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Implications of Generation Y Students’ Learning Preferences in Higher Education

Elizabeth Piñzón

St. John Fisher College

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Implications of Generation Y Students’ Learning Preferences in Higher Education

Abstract
This dissertation study qualitatively examined the learning preferences of Generation Y students through three focus group sessions held at three different institutions of higher learning. During focus groups, Generation Y participants were asked for instances from their experiences that illustrate what they want to learn and how they want to learn. The participants were also asked for examples of experiences from exemplary professors. Findings indicated that overall, the participants believe it is important for a teacher to be in tune with their students as well as in tune with the subject matter. The findings also showed that students become disinterested in the courses when taught by teachers who are “just about getting things done.” The participants indicated that engaging and motivating teachers are those who focus on higher order thinking, who are invested in the subject matter, who do not stray from the textbook or curriculum, and who know the students personally. Implications include the need for faculty development in technologies and pedagogies that appeal to Generation Y students.

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Implications of Generation Y Students’ Learning Preferences in Higher Education

By

Elizabeth Piñzón

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by Chair
Jerry Willis, Ph.D.

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Pam Davis, Ed.D.

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August 2012
Dedication

This dissertation is dedicated to my family: My sons, Anthony Gonzalez and Christopher Mulvey; my daughter-in-law and grandsons, Amy, Dean, and Aiden; and my life partner, Carlos, who all have helped me become the person I am today. Without their love and support, my life would be very different. I am eternally grateful to them.

To the research participants, I also owe thanks. Each of you was great, and I could not have asked for a better group of students. The deepest of gratitude is offered to my committee chair, Dr. Jerry Willis, and my committee member, Dr. Pam Davis. Their guidance, patience, and recommendations have been greatly appreciated and have assisted in making this dissertation a contribution to the research and literature on Generation Y’s learning styles. Additionally, I would like to thank Dr. Michael Robinson of St. John Fisher College for his executive leadership, assistance, encouragement, and voice of reason. St. John Fisher College’s Cohort 2 located at the College of New Rochelle’s campus will remain in my heart, as will the people who walked the doctoral journey with me. Above all, I want to thank Cohort 2’s five doctoral candidates: Janet Lyons, Marcia Lawrence, Reverend Robert Walton, Terrance Nicholas, and Reverend Torrence Robinson. As Quiet Storm Group II, we shared joy, prayers, madness, chaos, laughter, and tears together. The prayers were felt and appreciated more than you know. I want to give a special acknowledgement to my group partner, Janet Lyons, whose brilliance, strength and voice of reason sustained me throughout this journey.
Biographical Sketch

Elizabeth Piñzón is currently an adjunct professor at the College of New Rochelle where she teaches Communication to undergraduates in the Bachelor of Science program. Elizabeth Piñzón is also an administrator at the Albert Einstein College of Medicine for the Executive Dean and in the Diversity Mentoring Department. Elizabeth Piñzón completed her Bachelor of Science in Communication in 2007. She continued her studies and received her Master of Science in Communication in 2010. Elizabeth Piñzón came to St. John Fisher College in the summer of 2010 and pursued her research in the learning preferences of Generation Y students under the direction of Dr. Jerry Willis and received the Ed.D. degree in 2012.
Abstract

This dissertation study qualitatively examined the learning preferences of Generation Y students through three focus group sessions held at three different institutions of higher learning. During focus groups, Generation Y participants were asked for instances from their experiences that illustrate what they want to learn and how they want to learn. The participants were also asked for examples of experiences from exemplary professors. Findings indicated that overall, the participants believe it is important for a teacher to be in tune with their students as well as in tune with the subject matter. The findings also showed that students become disinterested in the courses when taught by teachers who are “just about getting things done.” The participants indicated that engaging and motivating teachers are those who focus on higher order thinking, who are invested in the subject matter, who do not stray from the textbook or curriculum, and who know the students personally. Implications include the need for faculty development in technologies and pedagogies that appeal to Generation Y students.
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Chapter 1: Introduction

Introduction

The study examined the preferred learning styles of Generation Y students as well as the various teaching methods employed by instructors that either support or run contrary to those preferences.

Instructors in institutions of higher education have the daunting task of educating students who have expressed a desire for gaining knowledge and wisdom in a particular area. Students choose to matriculate to an institution and enroll in a class, thereby indicating the need for training in a specific subject that will enable the student to prepare for life after college. The task of the instructor is to find how to best meet the specific learning needs of the students, which includes finding the most effective means of instruction in an age when technology has exploded.

Problem Statement

Throughout American history, each generation is often remembered for specific events that have occurred during one’s formative years, for famous people and/or products of that time period, or for character traits common among members of that particular generation (Tapscott, 2009). Generation Y, who are often defined as a cohort born between 1978 and 1995 (Prensky, 2005), are of particular interest because they are the newest and the largest segment within the current higher education school system. This generation has shared a significant number of experiences that impacts how they learn, communicate, and perceive the world. The explosion of digital technology is one
such experience.

In 1969, the student population in higher education resembled that of the faculty. The instructors of that time usually taught students who resembled them ethnically, economically, and culturally (Prensky, 2005). The distinct demographics changes of today’s student body mean that although higher education faculty is slowly become more diverse, most faculty members are or will be teaching students who come from different backgrounds than theirs and who have had different experiences (Black, 2010). As the United State’s college student population continues to shift economically and culturally, those changes will continue and impact who students are, what they need, and how they learn (Black, 2010). Because of these generational differences, there is a need to determine the most effective method for teaching Generation Y students that both enhances and promotes a student’s ability to learn and retain knowledge (Denham, 2002).

As each generation has its own social characteristics and behaviors, it also has unique learning traits. Therefore, educators are finding that to be effective in a classroom of Generation Y students, they cannot use the same instructional tools used with previous generations (Prensky, 2005). For instance, since Generation Y students appear to be tactile oriented (Oblinger, 2004), instructors should use activities that encourage learning through this method. As a result of the differences in learning styles, one could argue that if a student is instructed in the learning modality most closely related to the student’s learning style, then retention of material presented may be enhanced, prolonged, and improved.

The role of professors is to impart knowledge, and the role of the student is to learn and retain as much of that knowledge as he or she is able. When the professor fails
to accomplish this role or does not convey the information in a way that a student understands, the student may have difficulty or be unable to effectively learn the material. As a result, there may be a separation between what the professor is teaching and what the student is learning. Using the term *Digital Natives* to represent the Generation Y students, and *Digital Immigrants* to identify baby boomer professors (those having been born between 1947 and 1964), Prensky (2005) summed up this apparent separation.

It’s just dumb (and lazy) of educators—not to mention ineffective—to presume that (despite their traditions) the *Digital Immigrant* way is the only way to teach and that the *Digital Natives*’ “language” is not as capable as their own of encompassing any and every idea. (Prensky, p. 6)

As a result of the separation between how professors teach and how Generation Y students learn, more research is needed to determine the most effective and efficient method of instruction rather than continuing on a path that has been shown to be ineffective.

**Statement of Purpose**

Defining Generation Y students as a new type of learner cohort suggests a fundamental difference from previous generations in the way they approach knowledge acquisition, problem solving, and moving into the workforce. Technology brings new ways of learning and gives students new opportunities. At the same time, however, the increasing importance of technology is widening the gap between communities such as college students and faculty, because the two communities have different perspectives, experiences, and values (Black, 2010). If a professor’s style of teaching does not fit a student’s learning modality the student’s ability to learn may be impeded. In that
Generation Y students have been exposed to technological advances from birth, these students tend to be more tactile. As such, it becomes crucial for students to be actively engaged in the learning process (Black, 2010). It is essential for faculty to know the best method for instructing Generation Y students and providing the opportunity for cognitive retention in any course of study.

Research Questions

The main objective of this study was to explore and learn more about the preferred ways of learning and knowing of Generation Y students as well as the various teaching methods employed by instructors who teach those students. Data was collected in colleges where Generation Y preferences and patterns of learning interact with the teaching methods of instructors, who are primarily from the baby boomer generation. Analysis included where and why there are matches and mismatches between teaching methods and Generation Y student’s ways of learning and knowing. Based on the findings, the dissertation provides suggestions and guidance about how to develop strategies to assist instructors in effective teaching. The desired result is to actively engage students in the college learning experience.

An overview of the research design. The research design is a qualitative phenomenological study (Finlay, 2008). More specifically the researcher conducted focus groups of Generation Y students from three different colleges: Yeshiva University’s Syms School of Business, the New School, and the College of New Rochelle. The focus groups’ inquiry involved the following areas of interest:

- How they rate the effectiveness and teaching styles of their instructors.
- What the students want out of their college experience.
• What they identify as positive and negative aspects of their college.
• What their thoughts are on the instructor’s teaching methods.
• What changes they would like to see in the curriculum.
• How they expect to use the available technology.
• Illustrations of the experiences that some exemplary professors have given them.
• What their thoughts are on the virtual reality higher education classrooms on the website SecondLife.com.
• Whether they would consider attending a virtual classroom in a university or academic institution. For example, currently MIT uses Second Life for online collaboration, and Notre Dame uses it as a cost-effective solution to distance learning.

The data provided a better understanding of generational learning styles, motivation, and school-life balance. The research describes a “lived experience,” examining the human experience of learning in contemporary college classrooms.

Significance of the Study

The goal of higher education is helping students acquire the skills to live, learn, and work within society. Additionally, technology is a tool of empowerment for all higher education individuals, not only the students. The research literature thus far has shown that the Generation Y students are more technologically advanced than some of the faculty who are teaching them, and the continuation of this research shows additional reasoning for investigating this issue (Black, 2010).

The role of technology in education has long been considered. In 1995, Bill Gates
stated, “teachers sometimes express the fear that technology will replace teachers. Personal computers will not replace or devalue any of the human talent we need for the educational challenges ahead. We need committed teachers, creative administrators, and diligent students” (Gates, 1995, p. 215). He also stated, “we must take what some teachers do very well and incorporate that into a system with higher expectations.” How to do this was suggested in 1995, when Gates stated

> What seems to be the perfect business plan or the latest technology today may soon be as out-of-date as the eight-track player. History is a good teacher, though, and observing many companies over a long period of time can teach us principles that will help us with strategies for the years ahead (p. 38).

Consideration of the issue of technology and education leads to questions such as: Are there successful policies and procedures currently in place at universities to meet the challenges of teaching Generation Y students and future students? Are universities transforming their faculty to the same level as the students? Is this transformation successful or unsuccessful? Is the faculty willing to make this transformation? What devices are being used to market these students to apply to universities in the U.S.?

**Definitions of Terms**

- **Baby boomers.** People born between 1946 and 1965.
- **Digital immigrants.** Instructors who are older than Generation Y students. e.g., the Baby Boomer faculty currently teaching Generation Y students.

Prensky (2005) coined the phrase “digital natives” to refer to Generation Y. Prensky
stated that students entering college in 2009 students are native speakers of technology, fluent in the digital language of computers, video games, and the Internet.

**Generation Y.** Students born between 1978 and 1995. See Digital Natives

**Tactile learners.** People who prefer to learn hands-on. Generation Y students have been identified as tactile learners who do well with professors who both use manipulative and touchable and moveable three-dimensional materials as well as encourage graphic, written and computer records and information.

**Teaching style or instruction style.** The way that a teacher handles a learning task. It is assumed that a match between the teacher’s instructional style and the student’s learning style, results in a productive learning environment.

**Chapter Summary**

As each generation has their own social characteristics and behaviors, generations also have unique learning traits. Therefore, educators are finding that to be effective in the classroom, they cannot teach using the same instructional tools for Generation Y students as were used for previous generations (Prensky, 2005). Since Generation Y students appear to be tactile oriented (Oblinger, 2004), instructors utilize activities within the classroom that encourage learning through this method. As a result of the differences in learning styles, it is assumed that if a student is instructed in the learning modality that most closely relates to the student’s learning style, then retention of material presented may be enhanced, prolonged, and improved. If this is the case, more research is needed to determine the most effective and efficient method of instruction rather than continuing on a path that is shown to be ineffective. The remaining four chapters in this dissertation contain a review of the literature, a description of the methods used for data collection,
the results, and a discussion of the findings as well as implications for teaching and future research.
Chapter 2: Review of the Literature

Introduction

The study of a generation, in this case Generation Y, provides a better understanding of the unique characteristics associated with that generation as well as how those characteristics may influence how members of that generation acquire, maintain, and develop knowledge. However, it is important to note that the idea of what constitutes a generation has changed over the years, perhaps because the pace of change in society has accelerated. Guardo (1982) stated, “Previously, generations were defined by centuries, such as the current generation, one’s father as the previous generation, and the grandfather as the previous generation to the father’s generation (p. 502).” Now, within the time span of a generation as defined by Guardo, there have been many different generations ranging from the baby boomer generation to the digital native or Y generation.

The study described in this dissertation focused on Generation Y students. Generation Y is defined as Americans born between 1978 and 1995 (Prensky, 2005). An additional question to consider is whether all born during that time period are members of Generation Y or does Generation Y consist only of those who exhibit characteristics scholars have defined as indicators of Generation Y membership. Thus, a secondary focus of this study is whether Generation Y characteristics apply to all American students born between 1978 and 1995 or not.
Purpose of the Study

Every student is entitled to a quality education. Students may try their best at learning the material, but a portion of the responsibility lies in the hands of the professor. Just as students have unique characteristics, professors have different teaching styles and characteristics. For example, there are professors who prefer to lecture, and others who prefer to involve students in group activities. If some groups or categories of students learn better from one method rather than another, they may be at a disadvantage when their professors use teaching methods that do not match their preferred ways of learning.

If generations of students differ in their learning styles and preferences, as some propose, there are no “universal” answers to how college students should be taught. However, if different generations of students, including Generation Y, share characteristics that make some teaching methods more effective than others, then the way they are taught becomes an important aspect of how we judge equitable and appropriate access to higher education. Since Generation Y students have been exposed to an abundance of technology since birth, these students tend to have a more active learning style. These students learn through experiencing or doing things. For this reason, these learners may become bored more quickly than other students while listening to a class lecture. Generation Y students like to experience the world and act out events. For example, to remember a phone number, these students may remember the pattern of their fingers as they press the numbers, and they can remember complicated directions once they have acted them out (Black, 2010).

Generational Characteristics of Generation Y

Generation Y has similarities and differences with previous generations. Much
like Generation X (those born between 1964-1978) (Prensky, 2001), Generation Y have witnessed significant technological growth within the world. During the mid to late 1990’s, the dot.com explosion opened up new avenues for exploration and expression. However, unlike Generation X, members of Generation Y tend to believe that people in authority are looking out for their best interests, and as a result do not seem to question norms and standards (Denham, 2002). As a result, Generation Y appears to be more willing to abide by the rules rather than constantly questioning or challenging those rules. Furthermore, “For Generation Y, the academic emphasis has been on standards, the fiscal tilt has been towards kids, and child nurturing has been tightening” (Denham, 2002, p. 121).

Typical features of Generation Y relate to the technological advancements made during their lifetime. These advancements include technologies such as the Internet, cellular telephones, and other mass communication devices. The ubiquity of these tools has had a major impact on members of Generation Y.

“Because many of Generation Y have grown up with computers, a majority of youth in this generation are technologically literate. In fact, intrinsic to the proliferation of technology, modern tools of communication such as the internet, beepers and cell phones are social lifelines for this generation” (Arhin, 2003, p. 121).

While Generation Y has many characteristics similar to the previous two generations (i.e. Baby Boomers and Generation X), Generation Y is often viewed as being more closely similar to the Baby Boomer generation (as opposed to Generation X) because they share the same values (Denham, 2002). For instance, Generation Y also is
often viewed as having a focus of assisting others who need assistance (Brownstein, 2000), much like the Baby Boomer generation, who have been called the “Greatest Generation” (Brokaw, 1998, p.27) due to their sacrifices in assisting others. Generation X, however, grew up with a greater understanding of technology than the Baby Boomer generation and therefore can relate more easily to Generation Y with regard to technology (Arhin, 2003).

Learning Styles

Every person has a learning style. Generation Y students have grown up in a world that is different than that of preceding generations, especially in terms of information technologies. Contemporary researchers believe that has led to differences in preferred learning and communication methods (Tapscott, 2009). Styles also often vary with age, achievement level, culture, global versus analytic processing preference, and gender (Shaughnessy, 1998). Generation Y students almost certainly have a different learning style from those who are instructing them.

Instructional Techniques

Instructional techniques and teaching strategies mean the same thing. They are descriptions of the learning objective-oriented activities and flow of information between teachers and students. Direct and indirect instructions are two main categories that many educators find useful for classifying teaching methods. Other methods are direct teaching, cooperative learning, lecture with discussion, panel of experts, brainstorming, video tapes/slides, small group discussions, case studies, worksheet/surveys, and guest speakers. Designing which instructional method is right for a lesson depends on several factors such as the students’ age and developmental level, what the students already
know, and what they need to know to succeed with the lesson (Kizlik, 2012).

When educators use instructional devices that combine learning styles, a greater number of students may be reached and effectively taught (Azriel, Erthal, & Starr, 2005). For instance, combining a lecture with a PowerPoint presentation may reach students who learn by auditory means as well as those who learn through visual means. Similarly, when other activities are combined with these two methods, the potential for more students to learn appears to increase (Azriel, et al, 2005).

Generation Y students are different from previous generations and should be treated as such when selecting the educational techniques and tools to use (Prensky, 2001). Prensky stated, “Our students have changed radically. Today’s students are no longer the people our educational system was designed to teach” (p.1). Consequently, auditory instruction alone, which may have worked with previous generations, will not necessarily benefit many Generation Y students. Visual instruction also appears to not benefit every student within Generation Y.

One may surmise that the frequent use of video games and other technological gadgets have aided Generation Y in their preference for kinesthetic learning. Video games may also be useful for those who prefer visual learning in that those playing the game may be able to form a mental image (Prensky, 2001). Therefore, instructors must find ways of teaching that support each learning style while ensuring that they do not limit any one modality, as that may hinder students who learn through that specific modality. Thus, instructors should alter their pedagogy to incorporate various techniques in order to facilitate learning for all students (Prensky, 2005).

Effective learning may take place by engaging students in the learning process,
rather than allowing them to be passive participants. The use of games within the classroom setting provides the student with an opportunity to become an active learner.

Learning from doing provides an important paradigm shift away from the tutor as knowledge disseminator, expert and authority figure towards the role of the participant as an active processor of information. Using games ensures that all participants are winners in that all have the opportunity for involvement and to engage with experiential learning. (Allery, 2004, p. 504)

Allery examined four studies involving games and simulations, which showed that both games and simulations could be adapted to fit the needs of the instructor and the students. Allery used the following definitions to clarify games and simulations within an educational context:

- Simulation: Any structured experience designed to reflect reality, real life and real situations (e.g. role play, major incident exercises).
- Game: A competitive activity with a prescribed setting, constrained by rules and procedures. The learning results from playing the game (e.g. interactions and behaviors exhibited).
- Simulation game: A reality based game; learning results from the subject matter.
- Exercise: A structured, non-competitive, experiential activity.

While the effects of the games and simulations in relation to cognitive retention were not researched, it did become apparent to Allery that both games and simulations were beneficial within the classroom. Games and simulations, therefore, appear to assist rather than hinder Generation Y students in the learning process.
Cognitive Retention

There is a possibility that Generation Y students are less interested in learning basic knowledge such as facts taught separately from application and use (Clark, 2007). A student’s ability to learn is often essential for academic success, yet there are different levels of learning based upon the different forms of activities employed within an educational setting. As such, the different levels of cognition need to be examined and understood in order to promote the highest level of cognitive ability among students of all generations, particularly those students within Generation Y (Clark, 2007).

According to research conducted by Benjamin Bloom, there are three areas of educational activities including cognitive, affective, and psychomotor (Clark, 2007). The results of Bloom’s study are described in a pyramid known as Bloom’s Taxonomy of Cognitive Domain (as cited in Huitt, 2004). Cognition is defined as “mental knowledge” (Clark, 2007). The mental knowledge a student has in reference to a particular subject may indicate the student’s ability to not only learn concepts, but also to understand the information presented and therefore progress to a higher degree of learning (Clark, 2007).

The various levels of cognition must also be known in order to determine the actual level of understanding. Based on Bloom’s taxonomy, Figure 1.1 shows the gradual progression of learning based on cognitive activities, with each level up the pyramid as a higher level of cognitive skills acquired by an individual (Clark, 2007). Each level within the pyramid represents a type of cognitive ability that may be attained, with each level dependent on the preceding level. Teachers at academic levels have wanted students to excel and continually reach the next level of cognitive ability (Forehand, 2005).
Despite the overwhelming popularity and consistent use of Bloom’s taxonomy, researchers have attempted to make changes to Bloom’s conceptual pyramid (Forehand, 2005). One of the more significant modifications was done by a former student of Bloom and by Bloom’s co-editors, in an effort to provide relevance for 21st century students and teachers (Forehand, 2005). Basing their research on Bloom’s original taxonomy, Anderson and Krathwohl (as cited in Atherton, 2005) changed the pyramid as shown in Figure 1.2. They attempted to make the process of learning more active as opposed to the traditional passive role found within Bloom’s model (Forehand, 2005).

*Figure 2.1. Bloom's Taxonomy: Cognitive Domain Adapted from “Bloom’s Taxonomy: Original and Revised,” by M. Forehand, 2005, Emerging Perspectives on Learning, Teaching, and Technology. M. Orey (Ed).*
Both pyramids are similar in that as an individual’s cognitive ability increases there appears to be a higher level of comprehension. It is important to note that the primary purpose of both models was to develop a tool that instructors could use to measure a student’s ability (Forehand, 2005). With the dramatic changes in society over the last five decades, the revised Bloom’s Taxonomy provides an even more powerful tool to fill the needs of teachers today (Forehand, 2005).

Anderson, et al. (2001) provided definitions for the new taxonomy terms:

- Remembering: Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
- Understanding: Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
- Applying: Carrying out or using a procedure through executing, or
implementing.

- **Analyzing**: Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
- **Evaluating**: Making judgments based on criteria and standards through checking and critiquing.
- **Creating**: Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing (pp. 67-68).

Wright (2012) literally turned Bloom’s taxonomy theory upside down. She agreed that the taxonomy classifies the various types of cognitive thinking styles, but she argued that the organizing framework is not correct.

Figure 2.3 shows Wright’s (2012) inverted model. Instead of starting with knowledge, the individual starts with creating and then identifies the knowledge needed.

![Figure 2.3. Adapted from Blooms 21 from “Flipping Bloom’s Taxonomy,” by S. Wright, 2012, Powerful Learning Practice.](image)

Wright (2012) used her Blooms 21 theory on students she taught in her Media,
Science and English classes by putting Creating, Evaluating, Analyzing and Applying first.

1. She began with having students write a paragraph, either in response to a prompt or their own free writing.
2. She arranged students to work in small groups or pairs, evaluate several master texts for the criteria we’re working on. How does the writer use punctuation or voice in a particular text? What similarities are there between texts?
3. Students then compare their own writing with each text. What did they do correctly or well? How does their writing differ and to what effect?
4. Analyze the pieces for similarities and differences and group them accordingly.
5. Wright introduces the concept of run-on sentences, comma splices, and fragments. Students then identify the criteria for good writing.
6. Co-construct criteria and rubrics for summative assessments.
7. Students then apply what they’ve learned by returning to their own writing. They change elements based on the ideas they’ve encountered.
8. Students further understanding by either listening to a podcast, or engaging in their own research of grammar rules.
9. Finally, as the knowledge piece, students create a graphic organizer/infographic or a screencast that identifies the language rules they have learned.

Wright (2012) believed the flipped Bloom’s theory works because the students
are spending their time creating, evaluating and analyzing, instead of solely focusing on acquiring rote knowledge. Wright argued that students involved in their own learning and creating content is most meaningful for them.

In the original Bloom’s Taxonomy and the revised taxonomy, knowledge and the remembering of knowledge attained are the lowest levels of learning. In Blooms 21 instead of starting with knowledge, learning starts with creating and students eventually discern the knowledge that is needed from it. Consequently, instructors who strive for their students to reach a higher level of cognitive ability need to gain an understanding of how students learn in order to assist the students.

Another tool widely used throughout the educational world is Dale’s Cone of Experience originally created around 1954 (Thalheimer, 2006). Figure 2.4 represents the third revision of Dale’s Cone, revised in 1969 (Thalheimer, 2006). Dale, who used his experience in both the business world and teaching, showed the relationships between the various levels of retention and the activities that are employed to attain the varying levels of retention (Thalheimer, 2006).
Figure 2.3. Dale's Cone of Experience, adapted from Thalheimer, 2006, *Will at Work Learning*.

Dale created the cone in an effort to better understand the relationship between learning and various activities and teaching methods. The cone was not intended to be utilized. In fact, Dale warned his readers not to take the model too literally (Thalheimer, 2006). After the original publication, Dale’s Cone was changed to include percentages of likelihood associated with the actual learning of an individual based on various teaching methods and activities used (Thalheimer, 2006). The National Training Laboratory Institute for Applied Behavioral Science (NTL Institute) has since taken credit for what they term the Learning Pyramid (Figure 2.5), although researchers such as Atherton (2005) and Thalheimer (2006) attributed the original concept to Dale. Furthermore, Atherton and Thalheimer agreed that although the percentages on the Learning Pyramid make sense on the surface, they stress that there is a lack of statistical data and actual research to validate the percentages promoted by the NTL Institute. Moreover,
Thalheimer discredited the percentages as misleading because there are validation issues among the activities. For instance, the NTL Institute percentages do not distinguish as to whether it is the reading of information or the seeing of the words that allows an individual to retain knowledge (Thalheimer, 2006).

Figure 2.4. Learning Pyramid. Adapted from National Training Laboratory Institute (2012).

Despite the apparent lack of statistical data to validate the percentages shown on the Learning Pyramid (Figure 2.5), educators have found the percentages to be somewhat consistent with the actual learning and retention that takes place in the classroom if the percentages are related to isolated activities that may easily be distinguished between auditory, visual, and kinesthetic modalities (Thalheimer, 2006). Therefore, if the Learning Pyramid reflects what educators have found in the classroom, then the use of games and simulations to teach Generation Y students would have a greater likelihood of increasing cognitive retention among those students. This is particularly the case in that games and simulations (depending on the type being conducted) generally fall somewhere between the “discussion” and the “teaching others” categories of the Learning Pyramid.

Allery (2004) stated, “There is a reason to think that role play, games and similar methods with high activity and personal involvement may be equally effective than
discussion. The value of structured experiences lies not in the game, simulations or exercise, but in the learning that emanates from the educational experience” (p. 7). Cognitive retention, therefore, may be defined through the use of Bloom’s taxonomy and Dale’s Cone as the ability for students to retain information (e.g. knowledge). As a result, it could be reasoned that if a Generation Y student were to teach another student, then the likelihood is that the Generation Y student would have greater cognitive retention of the material than when compared to a Generation Y student who simply listened to a lecture. It is important to remember that Generation Y students crave stimulation (Arhin, 2003) and tend to have primarily kinesthetic learning tendencies (Marriot, 2004). Consequently, the instructor must find a way to actively engage the students, thereby meeting the stimulation cravings as well as allowing the students to become active participants within the learning environment.

**Chapter Summary**

Generation Y, the primary focus of this dissertation, is a generation of young adults who have grown up with high technological skills, and do not necessarily fit the current educational mold. As Prensky (as cited in Skiba & Barton, 2006) stated,

“Our students have changed radically. Today’s students are no longer the people our educational system was designed to teach. Consequently, Generation Y need more than just PowerPoint slides and lecturing. For example, a student in a lecture realizes that he does not understand the teacher’s lecture, and even the PowerPoint slides provide no new insights. This student, using his wireless laptop, canvasses other students in the class via text and instant messaging and discovers they too do not understand the lecture. To solve this problem, the
student Googles the concept, finds a URL with simulations that better explain the concept, and immediately transmits this URL to others in the class. It is important to remember that Generation Y seeks immediate information and knowledge not by finding it in a textbook, but by connecting to the Internet” (p. 5).
Chapter 3: Research Design Methodology

Introduction

This dissertation study was designed to qualitatively examine Generation Y students preferred learning styles. The dissertation validates or expands contemporary scholars’ views and research on Generation Y student’s learning styles. There is an emerging consensus that Generation Y is different from prior generations. This dissertation seeks to clarify what Generation Y students are looking for in their college experience, how they expect to be taught, the methods they expect to be used to engage them in their education, and how they expect to use available technology. During focus groups, Generation Y participants were asked for instances from their own experiences that illustrates what they wants to learn, how they wanted to learn, and examples of the experiences that exemplary professors had given them.

Research Context

The main objective of this study was to examine the preferred learning styles of the students as well as the teaching methods employed by instructors that either support or run contrary to those preferences.

The research involved three focus groups, each from a different college for a total of nine participants. The three participants in each focus group were Generation Y college students. The study examined the following questions:

- How did Generation Y students rate the effectiveness and teaching styles of their instructors.
• What did Generation Y students want from their college experience?
• What did Generation Y students identify as positive and negative aspects of their college experience?
• What were Generation Y student’s thoughts are on their instructors’ teaching methods?
• What changes did Generation Y students want to see in the college curriculum?
• How did Generation Y students expect to use the available technology?
• What illustrations were given by Generation Y Students of learning experiences that some exemplary professors gave that best fit their preferred approaches to college learning.

Data was collected through a qualitative phenomenological study in order to better understand generational learning styles, motivation, and school-life balance. The goal of the research was to describe the “lived experience,” of learning in contemporary college classrooms.

The researcher initially contacted the Dean of Student Academic Affairs from each college, arranged the date of the focus groups, and requested the following:

• Three Generation Y students for each focus group
• A climate-controlled conference room with three small tables and three chairs for the students, facing two tables and one chair for the Researcher and audio/visual equipment.

Research Participants

The study involved Generation Y students, born between 1978 and 1995 from the
Yeshiva University Syms School of Business, the New School, and the College of New Rochelle.

Qualitative research methods that seek to build understanding and discover meaning are practical for students and provide information beyond quality-of-life surveys, which are usually multiple-choice questionnaires with limited room for comments. Qualitative research methods with a face-to-face, open-ended interviewing and dialogue approach for data collection provide students the opportunity to give an unqualified assessment of campus life (Creswell, 2009). Rather than a set of categories where students fit their views to the available options, participants in this study were free to choose the aspects of student life upon which to comment. This is desirable in this study because research on Generation Y learning is not mature. The opportunity for findings that were unanticipated was therefore desirable. As such, the resulting data is richly descriptive and, hopefully, faithful to Generation Y students’ perspectives. From beginning to end, this process was very similar to the empathetic listening skills educators incorporate into their administrative styles (Creswell, 2009).

**Instruments Used in Data Collection**

**Data Collection.** Three focus groups were held, one at each of the participating institutions. The focus groups were video recorded and then transcribed. In addition, researcher notes were written during and after each focus group session.

**Data Analysis**

Once the data was accumulated the following steps were taken:

**Validate Data.** Analysis depended on understanding the data. For the qualitative analysis, the text was read several times. Video recordings were viewed several times,
and observations and impressions were written down. The quality of the data was considered. Using Microsoft Word, the researcher assigned codes to units of the data and then developed patterns in the data and themes that illustrated relationships between the codes and patterns.

**Procedures for Data Collection and Analysis**

The following are the step-by-step procedures that were undertaken for the research.

1. The Associate Deans of Student Academic Affairs were contacted at the Yeshiva University Syms School of Business, the College of New Rochelle, and The New School. An appropriate date to do the data collection was confirmed.

2. The researcher requested and confirmed that the participating Generation Y students’ dates of birth were between the beginning of 1978 and the end of 1995, and that each student was currently enrolled in the institution.

3. The researcher requested a climate-controlled room with three small tables and chairs for the students, set up opposite the researcher’s table and chair. The room was shaded and quiet to allow for quality videorecording and audiorecording.

4. The researcher requested three students to be part of each focus group. Each focus group met for approximately 1 hour.

5. The study used a set of questions with each focus group (Appendix A). Except for the last two, these questions were variations of the research questions presented in Chapter 3. Before beginning the guided discussion, participants read and signed the consent form (Appendix B).
6. Once the data was collected and transcribed, an analysis was conducted. Using Microsoft Word, the researcher conducted an analysis that involved coding the data and developing themes.

7. The coding was categorized to identify themes.

8. Using the themes and connections between the themes, the data was interpreted within the context of the literature review. A list was created consisting of key points and important findings discovered as a result of categorizing and sorting the data.

9. An outline was created presenting the results of the dissertation.

The results are discussed in chapter 4.
Chapter 4: Results

Introduction

The results from the Generation Y focus groups are presented in this chapter. The specific results and analysis are organized by research question. To maintain confidentiality, the names of the nine student participants are not provided. Students are referred to by the code of Student 1, Student 2, or Student 3 and the focus group in which they were a member. Table 4.1 shows the demographic information for each of the participants along with their code and focus group membership.

Focus Group 1 was conducted at an over 100 year old catholic traditional college, Focus Group 2 was conducted at an over 100 year old Jewish traditional college, and Focus Group 3 was conducted at public contemporary New York City college. All institutions were in the New York City region.

Table 4.2 shows the codes and themes used for categorizing the participants’ responses.

Data Analysis and Findings

This section contains a description of the findings. Findings are organized by research question.
Table 4.1  

*Characteristics of the Generation Y Student Population*

<table>
<thead>
<tr>
<th>Student #</th>
<th>Focus Group 1</th>
<th>Focus Group 2</th>
<th>Focus Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>M</td>
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<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
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</tr>
<tr>
<td>AA</td>
<td>AA</td>
<td>H</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>W</td>
<td>W</td>
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<tr>
<td>AA</td>
<td>AA</td>
<td>W</td>
<td></td>
</tr>
<tr>
<td>Academic Major</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CJ</td>
<td>SC</td>
<td>SC</td>
<td></td>
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<tr>
<td>IT</td>
<td>FN</td>
<td>MT</td>
<td></td>
</tr>
<tr>
<td>DF</td>
<td>ED</td>
<td>PL</td>
<td></td>
</tr>
<tr>
<td>Years in School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fr</td>
<td>Fr</td>
<td>Fr</td>
<td></td>
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<tr>
<td>Sr</td>
<td>Sr</td>
<td>SP</td>
<td></td>
</tr>
<tr>
<td>Jr</td>
<td>Gr</td>
<td>Jr</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* M=Male. F=Female. AA=African American. H=Hispanic. W=White. Fr=Freshman. SP=Sophomore. Jr=Junior. Gr = 2nd year graduate student. Majors: Criminal Justice (CJ), Sociology (SC), Information Technology (IT), Finance (FN), Management (MT), Dance/Film (DN), Education (ED), and Philosophy (PL).
Table 4.2  

*Codes and Themes*

<table>
<thead>
<tr>
<th>Code</th>
<th>Theme</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A</td>
<td>Some teachers are just about &quot;getting things done&quot;</td>
<td>1</td>
</tr>
<tr>
<td>4B</td>
<td>Some teachers, which are rare, focus on higher order thinking</td>
<td>1</td>
</tr>
<tr>
<td>4C</td>
<td>Teachers who not only teach the material in the curriculum or in the textbook, but are invested in the subject matter to add in their own knowledge or viewpoint are interesting</td>
<td>2</td>
</tr>
<tr>
<td>4D</td>
<td>For some courses where the material is complex, it is best for the teacher not to stray too far from the textbook or curriculum</td>
<td>1</td>
</tr>
<tr>
<td>4E</td>
<td>Teachers who know their students personally are more interesting and motivating</td>
<td>4</td>
</tr>
</tbody>
</table>

**Research Question 1 – How do you rate the effectiveness and teaching styles of your instructors.** Several major themes evolved from this question. The students stressed the importance of a teacher’s ability to connect with students over teaching style. As to teaching style, however, the members of the three focus groups expressed a preference for a combination of styles or changing styles suited to subject matter. They mentioned that PowerPoint as a teaching style was helpful because it provides a record for later use, but indicated that with some professors PowerPoint becomes monotonous. They suggested that PowerPoint should be used to supplement the textbook. The students also indicated that a lecture could be helpful depending on how interesting it is. Specifically in respect to instructor use of PowerPoint, Focus Group 2 Student 2
advised that along with class discussion, the use of PowerPoint, information on the board, and distribution of the PowerPoint enabling the student to refer back the work was highly rated. Additionally, Focus Group 3 Student 1 said,

There are positive and negative aspects of the use of PowerPoint. The negative is that PowerPoint is often an accessory to add to what a teacher is saying. It is exactly what the teacher is saying overall, so professors tend to become so monotonous in their discourse. The best way to use PowerPoint is to add to what the teacher is saying rather than simply replacing it.

However, Focus Group 1 Student 2 stated,

I am not a fan of PowerPoint. I think it’s very bland, unless they have videos that the teacher has incorporated into it. I feel like that adds a lot to the learning. The best style for me is a combination of just different approaches for a teacher to balance lecture with discussion, bring videos, and a PowerPoint. I find that to be the best style.

Additionally, the participants stressed that faculty should make themselves available after classes to answer additional questions regarding the lesson, for advice, to simply have a conversation to discover who their professors are, or to introduce themselves to their students. The participants added that most professors immediately leave after the classes and are not available for discussions, and/or not seen or heard from again until the next class.

Research Question 2 – What do you want out of your college experience. The students had diverse expectations and hopes for their college experiences. They expressed that they wanted (a) experience; (b) skills, and training, knowledge (how to
succeed in the real world); (c) a study of diverse subject areas to become more well rounded; (d) networking (social for now, professional for future); and (e) increased self-reliance (touching on the experience of “growing up”). None of the themes were mutually exclusive and no student expressed any negative comments in response to this question.

For instance, Focus Group 2 Student 3 answered the question by saying,

First to get experience, and also not necessarily information, but knowledge on how to be successful in the real world. Real practical knowledge that I could take out and apply to whatever my profession is. I want key tools and quality that I can learn to be adaptable in the real world. Also, to gain perspective and knowledge of where to go in life.

Focus Group 1 Student 2 responded,

I want two things out of my college experience. First, I think would be skills and training. I’m an information systems major so computers with all sorts of different types of programming. What I appreciate most in my college education are the classes that I took that stuck to the topic. The second thing is to pursue areas that just interested me that had nothing to do with my curriculum. I found that in an effort to make students so well rounded and having so many requirements it stops students from well rounding themselves in the way they would like.

Additionally, Focus Group 3 Student 3 advised,

“I’m looking to make connections and make friends not only with my colleagues but also with professors that can help me out and have connections for later on in
life. I’m looking for the social aspect of being more self-dependent, being more self-reliant. Those are things that are important for the rest of life, and they’re also important for everyday life. They’re important to me now, and they’re important for me in ten years.

**Research Question 3 – What do you identify as positive and negative aspects of your college.** Several positive and negative themes emerged from the responses to this question. Of note is that teaching or professors are raised in several of them. Students indicated that they enjoy professors who bring their real-life experience into the teaching forum. The disinterested, burned out, unavailable, or waiting-to-retire professors were a negative aspect. Additionally, the nature of the college campus was important given that students from two separate colleges mentioned that not having a regular college campus with common areas was a negative. The students also said that the limitations the colleges have on exploring non-major courses/studies, as well as the small size of the college is another limitation in terms of available teaching faculty. However, the small size of the college was seen as a positive in that it created a sense of community among the students.

For example, Focus Group 2 Student 2 talked about the importance of community:

One positive of being at student at YU in general is the community for me because everyone that comes here is from the same background, looking for some sort of focus on personal growth in a Jewish setting. It creates a certain camaraderie. Since the family already exists from the get go that helps to last beyond college. I appreciate that socially in this college, and is helpful for
classes, in terms of just quickly connecting with other people for whatever you need in class. Negatives, academically, Syms has a business core curriculum and that limits the amount you can take outside of what you’re interested in.

In respect to the quality of professors and lack of a college campus, Focus Group 1 Student 2 commented,

One of the positives is that we have professors that have real life experiences and believe in self-disclosure. One of the negatives is that we do not have a college campus. We don’t have a main common area, which makes it difficult for places to meet professors, or to go meet other students.

Additionally, Focus Group 3 Student 1 remarked on the limitations on courses and quality of professors.

One of the negatives was that I had to take a class I really didn’t want to take because it was my only option. There are good amount of teachers I really did not enjoy because I don’t think they did a good job. They have been here a long time and the college doesn’t want to fire them, or the professors are just old in age, or perhaps they were good at one time, but are not anymore, or they don’t really care as much.

**Research Question 4 – What are your thoughts on your instructor’s teaching methods?** Overall, the students felt that it is important for a teacher to be in tune with their students as well as in tune with the subject matter. The students indicated that professors who not only teach the material in the curriculum or in the textbook, but also are invested in the subject matter enough to add in their own knowledge or viewpoint are interesting. However, for courses that are complex, the students said it is best for the
teacher not to stray too far from the textbook or curriculum. Students also spoke about the rarity of having professors who focused on higher order thinking, and that there are professors who are just about “getting it done”.

When discussing the quality of their professors, Focus Group 1 Student 2 said, Teachers who actually just give homework or give tests are just about getting things done, just doing the assignments. It is just protocol. Then you get those rare teachers that are not as focused on spitting back information but are utilizing your knowledge, forcing you to think and maybe think outside of the box. I have a teacher who has really creative homework assignments, so that class is a success with all the students. I found teachers that have teaching methods that are not “old school” but more creative or teachers that question the force of applied knowledge that you’ve learned rather than just spitting back the definitions are more valuable as professors.

Similarly, Focus Group 3 Student 2 answered,

I have had my share of professors where they do not add much and are just running through a curriculum, and that is very boring. There’s really not much even reason to pay attention because you can find it all in the textbook. The professor should really be adding in their own material. I’ve had better experiences in the liberal arts college. In the liberal arts college the professor is really adding his own insights into what we’re studying and I find that is the best learning experience twice a week that I have gotten in my college now.

Focus Group 2 Student 1 stated the importance of having a professor who is interested and invested in the subject matter:
I have had lectures where the professor talking or lecturing the entire time was very uninteresting. However, I took this Jewish history professor twice because he was so good. The whole class was the professor’s lecture, and then you have to study everything for a final. That’s all there is, there’s no participatory assignments. The professor was so interested in the class material that the class was also interested. The second time I took him, I signed up for this class even though it was an early time in the morning and it was an inconvenience for me. I just really enjoyed that professor’s teaching methods. The most important thing is not the teaching method, but how interested the professor is in what they’re actually teaching and not being afraid to teach things that aren’t in the book, and just have students read it on their own time.

**Research Question 5 – What changes would you like to see in the curriculum.**

Aside from the theme of “fewer options to avoid overwhelming students,” the student participants agreed that, generally, more options were needed in the curriculum to serve their needs. The students would like (a) less curriculum, (b) more electives, (c) more variety in course offerings, and (d) more variety in professors for the same courses/majors.

Specifically, Focus Group 1 Student 2 stated, “It could be a factor being a small school, but I know that other students have expressed similar opinions that we do not have a lot of options in the curriculum. Focus Group 2 Student 3 also pointed out the need for more faculty variety. The student said, “I would prefer more teachers for one subject. Also, there are some requirements that we have which really aren’t necessary. It really just slows us down, especially if we’re not interested in those subjects.”
Focus Group 3 Student 3 also indicated the need for changes in the structure of courses:

More hands-on training in the classes. For example, there’s one program for my major it’s called “I Have a Dream” it’s part of the theater program. They go into a school with kids, and they put on plays and do little workshops with them and/or just regular homework help. Having more programs like that where I can actually apply what I’m studying. If I am a musician I’m not just going to read about it, I’m going to play the instrument as well. So as someone who’s trying to be a teacher, I would like to be able to do that more than I have. I’ve had to go outside of the university in order to get that.

**Research Question 6 – How do you expect to use the available technology.**

The main message was that technology that is flexible to the point of being optional and versatile is best. For example, the students suggested that laptops in the classroom for note taking is neater, more efficient, and provide easily shared notes. Students mentioned the service, Aplia, which provides online textbooks and homework, is convenient as long as it directly supports course studies. They pointed out that the Kindle software and iPad is versatile and therefore convenient and useful.

However, for one student, pencil and paper was preferable to laptops in most cases. Specifically, Focus Group 1 Student 2 stated,

I pay attention better using a pen and paper. I find that a laptop is distracting. I only bring the laptop to certain classes and the reason is because the professor is boring. I can learn much better out of the textbook. I need something to keep me busy for during the class so I bring my laptop.

Regarding online access to textbooks and homework, Focus Group 2 Student 3 said,
As an Information Systems major, I’ve obviously used computers to learn computers. I have to see what’s up and coming, is new, and is going to be. We have a service called Aplia. It’s a combination where you can get the textbook and homework online. I found it convenient to have the textbook online. However, not all students preferred online material. For instance, Focus Group 3, Student 1 said, “I like to hold the textbook in my hand. I like to turn pages, but I also use my laptop.

The students also advised that when professors did not effectively give clarity to the lesson, the student would text or IM (instant message) another student in the class asking if they could clarify to the professor’s statement. If both students needed clarification, they would go onto the Internet and find their own answers, and share via IM with other students. This finding supports Arhin’s (2003) claim that the majority of youth in this generation are technologically literate because many have grown up with computers.

**Research Question 7 – Can you give illustrations of the experiences that some exemplary professors have given you.** Echoing the message from Research Question 4, the students seemed to feel that teachers who were focused on and invested in their tasks and goals in the classroom were the best ones. Students experienced exemplary professors who not only taught the material in the curriculum or in the textbook, but also were invested in the subject matter enough to add their own knowledge or viewpoint. A few students stated they had great professors who were available to them outside of the classroom and willing to engage on a personal level. Students felt that it is difficult to become engaged in a class when the professor appears to expect students to care more about the subject matter or coursework than they do. Students felt that many of their
professors are too focused on policy or curriculum because they fear students will not care about their schoolwork otherwise.

When describing a professor who was invested in the course, Focus Group 1 Student 1 stated,

My favorite professor was just very interested in his subject, and it showed. For example, if you asked him a question and he didn’t know the answer, the next time in class he would give you the whole story, the whole nine yards. That is a symptom of the fact that the professor really cares about his material. Any professor who will take the time to go out and meet and be with the students is always the better professor. I’ve had professors that just leave right after they’re done talking. They are the professors nobody likes.

Focus Group 2 Student 2 also explained what made a good professor:

I had a professor that I took for most of my classes in my major. The classes were small, and he was always available to you for any questions that you might have. I always appreciated that, and it was very helpful. He didn’t just answer questions about the class, but if you had questions about career, the industry, he’d spend hours talking to you. My friend was a psych major, and he didn’t know what to do. This professor stayed on the phone with my friend for two hours. The professor’s class turned my friend on, and he decided to go into computers. Those types of professors obviously really shine.

Focus Group 3 Student 2 also described a positive experience with a professor:

There’s a professor I’m taking this semester, and by far the best teacher I ever had. One of the key qualities that makes him stand out is the fact that he really
care about us and his subject matter. Just the way he speaks is different. You can feel his passion. He utilizes the whole period and entrusts as much information as possible. He has different teaching styles – he speaks, discusses, shows videos, brings in speakers. He utilizes everything he can. He puts a lot of time into preparing for class. He is not so much into the system. He doesn’t care as much about grades and tests. He really just wants us to learn the subject matter. Students stay a half-hour or more after class just to talk to him about his subject.

**Research Question 8 – What are your thoughts on the virtual reality higher education classrooms on the website named SecondLife.** The students identified a few positive and negative ideas about the online classroom website SecondLife. Students said that online courses provide an opportunity to many students to receive teaching from prominent professors who might otherwise be inaccessible to them. However, a negative aspect of online courses was that it removes the desirable social aspect of physically going into a class. Several students mentioned online video as a good teaching tool because it is an edited (rather than impromptu as in the classroom) teaching method and can be viewed as many times as necessary.

When discussing online courses, Focus Group 2, Student 2 said,

I am in favor of the idea if that’s the way that things can be taught to the masses. Through a video you have better time to perfect. I think it was Stamford [sic] where 200 people registered for a course. When they found out there was a web version by the end there were 30. Students preferred to take the web version because it was just easier to just have the video with a pencil and paper, a diagram that the professor would show in the video was much easier to follow than a
classroom. There’s a lot of potential for better learning in certain ways by online learning. If you miss something you can just play/repeat the video. There are definitely a lot of advantages there.

Focus Group 3 Student 1 pointed out the negatives and positives of online education:

There are a lot of advantages and disadvantages. An advantage is getting the professor or the class where you might not be able to otherwise. A disadvantage, for me, is that a big part of every class I take are the students in it. I like talking to my peers about the subject; about different papers we had, studying with them for tests. You lose that aspect if you take it online.

**Research Question 9 – Would you consider attending a virtual classroom in a university or academic institution.** There were mixed-feelings in response to this question. The majority of the students said no, because reality is better than virtual reality, especially in meeting with the professors and fellow students face-to-face. The students felt that face-to-face interaction is necessary for some subject matter, and some internet-based learning is best suited for more objective courses of study. However, there were a few students who were intrigued at the prospect of having a degree from Notre Dame and saving some money, and others felt that if great professors taught the students it would be an incentive to try SecondLife.

The comments of two students captured the mixed feelings of the participants.

Group 2 Student 1 was resistant to the idea of virtual courses and responded,

Not really interested. I like the physical. I’m not a very Internet based person. I actually like meeting the professors. I like to be sitting in the room and the more personal experience the better.
However, Focus Group 2 Student 2 said,

I would consider it. Creating an avatar sounds somewhat silly, but online learning definitely appeals to me. There are certain classes that don’t lend themselves the same way to online learning. I would say literature class is a discussion-based class. It does not seem as necessary to have that face-to-face interaction and there’s a ton to be gained from just having a high quality professor available online.

In that Generation Y students are considered to be technologically inclined, it is worth noting that the findings revealed that none of the students interviewed were aware of SecondLife.com, an online virtual reality higher education classroom. The student creates an avatar and enters a virtual classroom, who in turn is taught by an avatar professor. It has the same rules and regulations as any university, and students are held accountable for the classwork and lessons. Every year SecondLife.com has graduation ceremonies where the student avatar wears a cap and gown and walks into the virtual auditorium, and is handed a degree by the Dean of the School avatar. MIT uses Secondlife.com for online collaboration, and Notre Dame uses it as a cost-effective solution to distance learning.

Two students were intrigued at the concept, and mentioned that they enjoyed playing games on-line. However, they advised that the need for the discipline that is required by physically attending classes in a classroom outweighed the gaming aspect. They mentioned that attending virtual classes would seem like they were playing video games, and would leave too much time for not staying on point and concentrating on the project at hand. Although the students were intrigued at the concept of virtual learning,
not one student said they would consider attending a virtual on-line higher education university. All the students agreed that being taught by a professor inside of a classroom of a college and having an academic relationship with the teacher was the successful way to learn.

Significantly, the participants stated that the technology offered by professors was less important than having a knowledgeable and compassionate person sharing their life’s lessons and experiences. Given the participants’ sense that virtual learning was too similar to playing video games thus opening up the possibilities for distractions, the findings did not validate Allery’s theory (2004) involving games and simulations. Allery (2004) emphasized the need for actively engaging students in the learning process and noted that the use of games and simulations would be a paradigm shift from traditional teaching pedagogy. According to Allery, games and simulations appear to assist rather than hinder Generation Y students in the learning process; however, the study participants stated that although they enjoyed playing games, none of their professors offered games or simulations to assist in the lesson plans. Despite their belief that games would be distracting, they said if some of the professors had offered games or simulations they would have been open to it.

**Summary of Findings**

Overall, the participants indicated that it is important for a teacher to be in tune with their students as well as in tune with the subject matter. The findings showed that students became disinterested by teachers who were “just about getting things done.” The participants indicated that engaging and motivating teachers were those who focused
on higher order thinking, who are invested in the subject matter, who do not stray from the textbook or curriculum, and who know the students personally.
Chapter 5: Discussion

Introduction

The study examines the preferred learning styles of Generation Y students, as well as the various teaching methods employed by instructors that either support or run contrary to those preferences. A second focus of this study is whether Generation Y characteristics apply to all American students born between 1978 and 1995.

Researchers such as Prensky (2001) emphasize that additional teaching methods are needed in order to effectively educate Generation Y students. The participants in the study presented in this dissertation stress the importance of a teacher’s ability to connect with students over the importance of specific teaching styles. A prominent theme that emerged is that teachers who know their students personally are more interesting and motivating.

The focus groups’ preferences for teaching methods are a combination of styles suited to the subject matter. According to the participants, the technology faculty use, such as PowerPoint, is helpful because it provides a record for later use and adds to the lesson. However, the findings indicate that students stated that PowerPoint presentations became monotonous with some professors. The students stated that, ideally, if PowerPoint was used for a lesson, it should be accompanied with videos as well as lecture. This finding reconfirms Azriel’s (et al, 2005) theory that when educators use instructional devices that support various learning styles, a greater number of students may be reached and effectively taught. For example, combining a lecture with a
PowerPoint presentation reaches students who learn by auditory means as well as those who learn through visual means. Similarly, when other activities are combined with these two methods, the potential for more students to learn appears to increase.

Black (2010) further emphasized that since Generation Y students have been exposed to an abundance of technology since birth, these students tend to have more active learning styles and learn through experiencing and doing things. For this reason, these learners may become bored more quickly than other students while listening to a class lecture. The findings in this study are consistent with Black’s (2010) and Prensky’s (2007) theory, in that the participants mentioned experiencing boredom during lecture-only classes. The research participants also made a point of advising that they would like to see more “hands-on” teaching. Specifically, the participants said they would like faculty or the university to arrange for the students to visit or work at locations where they could gain experience and perhaps be part of a workshop in their major.

For example, a research student majoring in finance indicated he would like to work, visit, or intern on Wall Street or spend the day at the stock exchange. A participant majoring in education said he would like to visit a school where children are being taught in order to observe, interact with, or tutor a child. A few participants mentioned that having their university arrange these workshops with the establishments would be easier than the student trying to negotiate access.

Implications for Teaching

The research literature suggests that if different generations of students differ in their learning styles and preferences, then there are no “universal” answers to how college students should be taught. However, based on the research described in this
study, teaching Generation Y is as simple as having genuine conversations with them. This, of course, is an oversimplification, but analysis of the three focus group discussions indicate that communication is a crucial key for these students. A main factor is the students’ need to have heart-to-heart conversations with their professors. The data indicate that once the professors make the communication connection, it is easier for the student to respond and remain engaged. Although state-of-the-art technology does help, what is crucial to the student’s learning is the verbal transaction between the professor and student.

Data analysis also indicate that students fault the university for holding on to faculty who have lost the passion and creativity needed to teach, or have become indifferent to developing new approaches to teaching. The students said that this was the most serious aspect of teaching. The review of literature Chapter 2 also noted how contemporary students are no longer the people our educational system was designed to teach. Additional research is needed to explore ways of supporting faculty development in new technologies and teaching methods.

Based on the results of this study, an implication is that for a majority of college instructors there is no apparent need to abandon their current instructional methods and procedures in order to change to completely new methods. The Generation Y students in this study, for example, accepted the idea that lectures and PowerPoint presentations are a part of their college experience. However, poorly executed teaching methods, regardless of whether they are established, innovative, or cutting edge, are not well accepted or tolerated. In addition to making sure the quality of instruction is high, regardless of the teaching methods being used, personal engagement on the part of the instructor – with
their subject matter, with the course, and with individual students – is valued and appreciated by students. The students want to know who the professor is who is teaching them, and they are interested in their professors’ life experiences as related to the course content. Generation Y students want to know that their professors are human and humane, and not just a voice for a syllabus. Generation Y students want self-disclosure from their professors. The findings indicate that when this occurs, Generation Y students will reciprocate, and remain engaged with the lessons at hand.

Limitations

A second focus of this study is whether Generation Y characteristics apply to all American students born between 1978 and 1995. Given the small population sampled and the limited number of institutions of higher education included in the study, the research conducted was unable to address the question. As such, the findings of this study cannot be generalized to all Generation Y students across America. However, one way of using the data from this study to address the question of how widespread Generation Y student characteristics are is to take a list of characteristics like the one presented in Chapter 2 and look at whether each one is a general characteristic of the students in this study. Table 5.1 shows a comparison of the characteristics of Generation Y as identified by the literature and the characteristics of the study participants as revealed by analysis of the focus group discussions. The comparison of the generalizations about Generation Y and the study participants show that the participants do match some of what the characteristics identified by the research, but in key areas such as technology literacy, they do not. As such, care must be taken when making decisions into how to create supportive learning environments for students.
Table 5.1

*Generation Y Characteristics Compared to Participants*

<table>
<thead>
<tr>
<th>Generation Y Characteristics</th>
<th>Participant Characteristics and Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not question norms</td>
<td>Accepted realities of PowerPoint and lectures</td>
</tr>
<tr>
<td>Abide by rules</td>
<td>No data</td>
</tr>
<tr>
<td>Technologically literate</td>
<td>Limited experience with technology</td>
</tr>
<tr>
<td>Interested in assisting</td>
<td>No data</td>
</tr>
<tr>
<td>others</td>
<td></td>
</tr>
<tr>
<td>Kinesthetic learners</td>
<td>Requested hands-on learning experiences</td>
</tr>
<tr>
<td>Require more than</td>
<td>Suggested use of movies and hands-on learning experiences.</td>
</tr>
<tr>
<td>auditory teaching methods</td>
<td></td>
</tr>
<tr>
<td>Learn well through</td>
<td>Requested hands-on learning experiences.</td>
</tr>
<tr>
<td>simulations and games</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendations for Future Research**

Overall, the purpose of the study was to examine the preferred learning styles of Generation Y students, as well as the various teaching methods employed by instructors that either support or run contrary to those preferences. This study was limited in a number of ways, as is noted in another section of the chapter. However, it does illustrate how Generation Y students can be both a topic of research and a target group for findings. For instance, a study that samples Generation Y students who have had the opportunity to use cutting edge of technology might reveal different and much more specific themes in respect to technology use. Other studies might look at the impact of the
campus climate (party school, serious academic, practical/career focused, religious emphasis) on Generation Y perspectives.

**Conclusion**

When students are actively engaged in a subject, the common belief among Generation Y researchers is that those students will learn. While this may be inherently true, the data from this study does not fully support and validate this assumption. As the students in this study perceived it, engagement appears to be more closely tied to the personal connections a student makes with the professor than with particular teaching and learning styles. Furthermore, in the view of students, technology also plays a secondary role to engagement. These findings do not mean that teaching methods and technology are unimportant in terms of encouraging engagement. However, in this study students emphasized the importance of a professor’s personal commitment to the course, the student, and the discipline as a critical factor in encouraging student engagement. Considered broadly, the results indicate that student engagement is influenced by the personal commitment of the instructor as well as the use of innovative teaching methods and cutting edge technology. A primary finding of this research is that when professors have academic one-on-one conversations within students that include self-disclosures it helps students in not only acquiring basic knowledge of a particular subject matter but also in their preparation for the world outside of the classroom.


Appendix A

Focus Group Questions

1. How do you rate the effectiveness and teaching styles of your instructors?
2. What do you want out of your college experience?
3. What do you identify as positive and negative aspects of your college?
4. What are your thoughts on your instructor’s teaching methods?
5. What changes would you like to see in the curriculum?
6. How do you expect to use the available technology?
7. Can you give illustrations of the experiences that some exemplary professors have given you?
8. What are your thoughts on the virtual reality higher education classrooms on the website Second Life?
9. Would you consider attending a virtual classroom in a university or academic institution? For example, currently MIT uses SecondLife for online collaboration, and Notre Dame uses it as a cost-effective solution to distance learning.
Appendix B

Consent Form

FOCUS GROUP
Implications of Generation Y's Learning Preferences for Higher Education
Study Conducted by: Elizabeth Pfitz

You are being invited to take part in a research conducted by Elizabeth Pfitz, doctoral student, at St. John Fisher College. St. John Fisher College's IRB department has reviewed the research. Please read the following information and, if you consent to participating, sign below. The purpose of this study is to examine the learning styles of the students, as well as the various teaching methods employed by instructors, and develop strategies that could assist instructors in effectively teaching their students. The desired results would be actively engaging students in the classroom and effective teaching by the instructors. The researcher will ask questions to the students in a focus group setting. The study will search for a better understanding of generational learning styles, motivation, and school-life balance. The goal of the research is to describe a "lived experience" examining the human experience of learning in contemporary college classrooms.

The study will be represented as part of the dissertation paper for Elizabeth Pfitz's doctoral project for St. John Fisher College. Participating students will be asked to be in a three-student focus group. Each student will be assigned a number in order to provide anonymity of response, and therefore do not put your name on the form.

I have read and understand the above information. I am aware that questions do not touch on sensitive subjects. I understand that at any time if I feel uncomfortable, I have the right to end my participation with no negative consequences and my responses will remain anonymous. If there are any questions please feel free to contact Elizabeth Pfitz at evel39@buffalo.edu or the St. John Fisher College Office of Academic Affairs at (585) 385-4034.

Subject Signature: ___________________________ Date: __________
Principle Investigator: ________________________ Date: __________

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