

Blending Technology in Fluency Instruction for Intellectually Disabled Students: Inclusive
Teachers Perspectives

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Research Problem

The State of New Jersey has classified 232,526 students, ages 3-21 within 13 categories, as eligible for special services. New Jersey Department of Special Education (2016) defines students with disabilities as “a child with physical, emotional, learning and cognitive disabilities who, because of the condition, needs special education and related services.” Jersey City, the second largest city in the state of New Jersey, provides services to 3,636 students identified within these categories (State of New Jersey Department of Education, 2016) in public and private placements. Jersey City currently serves 300 Multiply Disabled (MD) and 215 Intellectually Disabled (ID) students in district public schools.

Literacy skills, including the ability to read fluently for the ID student, is a major issue that continues to trouble the educational system in the United States. ID students who fail to learn to read fluently require additional supports and are unlikely to become financially self-reliant post-graduation. ID students who gain the ability to read fluently have increased opportunities to become productive members of the job force supporting the goals prescribed in New Jersey’ educational 21st century common core standards. New Jersey joined in the development of national standards designed to prepare all students in obtaining skills that prepare them to be college or workplace ready (P21.org, 2016).

Questions have been raised in the research literature (Spooner & Browder, 2015) as to the potential benefits of blended learning practices for students with ID in K-12 learning environments. The importance of literacy instruction for students with intellectual disabilities has

been identified by researchers (Lyons & Arthur-Kelly, 2014; Spooner & Browder, 2015) as a necessary skill for daily events. Engaging students with the use of unfamiliar methods through the inclusion of technology will require a shift in instruction for all. How K-8 teachers perceive the use of blended learning literacy programs to serve ID students in an inclusive classroom is an area that remains underdeveloped in the research surrounding literacy instruction and special education (Browder, et al., 2009; Rupp, 2015; Ryndak, Morrison, & Sommerstein, 1999; Scruggs, 2008; Tindal, Nese, Stevens, & Alonzo, 2016).

Need and Value

A determination of teachers' perception of the use of blended learning instructional materials in an inclusive literacy class is necessary to continue making improvements to instruction at the K-12 level. Research on reading instruction for ID students has focused primarily on "sight words encountered in daily living" (Browder, et al., 2009; Cumming, Strnadova, & Singh, 2014). A review of the literature recognizes the need to promote change through inclusive educational practices in social, political, economic, and pedagogical areas (Lyons & Arthur-Kelly, 2014; Spooner & Browder, 2015). The necessity of supporting teachers in the obtainment of skills needed to become users and designers of blended instruction to meet the needs of all students was also discussed in previous studies.

Preparing and engaging ID students using technology will require a transformative shift in educators' instructional practices. The perceptions of educators providing services to the identified ID students will build on the current understanding of how technologies used for blended learning instruction impact their students' attainment of fluency literacy skills. The researcher through compiling, interpreting, and exploring the results of comments from

participants who deliver language arts skill acquisition to ID students from an educator's perspective offers an underrepresented view to the current research literature on the use of Blended Learning as an instructional approach for ID students.

Research Questions

Qualitative Research Questions:

What are the teacher's perceptions of ID students using an online literacy Blended Learning program designed to improve reading fluency skills?

Qualitative Research sub-questions:

In what way, would your participation in Professional Development impact your student's attainment of fluency literacy skills?

Would participation in an Online Professional Learning Community influence your instructional practice?

Literature Review

A review of the literature was undertaken to determine the past connections to current practices supporting the use of blended learning instructional methods with ID learners. The researcher sought to provide a definition of the terms deemed important for clarification through the research to allow for a better understanding of their use within this research project. The defined terms are blended learning, intellectual disabilities, and multiply disabled. Blended Learning as defined by Horn and Staker (2015) is "adding a brick-and-mortar component to... online learning allowing students to learn any time, in any place, on any path, and at any pace at scale" (p.xxvi). Multiple Disabilities (MD) is defined as "concomitant impairments (such as

mental retardation-blindness or mental retardation-orthopedic impairment), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments (United States Department of Education). Intellectually Disabled (ID) students, those formally identified as Mentally Retarded, are described as “having significantly sub average general intellectual functioning, existing concurrently with defects in adaptive behavior and manifested during the developmental period, which adversely affects the child’s educational performance” (United States Department of Education). Students with intellectual or multiple disabilities in K-12 inclusive settings are in classes that utilize blended learning to some degree to meet the goals of their 21st century learners as outlined by the Common Core State Standards (Greer, Rowland, & Smith, 2014).

Transformational philosophy as it relates to providing agents to effect change for a subgroup of the population Students with Intellectual Disabilities served as the foundation for the critical evaluation of the inclusion of literature. The researcher gained an understanding of the current state of the field through a review of a compilation of descriptive knowledge on the K-12 literacy practices in the U. S. relating to blended learning with a special focus on the inclusion of Intellectual Disabilities (Cumming, Strnadova, & Singh, 2014; Dennis, 2016; De Silva, 2013; Ruppar, 2015; Scruggs, 2008; Zebehazy, 2015) . Ryndak, Morrison, and Sommerstein (1999) research on literacy instruction for an ID student, before and after inclusion, highlights the changes in instructional and social perceptions over the course of a seven-year case study. With the growth in inclusion for students with ID in public educational settings how to best meet their needs instructionally became a dividing issue in the research (Zascavage & Keefe, 2004).

Literacy instruction for ID students focused on sight words, functional literacy or more recently context dependent based on the individual student’s ability to communicate and the

designated form of communication. The lack of experience many educators have with assistive technologies and augmentative and alternative communication can act as a barrier to literacy instruction for ID students (Zascavage & Keefe, 2004). The impact of technology and Blended Learning on instructional approaches for ID students since 2010 has opened the door to delivery options for literacy instruction to the use of mobile technologies and applications (D'Agostino, Rodgers, Harmey, & Brownfield, 2015; Sponner, Kemp-Inman, Ahlgrim-Delzell, Wood, & Davis, 2015). The current debate in the research literature on instructing ID students in literacy skills attainment supports the need for a study of teachers' perspectives of blended learning instructional technologies.

Methodology (Philosophical Framework, Population Sampling, Research Design)

Dewey (1938), who believed in finding solutions that worked as the purpose of research was a large part of the pragmatism movement. A case study of inclusive teachers' perceptions of the use of an online literacy program to teach reading fluency to ID students will be the focus of this pragmatistic research study. Picciano (2016) defines case study research as a descriptive research that involves describing and interpreting events, conditions, or situations. (p.17) Stake (1995) describes case studies (as cited in (Gentles, Charles, Ploeg, & McKibbin, 2015))as being, "not a methodological choice but a choice of what is to be studied" (p.443), distinguished from other forms of qualitative research by its analytical focus on one or a small number of bounded cases, each of which is studied within its distinct context. Moreover, the data one collects to learn about each case often take varying forms including observations, interviews, documents, and so forth."

District X a large urban district in New Jersey is not fully inclusive. Providing in district and out of district placements for students identified as ID. The ID students who are placed in district are served in either separate special needs placements in a regular district school or in an inclusive classroom within a regular district school. This research study focuses on District X teachers of ID students in in district inclusive placements who provide blended instruction utilizing online technologies for literacy, specifically, reading programs that teach fluency.

The parameters for inclusion limit the size of possible respondents allowing the researcher to utilize all district teachers who fit the above description within the research project. A review of district records will determine which schools and teachers adhere to the guidelines for study inclusion. Further delineation will be based upon individual teachers' subject area specialty. A request, in the form of an introduction letter will be made to each building principal introducing the researcher, outlining the study, requirements for participation, and requesting permission to complete the study within their school and an introduction to perspective teachers. A follow up phone call will be placed one week after mailings as a personal outreach for permission.

Upon receiving permission, a similar letter will be mailed to perspective teachers with a link to an online Google form designed with open-ended questions which will be accessible to all participants for a one week period. The three-part form will be designed using fill in the blank, multiple choice, and open-ended questions to gather demographic information, experience with literacy instruction, and experience with blended learning instructional technologies of participants.

The descriptive researcher will utilize the responses from the online open-ended questionnaires to develop categories for further questioning to be concluded through the formation of on-site focus group interviews conducted utilizing open-ended questions to gather teachers comments on their perceptions of the use of an online literacy program utilized in district for literacy instruction. Picciano (2016) suggest the use of structured interviews as a means of collecting data one-to- one or with a group of subjects (focus groups). (p.21) Focus groups will be held at each participating school over a two-week period. Included will be all ID inclusive literacy teachers in the building who completed the online questionnaire and the researcher. Scripted fill in the blank and open-ended questions will be prepared prior to the meeting and shared with the appropriate building supervisor for inclusion in the interviewer's script to reduce potential risk of acceptance or participants' dissatisfaction with results. All interviews will, with permission, be audio recorded for researcher's review of notes and documentation of the experience.

Sample Interview questions:

- The approaches I utilize when instructing ID students in reading fluency are...
- When developing lesson plans for reading, I include technology as an instructional agent by....
- My experience with the use of online reading programs with ID students has been ---
- Professional development in blended learning for literacy instruction with ID students would
- My experience with Online Professional Development has been ...

Timeline for completion upon receiving IRB approval

<ul style="list-style-type: none"> • Send out letters of introduction to school principals/follow up phone calls to request permission to complete the study, entrance to the school and an introduction to teachers 	Two weeks`
<ul style="list-style-type: none"> • Letters of Introduction to teachers and teachers' completion of online Google Form/ compiling data from forms and developing interview questions 	Three weeks
<ul style="list-style-type: none"> • Focus Group Interviews 	One week
<ul style="list-style-type: none"> • Coding and compiling interview responses 	One week
<ul style="list-style-type: none"> • Writing up results 	One week

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