DESIGNING ENVIRONMENTS THAT SUPPORT AND ENGAGE GENERATION Z
Investigating the Impacts of Digital Technologies in the Learning Environment
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INTRODUCTION

Designers of today are challenged to create environments that effectively support a digitally savvy generation without dismissing fundamental human needs. Modern educational systems are leveraging technology in "blended learning" models, a mix of online and face-to-face interaction in effort to create a self-directed experience and accelerate cognitive learning. These new learning models are radically transforming the educational landscape for high school students; however, little qualitative research has been conducted to understand the associated impacts to students’ wellbeing, social learning, and engagement level.

METHODOLOGY

The ongoing study seeks to understand how learning environments can better support, engage, and challenge Generation Z, and specifically investigates the effects of self-directed online education on the motivation level, social development, and wellbeing of high school students. Four high schools located near Harrisonburg, Virginia serve as a case study. An exploratory method is applied, using a combination of online survey and semi-structured interviews with students and instructors. The first survey received 40 high school respondents.

PRELIMINARY FINDINGS

1. Increased understanding of generation Z: introvert vs extrovert; collaborative vs independent work style; activity level; wellbeing indicators; learning environment preferences
2. Relationship between learning environment and passion/level of engagement
3. Relationship between learning environment and activity/movement throughout the day
4. Benefits and drawbacks of blended learning models

Generation Z is primarily made up of collaborative work types and the majority prefer to work with some kind of background noise. Most students (65%) indicated that they prefer learning by face-to-face lecture rather than watching digitized lectures at home and coming to class to work on problems. Students participating in face-to-face lectures indicated higher activity levels throughout the day; as class changes provides reason to get up and move at least every hour. Students participating in the hybrid class take breaks on average every 2-3 hours. However, a greater percentage of those participating in the self-directed experience (hybrid class) indicated an increased passion for learning than those participating in traditional face-to-face lectures. The majority of students indicated that the hybrid learning environment benefitted their education.

UNDERSTANDING GENERATION Z: SURVEY RESULTS

- 52% introverted personality
- 48% extroverted personality
- 70% collaborative work types
- 30% independent work types
- 65% prefer face-to-face lecture
- 23% prefer hybrid (digital lecture) class
- 60% prefer background noise
- 28% prefer silence
- 65% prefer face-to-face lecture
- 23% prefer hybrid (digital lecture) class
- 60% prefer background noise
- 28% prefer silence

Increased passion for learning: Hybrid Class Participants: 64%

Increased passion for learning: Non-Hybrid Class Participants: 27%

Average Frequency of Breaks for Recharge

Perception of Hybrid Learning Environment

Preferred Learning Environments by Personality

Preferred Learning Environments and Avg Study Time