

Using Blended Learning as a Strategy for Students with Multiple Disabilities to Develop 21<sup>st</sup>  
Century Skills: Inclusive Teachers Perspectives

Wendy F. Thompson

New Jersey City University

## **Introduction**

The State of New Jersey has classified 232,526 students, ages 3-21 within 13 categories, as eligible for special services. The state 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,” (NJ Department of Special Education, 2016). The 22,406 of those students in separate settings identified as in need of Special Education services, receive those services from the general education population. Jersey City Public School District, a large urban district located in Hudson County in the state of New Jersey, with 38 public schools, enrolled 27,571 students of which 3,712 are identified as special education students (United States Department of Education, 2012). Among those, 300 are identified as Multiply Disabled and 215 as Intellectually Disabled. Individual with Disabilities Education Act (IDEA, 2004) defines multiple disabilities 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.” (para 1). Intellectually disabled students are those 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.” (IDEA, 2004, para 1).

School districts are required to provide eligible students special education services constructed to account for their individual disability, the chance for significant learning, and the prospect of achieving educational goals. (IDEA. 2004, para ) Inclusionary opportunities and practices have expanded over the past quarter century as social demands against the separation of the disabled student from the regular setting gathered positive support (Odom, Buysse, &

Soukakou, 2011). Schools are increasing the use of educational technology to enhance instruction and serving students in and out of the classroom with online learning in various configurations functioning as one possible answer (Cavanaugh & Hargis, 2010). Along with the growth of online education came questions as to which students benefited from its application (Lyons & Arthur-Kelly, 2014).

Online learning has been defined within the K-12 environment as “education that is content and instruction delivered primarily over the Internet” (Greer, Rowland, & Smith, 2014). While the term Blended Learning is broad in scope, Staker & Horn (2012) define blended learning as “a formal educational program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home.” Picciano and Seaman (2009), in support of Christensen, Horn, and Johnson (2011), never questioned the sizeable role that blended learning will have in the approaching educational landscape; their disagreement was with the projected date by which it will happen.

The research in blended learning in the K-12 educational environment continues to grow, yet absent is the relation to students with Intellectual and or Multiple disabilities (Greer, Rowland, & Smith, 2014). With the increase in inclusive educational practices for students with intellectual disabilities (Justice, Logan, Lin, & Kadravek, 2014), and the multiple challenges involved for teachers, families, and administrators in designing instructional programs to meet their needs (Lyons & Arthur-Kelly, 2014). This study will examine the perceptions of teachers using various blended learning methods to engage students identified as intellectually or multiply disabled in an inclusive K-8 public school in Jersey City.

### **Statement of the Problem**

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 21<sup>st</sup> century learners as outlined by the Common Core State Standards (Greer, Rowland, & Smith, 2014). 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, 2002). Teachers roles are evolving as they find ways to accommodate the diverse needs of these additional students (Spooner and Browder, 2014) 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 methodology to involve students with intellectual disabilities in an inclusive classroom is an area that has been underdeveloped in the research literature surrounding Blended Learning.

### **Purpose of the Study**

The intent of this ethnographic study will be to examine the perceptions of teachers on the use of blended learning instructional practices to engage students with intellectual and or multiple disabilities in 21<sup>st</sup> century learning. This study will attempt to offer insight into the support teachers feel are needed to include the intellectually and multiply disable student in blended learning instructional activities. At this point in the research, Blended Learning will be defined as “combining face-to face instruction with computer-mediated instruction” (Bonk, Graham, Cross, & Moore, 2006).

## **Theoretical Framework**

Developing Communities of Inquiry in a K-12 educational setting is supported by theories on social constructivism, multiple intelligence and situated learning as defined by Dewey (1938), Vygotsky (1978), Gardener (1983), and Wenger and Lave (1991). The disruptive power of technology, as described in Christensen's theory of Disruptive Education (2011), backs up the use of "customized learning in student-centric classrooms" with tailored learning practices in education (p.37). The application of the before mentioned supportive theories provided a basis for the use of blended learning methods in inclusive classrooms. Subtopics that may come to light while describing teachers' view of the use of blended learning methods are recommendation of best practices in employment and roadblocks in the deployment. The teachers' perception of "presence," as explored by Wenger and Lave (1991) relating to students with intellectual and multiple disabilities participation in blended learning, will also be examined.

## **Significance of the Study**

A determination of teachers' perception of the use of blended learning instructional methods is necessary in order to continue making improvements to instruction, at the K-12 level. Research on blended learning has focused primarily on blended course design (e.g., Corry and Stella, 2012; Smith and Basham, 2014). 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 (e.g., Frey, Fisher and Pumpian, 2013; Hashey and Stahl 2014; Picciano and Seaman, 2009; Vasquez and Serianni, 2012) and may be repeated within this study. With the diminutive amount of research on blended learning in inclusive

settings that center on students with intellectual and multiple disabilities, there is a clear need for further research on this topic.

### **Develop Statement of Resources**

The use of blended learning has been viewed as a possible method for instruction of students with disabilities in and outside of inclusive education (Smith and Basham, 2014; Stacker and Horn, 2012). Teachers are using this instructional model with students identified as intellectual and or multiply disabled in inclusive classrooms. A literature review including peer reviewed journals, and dissertations, and school procedures will be completed to develop teacher open-ended questionnaires. To identify teacher's perceptions, open ended questions and researcher observation of participants in their work setting will be the methods of inquiry employed in this qualitative exploration. A request for permission will be extended to the building administrator before selecting teachers for inclusion in this study.

Approved participants will be interviewed, observed through video recordings and provided an open- ended questionnaire to complete as a means of gaining perceptions on the use of Blended Learning in their class setting. Information will be gathered on multiple occasions over the course of a semester from January, 2017 to May, 2017. Gathering respondent's comments upon completing the open ended questions and group interviews will be a means of understanding how schools utilizing blended instruction might support communities of inquiry (Garrison & Vaughan, 2008) in a K-8 inclusive school setting in Jersey City with a population that includes students with intellectual and multiple disabled students.

## Methodology

### Interpretative Framework (Philosophical Framework)

Creswell (2003) supplies a description of social constructivism as a means for the researcher to bring awareness to the meaning that others place on the world. A social constructivist framework will help guide this research to acknowledge the perceptions of teachers using blended learning strategies with multiple and intellectual disabled students. This study will utilize a qualitative research design with an ethnographic methodology. Creswell (2003) suggest that researchers choose a research design that connects the method with the desired outcome of the study. Ethnography as described by Berg (2004) is an action research by which the “researcher assist the stakeholders to examine their situation and to recognize their problem and bring attention to the stakeholders.” (p.198). Approaching this study from the Disability Inquiry worldview lens for this ethnographic study acknowledges this researchers’ professional background as a teacher of students with intellectual and multiple disabilities in a separate school setting. This qualitative design approach to research will attempt to describe the who, where, and when questions of the application of the theory as it relates to this ethnographic study (Graham, Henrie, and Gibbons, 2014).

The choice of a K-8 public school in Jersey City, with an inclusive program including intellectually and multiply disabled students allows for the researcher to use the inductive logic of research in this qualitative study. Data gathered from in person interviews, class video observations and teacher open ended questionnaires, will be used to acquire descriptions of teachers’ perceptions regarding utilizing blended learning methods with students with intellectual

and multiple disabilities in an inclusive setting. Videos and interviews will be transcribed and coded based on the developed rubric to define similar resulting categories. Participating teachers' survey replies will be gathered and coded using similarity in responses to generate categories by the researcher.

Coding will follow a two cycle design to decoded the information, with the first emphasis primarily on word or phrases expressing positive or negative sentiment on the use of blended learning. The second coding cycle will focus on encoding the detailed responses from open ended questionnaires to define any patterns in responses. The use of the online forms will allow for ease of access for the participants while allowing the research to maintain control of the data. Teachers will receive a copy of the final product to ensure the ethical consideration are adhered to in representation of participants' responses. The viewpoint of the educator entrenched in this process will provide the collection of data that is relevant and reflective of the concerns of the user.



## References

(2016). *P21.org*. Retrieved 10 April 2016, from

[http://www.p21.org/storage/documents/docs/P21\\_Framework\\_Definitions\\_New\\_Logo\\_2015.pdf](http://www.p21.org/storage/documents/docs/P21_Framework_Definitions_New_Logo_2015.pdf)

(2016). *Ed.gov*. Retrieved 10 April 2016, from

<http://idea.ed.gov/explore/view/p/,root,regs,300,A,300%252E8,>

(2016). *Edlawcenter.org*. Retrieved 9 April 2016, from

[http://www.edlawcenter.org/assets/files/pdfs/publications/Rights\\_SpecialEducation\\_Guide.pdf](http://www.edlawcenter.org/assets/files/pdfs/publications/Rights_SpecialEducation_Guide.pdf)

(2016). *Isites.harvard.edu*. Retrieved 14 April 2016, from

[http://isites.harvard.edu/fs/docs/icb.topic1334586.files/2003\\_Creswell\\_A%20Framework%20for%20Design.pdf](http://isites.harvard.edu/fs/docs/icb.topic1334586.files/2003_Creswell_A%20Framework%20for%20Design.pdf)

(2016). *State.nj.us*. Retrieved 9 April 2016, from

<http://www.state.nj.us/education/specialed/highlights/TaskForceReport.pdf>

Bonk, C. J., Graham, C. R., Cross, J., & Moore, M. G. (Eds.). (2006). *The handbook of blended learning: Global perspectives, local designs* (Kindle ed.). San Francisco, CA: Pfeiffer.

Cavanaugh, C., & Hargis, J. (2010). Redefining school from site to service: Learning in and from K-12 online education. *Distance Learning*, 7(2), 1-5.

Christensen, C. M., Horn, M. B., & Johnson, C. W. (2011). *Disrupting class: How disruptive innovation will change the way the world learns* (Kindle ed.). New York: McGraw Hill.

Corry, M., & Stella, J. (2012). Developing a framework for research in online k-12 distance education. *Quarterly Review of Distance Education*, 13(3), 133-151.

*Developing models and theory for blended learning research*. (2016). *Academia.edu*. Retrieved 14 April 2016, from [http://www.academia.edu/3623333/Developing\\_models\\_and\\_theory\\_for\\_blended\\_learning\\_research](http://www.academia.edu/3623333/Developing_models_and_theory_for_blended_learning_research)

Dewey, J. (1938). *Experience and education*. New York: Kappa Delta Phi

Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.

Greer, D., Rowland, A. L., & Smith, S. J. (2014). Critical considerations for teaching students with disabilities in online environments. *Teaching Exceptional Children*, 46(5), 79-91.

Hashey, A. I., & Stahl, S. (2014). Making online learning accessible for students with disabilities. *Teaching Exceptional Children*, 46(5), 70-78.

Justice, L. M., Logan, J. A. R., Lin, T., & Kaderavek, J. N. (2014). Peer effects in early childhood education: Testing the assumptions of special-education inclusion. *Psychological Science*, 25(9), 1722-1729. Retrieved from

[http://njcu.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw3V1Lb9NAEF6FcukF8SZQpL3ApXIVe9feXSQOUZWCogghkR7oJVrvA4WHU9G6Uvn1zGTXazcUiTPHWD7Y01--eX2eIYQVR5NshxMMK6wx4AqtEV46j\\_2cQiundGVU4bH-NpuzxUyenLGz0ajb5NVf-x8M\\_9GhbiPKNNbN4W0jjJOkY4IDNuIHU2ApsG1SxsXN9Fm6H7nke3vRGTJGtDcZNFJF0uWEXWHdB9i6r70uNI9C6XWOOlyjD6dHvXZxEQYbLH-12byNrhWdAqqu9ZX7Fsr-wEwfhkWLnCdV1rBb9re6ZJUJJeJ87MDKyOaqCCufOtoO30tHeKoBB0NIVgz8OfxUvbPrGvw7PjApE\\_s2Nj4IPkfOwSdArv0aZ7H\\_sGtz-dY12emnO5DoS0j3706P380-995fbNdSpte4LXO5oRrcBjLL--RezEDoNCDnARm55iHZT2a8fkQ0QohGCNF1Q7cQoglcNEHiDY0AogAgOgAQ3Xj6B4BoAtBjcnoyWx6\\_z-IqjuwcTgPimIJxJbzxopbMeshRpSsmDmI\\_h31rL0Vdc25taT3XKtfY3JW158IVTCDRPyF7zaZxzwg1vq7KnMLKW8llnUvpxQT5wXrFrXRjctAd2Cr-rS5WeVkxyOxLxsfkaTjE1XkYx7KCIL5iEImNySs81XQ97ybZ7xjy-T\\_e94Ls99A9IHuXP1v3EI7jq2l\\_Azv9hwU](http://njcu.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw3V1Lb9NAEF6FcukF8SZQpL3ApXIVe9feXSQOUZWCogghkR7oJVrvA4WHU9G6Uvn1zGTXazcUiTPHWD7Y01--eX2eIYQVR5NshxMMK6wx4AqtEV46j_2cQiundGVU4bH-NpuzxUyenLGz0ajb5NVf-x8M_9GhbiPKNNbN4W0jjJOkY4IDNuIHU2ApsG1SxsXN9Fm6H7nke3vRGTJGtDcZNFJF0uWEXWHdB9i6r70uNI9C6XWOOlyjD6dHvXZxEQYbLH-12byNrhWdAqqu9ZX7Fsr-wEwfhkWLnCdV1rBb9re6ZJUJJeJ87MDKyOaqCCufOtoO30tHeKoBB0NIVgz8OfxUvbPrGvw7PjApE_s2Nj4IPkfOwSdArv0aZ7H_sGtz-dY12emnO5DoS0j3706P380-995fbNdSpte4LXO5oRrcBjLL--RezEDoNCDnARm55iHZT2a8fkQ0QohGCNF1Q7cQoglcNEHiDY0AogAgOgAQ3Xj6B4BoAtBjcnoyWx6_z-IqjuwcTgPimIJxJbzxopbMeshRpSsmDmI_h31rL0Vdc25taT3XKtfY3JW158IVTCDRPyF7zaZxzwg1vq7KnMLKW8llnUvpxQT5wXrFrXRjctAd2Cr-rS5WeVkxyOxLxsfkaTjE1XkYx7KCIL5iEImNySs81XQ97ybZ7xjy-T_e94Ls99A9IHuXP1v3EI7jq2l_Azv9hwU)

Lave, J., & Wenger, E. (2003). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.

Lyons, G., & Arthur-Kelly, M. (2014). UNESCO inclusion policy and the education of school students with profound intellectual and multiple disabilities: Where to now? *Creative Education, 5*(7), 445-456.

2016). *Mthoyibi.files.wordpress.com*. Retrieved 14 April 2016, from

[https://mthoyibi.files.wordpress.com/2011/05/qualitative-research-methods-for-the-social-sciences\\_\\_bruce-l-berg-2001.pdf](https://mthoyibi.files.wordpress.com/2011/05/qualitative-research-methods-for-the-social-sciences__bruce-l-berg-2001.pdf)

Odom, S. L., Buysse, V., & Soukakou, E. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Intervention, 33*(4), 344-356.

Picciano, A. G., & Seaman, J. (2009). *K-12 online learning: A follow-up of the survey of U.S. school district administrators*. (Survey). USA: The Sloan Consortium. (Online Learning, Distance Learning, Blended Learning, Distance Education, Asynchronous Learning, Primary Education, Secondary Education, K-12)

Smith, S. J., & Basham, J. D. (2014). Designing online learning opportunities for students with disabilities. *Teaching Exceptional Children, 46*(5), 127-137.

Spooner, F., & Browder, D. M. (2015). Raising the bar: Significant advances and future needs for promoting learning for students with severe disabilities. *Remedial and Special Education, 36*(1), 28-32. doi:10.1177/0741932514555022

Stacker, H., & Horn, M. B. (2012). *Classifying k-12 blended learning*. San Mateo: Innosight Institute, Inc.

United States Census Bureau. (2016). New jersey quickfacts from the US census bureau.

Retrieved from <http://www.census.gov/quickfacts/map/AGE295214/34>

Vasquez, E., & Serianni, B. A. (2012). Research and practice in distance education for K-12 students with disabilities. *Rural Special Education Quarterly, 31*(4), 33-42.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.*

Cambridge, MA: Harvard University Press.

Wenger, E., & Lave, J. (1991). *Situated learning: Legitimate peripheral participation.* London

England: Cambridge University Press.