# Character Analysis of 21st Century College Students and Classroom Clickers

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Running head: CHARACTER ANALYSIS OF COLLEGE STUDENTS & CLICKERS 2

**Abstract** 

21st century college students have unique characteristics in their learning styles and their abilities.

Current undergraduate and graduate students are utilizing technology in ways that will change the

instructional methods instructors must use to foster engaging classroom instruction. Clickers, also known

as student response systems, are currently being used at several colleges to assist in technology

integration, give immediate feedback and change the learning environment to better accommodate the

uniqueness of these 21st century college students.

Keywords: College, Students, Undergraduate, Profile, Characteristics, 21st Century

## Character Analysis of 21st Century College Students

In education it is important to examine the characteristics of students before an instructor can begin to build a successful curriculum plan. Each generation of students changes the needs that instructors must be able to meet in post secondary education. The characteristics of the current body of undergrad college students have an underlying theme of technological innovation. Students are increasingly demanding teaching styles that create a technology rich learning environment. This environment is most successful if it acknowledges the following characteristics: students want immediate feedback from their instructors, students want easy access to their instructors, students expect instructors to have a strong knowledge of technology as it pertains to their field, students have access to more technology than ever before and students learn better through technologically-based collaborative projects.

### **Immediate Feedback**

More than ever, college student have placed importance on the need for immediate feedback from their instructors. NASPA – Student Affairs Administration in Higher Education (2008) has reported that the majority of students currently in college are from the birth years of 1987 to 1992. Students born in the 1980's and 1990's are considered as part of the Net Generation (also known as N-Geners, Generation Y, Generation NEXT, Myspace Generation and many more technologically charged descriptions). These are students that have been inundated with technology since they first started school or were first born. Their classrooms have always had computers and access to other forms of educational technology. Most of these students have also had access to technology at home starting at a very early age.

According to Conrad Abbott (2008), instant gratification is one of the main traits of the Net Generation. Abbott contends that many current learners are hooked on instant gratification

to where it is hard for individuals of this Net Generation to envision a long-term goal. This is due to the fact that there are many distractions available to these students that will give them instant gratification. This need for gratification is the same as the needs of current college students for immediate feedback from their professors. The Net Generation is not used to waiting or being patient. When these students learn something new and then try to solve a problem or complete work with their new learned skills, they desire immediate feedback to evaluate if they have done the work properly or not.

## **Easy Access to Instructors**

Data taken from several student surveys based on Students' Perceptions of Characteristics of Effective College Teachers (Onwuegbuzie, Witcher, Collins, Filer, Wiedmaier, & Moore, 2007) contends that students strongly desire teachers that are approachable and available. This information easily correlates to the characteristics of Net Generation students. These students utilize technological forms of communication that are based on efficiency, accessibility, and ease.

According to a NASPA (2008) survey conducted on college campuses across the nation, 76% of students surveyed regularly contacted their academic instructors outside of class. Of those same college student 57% of them preferred to use e-mail as the way they communicate with their college faculty outside of class. "Instructors that provide multiple opportunities for student and professor interactions within and outside of class" consistently ranked the highest among their peers in teacher evaluations (Onwuegbuzie, Witcher, Collins, Filer, Wiedmaier, & Moore, 2007).

As many colleges increase the number the of courses, degrees and programs that are offered online through distance education, the ability to correct identify the easiest way to

contact instructors becomes more important. N-Geners are more likely to request help from a professor through an e-mail than they are likely to call or visit the professor in person. This trend will not decrease. If anything in the future, it will increase and illustrate just how important it is for students to have easy access to their instructors.

## **Technical Knowledge**

Mark Taylor (2005) describes the technical knowledge of the Net Generation (Generation NEXT) as techno-literate. He explains that "as a generation wired since birth, NeXters tend to be very comfortable with technology, but impatient with a lack of technological sophistication in others. Instructors, service areas, and campuses that do not keep up can expect to have problems meeting student expectations for techno-currency and access." This techno-literacy is an important college student characteristic for teachers, administrators and academic advisors to understand.

Net Generation students are adept with several forms of technology. Due their own technological expertise, these college students expect their professors to also have a level of technical knowledge that is proficient with the technology required of their field or subject. For example, if an English professor teaches MLA style writing guidelines for papers, the professor should know and be able to demonstrate to his students how to use a computer and popular software programs to write a paper correctly. If the field or subject being taught is one based on technology such as computer science, then the students' expectations of the professor's technical skills will be even greater. Taylor (2005) further explains that "hard-wired youth have little patience for educational methods they see as outdated, like unidirectional lectures to rows of passive listeners. It might be easy for these students to assume that an instructor who is not aware

of modern technological trends might be equally unaware of current issues in his or her own field."

## Access to Technology

As members of the Net Generation, the majority of current college students are accustomed to having access to several forms of technology. When surveyed by NASPA (2008), college students reported that 83% of them owned laptops while 41% owned desktop personal computers. Students also reported that they used several different forms of technology to completed daily tasks such as emailing, blogging, texting and social networking. Out of the college students surveyed, 85% of them accessed the Internet most often from their personal computers with internet access on college campus computers coming in second with 6%. This data confirms what is already known about Net Generation students: they are technology addicts that expect fast, efficient and easy access to all forms of technology.

### **Technologically-Based Collaborative Projects**

Current college students are characterized by having access to numerous types of social media and network, thus making this generation a group that finds pleasure and necessity in being very social (Brint, Douglass, & Chatman, 2010). As educational techniques and teaching styles evolve, instructors must create a learning environment that is socially collaborative and student centered (NASPA, 2008). One of the easiest ways for a professor to achieve this goal is by creating collaborative group projects that are technologically-based.

Because current college students are more social through technology, it only makes sense for instructors to seize this attribute and use it as a teaching method. Students already belong to a wide range of social websites and some of these sites can be used for educational purposes.

For example, a math professor could divide his class into groups and have each group create and

update a blog that focuses on how math affects their daily lives. Other groups would be required to comment and interact with other blogs creating a classroom project that is student-centered and collaborative. These technologically-based collaborative projects would satisfy the students' needs of being social while also utilizing their technical skills.

## **College Students and Clickers Summarized**

Currently, several universities are using clickers, also known as student response devices, as a technical and educational engagement technique. Clickers enable professors to respond to some of the characteristics and needs of their students. Before examining how clickers can assist college professors in classroom engagement, an instructor must first complete an audience analysis of his or her students. Clickers can meet the following current college student characteristics: students want immediate feedback from their instructors, students want easy access to their instructors, students expect instructors to have a strong knowledge of technology as it pertains to their field, students have access to more technology than ever before and students learn better through technologically-based collaborative projects.

Clickers give students the opportunity for immediate feedback by automatically reporting to them if their answers are correct or not. Professors can then also use this information from the clickers to see which students need more help. This gives students easier access to their professors by giving their teacher personalized information regarding the progress of students. Students can also use their clickers to notify their teachers of their attendance and if they require assistance. Professors that use clicker technology in their classrooms will display their technological knowledge to their students by using a newer form of educational technology. The use of clickers will also meet the needs of the students to have access to new forms of technology. Lastly, professors can easily use the clicker during group work or projects.

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