50 percent retention of skills (Kuhfeld & Taresawa, 2020). Additionally, the emergence of online instruction for social distancing at the elementary school level can likely widen the achievement gap between low and high socioeconomic students, as emerging information begins to indicate (Gewertz, 2020). With the negative impact of the Covid slide, attempts to expand literacy opportunities during the summer months in the context of a city summer camp, appear advisable. In this article we discuss a unique partnership between two literacy professors and a large metropolitan city whose purpose was to provide a distinctive summer literacy program for at-risk students to combat the summer/Covid slide.

The Partnership

The Director of Educational Strategies from a large metropolitan city reached out to us, two professors in the School of Education at a small private urban university, with the notion of working together to address the summer/Covid slide among at risk students. Due to the pandemic preventing the summer slide was of utmost importance. The idea was to deliver a literacy intervention during the summer to students attending summer camps provided by the city. Recognizing both the value of community partnerships and the increased negative impact of the summer slide due to Covid, we readily agreed to the idea of working together, thus, solidifying our resolve to help minimize an increased summer slide brought about by the pandemic. Both parties agreed that our goal was to provide an engaging summer intervention that would not feel like summer school to the students. Our tasks were to create this intervention and train camp employees.

The city handled the logistics of enrolling students and hiring summer employees during Covid. They made the decision to limit summer camp to three sites and start in the middle of June. Twelve instructional specialists were hired to plan and monitor the implementation of literacy lessons from the content of the training.

Creating and delivering a literacy intervention in the middle of a pandemic brought many unique challenges. First, during the beginning development of the intervention we were not even certain that students would be allowed to participate in summer camps. If they were allowed, we did not know what camps would look like. For example, would student enrollment be limited, would social distancing be in place, would small group work be allowed, would camp occur daily, would camp be full or half day? Answers to these questions would certainly have been useful during the development of the intervention. Despite the many unanswered questions related to the delivery of an intervention, we continued to plan, hoping for some sense of normalcy to return by June.

Second, we did not know how we were to train summer camp employees because we were still in quarantine. Eventually the city decided that we could provide training virtually. We were provided two half days in May to train approximately 80 summer camp employees. This raised many questions. Both of us have a lot experience delivering professional development and trainings; yet,

never in a virtual format. What technology could support training so many people? How could we make a virtual training interactive and engaging for participants? How would we determine if the employees were truly participating in the training?

Fortunately, our university agreed to provide the necessary technology. We used Blackboard Collaborate for delivery of the training. Prior to the actual training, we participated in a trial run with city technology experts. Our trial revealed that all participants must use Chrome. Other servers did not support the audio and video in Blackboard Collaborate. The trial run provided us with a small sense of relief knowing that we would at least have audio and video that worked during the training.

A large amount of our planning time was spent brainstorming various methods to make a virtual training interactive and engaging. We planned for breakout groups and integrated hands-on literacy activities using reading, writing, listening, and speaking.

The first day of training ended in frustration for us. There was little to no engagement from some of the participants. These few did not appear to be engaged. We were discouraged, believing they were bored and withdrawn. That evening we regrouped and planned to strength participation the next day grouping participants for various activities and then calling on them to share. The second day proved to be more interactive, yet there were still some that chose not to actively engage.

The Literacy Intervention

From the onset we knew we did not want our intervention program to resemble summer school. We wanted our program to be exciting, engaging, and motivating. We began with a focus on the 5 components of reading: phonemic awareness, phonics, vocabulary, comprehension, and fluency. Through further discussion and planning we decided it was important to address oral language separately from vocabulary and to also incorporate writing. Hence, our basic intervention model is founded on these 7 pillars. We also wanted quality children's literature to be a key component of the literacy intervention. Most of our activities do center around a children's book. We compiled a list of quality children's books and the district purchased a copy of each book for the camp sites.

Table 1. Examples of Children's Literature Used for Summer Literacy Intervention

Children's Book	Author
<i>Those Shoes</i>	Maribeth Boelts
<i>Alma and How She Got Her Name</i>	Juana Martinez-Neal
<i>Peter's Chair</i>	Ezra Jack Keats
<i>Back of the Bus</i>	Aaron Reynolds
<i>Eyes of the Gray Wolf</i>	Jonathan London
<i>Seven Blind Mice</i>	Ed Young
<i>Amazing Grace</i>	Mary Hoffman
<i>A Bike Like Sergio's</i>	Maribeth Boelts
<i>The Stranger</i>	Chris Van Allsburg
<i>The Important Book</i>	Margaret Wise Brown

Next, we had to decide how to deliver this summer program without the aura of being in school. After all, summer camp is supposed to be fun. We considered many different implementation scenarios and eventually realized that we wanted the students to experience literacy events during the entire day, rather than in one large block of time allocated for instruction. Our goal was for students to recognize that literacy is all around us and used throughout the day.

Based on the content of our virtual training, literacy specialists then wrote daily lesson plans. Since our literacy intervention is not a scripted curriculum, we stressed during the training that multiple children's books could be used for any activity. This allowed for some creativity and autonomy in developing lesson plans.

Table 2. Sample Lesson Plan

1. Songs:
 - a. Old:
 - i. My Flea Fly
 - ii. Little cabin in the woods
 - iii. Animal Fair
 - iv. Little chick
 - v. Twinkle Little Slug
 - vi. My Bonnie
 - vii. Junior Birdman
 - viii. Viva La Campagne
 - ix. Head shoulders knees and toes
 - x. New Grand Ole Duke of York
 - b. Something Jaybird Shuffle (right hand on left ear, left hand on nose)
 - c. Something borrowed
 - d. Something Blue: Yellow submarine:
https://www.youtube.com/watch?v=m2uTFF_3MaA
2. Phonemic Awareness: Review alliteration
 - a. Betty Bother
 - b. Woodchuck
 - c. Sally sells seashells
 - d. Peter Piper
 - e. Fuzzy Wuzzy was a bear. Fuzzy Wuzzy had no hair. Fuzzy Wuzzy wasn't fuzzy, was he?
 - f. If a dog chews shoes, whose shoes does he choose?
 - g. I scream, you scream, we all scream for ice cream
 - h. I have got a date at a quarter to eight; I'll see you at the gate, so don't be late
 - i. I saw a kitten eating chicken in the kitchen
 - j. I thought I thought of thinking of thanking you
 - k. Snap crackle pop (x3)
 - l. Thin sticks, thick bricks (x3)
3. Fluency/Oral language: *Peter's Chair* by Ezra Jack Keats
 - Reading and Writing Connections Alphaboxes
Ask students to make a grid with one box for each letter of the alphabet (model how to do it on the board or chart tablet). Or, provide a premade sheet with the grid already there.
 - Have students work in pairs or small groups to

come up with one or more words for each letter of the alphabet that relate to the story they heard. For example, if the story is Cinderella, they could have A for attic, B for broom, C for Cinderella, S for stepsisters, stepmother and slippers, etc.

- They share their words and other groups may borrow words they do not have. Make a class chart of words for books.
4. Older campers : Twitter about their book (280 characters)
 5. Journal Writing: *I Love Saturdays Domingos* by Alma Flor Ada
 6. Oral Language: Begin high frequency words in journal

The Outcome

A simple follow-up survey was sent to the instructional specialists. We asked them to share with us aspects of the literacy intervention that worked best, suggestions for next summer, and any other relevant information they wanted to share. The instructional specialists communicated how much they appreciated and enjoyed all the literacy activities. They specifically mentioned that the wide variety of possible activities prevented the students from becoming bored. They also believed the game-like format of activities was effective with students. Some of the participants demonstrated positive attitudes toward the summer literacy intervention through the following statements:

“I appreciated having the 40 plus books provided and the literacy activities to prepare for each session.”

“I liked having the lessons ready to go with book suggestions.”

“I liked that the lessons were good for different age groups.”

“There was a variety of activities, from songs, to games, to art project.”

“The training provided by the [professors] was a great help! Wonderful guidance!”

Their suggestions for improvement dealt with logistics of the summer camp that are beyond our control, such as record keeping, sign-in procedures, reporting forms, and availability of all materials.

Despite our efforts, the literacy activities were delivered during a 45-minute block of time each day. Summer camp employees believed this was the easiest way to engage students effectively.

Future Planning

This intervention brought new perspectives to the existing summer program provided by the city. While maintaining the fun aspect of a summer camp, employees learned literacy activities to incorporate in “spurts” throughout the day. Instructional specialists, who also attended our training, visited the sites and supported workers during implementation. As noted before, the outcome was in many places, successful.

Based on our experience creating and delivering summer literacy model to summer camp specialists and employees we have learned, through trial and error, what makes it work. The following are recommendations for future planning and implementation of a similar program.

- Make sure to know who all will be involved in the planning and delivery of the instruction at each center. They need to participate in the training and show understanding and buy in.

- From the beginning, engage the upper administration to participate and monitor participation.
- Be available during implementation to visit the sites and provide coaching and feedback.
- If possible, engage preservice teachers as deliverers of this training.
- Be mindful that some summer camp employees are not certified teachers; for that reason, develop and deliver the training in a way that allows for understanding of best practices in education.

In summary, this literacy intervention accomplished several objectives. First, we introduced literacy instruction in a way that was fun and effective. Second, we empowered the summer camp employees to go beyond the usual summer camp activities by incorporating the literacy opportunities, including allowing children ample time to read and write for pleasure. Third, we partnered with the instructional specialists by engaging them in the training and making ourselves available during the summer for questions and support as needed. Finally, we cemented a relationship with city departments and personnel responsible for after-school and summer camps. Such a relationship is beneficial to all stakeholders and we will strive to continue it moving forward.

References

- Albee, J.J, Smith, M.L, Arnold, J.M., & Dennis, L.B. (2019). Digging struggling students out of the summer reading slump. *The Reading Teacher*, 73(3), 257-389. <https://doi.org/10.1002/trtr.1847>
- Allington, R.L, McGill-Franzen, A., Camilli, G. Williams, L., Graff, J., Zeig, J., Zmach, C., & Nowak, R. (2010). Addressing summer reading setback among economically disadvantaged elementary students. *Reading Psychology*, 31(5), 411-427. <https://doi.org/10.1002/trtr.1847>
- Allington, R.L. & McGill-Franzen, A. (2018). *Summer reading: Closing the rich/poor reading achievement gap* (2nd ed.), New York, NY: Teachers College Press.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer Vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227-268. <https://doi.org/10.3102/00346543066003227>
- Gewertz, C. (2020). Instruction during Covid-19: Less learning time drives fear of academic erosion. *Education Week*, 39(35), 14-15.
- Goldberg, A. (2018). What summer slide actually means – and 5 ways to fight it. *EdSurge*. <https://www.edsurge.com/news/2018-07-12-what-summer-slide-actually-means-and-5-ways-to-fight-it>.
- Godsey, M. (2020). Preparing for the Covid slide: The summer slide already presented its challenges. How can educators prepare for potentially steeper knowledge loss? *Literacy Today* (2411-7862), 38(1), 22-25.
- Kuhfeld, M. & Tarasawa, B. (2020). The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement. *NWEA Collaborative for Student Growth*.

Development and Use of a Formative Assessment Tool to Prepare Preservice Teachers for a High Stakes Performance Examination

by

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Abstract

The edTPA Elementary Literacy Assessment is a performance examination preservice teachers must pass for licensure. This study describes a formative assessment instrument for identifying elementary teacher candidates' perceived edTPA competence. The tool's design is grounded in teacher candidates' metacognitive thinking to foster: 1) content and pedagogical knowledge; 2) strength and need awareness; 3) empowered and controlled learning. Seventy-six elementary teacher candidates completed the instrument prior to edTPA submission during their student teaching semester. Results of this study suggest benefits and limitations of using teacher candidate self-perception data. They also suggest that the metacognitive design of this instrument is a promising practice for those engaged in in teacher candidate self-study, classroom based research, and edTPA formative assessment.

The edTPA is a performance-based examination completed during student teaching that sets licensure expectations across the United States. This high stakes examination was developed by the Stanford Center for Assessment, Learning, and Equity (SCALE) and the American Association for Colleges of Teacher Education (AACTE). Pearson Education, a for-profit publishing company, administers the examination (SCALE, 2019). At present, over 900 teacher preparation programs and forty-four states have used edTPA assessments to evaluate and measure teacher candidate knowledge and skills prior to licensure (SCALE, 2020). This study of examined seventy-six elementary teacher candidates' perceptions of edTPA tasks specified by the edTPA Elementary Literacy Assessment.

To complete the edTPA Elementary Literacy Assessment, elementary teacher candidates must complete three tasks. Task 1 is titled *Planning for Instruction and Assessment*. This task requires candidates to plan three to five consecutive lessons with written commentary that responds to specific prompts. Task 2 is titled *Instructing and Engaging Students in Learning*. This task directs teacher candidates to video record planned instruction with commentary that articulates what they did to model and guide student practice of an essential literacy strategy. Task 3 is titled *Assessment of Student Learning*. This task asks teacher candidates to summarize learning trends, provide feedback to learners, and then respond to assessment commentary prompts. Together, these three tasks form what all edTPA handbooks call the Cycle of Teaching Effectiveness (SCALE, 2017a, p. 2).

When the three Cycle of Teaching Effectiveness tasks are completed for the edTPA Elementary Literacy Assessment, teacher candidates can organize required edTPA materials and submit them to a Pearson Corporation website for external review. Pearson Corporation evaluators examine electronic portfolios using fifteen different sets of rubric criteria specified in Table 1. Each of the fifteen sets of rubric criteria is evaluated using a five point Likert scale. This scheme can generate a maximum score of 75. When this study was conducted in 2016 with Illinois teacher candidates, and the passing score for all Illinois edTPA portfolios was set at 35.

Table 1. General Overview of edTPA Tasks and Rubrics

Task 1 Planning Rubrics	Task 2 Instruction Rubrics	Task 3 Assessment Rubrics
<u>Rubric 1</u> Planning	<u>Rubric 6</u> Learning Environments	<u>Rubric 11</u> Analysis of Student Learning
<u>Rubric 2</u> Support of Varied Student Learning Needs	<u>Rubric 7</u> Engagement of Students	<u>Rubric 12</u> Providing Feedback
<u>Rubric 3</u> Knowledge of Students	<u>Rubric 8</u> Deepening Student Learning	<u>Rubric 13</u> Student Use of Feedback
<u>Rubric 4</u> Language Demands	<u>Rubric 9</u> Subject Specific Pedagogy	<u>Rubric 14</u> Analyzing Students Language Use
<u>Rubric 5</u> Assessments	<u>Rubric 10</u> Analyzing Teaching Effectiveness	<u>Rubric 15</u> Using Assessment to Inform Instruction

Authentic Performance Assessment and Metacognition

Authentic performance assessment was envisioned by Schon (1990), and later by Wiggins, McTighe, and McTighe (1998), as a realistic test event requiring judgement and innovation typical for workplace challenges. The authentic test-taker’s role is to act and reflect upon real decisions to demonstrate a meaningful repertoire of knowledge, skills, and dispositions. Therefore the extent to which an edTPA performance examination delivers this authenticity is a matter of metacognition—the degree to which candidates can plan, monitor, and assess their own performance. This phenomenon of self-assessment dates back to William James (1890) and John Dewey’s (1910) studies of the adult “tip of the tongue” phenomenon. John Flavell (1976) formally coined this phenomenon as “metacognition” to describe the critical awareness of one’s own thinking, oneself as a thinker, or any other condition affecting self-reflection. Eventually the discovery of metacognitive comprehension strategies in Brown’s (1980) study of middle school readers culminated in National Academy of Sciences recognition that a metacognitive approach to instruction is essential for learning (Bransford, Brown, & Cocking, 2000, p. 18).

Metacognitive thinking about an instructional task can foster teacher candidates’ knowledge of their content and pedagogical strengths and weaknesses as learners, instructors, writers, readers, test-takers, and empowered professionals. Two essential features of this knowledge are: a) recognizing limits of one’s current knowledge; b) communicating with oneself and others to acquire new knowledge. Teacher candidates who utilize metacomprehension strategies tend to “actively monitor their learning strategies, assess resources, and judge their readiness for particular tasks and performances” (Bransford, Brown, & Cocking, 2000, p. 67).

edTPA Readiness Inventory

By examining the *edTPA Elementary Literacy Assessment Handbook* (SCALE, 2015; SCALE 2017a), an inventory of forty-five items summarized in Table 2 was developed for the seventy-six Illinois elementary education teacher candidates who participated in this study. All of the items, except those in one particular area,

were directly related to tasks and rubric criteria outlined in the handbook. This particular area, Preparing Portfolio Materials, consisted of five Task 2 items, as well as one stand-alone item, that were not directly aligned with edTPA rubric criteria. Although details about these items were not addressed in this study, participant comments written after each readiness inventory section suggested that knowledge of skills such as website mechanics and document uploading was important.

Table 2. edTPA Readiness Inventory

edTPA Readiness Tasks	Sections	Number of Items
Task 1: Planning for Instruction and Assessment	A. Creating Lesson Plans for the learning segment associated with Task 1	6
	B. Responding to Task 1 Commentary Prompts	5
	C. Using Task 1 Rubrics to Prepare my edTPA	5
Task 2: Instructing and Engaging Students in Learning	A. Documenting your Teaching	5
	B. Responding to Instruction Commentary Prompts	4
	Using Task 2 Rubrics to Prepare my edTPA	5
Task 3: Assessing Student Learning	A. Analyzing both student learning and student use of language	5
	B. Responding to Assessment Commentary Prompts	4
	C. Using Task 3 Rubrics to Prepare my edTPA	5
Preparing Portfolio Materials for Electronic Upload by Examining edTPA Evidence Chart	A. Examination of edTPA Elementary Literacy Assessment Evidence Chart (SCALE, 2017a, pp. 40-44)	1

The seventy-six teacher candidate participants were each asked to indicate how competent they believed they were in completing each of the items identified in the edTPA Readiness Inventory. They used a ten-point scale, where “0” indicates *completely incompetent* and “10” indicates *competent*, to self-evaluate their ability with edTPA requirements.

Table 3 is a timeline of participants’ edTPA work with the readiness inventory and their elementary education faculty. Between fall 2016 field work in classrooms and spring 2016 final edTPA submissions to Pearson Corporation evaluators, the inventory was administered two times. The first administration occurred after teacher candidates had practiced the edTPA Elementary Literacy Assessment in collaborative school groups during their two day per week field work in the fall. This practice oriented study participants to edTPA submission requirements, handbooks, and rubric scales. Then readiness inventory data were summarized to pinpoint specific areas where teacher candidate participants needed faculty support and remediation. For example, literacy faculty used inventory data to prepare a literacy lesson and commentary assignment for participants, including

prompts aligned with “low competence” edTPA Readiness Inventory items. Other faculty held 1:1 meetings with teacher candidates whose edTPA Readiness Inventory performance suggested this support might be helpful.

The second administration of the edTPA Readiness Inventory occurred in January 2016, just prior to the start of the student teaching semester. Data from this administration was analyzed and directed towards continuing fall 2015 1:1 participant meetings, as well as additional 1:1 meetings with teacher candidates whose second inventory scores called for this support. For this study, teacher candidate perception data from the edTPA Readiness Inventory was taken from this second administration of the instrument.

During student teaching, faculty scheduled required workshops for participants to address common needs for greater competence. These workshops occurred as the student teaching semester began in January. Here “low competence” readiness inventory participants were engaged with “high competence” scoring participants before the first scheduled edTPA submission date in February 2016.

Faculty also scheduled individualized optional workshops during student teaching. These workshops included participants who wanted to learn more about the edTPA, and participant learning from these workshops was often passed along to colleagues. Unlike the general workshops conducted by faculty, these individualized sessions consisted of questions and answers raised by the teacher candidates. In March 2016, “low competence” candidates were also given the option of submitting edTPA materials to Pearson Corporation evaluators as late as May 2016 to make time for receiving even more faculty support.

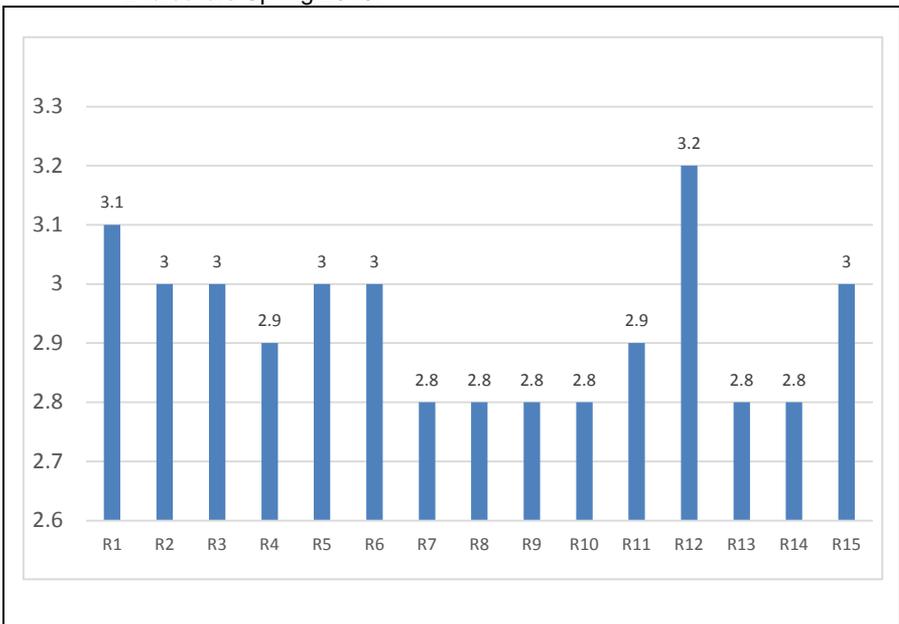
Table 3. 2015-2016 Academic Timeline for edTPA Readiness Inventory Events

	Aug/Sep	Oct	Dec	Jan	Feb	Mar-May
Instruction Events	Fall 2015 Student Teaching Field Work Begins Two Days Per Week Candidates participate in practice edTPA activities	Faculty provide internal review of practice edTPA	Literacy methods course lesson plan with commentary	Spring 2016 Student Teaching Begins Five Days Per Week		
Data Collection Events		1 st edTPA Readiness Inventory Administered		2 nd edTPA Readiness Inventory Administered	Candidates Begin edTPA Submission	Final edTPA Submission to Pearson for Scoring
Inventory Mediation Events		Some candidates are identified as needing additional support	Candidates begin to attend 1:1 meetings with faculty as needed.	Candidates keep attending 1:1 meetings with faculty Candidates attend required edTPA workshops	Candidates attend required and optional edTPA workshops	

edTPA Scores for the Spring 2016 Submission to Pearson

Results from the spring 2016 submission to Pearson evaluators are displayed in Table 4. Data is displayed according to averaged scores per rubric to allow for comparison with the edTPA Readiness Inventory data. All seventy-six teacher candidate participants scored higher than the designated Illinois cut score of thirty-five on the edTPA. All seventy-six passed edTPA in the spring of 2016 with one teacher candidate resubmitting a passing portfolio in May. These passing scores were achieved with average task rubric scores ranging from 2.8-3.2, demonstrating how a number of candidates exceeded the Illinois cut score of 35. In Table 4, the variable *R* signifies the edTPA rubric title designated in Table 2. Each of 15 edTPA rubrics has a one to five scale, with a score of 3 representing a midpoint passing score.

Table 4. Average Per Rubric edTPA Scores from Pearson Corporation Evaluators Spring 2016.



The Investigation

For this exploratory study, program faculty wanted to examine teacher candidates ratings on the edTPA Readiness Inventory going into student teaching, as well as the study participants' actual performance as determined by Pearson Corporation evaluators. To allow for comparisons, items on the inventory were clustered together under areas addressed in each of the fifteen edTPA rubrics. The scores on individual inventory items were averaged with others aligned to a common edTPA rubric. This clustering is depicted in Table 5. Aligning edTPA Readiness Inventory items with edTPA Elementary Literacy Assessment rubrics allowed elementary education faculty to compare fifteen inventory sub-scores representing teacher candidate's competence perceptions with resulting Pearson sub-scores for each of the fifteen edTPA rubrics. In Table 5, the variable *R* signifies the edTPA rubric title specified by Table 1.

Table 5. edTPA Readiness Inventory Item Alignment with edTPA Rubrics

edTPA Rubric Numbers	Task 1 (R1-R5)					Task 2 (R6-R10)					Task 3 (R11-R15)				
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
Inventory Items Per Rubric	4	3	3	3	3	2	2	2	1	2	4	3	2	3	2
Inventory Item Numbers	1A1 1A2 1B1 1C1	1A5 1B3 1C2	1A6 1B2 1C3	1A3 1B4 1C4	1A4 1B5 1C5	2B1 2C2	2B2 2C2	2B3 2C3	2C4	2B4 2C5	3A1 3A2 3B1 3C1	3A4 3B2 3C2	3A3 3C3	3A5 3B3 3C4	3B4 3C5

An extreme group design was used to compare the average edTPA Readiness Inventory ratings of the top ten highest performing teacher candidates with the lowest ten performing teacher candidates. This comparison gave faculty further insights into how confident each of these extreme groups were prior to their edTPA submission. Preacher (2015) outlines the limits of using this type of design for quantitative studies. However, this investigation was more exploratory in nature, and faculty approached this project from the perspective of teachers as researchers. Stremmel (2007) cited the work of Kenneth Zeichner and others stating, “Teacher research takes many forms and serves a range of purposes, but it is conducted by teachers, individually or collaboratively, with the primary aim of understanding teaching and learning in context and from the perspectives of those who live and interact daily in the classroom.” (p. 1).

Table 6 summarizes the actual performance of “Top 10” and “Bottom 10” populations on the rubrics associated with Tasks 1, 2 and 3 of the edTPA. Rubric score differences are also calculated in this table.

Some of the variations in edTPA self-perception and performance scores that are illustrated in Table 6 are worth noting. Variation between the top ten performers and bottom ten performers on the edTPA rubrics ranged from .25 points (Rubric 6 Learning Environments) to 1.5 points (Rubric 2: Planning to Support Varied Student Learning Needs and Rubric 5: Planning Assessments to Monitor and Support Student Learning). Elementary education faculty determined the two rubrics with the greatest difference (1.5) in performance represented two special cases that would be interesting to explore in relation to these candidates’ average edTPA Readiness Inventory ratings. Specifically, two academic pedagogy courses, *Learning Environments* and *Differentiated Instruction*, in early stages of development during the 2016 edTPA submission, and this curriculum development has benefitted from the promising practice of aligning edTPA performance with candidate self-perceptions of edTPA competence.

Table 6. Extreme Group Rubric Scores: Top Ten Average Versus Bottom Ten Average edTPA scores

Task 1 Planning	R1 Planning	R2 Support of Varied Student Learning	R3 Knowledge of Students	R4 Language Demands	R5 Assessments
Top 10	3.65	3.60	3.35	3.60	3.70
Bottom 10	2.80	2.10	2.45	2.40	2.20
Difference	.85	1.50	.90	1.20	1.50
Task 2 Instruction	R6 Learning	R7 Engagement	R8 Deepening	R9 Subject	R10 Analyzing

	Envir.	of Students	Student Learning	Specific Pedagogy	Teaching Effectiveness
Top 10	3.25	3.25	3.10	3.50	3.05
Bottom 10	3.00	2.45	2.55	2.35	2.50
Difference	.25	.80	.55	1.15	.55
Task 3 Assessment	R11 Analysis of Student Learning	R12 Providing Feedback	R13 Student Use of Feedback	R14 Analyzing Students Language Use	R15 Using Assessment to Inform Instruction
Top 10	3.55	3.40	3.45	3.45	3.50
Bottom 10	2.35	2.70	2.40	2.50	2.90
Difference	1.20	.75	1.00	.95	.60

By May of 2016, program faculty were concerned about teacher candidate pass rates and relieved that all of the seventy-six candidates were successful. The edTPA Readiness Inventory had provided valuable formative information, which allowed faculty members to not only make informed and timely instruction decisions before and during the experience, but also after participants edTPA scores were posted. However, responding in this manner required an investment of time. By gaining insights into the self-assessed competence levels of these two extreme groups, faculty thought they might gain additional information to help streamline the process in the future. For example, the two rubrics identified for future use in the extreme group comparison are bolded in Table 7. This table also provides the operational definitions of the teaching practices represented by Rubric 2 (Planning to Support Varied Student Learning Needs) and Rubric 5 (Planning Assessments to Monitor and Support Student Learning).

University courses in differentiated instruction that are not specifically informed by school practice may distance their curriculum from specific IEP and 504 objectives, as well as how these objectives are met by planned learning supports. Similarly, in an era where standardized test scores are a predominant means of monitoring student learning (Johnson & Batchelor, 2018), creating a learning environments that generate multiple forms of assessment may not be easy for university faculty and school partners. These instructional behaviors were highlighted by edTPA Readiness Inventory “Lowest Ten Versus Highest 10” comparisons in Table 7, and they warranted the attention of faculty who were developing curriculum for learning about differentiated instruction and learning environments. Specific definitions of these target pedagogical strategies in edTPA handbooks (SCALE, 2017b) were helpful for these faculty.

Table 7. Behaviors Described for Rubric 2 and Rubric 5

Lowest Ten Versus Highest Ten	Example of Level 2	Example of Level 3 +
<p>Rubric 2 – Planning to Support Varied Student Learning Needs 2.10 vs 3.60 Source: SCALE (2017b, pp. 7-8)</p>	Plans address at least one of the instructional requirements set forth in IEP’s and 504 plans. However, it is not clear that other planned supports will be helpful in supporting students to meet the learning objectives.	Plans address specific student needs (beyond those required in IEP and 504 plans). Scaffolding and supports are included to help individual students and groups of students with similar needs to gain access to the content and meet learning objectives.
Rubric 5 –	Assessments will	There are multiple forms

<p>Planning Assessments to Monitor and Support Student Learning 2.20 vs 3.70 Source: SCALE (2017b, pp. 13-14)</p>	<p>produce evidence of student learning, but evidence is limited (i.e. a single assessment)</p>	<p>of evidence, not just same evidence collected at different points in time or setting.</p>
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Teacher Candidates Perceptions of Competence

Faculty were also able to gain insights into teacher candidates perceptions of competence and elementary education program curriculum by comparing the extreme group averages of edTPA Readiness Inventory sub-scores associated with edTPA rubric two and five results. In doing this, an interesting trend emerged that is summarized in Table 8.

Table 8. Comparison of Average Rating for edTPA Readiness Inventory Items, Rubric 2, and Rubric 5

	Average of Items 1A5, 1B3, 1C2 Planning for Varied Needs (R2)	Average of Items 1A4, 1B3, 1C5 Planning Assessments (R5)
Top 10	8.05	8.15
Bottom 10	8.50	8.43

The edTPA Readiness Inventory anchored its score of 0 to a “completely incompetent” descriptor and its highest self-perception rating of “10” to a “competent” descriptor. While the above “8” average in Table 8 suggests all candidates were confident in the areas of planning for varied needs and multiple assessments prior to submission, the *lower performing teacher candidates* in bolded font had a *higher average edTPA Readiness Inventory rating* than did the higher performing teacher candidates. This suggests these lower performers may have been more confident of their abilities related to edTPA prior to submission than were those that actually performed at a higher level. Specifically, lower performers may have felt more confident in their abilities to provide helpful support for the diverse learners in their classroom (Rubric 2), as well as their ability to provide learning plans that provide satisfactory evidence of student learning (Rubric 5). Additional investigation into these phenomena with the other edTPA task rubrics found similar results. Table 9 shares how the average edTPA Readiness Inventory ratings varied across the different edTPA task rubrics.

Table 9. Average edTPA Readiness Inventory Ratings Across Three Tasks: Top Ten Versus Bottom Ten

	Task 1 Planning	Task 2 Instruction	Task 3 Assessment
Top 10	8.04	9.00	8.32
Bottom 10	8.34	9.04	8.51

For each task, the ten lowest performing teacher candidates were similar or slightly higher than the ten highest performing teacher candidates. Bolded numbers in Table 9 demonstrate this difference.

Conclusions and Next Steps

This Illinois elementary education faculty improvement effort is a promising practice. Developing and implementing a metacognitive self-assessment instrument prepared teacher candidates for a high stakes performance examination by informing faculty of steps they could take before, during, and after edTPA submission. However, focusing faculty resources on outcomes associated with the edTPA had value beyond ensuring candidates' successful edTPA performance and subsequent licensure. Program faculty also learned to embrace the idea that candidates' edTPA rubric scores, while far from comprehensive measures of competence, provided an accurate and valid expression of what teaching excellence can mean. Faculty efforts to improve candidate performance on this assessment may have contributed to the kind of candidate learning and program improvement that develops more effective teachers. Such a conclusion aligns with the following findings about effective teacher development programs:

- High-Leverage Practices: explaining and modeling content; coordinating and adjusting instruction during a lesson; building respectful relationships with students; learning about students' cultural, religious, family, intellectual, and personal experiences and resources for use in instruction; checking student understanding during and at the conclusion of lessons; interpreting the results of student work; providing oral and written feedback to students; analyzing instruction to improve it (Teaching Works University Michigan, n.d.).
- Danielson Framework for Teaching Practices: demonstrating knowledge of content and pedagogy; demonstrating knowledge of students; setting instructional outcomes; designing coherent instruction; designing student assessments; creating an environment of respect and rapport; establishing a culture for learning; using questioning and discussion techniques; engaging students in learning; using assessment in instruction; reflecting on teaching (Danielson Group, n.d.).
- InTASC Standards Practices: learner development; learning differences; learning environments; content knowledge; application of content; assessment; planning for instruction; instructional strategies; professional learning and ethical practice (Council of Chief State School Officers, n.d.).
- Illinois Professional Teaching Standards Practices: teaching diverse students; content area and pedagogical knowledge; planning for differentiated instruction; learning environment; instructional delivery; reading, writing, and oral communication; assessment; professionalism (Illinois State Board of Education, n.d.).

In this study, higher education faculty attempted to use the edTPA Readiness Inventory with candidates was through reflective thinking and metacognition. First, the edTPA Readiness Inventory summarized the tasks required to complete a portfolio submission. In this way, it served as a graphic organizer to help teacher candidates understand the various parts associated with this complex task. Second, the faculty found value in using data from this instrument to drive instruction in the moment of the edTPA experience by scheduling 1:1 appointments, adjusting a methods course assignment for all candidates, and strategically planning edTPA workshops to meet candidate needs. Finally, faculty used edTPA Readiness Inventory data to pinpoint ways of developing curriculum for two university courses in the future. With so many complex parts to the high stakes edTPA performance tasks, faculty were able to use the inventory to organize and match instruction to what candidates' knowledge prior to, during, and beyond the edTPA experience. In

addition, the inventory data assisted faculty in identifying candidates who needed the emotional support provided by 1:1 faculty meetings and the opportunity to workshop with “high competence” peers.

The results of this faculty improvement effort also suggest edTPA Readiness Inventory data interpretation requires caution; it raises questions about the ability of the lower performing teacher candidates to self-evaluate their learning needs. The limits of preservice teachers’ abilities to accurately self-assess is well documented in preservice teacher education research (Dassa & Nichols, 2019; Podgorsek & Lipovec, 2017).

A corresponding finding related to the phenomenon of self-evaluation in this study has been identified in psychology as the Dunning-Kruger effect (Kruger & Dunning, 1999). In Kruger and Dunning’s seminal study, psychology students had to predict their achievement on a test. Like the teacher candidates in this study, the results showed those with high abilities tended to underestimate themselves and those with lower abilities tended to overestimate. This phenomenon led to what is now known as the “double curse” of the Dunning-Kruger effect. People perform poorly but are not self-aware enough to make accurate judgements about their ability. This phenomenon, in turn, has the potential to hamper one’s ability to learn and grow. The findings of this study serve as a reminder for faculty that teacher candidates are still developing professionally. There is a need to provide additional support in helping teacher candidates identify and develop abilities that will eventually determine their professional agency (Calvert, 2016).

The edTPA Readiness Inventory may also be useful for such things as classroom level research and formative assessment. It provided faculty and teacher candidates with useful information that led to informed instruction. However, lack of reliability and validity measures, as well as the limitations of the preservice teachers’ accurate self-assessment, suggests the information it provides should be triangulated with other data sources before using self-assessment inventory data for high stakes decisions or judgements. Future activities related to the edTPA Readiness Inventory in this study may include exploring other ways its data might be useful to faculty and teacher candidates as a formative assessment tool, as well as further development of the instrument so that it provides stable and consistent results for more robust research and decision making.

References

- Bransford, J.D., Brown A. L., & Cocking R. R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Brown, A. L. (1980). Metacognitive development and reading. In Rand J. Spiro, Bertram C. Bruce, and William F. Brewer, (Eds.), *Theoretical issues in reading comprehension: Perspectives from cognitive psychology, linguistics, artificial intelligence, and education* (pp. 453-482). Hillsdale, NJ: Erlbaum.
- Calvert, L. (2016). Moving from compliance to agency: What teachers need to make professional learning work. Oxford, OH: Learning Forward and NCTAF. <https://nctaf.org/wp-content/uploads/2016/03/NCTAF-Learning-Forward-Moving-from-Compliance-to-Agency-What-Teachers-Need-to-Make-Professional-Learning-Work.pdf>
- Council of Chief State School Officers (n.d.). *INTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0*. https://ccsso.org/sites/default/files/201712/2013_INTASC_Learning_Progressions_for_Teachers.pdf

- Danielson Group (n.d.) Danielson Framework's vision for instructional excellence. <https://danielsongroup.org/framework>
- Dassa, L., & Nichols, B. (2019). Self-efficacy or overconfidence? Comparing preservice teacher self-perceptions of their content knowledge and teaching abilities to the perceptions of their supervisors. *The New Educator*, 15 (2), 156-174. <https://www.tandfonline.com/doi/full/10.1080/1547688X.2019.1578447>
- Dewey (1910). *How we think*. Boston, MA: D.C. Heath.
- Flavell, J.H. (1976). *The development of metacommunication*. Paper presented at the Symposium on Language and Cognition, Twenty-First International Congress of Psychology, Paris, July, 1976.
- Illinois State Board of Education (n.d.) *Illinois Professional Teaching Standards (2013)* https://www.isbe.net/Documents/IL_prof_teaching_std.pdf
- James, W. (1890). *The principles of psychology: Volume 1*. New York, NY: Holt
- Johnson, B.W., & Batchelor, M. (2018). Collaborative resistance to digitized instruction in a rural middle school. *Middle School Journal*, 49 (3), 4-16.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77(6), 11-21.
- Podgorsek, M., & Lipovec, A. (2017). Self-assessment ability of pre-service teachers. *The New Education Review*, 48 (2), 213-223. https://www.researchgate.net/publication/321490599_Self-Assessment_Ability_of_Pre-Service_Teachers)
- Preacher, K.J. (2015). Extreme groups designs. In R.L. Cautin & S.O. Lilienfeld (Eds.), *The encyclopedia of clinical psychology: Volume II* (pp. 1189-1192). Hoboken, NJ: John Wiley. http://quantpsy.org/pubs/preacher_2015b.pdf
- SCALE (2015). *Review of Research on Teacher Education: edTPA Task Dimensions and Rubric Constructs*. Palo Alto, CA: Board of Trustees of the Leland Stanford Junior University https://secure.aacte.org/apps/rl/res_get.php?fid=1705&ref=edtpa)
- SCALE (2017a). *edTPA Elementary Literacy Assessment Handbook*. Palo Alto, CA: Board of Trustees of the Leland Stanford Junior University.
- SCALE (2017b). *Rubric Level Progressions, Elementary Literacy*, Palo Alto, CA: Board of Trustees of the Leland Stanford Junior University.
- SCALE (2019). *Educative Assessment & Meaningful Support: 2018 edTPA Administrative Report*, Board of Trustees of the Leland Stanford Junior University. https://secure.aacte.org/apps/rl/res_get.php?fid=4769&ref=edtpa
- SCALE (2020). *edTPA by the Numbers*. Palo Alto, CA: Board of Trustees of the Leland Stanford Junior University. https://secure.aacte.org/apps/rl/res_get.php?fid=4796&ref=edtpa)
- Schon, D.A. (1990). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.
- Stremmel, A.J. (2007). The value of teacher research: Nurturing professional and personal growth through inquiry. *Voices of Practitioners*, 2(3), 1-9. [https://www.naeyc.org/files/naeyc/file/vop/Voices-Stremmel\(1\).pdf](https://www.naeyc.org/files/naeyc/file/vop/Voices-Stremmel(1).pdf)
- Teaching Works University of Michigan (n.d.). High-Leverage Practices. <http://www.teachingworks.org/work-of-teaching/high-leverage-practices>
- Wiggins, G., McTighe, J., & McTighe, J. (1998). *Understanding by design*. San Francisco, CA: Jossey-Bass.

Knowing and Practicing Fidelity to Education Laws in American Schools: A Contemporary Critical Issue for Teachers

by
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Abstract

This article provides specific examples of contemporary school laws that are not followed with fidelity by teachers but definitely should be followed given the consequences of non-compliance. This compliance is imperative in this second decade of the Twenty-first Century due to the everchanging societal expectations placed upon educators to meet the needs and interests of students during this unique time in our history. The examples used in this article are based on three decades of teaching graduate school law courses in three states by the author.

Knowing and Practicing Fidelity to Education Laws in American Schools: A Continuously Evolving Imperative

Educators must possess a comprehensive legal mindset as well as specific pragmatic knowledge regarding fidelity to school laws, regulations, and school district policies. This is due to the everchanging societal expectations placed upon administrators and teachers to meet the needs and interests of all students during a time of fervent national social and political acrimony as well as an international health crisis that increased public awareness of school operations and legal restrictions.

The institution of schooling in America has been classified as an open-social system that consists of six heterogeneous sub-systems: physical, psychological, symbolic, social, axiological, and governance that impact the evolution of schools while at the same time influencing the general society in which schools operate (Hatch & Cunliffe, 2013; Laszlo, 1972; Polka, 2014; Polka, & Guy, 2001). This type of mutually interactive social system has enabled the American school system to continue to grow and develop into a more inclusive institution that provides more services to children and families while at the same time continuing to influence the values of our society at large (Hoy & Miskel, 2005; Kaufman, Herman & Watters, 1996; Norton, 2005; Ravitch, 2016). The current 2020 Covid-19 experience has spotlighted school issues related to the inclusive 21st century custodial roles of schooling such as: child care providers; breakfast and lunch centers; and community resource locations. In addition to teaching and learning physical sites, this emphasis on the custodial role, has reinforced the significance of the American School as a major community hub supporting activities for children and their families.

This article provides educators with key contemporary information regarding school laws that are continuously evolving and becoming more ubiquitous in terms of daily school operations, especially in light of the ever-changing demands placed on schools during punctuated crises such as Covid-19. The article is based on the works of several school law authors including: Alexander & Alexander, 2019; Alexander & Alexander, 2018; Bradley, 2017; Boshier, Kaminski, & Vacca, 2004; Essex, 2009; Hachiya, Shoop, & Dunklee, 2014; Imber, Van Geel, Blokhuis, & Feldman, 2014; Looney, 2004; McDaniel 1976; Osborne & Russo, 2014; Schimmel, Stellman, & Fischer, 2011; Ravitch, 2016; Trachtman 2016; and Vacca & Boshier, 2012. The author developed and refined class activities based on the above references as well as others, including state and local school district reports, about school law mandates in Graduate School Law courses in Georgia, Maryland, and

New York. Students, practicing teachers and administrators, in those courses have always found the formal presentations regarding current school law mandates and discussions of them to be a major reflective experience. They often recounted the number of times that their colleagues violated some of the specific school laws presented and did not practice fidelity to the legal concepts and mandates of other similar school related legislative acts, court decisions, state education regulations, and local school district policies.

Subsequently, additional school law class activities were employed to analyze the frequency of various mandated and ever-evolving school laws using a variety of supplemental resources including compliance references, such as the *1979 Phi Delta Kappan* article by T. McDaniel: *The Teacher's Ten Commandments: School Law in the Classroom*. Accordingly, students were then asked to reflect about the various mandates presented via course lectures, supplemental references, and their personal school law journal entries. Therefore, over the past three decades, literally thousands of experienced practicing educators in three different states, provided acute insights regarding the degree of violation frequency of numerous school laws that they have witnessed in their diverse educational settings. The results were typically categorized into major categories: 1) most violated mandates; 2) second most violated mandates; and, 3) mandates that were violated to a lesser extent. However, those rankings varied based on contextual factors such as: national/state educational foci of the time period; location of school including: State (Georgia, Maryland, or New York); social economic status of the school district including wealth of the district compared to state averages (high wealth, average wealth, low wealth) and environment of the school: rural, suburban, or urban; as well as the grade(s) and/or instructional level (elementary or secondary) taught by the educators participating in the school law course at the time.

Those above factors were often discussed by course participants as they reviewed individual assessments of school law violations and worked in small groups to arrive at consensus regarding the most frequently violated mandates, the second most frequently violated category, as well as the least violated category, but, still of concern. However, specific individual or group data were not collected, stored, or analyzed for each of the school law courses taught over the past three decades since the activity was an in-class only experience. Thus, specific demographic data including the students' position, school district, and school building data were not documented.

But, the author of this article contends that the rankings of those school law mandates provide a key reference about school laws that definitely need to be comprehended and operationalized by today's educators so that they may practice their profession within legal guidelines. Therefore, the following seven school law mandates that were most frequently violated, according to practicing teachers and administrators in three states, must be continually addressed to keep educators practicing in their classrooms and not being challenged in courts.

The Seven Most Frequently Violated School Law Mandates

Constitutional Amendments, legislative acts, and court decisions are included with each of the seven most frequently violated mandates to reinforce their significance to teachers and administrators.

1. *Teachers must be aware of Federal and State laws regarding education as well as local school district policies that govern educational practices.*

Although knowledge of the law is not mandated for educators, not following the dictates of the mandates could be problematical for them since ignorance of

the law is no excuse for violating its legal expectations. The graduate students in each of the three states identified that teachers and administrators need to be aware of Federal and State laws regarding education and maintain fidelity to them as well as local school district policies that govern educational practices.

It is imperative that all educators have a good working knowledge of the historical basis for school laws in our country. Over the years, a number of students admitted that they did not know that education, per se, is not mentioned in the Constitution of the U.S.A. or its First Ten Amendments. They assumed that the Framers of the Constitution had identified the role that education would play in our society and how the federal and state governments would determine that role. Many educators were surprised to note that it is only via Amendment X that education became a state government responsibility. Amendment X includes the following, 'The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.' (Alexander & Alexander, 2019; Bosher, Kaminski, & Vacca, 2004; Shimmel, Stelman, & Fischer, 2011). Thus, Amendment X, enabled the states to establish and control education in their jurisdiction.

Accordingly, there are fifty state education departments in the United States today. And, all of the states have devolved various education powers to local school boards who are entrusted to make policies related to buildings, curriculum, instruction, financial support, assessment, popular election of representatives to the school board and public vote on school spending. Some states have over 1,000 school boards as is the case in both California and Texas, whereas only one state, Hawaii, is a unitary school system with one school board responsible for all aspects of education (Alexander & Alexander, 2019).

Those individual school boards are given the authority, by their respective state, to make local policies for the safe education of children. The individual school boards in the USA are perhaps the most democratic of our institutions since their members are elected by the public for specific terms, their meetings must be held in public, and their budgets for the financing of schools must be approved by the public, except in some circumstances. Although, knowing the structural framework of schooling in America is not mandated for educators, it is very important that they know federal and state laws and court decisions that may impact their schools and classrooms. And, it is especially important that educators know the local school board policies that impact them since those policies related to curriculum, instruction, assessment, calendar, transportation, facility use, etc. may vary significantly from local school board to school board (Imber, Van Geel, Blokhuis, & Feldman, 2014).

It is imperative during a national crisis like Covid-19 to know the state restrictions and local school board policies that govern the operation of schools and classroom instruction whether conducted traditionally in classrooms, or remotely, or in some blended format. Accordingly, Schimmel, Stelman, and Fischer, (2011) identify that the state governor has the power to act in a *parens patriae* role or parent of us all (, p. 456), and has authority to determine whether schools will remain opened or closed during health crises like the Covid-19 pandemic. But, if school districts are open, then they have latitude to determine the delivery of educational services including those custodial services previously identified such as food services, day-care options, and internet accessibility as well as the delivery of instruction and assessment programs. Educators are strongly encouraged to keep up with the current state regulations and local school board policies in order to effectively and efficiently deliver school services to children and their families. Definitely, not being aware of those laws, regulations, and policies is no excuse in

an emergency or crisis situation like Covid-19.

II. Teachers must practice their “in loco parentis” status and focus on health and safety during school activities.

Teachers possess “in loco parentis” authority over their students which basically means “in place of a parent” responsibility (Bradley, 2017). Additional school law experts such as: Boshier, Kaminski, and Vacca (2004) posit that this “in loco parentis” factor, especially given that states have enacted compulsory school attendance laws for students, has definitely increased schools’ liability for the prudent preparation of students and diligent actions in the face of crisis (, p.12). Consequently, teachers do have a parental and legal responsibility to protect the health and safety of children in school. Unfortunately, this school law mandate has been identified as one of the most violated school mandates by practicing teachers and administrators. It is imperative, during this Covid-19 pandemic, to be sure that students are well protected with the necessary personal protective equipment (PPE) including masks and safe distancing whether students are in schools either full time in face-to-face classrooms settings or spend sometime in school classrooms in hybrid instructional models. The best advice for teachers and administrators is to follow the Center for Disease Control (CDC) guidelines and the state and local health regulations for maintaining a safe environment for all students.

There have many school laws and court decisions that attest to the imperativeness of the health and safety role that educators possess due to their “in loco parentis” status and as Schimmel, Stelman, and Fischer (2011) aver, to “...justify the power and authority of school officials over students at school or while traveling to and from school”(, p. 245). However, one of the most horrific situations that promulgated the passage of several state laws designed to protect students from bullying experiences was the case of *Scruggs v. Meriden Board of Education (Connecticut, 2005)*. This case involved a 12 years old child who died by suicide after years of physical and verbal bullying in middle school. The issue was whether the school failed to follow appropriate special education procedures, adequately train staff, and have appropriate anti-bullying and harassment policies in place to address the continuous bullying. The plaintiff successfully proved that the child was bullied because of a learning disability, and that the school failed to follow appropriate special education procedures. As result of the decision by the court, the Connecticut legislature passed antibullying legislation and the New York legislature, quickly followed suit, passing the 2010 *Dignity for All Students Act (DASA)*. These legislative acts identified that schools need to be providing greater protections to all students against discrimination, bullying, intimidation, and taunting. But, such protections against bullying of students needed to be extended to situations that could occur outside of school due to the advance of technology in our society (Alexander & Alexander, 2019).

Subsequently, another case, *J.G.S. vs Bellmore-Merrick Central High School District (New York, 2014)*, reinforced that no student shall be subjected to harassment or bullying by employees or students on school property or at school functions. Subsequently, the key outcome of that decision was the addition of cyber bullying in DASA and expanding DASA to include at all school related functions. In another more recent case, *C.R. v. Eugene School District (Oregon, 2019)*, the courts decided that the “reach of the school” could be even further extended if there is a substantial foreseeable prediction that an incident outside of school could cause a disruption to the in school instructional program, then the school has a right to act and hold those responsible to the appropriate school and civil sanctions.

Recently, an out of court settlement that has significant implications for school

districts today, especially in light of the George Floyd murder and the *Black Lives Matter* movement, is the US Justice Department's settlement with the school district in the case of *U.S. v. Falcon School District 49, (Colorado, 2014)*, wherein it was identified that schools must protect all students from racism and harassment. Accordingly, schools must properly document incidents and enforce appropriate consequences for acts of racism and harassment. This agreement requires the district to take affirmative steps to eliminate and prevent racial harassment and discrimination in schools so that a "hostile environment" can be abated (Alexander & Alexander; 2019). This agreement may serve as a model for other school districts in light of the events of the 2020 summer and the resultant highlighted macro-focus on *Institutional Racism in America* and the potential micro-focus on local *School District Racism* as well. Educators have a responsibility to address social issues that impact students, schools, and communities. And, this settlement presents an opportunity for school leaders to consider how the key components of it may be applied in other contexts in our country to specifically address historical and current racial harassment and discrimination.

III. *Student personal information must be held in strictest confidence.*

Another one of the recent most violated school laws that the graduate students have identified has been conducting inappropriate verbal discussions or written distributions of student personal information. Especially in this period of extended remote learning experiences and the need to teach and learn via the internet, teachers are reminded to be very careful not to disclose student personal information, including photos, online or via communications with other students, parents, or teachers.

The Family Education Rights and Privacy Act of 1974 (FERPA) specifically identifies the proper procedures to collect, maintain, and appropriately dispose of official school personal information. Part IV of the Act specifically, protects student rights to privacy in that no personal information shall be collected or given without parental consent (Hachiya, R., Shoop, R., & Dunklee, D., 2014).

In the 1983 Maryland Court of Special Appeals decision of 460 A.2d (1983), *Kelly Trina Klipa et al. v. Board of Education of Anne Arundel County et al.*, the court determined that since *FERPA* protects the rights of students and parents regarding student's records, teachers must be very careful with the kind of information and notes they place in students' education records. Teachers should report only factual statements in student records without using terms to describe student behaviors and achievement that may be considered libelous. Teachers are admonished to proof read record insertions not only for accuracy but also to remove emotional or colloquial expressions that do not contribute to the report but may be considered prejudicial or inflammatory.

In 1998 Congress enacted the *Children's Online Privacy Protection Act (COPPA)* that places parents in control over the information that is collected from their young children online. This Act was designed to protect children under age 13, while accounting for the dynamic nature of the Internet.

In the Supreme Court case, *Falvo v. Owasso Independent School District (Oklahoma, 2002)*, the court ruled that the practice of teachers allowing students to score each other's tests and call out the grades in class is not a violation the *Family Educational Rights and Privacy Act of 1974 (FERPA)*. However, teachers and administrators are cautioned about collecting and grading major marking period tests in this manner and are reminded to only include teacher corrected marks and grades as part of student permanent record information. Teachers need to be vigilant in their classroom practices that may expose individual student grades

or permanent records to others. Do not allow students to grade or observe major test results, evaluated projects, or other student permanent records.

In the case of *G.C v. Owensboro Public Schools, (Kentucky, 2013)*, the 6th Circuit Court of Appeals found that a school administrator overstepped his authority in searching the contents of a student cell phone in violation of *FERPA*. That court relied on the Supreme Court's established position that the search of a student's possession depends on the reasonableness of the search which involves a two part inquiry: first, whether the action was justified, and, second, that the scope of the search was justified (Alexander & Alexander, 2019). In this case, the 6th Court of Appeals determined that the school officials had no reasonable grounds to suspect that a search of the student's phone would result in evidence of any improper activity. It was determined by the court that the search of the cell phone was unreasonable since the administrator had no specific reason at the inception of the search of C.G.'s phone to believe that the student was involved in unlawful activities or that the student was planning on injuring himself or another student. In 2014 New York State passed Education Law 2d. This law is also known as a *Parents' Bill of Rights for Privacy and Data*. This Law requires that in the State of New York, a *Parents' Bill of Rights for Data Privacy and Security* must be developed by each educational agency including school districts. Parents must also be informed about these type of acts and the legal requirements that must be followed to ensure the privacy and security of student data (Bradley, 2017). Confidentiality is paramount and schools must follow these guidelines to avoid possible litigation. It is presumed, given that states act as dominoes when one state enacts a law that addresses an identified school law issue, other states will follow and enact similar legislation. Educators are encouraged to check with their respective state laws regarding such a "Parents' Bill of Rights" as well as with their local school district policies.

Therefore, the confidential maintenance of student and parent personal information is to be jealously protected but educators do cross the line of fidelity to the above legislative acts and court decisions when they conduct informal discussions with others about students and their families in faculty lunch rooms and in other social settings. A word of advice to teachers, 'jealously guard information that you possess about your students and their parents'; do not release any information to any person or agency (media outlet) without the approval of your administration and the student's parents. In the past there was a wartime saying that, "Loose Lips will Sink Ships"...a contemporary version of that saying in schools maybe, "Loose Lips about Students will Sink Careers"...don't let that happen to you!

IV. Educators must comply with copyright laws regarding the instructional use of materials including: print, photo, video, musical, and software.

The most violated school law during past three decades according to graduate students in school law courses has been the recognition of and compliance with copyright laws. Copy machines and other information recorders are prominent fixtures in school offices and faculty workrooms throughout the country and their reproductive speed and quality has increased dramatically. Too often, most educators still do not understand the basic legal concepts regarding copyright laws in that the creators and producers of both print and non-print publications (books, workbooks, research articles, movies, videos, music, software, etc.) have a right to make a profit from their publications.

However, educators do have the ability to make limited use copies of copyrighted materials. The key is knowing what is acceptable limited use of

copyrighted information and materials and what is not. In 1976 the U.S. Congress passed the *Copyright Act that included the Fair Use Provision* that permits limited use of copyrighted material without having to first acquire permission from the copyright holder given the following conditions: a) the intended use of the original production is for non-profit use; b) the degree of creativity of the original work is itself limited; c) the amount of the original work copied is limited; and, d) the copying of the original work does not have an impact upon its potential monetary value. Consequently, educators need to refrain from the wholesale copying of published books, workbooks, videos, music, and other commercial productions such as computer software programs unless specific permission for use is given or site licenses exist for their reproduction. If in doubt, educators should review their local school board policies or contact their local school attorney for clarification (Hachiya, Shoop, & Dunklee, 2014).

A few recent court cases have reinforced the above fair use limitations. In the case of *DynaStudy, Inc. v. Houston Independent School District (Texas, 2017)*, teachers and administrators copied and distributed study guides to students apparently to save the cost of purchasing the guides and with the knowledge that they, maybe, violating copyright law. The courts subsequently ruled in favor of the plaintiff, DynaStudy. This case did not pass the four factors test of fair use regarding the amount and effect as stated above. The school district was ordered to pay \$9.2 million dollars (reduced to \$7.8 million) and that all employees were required to participate in annual copyright training which of course, is not a bad idea for all school districts to consider.

In another similar case, *Great Minds v. FedEx Office and Print Services (New York, 2018)*, Great Minds created the curricular materials known as the New York State Math Modules. The math modules were available to educators online at Engage NY and are an open educational resource. Some New York State School districts contracted with FedEx to print those math curricular resources for their teachers and students instead of copying them in schools. In this case, it was decided that school districts can use third party printers to make copies of open educational resources. But, educators are reminded, do not deny the original author and publisher their right to make a profit from their work unless there is a site license, written permission, or fair use situations apply (Hachiya, R., Shoop, R., & Dunklee, D., 2014).

Subsequently, educators need to have that mindset awareness of the intent of the copyright laws as well as the specifics of the *Fair Use Provision of the 1976 Act* and related court cases that amplify the importance of knowing the law before you press: COPY, on any copying device.

V. Educators must not use the internet and social media to send or post inappropriate messages or photos.

Another one of the recent most violated school laws, according to the school law students, has been the inappropriate use of the internet and other social media. Although educators are frequently admonished not to post inappropriate selfies, group pictures, or other publications that are inconsistent with the mission of the school, they still do, and often suffer the consequences for doing so. There have been numerous legislative acts and court decisions related to this issue but too many educators are still unaware of these laws and related school district policies that could adversely impact their respective employment in education (Schimmel, Stellman, Conlon, & Fischer, 2014).

In the initial internet court case: *Reno v. American Civil Liberties (1997)*, the Supreme Court decided that the *1996 Communications Decency Act*, designed to

protect minors from the transmission of any indecent messages or displays, was unconstitutional because it was a blanket restriction of free speech. But, the issue was confronted again in 2003 in the *United States v. American Library Association* case wherein the Supreme Court upheld the constitutionality of the federal *Children's Internet Protection Act (CIPA)*, finding that the act, designed to protect children from the transmission of indecent messages or displays, did not violate a library patron's First Amendment rights. This act required public schools that planned on accepting E-Rate discounts to install web filtering software as a condition of receiving federal funding. This *Child Internet Protection Act (CIPA)* resulted in a series of school district policies relating to "acceptable use of technology" and the internet in schools. It is imperative that teachers be aware of the *Acceptable Use Policy* in their respective school districts especially due to the current increased emphasis on remote learning and hybrid instruction (Alexander & Alexander, 2019).

The decision of the 4th Circuit Appellate Court in *Kowalski v. Berkeley City Schools, (West Virginia, 2011)* reinforced that student freedom of expression on the internet may be curtailed if a student's actions on social media leads to disruptions in school operations. Educators need to recall that, although students do not leave their, "...Constitutional Rights at the School House Door.", their Constitutional Rights in school are not coextensive with those of adults outside of school since students are still in the formative stage of values development (Alexander & Alexander, 2019; Looney, 2004). Likewise, in another Appellate Court decision *Bell v. Itawamba County School Board, (Mississippi, 2015)* the 5th Circuit Court again identified that cyberbullying harassment of teachers using a home personal computer is grounds to place limits on students' free speech rights.

Teachers and school administrators need to recognize the dangers inherent in the posting of indecent messages or displays since educators are held to be role models in their respective community and should practice congruency with the values expressed in their school's mission and vision statements. There are several contemporary examples where teachers and administrators, as well as recognized celebrities and politicians, have been repudiated and disgraced for their internet posts (Polka, Adelakun, & DeSimone, 2020). Educators have worked too long and hard and have spent a considerable of money and time to become certified to work professionally in schools, they need to "think" before they hit 'SEND' on any internet message or image of questionable or vulgar content.

VI. *Teachers must comply with all student IEP requirements and 504 accommodations.*

Educators must maintain an acute fidelity to the expectations and details articulated in the Individual Education Plan (IEP) for students with classified disabilities as well as the 504 accommodations document for students with life restricting disabilities (Osborne & Russo, 2014). The IEP and 504 are basically contracts between the school and the student and their parents/guardians. Teachers are admonished to follow the expectations listed on the IEP and provide for the accommodations of the 504 plan in teaching and student services, otherwise, there will be repercussions that not only could cost teacher and administrator time but also possibly cost the school district large sums of money for legal fees and court costs. However, teachers and administrators who supervise students with disabilities have been known to not follow some of the IEP requirements or 504 accommodations due to a lack of support services or equipment necessary to be complaint with the plans. But, the school district and the respective teachers of special education students need to exhaust all options to

maintain fidelity to the IEP or 504 Plan.

Educators know that *Brown v. Board of Education of Topeka*, (Kansas 1954) was one of the seminal unanimous decisions of the Supreme Court that rejected the “separate but equal” doctrine of *Plessy v. Ferguson*, (Louisiana, 1896), and stated that this doctrine had no place in education (Trachtman, 2016). According to the Court, even if the facilities were physically equal, the children of the minority group would still receive an inferior education. Separate educational facilities were held to be “inherently unequal.” But, as school law expert, Looney (2004), posited, “...the Brown case opened the door for other constitutional issues based on discrimination to come forward...” (p. 240), including rejecting the general discrimination in education as well as the segregation of students into special classes and sites based on their learning disabilities.

In *Mills v. Board of Education of District of Columbia*, (1972), the Supreme Court of the United States affirmed that the Board of Education of the District of Columbia violated student rights to due process. The Court held that the Board of Education must provide public schooling for exceptional children, along with a hearing beforehand to decide whether the child was, indeed, exceptional. The Court stated that the Board of Education had an obligation to provide whatever specialized instructions were needed to benefit the children, and that every child between the ages of seven and sixteen shall be provided regular instructions. No child eligible for public education was to be excluded from school unless an adequate alternative, suited for their needs, was identified (Osborne & Russo, 2014).

That Mills case served as the basis for 1975 *Education for All Handicapped Children Act 94-142* enacted by Congress. This act required all public schools accepting federal funds to provide equal access to education for children with physical and mental disabilities. Also, this Act provided parents with due process rights in terms of planning the program for their child or disputing the school district’s version of the plan. This *Federal Act 94-142* has been a keystone in the continuous evolution of special education programming for students with exceptionalities. Numerous legislative acts and court cases followed *Public Law 94-142* and reinforced several key components of special education (Alexander and Alexander, 2019) such as:

a. The formal development of an Individualized Education Plan (IEP) for all special education students. The IEP contains specific goals and objectives for the child including timelines for completion of activities associated with each objective and supports both personnel (teachers, teacher aides) and materials and equipment that enables the child to achieve success in school. The IEP is to be developed by a teaching team that consists of regular education teachers, special education teachers, school support personnel like school psychologists and social workers, and, most importantly, the child’s parents.

b. The Supreme Court decision in *Board of Education of the Hendrick Hudson Central School District, New York v. Rowley*(1982) specifically established the definition of free appropriate public education (FAPE) for all children and promoted the inclusion of special education students into regular education classes with their respective peers.

c. *The Americans with Disabilities Act (ADA)* that became law in 1990 is a civil rights law prohibiting discrimination against individuals with disabilities in all areas of public life, including: employment, education, transportation, and all public and private places that are open to the public. As a result, schools became more disability friendly in terms of facility access including the addition of elevators, wheelchair ramps, and other handicapped accessible structures and devices.

d. The Supreme Court let stand the decisions of lower courts in the case of

Sacramento City Unified School District, California v. Holland (1994). This case was the first successful case identifying that a child must be placed in the least restrictive environment (LRE). The school district had previously ignored the process required in the *Individuals with Disabilities Act (IDEA)* and its safeguards of student rights.

e. Congress passed the updated *Individuals with Disabilities Education Act (I.D.E.A.) in 1997*. School districts have an obligation to provide all children with disabilities a free appropriate public education (FAPE). Also, school districts are required to specially design instruction to meet educational standards in the student's Individualized Education Program (IEP).

f. In the case of *Shapiro v. Paradise Valley Unified School District, Arizona 2003*, the Ninth Circuit reaffirmed the necessity of the participation of the child's parent and regular teacher in IEP meetings and in the decision making process.

g. In 2008 in two separate court cases: 1. *Harris v. District of Columbia, 2008* and 2. *Danielle G. v. New York City Department of Education* that: 1. Functional Behavioral Assessments (FBA) and Behavioral Intervention Plan (BIP) are forms of educational evaluations and parents have the right to a second opinion at the expense of the public; and 2. The IEP Team must conduct a FBA/BIP according to IDEA when "in the case of a child whose behavior impedes the child's learning or that of others". Courts have recognized the importance of student behavioral issues in the teaching and learning of special education students as well the impact of those issues on other students (Osborne & Russo, 2014). Teachers need to be aware of the specifics of the FBA and BIP for any of their students who have such assessments and plans. They must provide for the interventions as identified.

h. In terms of students who possess a 504 accommodation because of a life restricting disability, the courts have ruled that school districts could be held responsible and charged with wrongdoing if there has been a "deliberate indifference" on the part of administration or teachers to provide for the 504 accommodations such was the decision in the case of *K.K. v Pittsburgh Public School, Pennsylvania, 2014*).

i. The primacy of parent involvement in the Committee on Special Education (CSE) that creates the exceptional child's IEP and determines the specifics of LRE placement in the educational system has been reinforced several times since the *Mills case of 1972* with specific recognitions of the parent's rights to due process throughout. More recent cases such as: 1. *Doug C. v. Hawaii (2013)* and 2. *M.C. v. Antelope Valley Union High School District, California (2017)* have reaffirmed that when educators are developing the IEP for children: a. The child's parents need to be an integral part of the IEP creation process and b. parents' availability takes priority over other IEP team members.

Educators need to have a comprehensive mindset about the above legislative acts and court decisions and they must specifically practice resolute fidelity to the terms and conditions for learning that are part of the IEP contract between the school and the parents of a child with a disability (Alexander & Alexander, 2019; Osborne & Russo, 2014). Educators must also maintain a welcoming and caring disposition towards the parents of a child with a disability recognizing that the child is the central person in the process and that the parents want an educational program that is best for their child in the least restrictive environment possible so that the child can be with their peer group in school as much as possible and so there is as limited a negative stigma as possible attached to being identified as a child in need of special services. Also, educators need to be cognizant not to "over express" their knowledge of special education laws and commence relating to parents on a personal level eliminating many of the above cited acronyms in the discussion. It

should be noted that teachers who work with parents have a better experience in educating their children than do teachers who tend to dominate parents at such special education meetings. The following is an old teaching axiom that reinforces the caring approach necessary in education: ‘Students, at all levels of the instructional spectrum, do not care how much the teacher knows until they know how much the teacher cares’. In terms of working with special education parents, all school personnel need to be reminded of this axiom and practice an acute caring approach not only with students but also with parents.

VII. *Student diversity including cultural, religious, and language differences must be addressed in today’s schools.*

Another evolving issue that was identified by school law students in the past has been the changing nature of the student population and the need for teachers to not only become more aware of the cultural, religious, and language backgrounds of their students but also the need for them to stay compliant with school laws that protect the rights of those students to learn in ways most appropriate for them. Teachers in 21st Century schools must be “culturally proficient teachers” who are focused on providing appropriate learning activities that facilitate academic and social-emotional achievement for all students. Maintaining fidelity to key school laws is an imperative for promoting a more inclusive society.

One of the key legislative acts that teachers should know is the *Civil Rights Act* (1866). This Post-Civil War Act along with the 13th, 14th, and 15th Amendments changed the cultural landscape of America and promoted large scale immigration to the USA and within the USA. The act specifically provides that, “All persons within the jurisdictions of the U.S. are entitled the same constitutional rights as enjoyed by white citizens”. This Federal Legislative Act reflected the principles of equality identified in the American Declaration of Independence, albeit 90 years later. But, the social, political, and economic forces that were set in motion by people who disagreed with this Civil Rights Act did effectively curtail its implementation via the *Plessy v. Ferguson (Louisiana, 1896)* which promulgated many of the “de jure” segregation practices of the first half of the Twentieth Century as well as the “de facto” practices after the landmark, *Brown v. Board of Education of Topeka, (Kansas, 1954)*. However, after Brown and the Civil Rights Movement of the 1960s, and additional legislation since, people in our nation and their legal representatives were beginning to trend away from less of a segregationist mindset and towards more of an integrationist mindset as evidenced by the following legislative acts and court decisions of the 1970s and 1980s:

The court case of *Diana v. State Board of Education of California, (1970)* established that children can not be placed in special education on the basis of culturally biased tests or tests given in languages other than the child’s primary language. Prior the decision, often only English language tests were used to assess students’ intellectual abilities. Students who were not white and were not “Home English” speakers had a difficult time succeeding on the test. As a result of this type of testing program, many schools inaccurately placed students in special education programs. This court decision challenged the use of English-only IQ tests in determining the placement of students in special education. The result of this court ruling was students were, subsequently, assessed for special education needs based on tests in their primary language.

As a follow-up to the *Diana v. State of California* case, the federal *Equal Education Opportunities Act* (EEOA) was passed in 1974. This Act required that all local school districts and their states must provide a program of bilingual education (*Bilingual Education Act*) to all limited English speaking students. In the same year,

the Supreme Court decided the famous, *Lau v. Nichols*. (California, 1974) that foreign language students who speak little or no English must have equal access to educational opportunities and if they have language barriers to those opportunities then it's the school district's responsibility to take "corrective" actions. This decision spurred the need for English Second Language (ESL), English Language Learners (ELL), and Limited English Proficient (LEP) teachers to accommodate students who are classified for a language other than standard English. Also, those court decisions reinforced that state education assessment tests must be supplied and translated into the student's language and interpreters may be brought into the schools to assist students. It became well established in school law that now schools were mandated to not discriminate against non-English students.

In the case of *Castaneda v Pickard*, (Texas, 1981), the 5th Circuit Court it was determined that the Raymondville Independent School District (RISD) did not take appropriate actions to facilitate English language learning for students who had deficits in English. Consequently, a three-pronged test was established as a result of this case to determine whether schools are taking "appropriate action" to address the needs of ELLs as required by the EEOA. The *Castañeda Test* stipulates: 1. The instructional program must be based on sound educational theory. 2. The program must be implemented with adequate resources and personnel. 3. Over time, the program must demonstrate effectiveness in overcoming language barriers (Ovando, 2003).

Another Supreme Court case of the 1980s that still has major ramifications today is the *Plyer v. Doe*, (Texas, 1982). The decision in this case was that all children in America are entitled to a "free appropriate public education" including the children of illegal immigrants. This decision, based on the 'child benefit theory', reconfirms that children are our future and must not be held responsible for the "transgressions" of their parents and/or guardians (Alexander & Alexander, 2019). Schools must provide education to all children within their residential areas even though it is a financial hardship for them to do so. A number of special programs were further expanded as a result of this decision including: ESL, ELL and LEP programs. In addition, curricula were developed to support multicultural instruction. Interpreters were hired to provide support for students to take assessments at the state level in their respective native language. It is imperative that contemporary teachers be *culturally competent educators* and comprehensively know their students' cultural backgrounds as well as their individual learning needs.

Summary

Our quest as educators to advance our society and our educational programs to a more equal and inclusive level has definitely been promoted by the foregoing legislative acts and court decisions. It is, especially apparent, from the foregoing review and analysis of key education mandates that for the comprehensive protection of student rights including their right to equal educational opportunities in safe and healthy environments, federal, state, and district school law mandates need to be followed with due diligence and focused compliant commitments. Educators need to be reassured that, as has been adroitly pointed out by key school law authors Schmmel, Stellman, and Fisher (2011): "...in recent years and in the years to come, both the Constitution and legislation have been used---and will continue to be used---to gain a significant degree of equality in education..." (p. 371). But, It is our individual responsibility as educators to continuously reflect about the ever-evolving open-social system of schooling in America and keep focused on the changing nature of the people, things, and ideas that intertwine in that heterogeneous system. Therefore, it is imperative for all educators to maintain a

comprehensive legal mindset as well as fidelity to the specifics of the school laws and district policies that impact classrooms and schools.

References

- Alexander, K. & Alexander, M. (2018). *The law of schools, students, and teachers in a nutshell*. (6th ed.). St. Paul, MN: West Academic Publishing Co.
- Alexander, K. & Alexander, M. (2019). *American public school law*. (9th ed.). St. Paul, MN: West Academic Publishing Co.
- Bosher, W., Kaminski, K., & Vacca, R. (2004). *The school law handbook: What every leader needs to know*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Bradley, L. (2017). *School law for public, private, and parochial educators*. Lanham, Maryland: Rowman & Littlefield.
- Essex, N. (2012). *The 200 Most Frequently Asked Legal Questions for Educators*. Thousand Oaks, CA: Corwin Books.
- Hachiya, R., Shoop, R., & Dunklee, D. (2014). *The principal's quick-reference guide to school law*. (3rd ed.). Thousand Oaks, CA: Corwin Books.
- Hatch, M. & Cunliffe, A. (2013). *Organizational theory: Modern, symbolic, and postmodern perspective*. Gosport, Hampshire U.K.: Oxford Univ. Press.
- Hoy, W., & Miskel, C. (2005). *Educational administration: Theory, research, and practice*. (7th ed.). New York: McGraw Hill.
- Imber, M., Van Geel, T., Blokhuis, J., & Feldman, J. (2014). *A teacher's guide to education law 5th edition*. New York: Taylor Routledge.
- Kaufman, R., Herman, J., & Watters, K. (1996). *Educational planning: Strategic, tactical and operational*. Lanham, Maryland: The Scarecrow Press.
- Laszlo, E. (1972). *Introduction to systems philosophy*. New York: Gordon and Breach.
- Looney, S. (2004). *Education and the legal system*. Columbus, Ohio: Pearson-Merrill.
- McDaniel, T. (1979). The Teacher's Ten Commandments: School Law in the Classroom. *The Phi Delta Kappan*, 60(10), 703-708. Retrieved November 19, 2020, <http://www.jstor.org/stable/20299571>.
- Norton, M. (2005). *Executive leadership for effective administration*. Boston: Pearson.
- Osborne, A. & Russo, C. (2014). *Special education and the law 3rd edition*. Thousand Oaks, CA: Corwin.
- Ovando, C. (2003). Bilingual Education in the United States: Historical Development and Current Issues. *Bilingual Research Journal*. 27(1):1-24.
- Polka, W., Adelakun, O., & DeSimone, K. (Eds.). (2020). *Fatal attractions in the digital age: The impact of dire "high-tech" and "high-touch" indiscretions in our global village*. Ronkonkoma, NY: Linus Learning Publications.
- Polka, W. (2014). The American school as an open-social system: A continuously evolving institution due to the interactions of six key heterogeneous sub-systems. In N. Pang and J. Huang (Eds.). *East West perspectives on educational leadership and policy*. Niagara Falls, NY: Untested Ideas Research Center. 133-152.
- Polka, W. & Guy, A. (2001). Developing a systematic approach to educational planning for the new millennium: An analysis of the North American school as a complex of heterogeneous systems, *Educational Planning*, 12(1), 27-33.
- Ravitch, D. (2016). *The death and life of the great American school system: How testing and choice are undermining education*. New York: Basic Books.
- Schimmel, D., Stellman, L., & Fischer, L. (2011). *Teachers and the law*. (8th Edition). Boston: Pearson.
- Trachtman, M. (2016). *The supremes' greatest hits: The 44 supreme court cases that most directly affect your life*. 2nd Edition---Revised and Updated. New York: Sterling Publishing.
- Vacca, R & Bosher, W. (2012). *Law and education: Contemporary issues and court decisions 8th edition*. New York: LexisNexis.

**Illinois National Board Certified Teachers' Experiences in Obtaining
Certification with Focus on the Teacher Reflectivity Component**
by
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Abstract

The following qualitative study provides an exploration of National Board Certified Teachers (NBCTs). An emphasis is made on examining the experience of NBCTs regarding the newly restructured Component 4: The Effective and Reflective Practitioner. An open-ended questionnaire was employed to collect data from 12 NBCTs across different school districts in the state of Illinois. Findings suggest that NBCTs pursue this certification mainly because of intrinsic motivation. Some NBCTs move on to leadership roles after achieving certification, however, this is not the case for all. Mixed opinions about the newly restructured Component 4 were shared by NBCTs.

One of the earliest advocates for the use of reflective practice in education was John Dewey. In Dewey's view, practitioners learn from their practice not only as they implement their actions but after they implement them, as well (Dewey, 1933). This notion of reflective practice in education is so wide-spread that high-stakes standardized assessments for prospective K-12 educators include teacher reflection components (Anderson, 2012; Flessner, Miller, Patrizio, & Horwitz, 2012; Forrest, 2008). Similarly, K-12 education professional licensure institutions include components of reflective practice in their certification process. This article will explore the perspectives of twelve 2018 Illinois National Board Certified Teachers (NBCTs) on their experiences completing the newly restructured Component 4 of the National Board for Professional Teaching Standards (NBPTS). Component 4: The Effective and Reflective Practitioner focuses specifically on providing evidence of educators' reflections in their classrooms. Additionally, this paper will explore the challenges, motivations, and impact of National Board Certification on the professional lives of the NBCTs.

The NBPTS is a nonprofit organization that serves educators in an effort to improve the quality of education. This organization is founded and operated by educators, many of whom are NBCTs (National Board for Professional Teaching Standards, 2015). Thus, candidates are assessed by well trained and experienced evaluators who have undergone the process of national board certification themselves. NBPTS is a respected professional licensure process with 25 licensure areas that address 16 different subject areas. For the state of Illinois the NBPTS is the only way that educators can receive Master Licensure.

In order to be eligible to apply for certification through NBPTS, an educator must first complete three years of teaching in the same state

supported school district. This criterion ensures that the candidate has had sufficient experience to become familiarized with the processes of education as well as the community and the school district in which he or she works. In addition to working for three years in the same school district, candidates must have a valid state teaching license and hold a bachelor's degree during their school employment. To successfully achieve NBPTS certification, candidates must complete the four components. Each component is then assessed by NBCTs and must receive a satisfactory rating (National Board for Professional Teaching Standards, 2017).

In 2014, the NBPTS underwent a process of restructuring to pursue improvement in the provision of resources for educators to help foster a better quality of teaching and student learning. Specifically, this restructuring process targeted Component 4 which was retitled as Effective and Reflective Practitioner (Murray, 2016). Due to its relative newness, no articles exploring NBCTs experiences with the new Component 4 were found. This explorative research project focuses on NBCTs reactions to completing the new Component 4 and their overall opinion of the experience and value of the National Board Certification process.

Reflection in Education

Reflective practice is one of the most fundamental principles in teacher education programs (Flessner, Miller, Patrizio, & Horwitz, 2012), teacher practice, and teacher certification programs (National Board for Professional Teaching Standards, 2017). It is challenging to envision how educative processes such as instruction and learning could be implemented and improved if teachers and other practitioners did not use reflection as a central cornerstone of their professional practice. Reflection is at the center of knowledge development because it allows for meticulous and diligent examination of the evidence on which knowledge is built. According to Dewey (1933), educators who do not practice reflection on their work have no clear sense of purpose and their role in education as they have not explored their unspoken assumptions and beliefs about student learning. Thus, to exercise reflection, educators have to develop a profound understanding of the process of teaching and learning and their role in these processes.

There are at least two main ways educators may engage in reflective practice: *reflection in action*, and *reflection on action* (Forrest, 2008). Practitioners engage in *reflection in action* when they examine their practice as they are doing the activities. An example of *reflection in action* is when an educator realizes the lesson is not going as expected; thus, he or she decides on a new strategy to deliver the lesson and boost student engagement in the class. *Reflection in action* draws from the multiple experiences of educators and relies on their capacity to assess and correctly interpret how students are engaging with the learning. Then, the educator adjusts instruction accordingly to improve teaching effectiveness and student learning.

Reflection on action is the careful and thorough examination of one's practice that takes place after a lesson, a unit, or an activity has occurred. One example of *reflection on action* is when an educator examines student learning at the end of teaching a particular lesson. Educators can reflect on their own about their performance and the students' level of understanding. Additionally, they can reflect on other aspects of their practice, such as their teaching, classroom management, teacher talk time, etc. (Forrest, 2008). As a result of this reflection, teachers can continue to improve their teaching practice.

Reflection on action has an advantage over *reflection in action* in that the former allows for the input of colleagues and other practitioners through collaboration. Thus, educators are not constrained to rely on their own experience and practice, but can benefit from others' expertise and support as well (Lupinski, Jenkins, Beard, & Jones, 2012). Van Manen (1977) theorized that reflection adds a centric social component to the process of education. Through collaboration, educators can build an improved vision and implementation of their practice to further student learning.

Educators practice reflection with the utmost importance, mainly because the factor of teacher behavior plays a central role in student learning (Flessner et al., 2012; Fox, Campbell, & Hargrove, 2011). Effective and successful educators, as well as those who take on leadership roles, have a higher tendency to engage students in active learning. This notion aligns with the specific beliefs and core propositions of the NBPTS. Reflective teachers strive to continuously improve their practice and engage students in meaningful learning by knowing their students (National Board for Professional Teaching Standards, 2017).

Therefore, to understand NBCTs' reactions to taking this newly restructured component, this explorative study employed an open-ended questionnaire regarding NBCTs experiences with the new Component 4: The Effective and Reflective Practitioner in an effort to gain insight from NBCTs reactions, opinions, and suggestions about Component 4. Additionally, some questions focused on NBCTs motivation and the impact of becoming an NBCT.

Methodology

This project was an explorative qualitative study that employed an open-ended questionnaire to examine the experiences, challenges, and successes of a sample of 12 NBCTs who completed their certification process in 2018. The study's focus was on exploring the process of taking the newly restructured Component 4: The Effective and Reflective Practitioner, as well as the motivations and perceived value of a National Board Certification for these NBCTs. A qualitative methodology was chosen for this project as this methodology uses the contextual nature of thought and behavior (Creswell & Creswell, 2018). Since this explorative inquiry aims to portray NBCTs experiences, which are deeply rooted in their context, a qualitative tradition can perfectly encompass the scope of this

study. Additionally, it was not the researchers' intention to generalize the findings and experiences of the NBCTs, but rather to provide a space to voice reactions and opinions of the participants of this study regarding their achievement of National Board Certification and their experience with the new Component 4.

This explorative study also falls under the umbrella of the social constructivist paradigm because the researchers captured the participant's own perceived reality about this study's topic. In a social constructivist worldview, individuals and their interaction with others and their environment facilitate the meaning-making and understanding of specific phenomena (Creswell & Creswell, 2018). Thus, in a social constructivist worldview, people create meanings of a phenomenon based on their experiences, context, and connection regarding the phenomenon (Patton, 2015). This is why the findings shared in this explorative study do not represent a generalization of the experiences of NBCTs. Instead, it shares a specific number of educators' experiences about specific aspects of the certification process through the NBPTS.

An open-ended questionnaire was used as the data gathering technique to collect participants' experiences with specific aspects of the certification process through the NBPTS. As the researchers were following qualitative research procedures, the design of an open-ended questionnaire was employed to allow the NBCTs to provide honest and open-ended responses to questions, rather than simple yes-or-no answers. Therefore, this study's data gathering technique allowed the researchers to employ coding processes to the data collected.

Participants

This study's participants were 12 accomplished in-service educators who in 2018 were working in school districts throughout the state of Illinois, USA. Among the participants in this study were primary, middle, and high school educators with certification in areas such as Science, Reading, Early Adolescence, English Language Arts, Early and Middle Childhood. Since NBPTS requires at least three years of work experience to be eligible to apply for this certification process, it is assumed that all of the participants of this study had at least three years of work experience in their respective fields. Thus, participants of this study were accomplished teachers who received or renewed their NBPTS certification during the year 2018.

Given the participants' particular characteristics that the researchers were searching for in this study, convenience sampling was employed for recruitment. This approach allows researchers to recruit candidates who fulfill specific criteria of interest for a research study (Creswell & Creswell, 2018). Specific criteria guided the participant recruitment process. Only those candidates who met the criteria were contacted to participate in this study. The criteria used for recruitment included: 1) participants must have a certification from the NBPTS completed in 2018 and 2) participants must have been in-service in their school districts when they were contacted.

These two criteria for selection were employed because the

researchers were interested in the experiences of NBCTs who completed the newly restructured Component 4 of the process for certification which was made available after 2016. Educators who went through the certification process in 2018 would have completed this newly restructured Component 4.

Data for this explorative study was collected using an open-ended questionnaire. This questionnaire was sent via email to all NBCTs who completed a National Board Certification in the state of Illinois during the year 2018. The open-ended questionnaire was the only data gathering technique used in this study. The data in this study represents the experiences of the 12 NBCTs who responded to the questionnaire.

Data Analysis

The data gathered through the open-ended questionnaire was analyzed in the following manner. NBCTs that consented to participate in this study were sent a link that contained an open-ended questionnaire through SurveyMonkey. As each questionnaire was completed, a text-based document of the responses was compiled for each participant. The researchers then compiled a combined document containing the responses of all participants directly from the SurveyMonkey website. Next, an in-vivo coding process was used to make sense of the collected information. In in-vivo coding, the researcher uses the participants' words as codes (Saldaña, 2015). Three cycles of coding were used to go from raw data to an exploration of the experiences of the NBCTs about their certification process and the new Component 4. The first cycle of coding generated a large number of codes or code-words used by the participants. Examples of these code-words are motivation, incentive, cohorts, vagueness, conciseness, etc. The second round of coding was focused on connections between codes. Such code-words as motivation, incentives, extrinsic, and intrinsic were combined into clusters or groups. Finally, the third round of coding focused on the relationship of the clusters to the study's general inquiry. This method generated three main themes to explore the research questions. A narrative expressing the participants' main experiences was compiled to explore the research questions of this study.

Findings

The following themes were elicited from the data analysis of the participants' responses concerning the experiences of 2018 Illinois NBCTs in completing Component 4. These themes highlight the overall value and benefit that NBCTs perceived from achieving National Board Certification: 1) Continuous Growing-- Motivated to do more; 2) Experiencing Component 4; and 3) Beyond the Certification Process. A description of these themes is offered through the participants' interpretation of their experiences in the following paragraphs.

All NBCTs expressed feeling motivated to go through the process of certification because they believed that in doing so they were pushing the boundaries of their professional growth. These educators believed that

Component 4 and the other components were essential to promote meaningful and successful student learning. This belief is in accordance with the five core propositions of the NBPTS. According to NBPTS, accomplished teachers are always reflecting on their practice to continue improving the quality of teaching and learning for the students' sake (National Board for Professional Teaching Standards, 2017). NBCTs expressed that exercising reflection is necessary because it encourages educators to develop a step-by-step process to evaluate their teaching practices and assessments. This process makes educators contemplate the necessary steps to improve student learning. Additionally, an NBCT explained, "This component [4] focuses on developing knowledge of students, collaborating with others, using assessment, participating in learning communities." This comment echoes Van Manen's (1977) theory that reflection adds a centric social component to the process of education.

In terms of motivation to become NBCTs, reference was made to having both intrinsic and extrinsic motivation. However, the majority of NBCTs said they were more intrinsically motivated. More details about NBCTs' motivation are provided in the following two sections.

Intrinsic Motivators

Participants of the study expressed a desire to foster meaningful learning and make sure their work positively impacted their students. As an NBCT explained it, "on a daily basis, it is vital to be an effective educator. Adjusting lessons and strategies is often a period by period process as the make-up of each group of students is unique." The realization that NBCTs look first at making a meaningful impact on student learning is explored massively on NBPTS core propositions. In fact, student learning drives accomplished teachers to look for better and innovative ways to provide a higher quality of education for the students (National Board for Professional Teaching Standards, 2015). As such, it is almost expected that intrinsic motivations are directly related to becoming an NBCT. Accomplished educators realize that there is always a need to do more to improve one's practice.

Accomplished educators continuously strive to improve their practice for their fulfillment (Duta et al., 2015; National Board for Professional Teaching Standards, 2015). The desire to grow professionally was also a key motivator to NBCTs to achieve certification. Most educators expressed a need to become better and achieve the highest standard in their practice to prove themselves capable of doing it. One NBCT addressed her motivation to pursue national board certification in this way, ". I wanted a challenge, I wanted to be pushed in my practice". The need for professional growth is an essential part of the professional life of accomplished educators. NBCTs also highlighted that the search for professional improvement is deeply rooted in the teaching profession. Therefore, a process of certification is essential to pursue professional growth. In the words of an NBCT,

I strongly believe that educators must continually search for

methods to improve their practice. Participating in workshops or ongoing courses is one of the most important ways for an educator to keep their teaching approach updated. The NBPTS process seemed the most logical method to improve my teaching practices.

This comment reinforces the notion that accomplished teachers take on continuous professional development to improve the quality of their teaching. According to the NBPTS, educators should strive to use the most effective set of skills to convey educational materials, promote learning, and advance students' thinking processes (National Board for Professional Teaching Standards, 2015).

Finally, another factor that motivated educators to become NBCTs was achieving the status of accomplished educators. NBCTs expressed that the certification process represented valued personal accomplishment that validated themselves as "having achieved a level of mastery." As an NBCT explains it, "My reasons were intrinsic. There isn't a pay bump or anything like that in my state or district, so I just wanted to see if I could accomplish the goal." Other NBCTs commented that a National Board Certification granted them a level of prestige in their school district, especially because achieving a National Board Certification is all about showing evidence of accomplished practice. An NBCT explained that the certification process focused greatly on asking candidates to elicit evidence of the detailed rationales of their practice and to justify the "hows" in terms of "How do you know?" and "How do you show?" The individual stated, "supplying evidence is a major component of the process." Thus, achieving an accomplished educator's status means having spent the time and effort to examine one's practice very thoroughly.

Extrinsic Motivators

Most NBCTs pursued a process of certification exclusively because of intrinsic motivation. However, other NBCTs were, additionally, extrinsically motivated to pursue their certification process. Some of these extrinsic motivators included receiving salary increases, annual stipends, and having the possibility of participating as a paid cohort facilitator after achieving their certification. There was only one NBCT who expressed receiving a salary increase. The individual explained, "My district offers a \$3000 base salary increase for those who become NBCTs. I knew that I could also become a reader or cohort facilitator to earn money after achieving." In addition to this salary increase, another NBCT expressed that an annual stipend of up to \$1000 would be received. Other NBCTs reported that their school districts supported them by paying for most of the certification process fee.

Experiencing Component 4

NBCTs' experiences of taking the newly redesigned Component 4 were divided mainly into two groups: those who thought that Component 4 needed improvement and those who thought the component was effective in

promoting reflection. The majority of NBCTs belong to the former group. The next section addresses the reported challenges that NBCTs experienced while completing Component 4.

The majority of the NBCTs who completed this survey believed that improvements need to be made to the restructured Component 4. One of the areas that stood out in the analysis of the survey responses was the need to restructure the prompt for Component 4. NBCTs expressed feelings of frustration because of the vagueness of the guidelines for Component 4. For instance, an NBCT explained,

I found the writing prompts convoluted and often unclear. Instead of encouraging reflective practices, I found the prompts were frustrating. I understood that the idea behind the prompts was to be reflective, but they were so repetitive in nature that it did not always allow the candidate to express their reasoning fully.

An NBCT indicated the vagueness of the instructions when completing Component 4 made it overly complex to decipher what was expected from the component. In fact, some NBCTs expressed that they had to retake Component 4 and attributed their success in the second attempt to their participation in cohorts that helped them meet the expectations of Component 4 and other components.

I initially started on my own but quickly found out about the ISU cohorts. I re-enrolled the following year with the support of the ISU program. There is no way I would have achieved the certification on my first try without the ISU support.

For some NBCTs, the vagueness of the guidelines in the prompts of Component 4 were problematic because, even after completing Component 4, it became challenging to exercise reflection in the same manner as promoted through the Component 4 portfolio. An NBCT suggested that it would be useful and helpful for candidates to access examples of what the NBPTS considers good models of reflective practice for Component 4. Arguing for the need for a restructuring of the prompts in Component 4, another NBCT expressed,

I think that further clarification is necessary on whether the students' needs and the professionals' needs are items that should or should not be directly related to the assessment of the students in the component's assessment part. This was the most confusing part of this component. I felt as though all parts of C4 were geared toward my growth as an educator, but the three parts were not related, and I was worried that I was doing something wrong.

In general, most NBCTs believed that Component 4 prompts and guidelines needed to be more effective and precise. NBCTs believed that there was no need to condense Component 4 because it could limit the level of reflection of the candidates. However, it needed to be scaffolded and articulated more clearly. Some of the specific suggestions to improve Component 4 included reducing the prompts' vagueness, using more

straightforward guidelines, and including examples of expected work.

A small part of the NBCTs expressed that Component 4 was beneficial for them to foster reflective thinking. For instance, an NBCT expressed that taking Component 4 was a challenging but rewarding process. According to the individual, “C4 was hard and so much! However, it really did make me think about how I use my time and how it will help me as a teacher.” Taking Component 4 was reportedly beneficial for some educators to think about unarticulated assumptions on why educators make pedagogical decisions for student learning. Having a space to exercise reflection on instructional decisions is essential to reprioritize academic goals (Gargani & Strong, 2014). This, in turn, leads to modifying instructional plans and improving student learning (Duta, Tomoai, & Panisoara, 2015). The ability to reflect on one's practice as an educator is the primary practice that defines accomplished practitioners because teaching demands practitioners to become eager and dedicated to continuous improvement (National Board for Professional Teaching Standards, 2017).

Other NBCTs shared that going through the certification process helped them realize that reflection is a critical component of becoming a better educator. Reflection has helped NBCTs adjust their lessons and teaching strategies and has become a continuous practice for these educators. One NBCT explained,

Being a reflective practitioner is extremely important. Reflecting on your practices (the way you deal with students, families and coworkers) on a daily basis is vital to being an effective educator. Adjusting lessons and strategies is often a period by period process as the make-up of each group of students is unique.

Component 4 was useful to lead NBCTs to reflect on their professional practices, teaching strategies, assessment, and how they drive student learning in their classrooms. Component 4 allowed educators to focus on what they were doing in the classroom and use evidence to address educational processes such as differentiation of instruction. However, most of the NBCTs reported that the instructions and guidelines for Component 4 need to be improved so that candidates have clear expectations of what to do to successfully complete Component 4.

Beyond the Certification Process

All NBCTs participating in this study expressed their valued appreciation of obtaining National Board Certification. Moreover, for most cases, NBCTs had intrinsic motivations to achieve the National Board Certification. These intrinsic motives did not mean that NBCTs did not value extrinsic rewards. It just represents the reality that most school districts do not reward National Board Certified teachers very much. Unfortunately, the level of change in teaching, student learning, and opportunities for half of the NBCTs in this study has, reportedly, not changed much since obtaining their certification. One NBCT described his change in the profession after

achieving his certification in the following manner "None at all. The teachers at my school haven't said a word to me even though we were recognized in front of the school."

On the other hand, other NBCTs reported receiving a pay increase from their school districts and opportunities to lead professional development. An NBCT explained,

In addition to the \$3,000 base salary increase, the district is a part of the Professional Development Schools from the National Board Resource Center out of Illinois State University - which means that each year of candidacy, there is a facilitator that leads 12 professional development sessions.

Other NBCTs reported achieving leadership roles in their school districts as well as within National Board Cohorts. However, no mention of a pay increase associated with their obtained certification was made. One NBCT said,

My district offered a cohort at the elementary, middle, and high school levels for obtaining NBPTS certification. This cohort was led by a National Board Certified Teacher and followed the NBPTS material (PowerPoints, lessons, etc.). Permitting teachers to join forces in working through this process was invaluable.

In general, the level of change in the professional life of NBCTs was different for all NBCTs. For some, there were no changes yet to their teaching and leadership roles. For others, there was an increase in salary and monetary incentives, and for others, obtaining certification opened the door to be part of National Board Cohorts, professional development opportunities, and leadership roles in their school districts.

Conclusion

This explorative study investigated the experiences of twelve 2018 Illinois NBCTs who completed the National Board Certification process. Specifically, the study focused on the motivation to pursue certification and the challenges and perceptions of achieving the certification process. The newly restructured Component 4: The Effective and Reflective Practitioner was the focus of the study. The findings suggest that going through the National Board Certification process is associated with achieving an accomplished level of teaching practice in education. NBCTs believe that Component 4 is a critical element of the certification process because reflection is the cornerstone to improving professional practice. However, they expressed that the guidelines and the prompts for taking Component 4 need improvement and scaffolding. Finally, the findings suggest that NBCTs have varied levels of support from their school districts ranging from none at all, to salary increases and opportunities for additional work. However, half of NBCTs have experienced no changes in their practice and leadership roles after obtaining their certification in 2018.

References

- Anderson, L. (2012). What Every Teacher Should Know: Reflections on 'Educating the Developing Mind'. *Educational Psychology Review*, 24(1), 13-18. doi:10.1007/s10648-011-9189-0
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles: Sage.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: D. C. Heath.
- Duta, N., Tomoai, E., & Panisoara, G. (2015). Desirable Characteristics Defining to Describe an Effective Teacher. *Procedia - Social and Behavioral Sciences*, 197(7th World Conference on Educational Sciences), 1223-1229. doi: 10.1016/j.sbspro.2015.07.383.
- Flessner, R., Miller, G. R., Patrizio, K. M., & Horwitz, J. R. (2012). *Agency through teacher education: Reflection, community, and learning*. New York: Rowman & Littlefield Publishers.
- Forrest, M. S. (2008). On becoming a critically reflective practitioner. *Health Information & Libraries Journal*, 25(3), 229-232. doi:10.1111/j.1471-1842.2008.00787.x
- Fox, K. R., Campbell, M., & Hargrove, T. (2011). Examining Reflective Practice: Insights from Pre-Service Teachers, In-Service Teachers and Faculty. *Journal of Research In Education*, 21(2), 37-54.
- Gargani, J., & Strong, M. (2014). Can we identify a successful teacher better, faster, and cheaper? Evidence for innovating teacher observation systems. *Journal of Teacher Education*, (5), 389.
- Lupinski, K., Jenkins, P., Beard, A., & Jones, L. (2012). Reflective practice in teacher education programs at a HBCU. *Educational Foundations*, (3-4), 81.
- Murray, J. (2016, November 27) NBPTS Component 4 Instructions Released: Effective and Reflective Practitioner is Now Public [News Post]. Retrieved from <http://www.nbctwave.org/news-blog/nbptscomponent-4-instructions-released-effective-and-reflectivepractitioner-is-now-public>
- National Board for Professional Teaching Standards. (2017) *Guide to National Board Certification*, version 2.3. Retrieved from http://www.nbpts.org/wpcontent/uploads/Guide_to_NB_Certification.pdf
- National Board for Professional Teaching Standards. (2015). *What teachers should know and be able to do* (2nd ed.). Retrieved from <http://accomplishedteacher.org/wpcontent/uploads/2016/12/NBPTS-What-Teachers-Should-Knowand-Be-Able-to-Do-.pdf>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (Fourth ed). Los Angeles: Sage.
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. Los Angeles: Sage.
- Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6, 205-228.

**Review of *Equity, Exclusion and Everyday Science Learning: The Experiences of Minoritised Groups*, by Emily Dawson, 2019.
Abingdon, Oxon: Routledge, paper, 194 pages.**

by
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Abstract

Ongoing efforts to provide access to equitable science experiences for all members of society have largely focused on changes at the K-12 level. Everyday science learning experiences that are structured (museums) or unstructured (conversational) are neglected areas with great potential to serve those that wish to engage with science. Despite that, current configurations are not inclusive and reproduce existing societal structures that effectively bar large proportions of people of color and other minoritized groups from participating. While giving voice to many perspectives traditionally excluded from traditional spaces of science learning, Dawson provides a framework for understanding historical patterns and ways to pursue meaningful change.

Science, as a discipline, has endured a great deal of criticism for a positivist epistemology that promotes a body of knowledge ready to be obtained by newcomers to the field. Emily Dawson offers a compelling insight into some of the ways that groups of people are excluded from participation in science and its subsequent impact on society. She argues that this rigidly-defined body of knowledge can be considered a form of cultural capital in our global society and valued as such (p. 35). Throughout the text, the author presents a large-scale ethnographic study in which she synthesizes the experiences of more than fifty individuals from at least five distinct community groups in London. She contrasts science education and science communication with the extent that individuals are able to fully participate in each process. In order to explore the ways people engage in science outside of schools, Dawson uses the term “informal science learning”-- which includes learning not just in museums, but also in conversational settings as well as in popular media (television, books, or newspapers) (p. 7). Areas in which science is explored outside of a formal school setting holds a great deal of potential for expanding access to relevant learning opportunities that relate to the sciences.

Dawson paints a much more nuanced picture of individuals who often find themselves commonly reduced to caricatures seen as “disliking” science. Though many she interviewed explained that science was for those with unique intellectual gifts, it became clear that “where science was relevant to participants’ lives they were passionate, interested, knowledgeable and highly skilled” (p. 73). This suggests a degree of intimacy with science and scientific processes born out of interest and relevance, not capacity or some other imaginary personal deficit.

The author suggests that current research relating to issues of access and equity in science, particularly, “...overlook the roles played by structural inequalities and the intersections of ‘race’/ethnicity, gender, class and other social positions” (p. 25). Dawson makes a compelling argument that helps the reader to begin to understand some of the ways that inequitable access to everyday science learning experiences privileges certain groups of people. The author makes a case for reconsidering what we define as “science” in order to deconstruct the existing barriers that serve to exclude and position science as solely for the elite. In doing

so, she explains that the "...traditional canon of scientific knowledge was made by and for wealthy white men" (p. 82). Several participants she interviewed noted the presence of minority groups only in tokenist contexts while otherwise being absent, even if their presence would be appropriate. For example, Dawson identifies the strong presence of Florence Nightingale in an exhibit about nursing despite Mary Seacole's comparable influence. Similarly, the continent of Africa is represented as needing "saving" by Western medicine and images of people of color are only present in the outreach literature offered by an institution of everyday science learning as an example of its great works in communities of perceived need. Clearly, the cultural capital is seen as exclusively belonging to dominant, Eurocentric groups.

Dawson problematizes access to the physical infrastructure of these learning spaces in terms of many exclusionist policies that include cost, geography, language, and marketing. In order to remedy these areas, she argues for rethinking hiring practices and the ways in which content, activities, and exhibits are developed as well as to offer alternative hours, makerspaces, and childcare. Similarly, the author encourages the rethinking of pervasive ideas relating to literacies, cultural capital, language, and codebooks for navigating museum experiences to include and empower those that are currently excluded. In order to do this, Dawson suggests changing the proverbial rules of the game to encourage dominant groups to begin the process of "...reflecting on the assumptions, norms, expectations and power practices embedded within everyday science learning" (p. 145). The role of community is also described in context of the dominant group's willingness to accept newcomers to spaces they have historically owned as well as their degree of interest in engaging in processes that might lead to deconstructing their own privilege or initiating the changes required. Naturally, given the scope of the work presented in the text, the suggestions offered leave much in the way of specificity to be desired. Dawson, however, would likely argue that the specificity required lies in the particular context being reimagined or reformed. By employing a reflective approach to reinventing a space as anti-oppressive, the unique needs of the area and population can be included in ways that defy broad generalization. Dawson reminds the reader that these pervasive issues can be solved, "...if we choose to" (p. 148).

Given the scope of Dawson's study, it seems clear that everyday science learning experiences as they've been defined hold great promise for undergoing the fundamental reconfigurations required to overcome the current exclusiveness that permeates these facilities. Based on the arguments laid out by Dawson, these patterns of exclusion are real, embodied, and simultaneously, solvable. The patterns of exclusion in the structures and practices of everyday science learning extend to general science curricula within schools in many of the same ways outlined by Dawson in her work. In addressing some of the specific ways that access is socially constructed, Dawson channels Bourdieu in suggesting that the prestige of a field is directly proportional to its difficulty to access and participate in. This form of privilege suggests deep-rooted structural issues that afford the included population a degree of social standing deliberately designed to be prestigious by virtue of its exclusivity. Dawson's book provides a meaningful contribution to an existing gap in the current science education literature and offers critical insights to help begin to deal with many of the issues of equity that we still grapple with to this day.

References

Dawson, E. (2019). *Equity, exclusion and everyday science learning: The experiences of minoritised groups*. Abingdon, Oxon: Routledge.

**Review of *The Art of Reflective Teaching: Practicing Presence*,
by Carol Rodgers, 2020.
New York: Teachers College Press, paper, 135 pages.
by
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This truly is a book for teacher educators. They will enjoy it on more than one level. The examples of classroom interaction and the scenarios are revealing and practical both. The discussion of schools of thought in teacher education, and about teaching in general, are varied and helpful.

Other educators and stakeholders can make use of the book, too, reading it with different lenses. Many institutions do not have a strong track for developing teacher educators (some do of course) and this would be a good book for departments to include in such programs and opportunities. Carol Rodgers presents here an informative and engaging discussion of teacher education and provides a lot of the “why’s” of what happens in schools and what can happen. The author is as at home talking about Dewey as she is discussing Freire and Piaget. From the standpoint of more philosophical levels of educational theory, Rodgers is right on with the way she brings together these and other experts who have spent their whole lives striving to find better and more equitable approaches to teaching.

The author also discusses the idea of presence—not “having a presence when you walk into the classroom”—but being attuned to what students are doing and thinking in the classroom. Mindfulness is another key topic in the book, as is reflection. Being aware of what is happening and what has happened should drive good teachers. Reflection on what goes on is essential, according to Rodgers. While I will not give away all of the content of the book here, I will say that as a teacher educator and a consultant in professional development, much of what is here would be very valuable for other teacher educators to read. Often while reading and studying the book I would say, “Yes, that is so important for teachers to somehow learn!” Rodgers draws together here earlier work she did with her colleague Miriam Raider-Roth on these topics. Mindfulness, presence, reflection, and a general life-long awareness of good teaching are joined by Rodgers’ interest in meditation.

While I strongly recommend this book for educators, I was surprised there was no mention of the Jesuits’ role in advancing reflection in education (this is one of their trademarks) or of the huge role they played in educating America. I also noticed it was difficult to read some of the lettering in figures (in the copy I received anyway) such as the label information in tables (e.g., 6.2 on page 49 and 6.3 on page 53). Perhaps these labels show up darker in other copies of the book.

Overall, again, this is a great book with potential for teacher educators. The book should be part of our dialogue at conferences and workshops—especially for the theory side of the information presented here. I have enjoyed reading and studying this book. Rodger’s work in this volume with principles and methods used by the Jesuits could bring about a strong force, indeed. It is the sort of project I personally would be interested in working on.