

# 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

take breaks on average every **1 hour**  
average time spent working in one setting:  
**3.375 hrs**

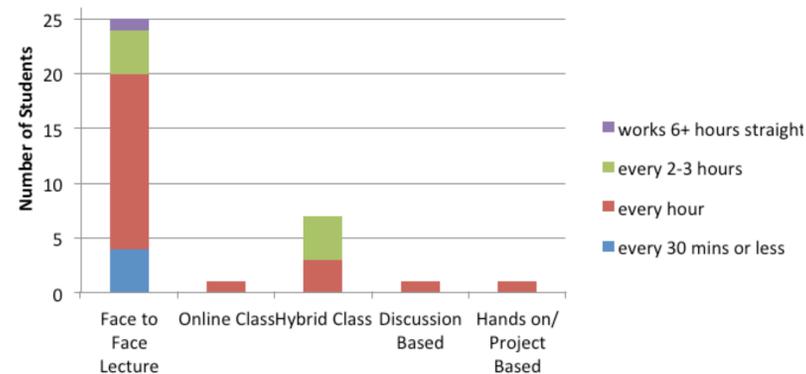
#### Increased passion for learning: Hybrid Class Participants



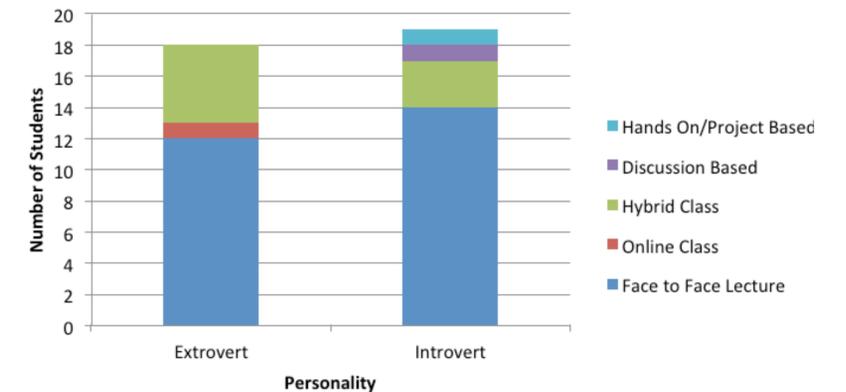
#### Increased passion for learning: Non-Hybrid Class Participants



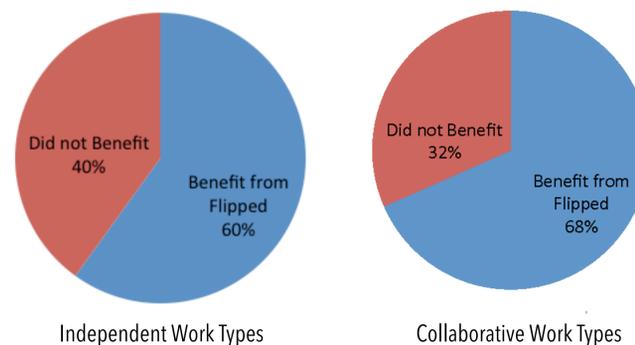
#### Average Frequency of Breaks for Recharge



#### Preferred Learning Environments by Personality



#### Perception of Hybrid Learning Environment



#### Preferred Learning Environments and Avg Study Time

