

# Teaching Speech Communication in a Black College: Does Technology Make a Difference?

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Teaching a speech communication course in typical HBCUs (historically black colleges and universities) comes with many issues, because the application of technology in some minority institutions differs. The levels of acceptability as well as affordability are also core issues that affect application. Using technology in the classroom means many things to many people, even though technologically enhanced classrooms continue to expand in campuses of HBCUs across America. It has been observed that the use of technology has often helped educators accomplish what they could not ordinarily accomplish in situations where such enhanced teaching tools are absent. As a result, utilizing hybrid courses has grown in popularity in most institutions of higher learning in the US. This paper, therefore, explores the teaching method that provides students a better and more flexible way of comparing their performances using technologically enhanced teaching tools. In essence, this paper argues that technology enhances teaching effectiveness and learning. It further posits that technology creates effective forums as well as aids the assessment of learning outcomes through guidelines, responses and rubrics. Hybrid and traditionally inclined students' performances were compared using *t*-test scores to statistically determine the conclusions reached.

*Keywords:* hybrid courses, traditional courses, speech communication, technology, learning, performance, higher education, HBCUs (historically black colleges and universities)

## Introduction

In the past, teaching in higher educational institutions focused on lectures, group work and homework assignments. In more recent time, simulations, case studies, seminars, role plays and excursions were added as practical measures to enhance the teaching and the learning environment. The advent of technology has permeated into virtually all institutions of higher learning that any learning approach that does not take into cognizance this development may soon lose relevance. Instructors worked only to upgrade and integrate new technologies into their teaching styles, but also instruct students on how to utilize computer mediated courses. Competent communication instructors recognized the value and importance of addressing diverse learning styles in their classes. These instructors strived to meet the challenge of engaging their students through the learning process as well as attending to their learning styles and conditioning.

Today, with the growth of technology such as the Internet, distance learning has become a hot cake at all levels of education (Ahem & Repman, 1994). Nwadike (2010) as cited in Sherry (1996), Dunn (2000) and

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Harvey (2002), also noted that the application of technology is expanding at an extremely rapid rate. In a more recent report, the NCES (National Center for Educational Statistics) as cited in Nwadike (2007), confirmed that 8% of undergraduates and 12% of masters' students enrolled in distant education classes at higher education institutions in 1999-2000. Various studies have investigated the difference in students' performance for those who utilized online learning opportunities against traditional in-class learning opportunities including both online and hybrid approaches. Schwartzman and Tuttle (2002) estimated that by 2005, about 90% of colleges and universities would have online courses of some variety, whether or not they were online or hybrid methods.

To put these figures in proper perspective, Nwadike (2010, p. 2) observed that the minority, especially, the black population in the US have started assuming interesting dimensions as presented below:

In 2000, minorities comprised approximately 30% of the population of the US (US Census Bureau, 2000, as cited in Nwadike, 2007). By 2050, it is projected that the minority population will represent approximately 50% of the total US population, meaning ethnically and racially, diverse people may no longer be a numerical minority (US Census Bureau, 2000). Whereas from 1988 to 1998, minority students' enrollment in colleges increased by 62.2% (ACE (American Council on Education), 2001, as cited in Nwadike, 2007), in the last three years, graduation and retention of HBCUs have declined drastically based on reports. It is imperative also to note that enrollment statistics show a high drop-out rate among minority college students, especially among first-year students. (Sleeter, 2000)

The purpose of this study therefore, was to explore a teaching method that provided the students a better and more flexible learning style through comparative analysis of existing styles. A Speech Communication course taught by the authors was used as a case study to determine if technology has enhanced students' performance or not. Learning activities were offered in the Speech Communication class utilizing both traditional and online/technology tools. The primary technology tool used for the online administration of the course was blackboard/tegrity. Based on Martyn's (2003) study, a hybrid course was found to lead to better overall student performance in the courses analyzed. This particular study is an attempt to either support this conclusion or question its generalizability.

Nwadike (2007) as cited in NCES (National Center for Education Statistics) (2003), observed that the latest figures from the US Department of Education indicate that approximately three million students enrolled in distance learning courses throughout the academic year of 2001-2002 in two- and four- year colleges. This accounts for an increase of about four times the number of students that were enrolled in distance education courses during the academic years of 1994-1995.

The literature analyses of this subject matter show that the concept of hybrid course was relatively new (Young, 2002) and so only a handful of research existed in the area. The literature review therefore captured a few articles that discussed this concept in its relative newness and details.

The assessment in this study was described as an ongoing measurement of excellent feedback on learned concepts, such as examination, presentations, analysis and group interactions. An integrated approach to teaching, learning and assessment is always likely to be more successful than a random approach. Nevertheless, teaching and assessment methods need to cohere if learners are to learn successfully, and if valid and reliable results are to be achieved from assessment procedures. Both formative and summative assessment will be used to measure students' progress in specific areas. Formative assessments gives immediate feedback, such as tests and oral presentation, while summative deals with end of the course examinations and final projects, such as "Speakers in Salute" programs.

## Literature Review

As earlier pointed out, the literature on the subject matter is rather sparse because of the few published works in the area. However, Nwadike (2007) as cited in D'Souza (1998), Nueshauser (2002) and Martin and Rainey (1993), noted that students who enrolled in distance learning courses had similar learning experiences to those who enrolled in traditional face-to-face courses in terms of learning outcomes. D'Souza (1998) reported specifically compared three different graduate level programs and found little difference in students' outcome. Other findings, however, showed that students adhered to higher taught course grades in distance learning courses than students enrolled in traditional courses (Barlett, 1997; Bothun, 1998; Heines & Hube, 1996, as cited in Aycock, Garnham, & Keleta, 2002).

Alfred and Hope (2004) noted in their study that,

A second focus of change is the shift from providing exclusively traditional classroom instruction to reaching out to students by delivering courses at a distance using technology. Distance education is already a pervasive element of higher education and it continues to expand rapidly. Research, however, suggests that online courses are not suitable for all types of students and faculty.

As cited in Collins (1999), Alfred and Hope (2004) further stated that students and teachers react to new educational technologies with varied emotions, ranging from enthusiasm to disabling fear, which supports Abrahamson's (1998) position that distance education is required students to who were self-regulated and independent. In the same vein, Marino (2000) as cited in Alfred and Hope (2004) also discovered that some students experienced difficulty adjusting to the structure of online courses, managing their time in such environments and maintaining self-motivation.

To further defend their position, Alfred and Hope (2004) stated that:

The text-based CMC (computer-mediated communication) that is used by Internet-based e-learning systems for discussion board and email discourse is a powerful tool for group communication and cooperative learning that promotes a level of reflective interaction that is often lacking in a face-to-face, teacher-centered classroom. However, the reduced non-verbal social cues in CMC, such as the absence of facial expressions and voice inflections, can generate misunderstandings that adversely affect learning.

Based on the University of Central Florida's RITE (Research Initiative for Teaching Effectiveness), evaluation of hybrid courses indicated that students in hybrid courses had higher success and lower withdrawal rates than both traditional face-to-face courses taught completely online. However, this data is limited, because it only provides a descriptive analysis of the findings (Sengupta, 2001).

In a related study, Alfred and Hope (2004) concluded that:

The blended concept of learning is highly consistent with the three areas of change identified in the introduction—thinking less about delivering instruction and more about producing learning, reaching out to students through distance education technologies, and promoting a strong sense of community among learners. Indeed, the concept of blended learning may be a synthesis of these areas as the learning environment becomes more learning-centered, with emphasis on active learning through collaboration and social construction of understanding. Such a concept is moving toward O'Banion's (1997) vision of a learning college as a place where learning comes first and educational experiences are provided for learners anyway, anyplace and anytime. Graham B. Spanier, president of The Pennsylvania State University, referred to this convergence of online and traditional instruction as the single-greatest unrecognized trend in higher education today. (Young, 2002)

### **Hybrid Course Designs**

Before the blackboard/tegrity program (hybrid) courses were created, some colleges and universities were primarily using contemporary distance courses as fully online courses that required face-to-face interaction between faculty and students. These classes allowed students access to course materials and the instructors through electronic means. Hybrid courses on the other hand, are designed as online courses without the total loss of face-to-face interaction between students and faculty (Young, 2002).

### **Traditional Teaching**

This method utilized face-to-face using verbal and non-verbal skills to teach students the fundamentals, principles, concepts and methods essential for the acquisition of effective communication skills. The traditional face-to-face classroom instruction provided opportunities for the teacher to reach all four learning styles, such as assimilation, converging, interviewing and proficiency in public speaking.

### **Research Questions**

This project focused on the following research questions:

- (1) Do the performances of students who enrolled in a traditionally taught course differ from those that enrolled in a computer hybrid class?
- (2) Where does learning leave the traditional instructor and traditional students as they enter into the technology superhighway?
- (3) Is there any significant difference in this study?

### **Research Methodology**

This project focused on the following research questions as above. The hypothesis explored was that there was no difference between students' performances of those who enrolled in a traditional taught speech communication course as against those enrolled in a course taught as computer hybrid course. The effectiveness of this assessment approach would be non-experimental quantitative method using both descriptive and comparative design. The null hypothesis result was that there was no difference between the hybrid and traditional teaching method. Its immediate implication was that any difference found between the means of the two samples should not significantly differ from zero.

The primary methods of delivery in the traditional course involved lectures-using conventional materials, such as blackboards, overheads, transparencies, video and handouts. Computers were not used to deliver any of the materials in the traditional course. The hybrid course would be specifically designed for lectures, assignments and discussions including both face-to-face interaction and use of computers in and out of the classroom. The hybrid class meetings would be conducted in a laboratory setting, so that each student could access to a computer station during lectures. The use of computers would give students the opportunity to access course materials, such as lectures, syllabus websites, study guides and student, and instructor communications. Both classes would be offered in the fall of 2008 respectively, two days a week. The traditional course would be offered from 2:00 to 3:20 p.m. every Monday and Wednesday, while hybrid would be taught from 12:30 to 1:50 p.m. on the same days.

### **Definition of Terms**

The variables discussed in the questionnaire include efficiency, critical thinking, problem-solving, participation, motivation, interesting, performance, live long learning, and retention. Efficiency is defined in this content as calculating amount of work efforts and producing an effective result or being effectual. Critical thinking means reasoning and thinking critically. Problem-solving means capable of resolving academic issues before and after lectures. Participation means interaction and sharing with other students in class. Motivation refers to the degree of readiness to pursue some designated goals. Interesting means exciting and engaging studies. Performance achievement as a result of what is being taught. Live long learning, being able to utilize the knowledge acquired from the lecture daily and retention is remembering and practicing based on the knowledge in other words committing to memory.

### **Summary of the Results**

#### **Research Question 1: Does the Performance of Students Enrolled in Traditional Taught Courses Differ From That of Students in Computer Hybrid Classes?**

Based on the answers at the end of the semester grades, the two classes performed well and ranked the same. Overall, about 87% of both classes passed. However, students in the hybrid class stated how they felt about the classroom technology. The majority of the students did not care about tegrity/blackboard usage, because there was too much technology involved with it. Some said that class time was always delayed due to computer failures or computers not being able to record class lectures or the screen not functioning as it should be. Some also noted that they preferred a traditional classroom setting better while others indicated that tegrity pens and writing notes were expensive. In addition, technical support system was absent. A few students' commuters confirmed that they could not afford DSL (digital subscriber line) and PC (personal computers) to enable them to work at home or do assignments. Unfortunately, it was also reported that blackboard accounts could not be retrieved from home and students could not afford to be on campus after their normal schedule due to their jobs.

Albeit, a few more students commented that computer tegrity/blackboard is enjoyable especially the power point presentations, speech preparation and final projects, but they also noted that they still needed some more technical training and assistance to maximally use such tools for greater efficiency in their academic pursuits. The students also argued that there should be some forms of intervention funds to enable them access these technological tools at very relative cheap prices. It is their opinion that maximum application of technology to learning should be a function of availability.

#### **Research Question 2: Where Does Learning Leave the Instructor and Traditional Student as They Enter Into the Technological Superhighway?**

The speech communication, as a general education course, should enable students to gain knowledge and retain information. Students were able to pass their tests, present their speeches and analyze some speeches based on Aristotelian proof of rhetoric. According to Lewis (1990), assessments on how to apply those skills in their daily lives, people retain about 10% of what they hear, 30% of what they read, and 50% of what they saw and 90% of what they did. The traditional class enjoyed the use of some visual aids while some hybrid students enjoyed power point presentations, even though, students were constantly copying from the screen, their attentions were distracted.

Managing the development of a large enrollment hybrid course requires a different set of instructional and project management skills than those required in a traditional course. For the most part, all development activities must be completed well in advance of the beginning of the semester. And the process of learning the technology required to create online or course modules is always slower than one expects. It has been confirmed that planning and developing a large enrollment hybrid speech course takes two to three times the amount of time that a traditional face-to-face course would take.

Overall, the instructor did not have problems teaching both the traditional and the hybrid classes, however, some hybrid students were not relaxed due to unforeseen circumstances of computer failure. Evidently, both the instructor and students were new to this program and needed to receive on-going training. Generally, the instructor and students worked cooperatively, the men became impatient, when there was a technical breakdown. The teacher's observation was that women paid more attention to the new technology than men.

However, the core issues that may affect the trainer and the learner is the constant updating of knowledge in the use of technology to avoid self-exclusion or what we may call self-alienation resulting from lack of usage knowledge and the "shame" of admitting to such. This may lead to having students "pretend" they are doing well with the technology when in fact they are facing personal problems trying to grapple with the technology. Second issue is to make both the teachers and the students become more technical inclined to handle some minor challenges or repairs without having to resort to core technical persons each time a minor challenge arises. Third, there are a lot of disadvantages associated with the application of these technological tools to learning. These, should not be swept under the carpet. They should be addressed to reassure the students of the integrity and reliability of the process.

### **Research Question 3: Is There Any Significant Difference in the Study Between Students in Traditional and Hybrid?**

The hypothesis reported no difference between students' performance for those that enrolled in traditional and hybrid classes. The null hypothesis was that there was no difference between the two in speech communications. However, there are some limitations in this study.

#### **Limitations**

Reports confirm that assessing speech communication is a very complex task yet computers are still not fully adequate in either automatic speech communication recognition or natural language processing. Research in this area is developing rapidly. Technology can be a set back to speech discussions and adult learners may not be adept at using computers. Based on the result of this study, it showed that some students in Coppin State have not been exposed to this type of study, as a result, they seemed not to take this questionnaire seriously.

#### **Validity of This Study**

Validity has been found in other similar studies. For example, in 1997, Gerald Schutte at California State University, Northridge, completed one of the exemplary studies of traditional online instruction to date. The review of this said study indicated that students who attended the online class outscored the traditional classroom students by an average of 20% on both exams (Schulman & Sims, 1999). By 1999, Schulman and Sims extended Schutte's study by looking at prepared post-test scores of students enrolled in online and traditional class sessions of the same course taught by the same instructor. The results of their study showed that online students scored significantly higher in the pre-test than the in-class students. However, there were no

significant differences for the post-test scores. The result of this study indicated that the online learning was equivalent in the class courses.

### **Conclusions and Recommendations**

Learning is not product of technology rather learning is a product of interconnections of students' constructs of the learning process. Evidently, the instructor is a person who provides the best possible situation conducive to learning, be face-to-face or online. As Confucius once said, "Tell me and I will forget; show me and I may remember; involve me and I understand". Discussion groups with appropriate assessment practices will be provided for all learning styles. Well documented and coordinated classroom discussion allow students to share perspectives and experiences, establish relationships, seek assistance from each other, and support and encourage learning.

Rubrics have increasingly become important in assessing students' work in many disciplines including speech communication. Rubrics are built around goals and objectives of the course. Ideally, the instructor wants students to use all areas of the learning circle in constructing knowledge. Not only is assessment important in student learning, it is also important to instructor learning on how to evaluate students accordingly.

The environment of the students did not seem to alter their perspectives of the hybrid and the traditional classroom. The accessibility of computers did not greatly affect the influence of technology in the life of the students. Information sharing software packages, interactive videos, listserv, and desktop and tegrity pen does not guarantee excellent in students' learning, but it gives the individual options on how and when they want to learn. Whereas traditional setting restricts the type of learning and environment a student experiences; research has shown that the preference between hybrid and traditional classroom fall upon the choice of the individual. Therefore, technology should be seen as an end in itself; rather, it should be seen as a means to an end.

There is no doubt that technology enhances the learning environment as well as the teaching outcomes. There is also no doubt that the human psychology is built in such a way to want to resist change no matter the benefits to humanity such changes may result into. Bearing these in mind, it is suggested that institutions that wish to migrate to these innovative teaching platforms should find a practical way to cushion the effects or potential effects to the persons involved. The migration must not be revolutionary. We suggest a gradual but steady flow into the new hybrid forms of learning.

The institutions through the information technical program or through any other practical means should provide constructive technical training to both teacher and students, which will make them technically knowledgeable and thereby become handy in offering emergency technical support system.

The institutions must take the bull by the horn and install complete permanent PC station in the classrooms and provide students with the requisite pens if they must be encouraged to fully participate in tegrity/blackboard programs. Efforts could also be made to offer students soft loans to enable them purchase the required materials especially 3G or 4G friendly laptops.

Lecturers/teachers should also be encouraged to network and collaborate with other scholars in and around their country so as to see similar application of the same or related technology in related situations.

In conclusion, we recommend that another related study should be carried out to include interviewing students/faculty teaching with tegrity/blackboard and even online courses, for the purpose of reliability. We also recommend that the sample size in the new studies should be increased by extending the research to other disciplines at other related universities.

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