Blended Learning Programs- Individualized Learning for the 21st Century Learner

A Literature Review

Venus McDaniel

Lamar University

Introduction

Blended learning is not a new concept. It is a model that combines traditional learning styles with online learning to address the needs of the 21st century learner. Not everyone is quick to embrace the model of blended learning. It is evident that the 21st century learner require different modalities of learning. Schools are charged with the challenge of addressing the needs of every student where they are, whether it is closing foundational gaps, providing opportunities for significant growth, or enriching high achieving students. Weber (2016) states, "the power of devices, 24-7-365 connectivity, digital learning applications, and contemporary pedagogies, principles and practices will significantly improve all tiers of supports of students—from differentiated Tier 1 core instruction to supplemental and increasingly individualized and personalized Tier 2 and 3 interventions and enrichments."

In addition to these challenges, some schools are also tasked with providing these opportunities to high a population of economically disadvantaged students which produces additional challenges. With varying student levels, one approach is a focus on individualized learning. Models with a focus on individualized learning include Station Rotation, The Flipped Classroom, and Individualized Homework.

This literature review will define the 21st century learner, their needs, and in depth look at the pros and cons of the models mentioned above. It will also discuss the implications of blended learning among the economically disadvantaged population.

The 21st Century Learner and Their Needs

Learning today looks quite different than it looked a decade ago and even more different than two decades ago. Today's learners are surrounded by technology personally and academically. Lynch (2018) defines the 21st century learner as an "engaged thinker, having an entrepreneurial spirit, and an ethical citizen." Student engagement is pivotal to any learner, but even more so with today's learners. Authentic learning opportunities increase student growth, prepare students for the real world with a focus on critical thinking and problem solving. Lombardi (2007) shares in her article Authentic Learning for the 21st Century, "Educational researchers have found that students involved in authentic learning are motivated to persevere despite initial disorientation or frustration, as long as the exercise simulates what really counts—the social structure and culture that gives the discipline its meaning and relevance." Students are highly stimulated with the use of technology via mobile and video game use. This same stimulation can be provided through the use of blended learning.

Blended Learning and the Economically Disadvantaged Student

Blended learning is a model that is being implemented across the world. Singh (2003) discusses a simplistic view of blending learning stating, "At the simplest level, a blended learning experience combines offline and online forms of learning where the online learning usually means "over the Internet or Intranet" and offline learning happens in a more traditional classroom setting. It is a different model than that of strictly online learning. Online learning has changed the method of which people access information. Blended learning has accomplished this same feat but has encompassed the traditional method of learning as well. A technology rich environment is a far cry from a true blended learning model. Staker and Horn (2012) define blended learning as, "a formal education 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 in a brick and mortar location away from home." Their definition of blended learning echoes many of the elements defined by many educational researchers. There are four main models of blended learning. These models are not to be confused with traditional educational models that offer online learning as a tool.

Research is being conducted continuously to show the effect of blended learning in different populations. A study conducted at KIPP Empower in Los Angles with 92% of their students labeled as economically disadvantaged and 99% Black and Hispanic showed significant improvement within the first year of implementation of a blended learning program. "At the start of the school year, only 9 percent of students tested as proficient or advanced on the STEP Literacy Assessment. Halfway through the year, 78 percent scored proficient or advanced (Staker, 2011)." This school improved their student scores with a major budget cut and increased their class size. It is imperative to focus on all students excelling. Schools with high populations of economically disadvantaged students are tasked with combating other issues than education, therefore they must do what they can to meet the academic needs of these students. INACOL (2015) shared a fact from The Department of Education stating, "research shows that students with access to a combination of online and face- to-face instruction excel in relation to peers who have exposure to only one method of instruction."

Models of Blended Learning

There are 4 main models of blended learning, however this literature review will focus on two models within the Rotation Framework: The Flipped Classroom and Station Rotation. Models of blended learning abandon the teacher as the centerpiece of student learning. Teachers

are no longer the source of all information and their role shifts from sole instructor to that of a facilitator. The focus of the classroom is on the student and their individualized learning. The flipped classroom is not just students watching videos online. Staker and Horn (2012) provide an example of how Stillwater Public Schools in Minnesota use the Flipped Classroom, "students in grades 4–6 math classes use Internet-connected devices after school at the location of their choice to watch 10- to 15-minute asynchronous instruction videos and complete comprehension questions on Moodle. At school they practice and apply their learning with a face-to-face teacher." Students greatly benefit from this model because they are able to view and review the videos at their leisure. The videos student watch are short and engaging, directly to the point. Class time is used for practice and activities from the direct instruction online that is viewed at home. Herreid and Schiller (2013) thoroughly discuss the benefits of the flipped classroom, one of the benefits they mention is that assignments that were previously assigned for homework are beneficial to be completed in class with the guidance of the instructor. The flipped classroom allows learning to happen everywhere. Singh (2003) conveys this idea, "that learning is not just a one-time event—*learning is a continuous process.* Blending provides various benefits over using any single learning delivery medium alone."

Station Rotation is reminiscent of traditional stations or centers that most elementary classrooms are accustomed to utilizing in their everyday regiment. The difference in the blending learning station rotation is that according to Staker and Horn (2012), the rotation includes at least one station for online learning. Other stations might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments. A case study was conducted of Randolph Central School District in New York revealed they had many students with varying levels within a grade level, whether it was behind several grade

levels, on level, or advanced. Upon implementation of the station rotation model, teachers are able to target individual student needs by using data from online assessments given while in station rotations. "In addition to student groupings, teachers use individual student data to differentiate instruction and assign online content. Math and ELA students rotate at the teacher's discretion between online learning, small-group print materials, and teacher-led instruction, using i-ready and IXL Learning for online content and assessments (Watson, 2015)."

Conclusion

Blended learning is a promising method to meet the needs of all students, this includes economically disadvantaged students. Research has shown significant benefits to incorporating blended learning into the traditional delivery of instruction. It provides students with authentic and individualized paths to improve their academic success. Teachers are more informed of their student progress and are able to effectively serve each individual student. Many reports show dramatic increases in student performance on standardized testing. Ever changing technology and its access to all have provided unprecedented opportunities for learning and this must be taken advantage of to continue to meet the needs of the 21st century learner.

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