

**“THE NEW LEARNER”  
THE INFLUENCE OF SHIFTING FORCES IMPACTING HIGHER EDUCATION**

*Gary Janchenko, University of Pittsburgh, gary.janchenko@pitt.edu*  
*Anthony Rodi, D.Sc., University of Pittsburgh, afrodi@katz.pitt.edu*  
*Michael J. Donohoe, D.Sc. National Defense University, m.j.donohoe.civ@ndu.edu*

**ABSTRACT**

*Higher Education in the United States has been evolving from a traditional classroom experience to variations of learner experiences. Shifting forces in the form of generational and industry expectations, as well as, engagement with student user technologies is driving the customization of traditional programs at post-secondary institutions. Online delivery of courses and programs have been around for quite a while and are nothing new to most universities and their students. However, many universities have customized their traditional programs to accommodate the “New Learners” technologies and demands with Blended Learning. These “New Learners” seek the convenience of an online delivery with the interaction and guidance of a face-to-face course. Students are important stakeholders in higher education and determine growth of programs based on enrollment. With current enrollments dropping due to smaller populations of available students, it is important that programs appeal to them in multiple ways. A recent example of a pilot blended course is featured and discussed to determine the effectiveness of delivering a blended format of traditional course materials.*

**Keywords:** Learning, Teaching, Information Systems, Learning Management Systems, LMS, Blackboard, Synchronous Learning, Asynchronous Learning, Flipped Classroom, Millennials, Generation Z

**INTRODUCTION**

Higher Education in the United States has been evolving from a traditional classroom experience to variations of learner experiences. Shifting forces in the form of generational and industry expectations as well as engagement with student user technologies is driving the customization of traditional programs at post-secondary institutions. Online delivery of courses and programs are not new to most universities and their students; however, many universities have customized their traditional programs to accommodate the “New Learners” technologies and demands with Blended Learning. These “New Learners” seek the convenience of an online delivery with the interaction and guidance of a face-to-face course. Students are important stakeholders in higher education and determine growth of programs based on enrollment, thus taking into consideration their desired content delivery is crucial to maintaining enrollment rates. With current enrollments dropping due to smaller populations of available students, it is important that programs appeal to them in multiple ways.

This paper is about the New Learner, who are not only millennials, but Next Gen learners who are Digital Natives, with cutting edge technologies who expect the same from the university that they attend. They are deeply embedded in Social Media, smartphones, computers, online collaboration tools such as Google Docs, etc. Their expectations of learning are online or blended and they are familiar with a Flipped Classroom and multiple Learning Management Systems. “The classroom is no longer where students go to simply absorb information. Colleges and universities are adopting hybrid learning approaches, including the flipped classroom, where course content is available online and in-class time is devoted to discussion and experiential projects,” (PWC, 2016). Equally, the career professional, often with years of work experience, they too are expecting the higher education learning experience to align with the many collaborative technologies they use on a daily basis in their global work settings. When considering a return to the classroom; either for a career change or an advanced degree enhancement, these students require a format that fits well within their advanced technological skillset and look for online or blended learning opportunities when choosing schools

## LITERATURE REVIEW

“The millennial generation, which makes up the majority of today’s students, has grown up with technology, so incorporating technology into learning provides a comfort zone for these “Millennials”” (Rodi, et al, 2013). Higher education has been struggling to accommodate the millennials with up-to-date technologies, online courses, flexible environments, and non-traditional communication methods. Now, the next generation named “Generation Z” or “Plurals” as named by Majid (2012), are those born beginning in 1997 to present (Magid, 2012). These Generation Z or Plurals, are known as “The First Generation of the 21<sup>st</sup> Century” (Magid, 2012). They are ages 8-15 and are an extension of millennials in technology knowledge, use and demands. This generation is the up and coming students in our classes. This latest generation is very savvy with technology, high achievers and have been involved in online learning activities throughout their K-12 journey. The majority of the people in our study also said that their ability to communicate clearly in person, specifically with older adults, was the number one skill that would ensure their future success (Finch, 2015). This group of upcoming college students are not only brought up on technology, but require the blending of soft skills with their online experiences.

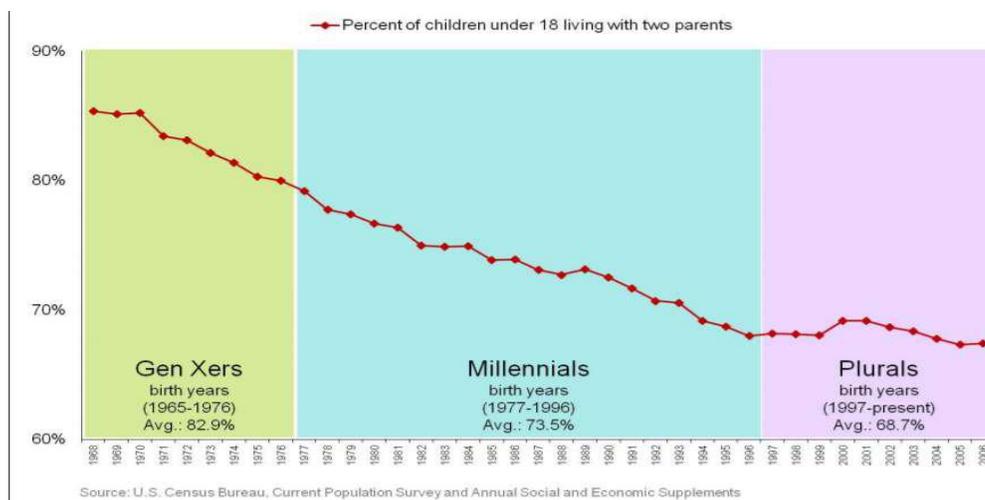


Figure 1. Magid Generational Strategies™ analysis of U.S. Census Bureau, Current Population Survey and Annual Social Economic Supplements (Magid and Associates, 2012).

### The Shifting Forces and Challenges in Higher Education

The shifting forces in Higher Education is not only generational but technological. Younger generations who are very comfortable with multiple technologies are putting pressure on universities to engage with their needs for technology and learning styles. Additionally, the returning professional student, has also been exposed to the ever changing work environment, through the increased demand for technology driven ‘competitive advantage’ solutions, that require the work force to become more agile and open to technology adoption to stay relevant and viewed as a value to the organization.

### The Digital Divide in Higher Education

Is there a Digital Divide in Higher Education? As colleges and universities become more innovative in their approaches to learning, the learning environments become more dependent on the use of technology. From the perspective of a student participating in a professional education program:

*In many instances, a definitive divide can be identified within graduate school programs upon comparing the levels of technology familiarization and comfort among age brackets, not necessarily among the student population, but among the various levels of technological buy-in and expertise exhibited by some faculty.*

In 2007, the average age of a graduate student was between 25 and 29 (cgsnet.org, 2009). This means that the average student has spent most of his life with some form of computer technology and often would prefer at least some classroom content delivered via some computer technology medium. The digital divide often stems from the resistance to adopt the technology to ineffective use of the technology. Course materials must also progress with the changes in technology. The pace at which technological changes occur and the ever more rapid adoption of some technologies demands that course materials be updated more frequently, if not yearly or each semester. While the underlying principle of a lecture or the artifacts used to convey the principle may not have changed in decades, students today are demanding current applications of tried and true lecture materials. If a textbook has a definitions section in which a fax machine is described as a new technology or a voicemail system is defined, the material is too old.

The divide moves beyond lecture content and into the web-based applications that many universities use to publish classroom content, such as BlackBoard, Desire2Learn, or other Learning Management Systems. Students are expecting to use these applications to view grades, access course documentations or to interact with other students only to find that there is almost nothing published or the tool is simply not used at all. Some research shows that 92% of respondents say that faculty resistance to use or slow uptake of technology have limited the effectiveness of online technologies (Watty, 2016). This, of course, does not describe all faculty but the limited interest in technology by some makes the widespread acceptance and overall impact more burdensome on those who use the online medium with ease and frequency. When considering offering online courses, the capability of the professor to maintain such an application could strongly influence the outcome of the course. Poor organization, slow response times in synchronous or asynchronous meeting times or difficulty helping students navigate and troubleshoot the application will ultimately destroy the potential of the offering.

In a study conducted by Flavin, 2015, it shows that there is misalignment or disconnect between technologies used in Higher Education compared to those used by students, (Flavin, 2015). An additional study by Wisneski, et al, 2017, it is stated that 25% of students report technology issues in online courses (Wisneski, et al, 2017). “We have a legacy infrastructure in higher education that was built before the digital mode existed,” (Kamenetz, 2015). As a result, there appears to be a legacy culture of educators.

Through attrition, it is highly likely that higher education systems will experience better utilization of these platforms in the coming years. The culture of some schools is such that the faculty elect to continue to teach classes requiring a physical classroom presence when those courses could be transformed to online or blended learning.

### **BLENDED LEARNING**

“Blended Learning” is defined by the use of a combination of synchronous and asynchronous delivery of course content and interaction with students. “Blended Learning combines classroom learning with online learning” (Tucker, C., 2013). The blended learning (bLearning) approach to the learning process wherein some time throughout the course is spent in face-to-face-sessions and is mixed with online, asynchronous meetings is gaining traction and numerous studies indicate the benefits (Maza, 2016). The methodology behind blended learning provides students time for self-learning yet still guides the students towards the goal of the course through periodic checkpoints provided by meetings within the classroom (Broadbent 2017). This approach is widely debated as faculty members lower familiarity to the online-only approach and argues that it removes valuable student interaction time, an increase in the time needed to prepare online materials and difficulty in working with online interaction (Porter 2015). It is also suggested, on the part of the student, that online learning limits the student’s ability for peer learning or altered their help-seeking strategies whereas students in blended learning courses indicated that they made greater use of their peers to assist with any difficulties they experienced (Broadbent 2017).

A leader and early adopter of distance learning in the United States is the Department of Defense (DoD). As early as 1997, in the Quadrennial Defense Review, a strategy was presented by senior Pentagon officials, to use distance learning and information technologies to modernize the education of a globally deployed military service. It was viewed as a cost effective necessity to maintain a high level of education, while effectively managing the many learning objects (sessions, classes or structured courses), within an increasingly demand driven, global operational environment, sharing and reusing content amongst similar military agencies.

In Frances Cairncross' book, *The Death of Distance: How the Communications Revolution Will Change Our Lives*, the author discussed how the growing speed low costs of communications has created a world where people will be able to interact and work: down the hall, across the street, or half way around the world (Cairncross, 1997). Knowledge workers (technology-aware professionals) today are now able to earn a living anywhere.

For traditional teaching faculty, the thought of teaching an online or blended course can be overwhelming. It can be difficult to effectively transfer teaching styles and content to a blended environment. In addition, many faculty are not up to date with the latest tools used in an online or blended setting. "The multitude of web tools, computer programs and learning management systems now available can be overwhelming," "Technology should be used to replace and improve what you already do." (Tucker, 2013). When considering course design for a blended format, integration of digital formats should be included. These formats need to create opportunities for synchronous and asynchronous collaboration and communication, which help contribute to learning (Swaggerty, et al, 2017).

### **A Recent Example of a Pilot Blended Course**

Over the past 2 years, a particular university in Southwestern Pennsylvania, like many other universities, has struggled with decreasing enrollment in a traditional on ground, MBA program. A committee was formed to find alternative delivery methods to offer to the students to boost enrollments. Over the past year, one of the authors, serving on this committee helped to lead an initiative to offer "Blended Learning" delivery to traditional MBA classes. The program, renamed PMBA (Professional MBA), was designed to attract nontraditional, part time working adults, by offering online options for classes in the traditional MBA program. This large university (approximately 30,000 students) in southwestern Pennsylvania involved two separate classes consisting of Information Systems and Finance. The focus of this paper will be on one course, Information Systems. The course has always been taught in a traditional format, in a classroom, face-to-face. Due to the appeal of the interactive nature of the course, the proposed blended delivery was to meet in person on the first and last class session, with interactive live remote synchronous video sessions conducted weekly. All other sessions during the course took place asynchronously. The goal was to offer the course in the blended format while retaining the integrity and effectiveness of the course, in addition to offering the convenience of remote access.

Class size was kept at or under 20 students for the pilot. Support technology was the learning management system (LMS) named Blackboard. The Zoom video conferencing tool was selected because of existing licensing agreement and due to familiarity of the tool. The weekly synchronous sessions using Zoom were planned to create class discussion and knowledge sharing of chapter concepts, real world application based on student industry experience, and to simulate robust classroom interactions. The Discussion Board was used to help keep the students connected to the course and collaborate with classmates by developing discussions around weekly case study assignments. Even though blended delivery is nothing new to academics, great care was taken to retain the interactive feel and effectiveness of the course. Online and traditional office hours were employed, where the online portion used the Zoom video conferencing tool.

Moskal, et al, states that fully online and face-to-face courses are easier for the instructor to manage and for the student to navigate. However, a blended course may become more difficult and time consuming for faculty but offers the student a well-rounded experience (Moskal, et al, 2012).

### **FINDINGS**

The experience of the students was very positive and confirmed what the instructor intended. Students were interactive as the course provided multiple avenues of engagement and collaboration. Based on ongoing observation and feedback from synchronous sessions from the students, the following findings determined were that the effectiveness of the course included the personal approach and human interaction with less of a disconnect than fully online courses. Discussion boards played an important role in creating the interaction that kept students connected with the class. Many students struggle with the completely online course structure since they feel disconnected and bored. While students still see value in online delivery, they no longer want to simply take an online course for convenience, but they also want to be part of a community. They liked the synchronous sessions since it allowed them to connect with

other classmates and interact via the video conferencing sessions. They felt that the course was well organized with structure, convenience, collaboration with other students, online office hours, in addition to meeting their timelines and deliverables. They thought the blended course felt much like a traditional course because of the interaction through the synchronous sessions.

Overall, the blended format provided a rich experience for the students in the pilot section of the graduate course. It was well received, with no lapse in delivery of content that is normally taught in a traditional, on-ground session.

### **DISCUSSION, CONCLUSION AND FUTURE RESEARCH**

The experience presented suggests that blended learning involving face-to-face education can be more effective than a fully online course while using interactive technologies, usually found in a learning management system. Even though online learning meets higher enrollment needs, Blended Learning satisfies the need for convenience as well as human interaction necessary to provide a fulfilling learning experience. Even though Blended Learning is routinely used at many universities, the impact made to a very traditional school can be transformational. The “impact of blended learning is monumental, permanently changing students’ interaction with higher education” (Matheos, 2010). Blended Learning is a necessary tool needed to stay competitive with competing schools and to provide an advantage over traditional or fully online programs and courses, it is a necessary tool to be used to remain competitive and even to provide an advantage over traditional or fully online programs and courses (Francis, 2012).

In the case of the university that conducted the pilot graduate course using blended learning, it was a case of competitive necessity. Neighboring colleges and universities have already been providing online and blended programs and courses. This provides an enrollment opportunity as well as convenience for working adults or nontraditional students working full time, caring for families, or for convenience for out of town students who want a better online experience. We plan to conduct future research to determine the effectiveness of the blended program and courses as more sections and course offerings in the program occur in the near future. These ongoing courses will provide additional information on student experience, performance and acceptance of the blended courses in a traditional program. Additional areas of research would be to compare the student grades of the blended learners with those of traditional courses. Insight on the teaching experience from the instructors of blended courses providing detail on successes and roadblocks to determine best practices and innovative teaching techniques.

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