

Theory-to-Practice

Nontraditional Students of Color Integrating Teaching and Technology

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Abstract

Despite an increased number of nontraditional adult learners in higher education institutions, most teaching practices are built upon the needs of traditional student populations. In view of the changing educational landscape, educational researchers have questioned the teaching processes designed for nontraditional adult college students (Kasworm, 2008). The purpose of this article is to discuss the benefits of utilizing technology in the classroom, the need for implementing innovative teaching strategies, and the importance of incorporating a multicultural education curriculum to meet the various academic needs of nontraditional students of color.

Introduction

In recent years, institutions of higher learning have seen an increase in the number of adult learners seeking degrees and certificates to boost career opportunities. This group of students, who are swiftly reshaping the image of a college student, are collectively known as nontraditional students. Choy (2002) describes nontraditional students as individuals who are classified by one of the following attributes: single parenthood, part-time enrollment, financial independence, full-time employment, responsibility for multiple dependents, delayed college enrollment, or

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GED or high school certificate completion. These attributes have been studied with data from national databases and have revealed a significant enrollment increase in nontraditional students.

Recent statistics highlight the need for higher education professionals to obtain a better understanding of the impact this trend may have on the collegiate environment. This is imperative in order for higher education institutions to implement programs and services that address the unique needs of this population of students. Schatzel, Callahan, Scott, and Davis (2011) indicated that this important population is made up of eight million people. According to the U.S Department of Education National Center for Education Statistics (as cited in Snyder & Dillow, 2011), between 2000 and 2009, the enrollment of nontraditional students (43%) outpaced the enrollment of traditional students (27%). Furthermore, they stated that the nontraditional student population is projected to grow an additional 23% by 2019.

Aside from being the fastest growing segment in colleges and universities, however, it is also important to note the diversity of this group (Wyatt, 2011). According to Paulson and Boeke (2006), a large percentage of the nontraditional student population consists of people of color, more specifically stating that approximately four in 10 nontraditional students are Black, Hispanic, or Asian. For colleges and universities, these factors present additional challenges in addressing the needs of students who are classified as both nontraditional and members of a minority population. Some of the most important issues that need to be addressed are those associated with the need to create an educational environment that embraces minority students, promotes inclusion, and attends to this group's learning preferences.

In addition to the change in demographics, higher education institutions are being challenged by other transformations. Changes such as the use of technology in the classroom have contributed to the need for innovative strategies that address the needs of nontraditional students, and more specifically nontraditional students of color. We are living in a world that is rapidly changing due to technology, and the higher education arena is no exception, as an increasing number of postsecondary courses are implementing technological innovations. For decades, educators have been continuously faced with the challenge of improving their use of technology as a learning and teaching tool. In view of the changing educational landscape, educational researchers have questioned the teaching process for nontraditional adult college students (Kasworm, 2008).

Despite the increase in nontraditional adult learners in higher education institutions and the amount of research defining accommodations for adult learners, most current teaching practices are built upon the needs of traditional student populations. Additionally, online learning, now commonly utilized on most campuses, remains problematic for the nontraditional student population. Meister (2002) asserted that 70% of adult learners enrolled in online programs fail to complete their degrees. Furthermore, there is little or no literature addressing this specific need for nontraditional students of color. Given the numbers, diverse backgrounds, and predicted enrollment increases for this student population, it is imperative for institutions to identify strategies in order to accommodate their unique learning needs, increase retention, and promote overall student success.

In order to be effective educators, higher education professionals need to consider the diversity of all their students' needs, especially nontraditional students of color who are often first generation and from low socioeconomic backgrounds. Due to the variation of students' academic needs, it is imperative that higher education professionals understand some of the pressing issues that will affect the academic progression of adult learners of minority backgrounds. Therefore, the purpose of this study is to (a) provide a description of the nontraditional student population, (b) discuss the needs and learning preferences of nontraditional students with specific focus on minority students, (c) provide a discussion on the process of learning, and (d) identify different strategies and recommendations for higher education professionals. This includes a discussion of various teaching strategies, ways of utilizing technology in the classroom, and ideas for incorporating a multicultural education curriculum to meet the various academic needs of nontraditional students of color.

Nontraditional Students

While a diverse group of nontraditional students is showing up on college campuses, there are many facets to this population. Before addressing some of the challenges and learning preferences of nontraditional minority students, it is important to provide a brief description of the nontraditional student. Bland (2003) asserts that the nontraditional student group is comprised of displaced workers and retired individuals pursuing another career. Although many adult learners are resuming their educational pursuits after a hiatus, many are new to higher educa-

tion and are looking to either reinvent themselves or create opportunities for a better and stable future (Kasworm, 2008). Previous literature shows that adult learners may also be returning to college for multiple other reasons, including the desire to become better informed citizens, personal interest, increasing salaries and meeting criteria for job qualification (Bradburn & Hurst, 2001). The numerous variations in this diverse group present a challenge for educators attempting to meet the needs of nontraditional students, especially those challenges related to familiarity with new technology and flexibility of schedules. These may present as additional barriers for minority students who may already be confronted by significant challenges.

It is evident that nontraditional students bring unique characteristics to higher education. Having an understanding of the different reasons that may motivate individuals to enroll in higher education may be valuable in developing strategies that address their particular goals. Furthermore, higher education professionals must take into account whether nontraditional students are reenrolling or are new to the enrollment process. Furthermore, institutions have to be mindful of the transitional issues some nontraditional students will face such as applying for admissions and financial aid for the first time and completing the orientation and registration process with limited knowledge. In order to successfully accommodate nontraditional students, it is imperative that higher education professionals develop a complete understanding of the reasons their students are pursuing a higher education, their prior knowledge, and transitional issues. Additional pieces should include obtaining an understanding and acknowledging the role of the students' cultural experiences and learning style preferences.

According to Dickerson and Stiefer (2006), accommodating strategies for working with nontraditional students should consist of encouraging self-motivated learning, giving feedback on student development, creating activities in relation to student aspirations, validating student cultural differences, and recognizing student uniqueness and difference in learning style. Because adult learners are more focused on achieving their academic goals and prefer to be in charge of their academic career, instructors should develop flexible courses, integrate educational activities tied to career interests, and modify instruction to include cultural relevance and constructive analysis of academic development. In regard to nontraditional students' learning style, it is important for educators to frame learning strategies so that adult learners can see the purpose of the exercises (Kenner & Weinerman, 2011). Kenner and Weinerman (2011)

further indicate that these strategies should incorporate repetition and a variety of styles.

Although researchers have acknowledged that a large percentage of nontraditional students are of minority backgrounds, little or no literature has addressed the particular challenges faced by these students. Just as limited is the research outlining specific strategies that may be helpful in assisting student learning, development, and retention in relation to this particular group of students.

Nontraditional Minority Students

As Prensky (2001) stated, “our students have changed radically. Adult learners of color, have changed the direction of our educational practices, the students today are no longer the individuals our educational system was designed to teach” (p. 4). Wlodkowski (1999) added that adult learners of color, with their unique characteristics, are challenging the traditional classroom teaching structure. This has forced instructors to realize that traditional classroom teaching is no longer effective with this new student population.

Unfortunately, not all educators agree that adult learners of color are different from their traditional counterparts or that, even if they are different, their would be any benefit in modifying current teaching and learning practices to address these variations (Wlodkowski, 1999). Naomi S. Baron from the American University states that “the pressure to meet the demands of adult learners of color is mere hype and educators need not ‘mold’ their teaching styles to the way millennial students learn” (as cited in Carlson, 2005, p. 34). She further contends that it is unnecessary for traditional methods of teaching to change. Carlson (2005) also believes that instructors should not be forced to change their teaching approaches by shortening lectures, reducing the amount of readings assigned, or customizing teaching practices to meet the different needs of students.

In contrast with Carlson’s argument, Skiba and Barton (2006) state that:

Traditional teaching emphasized content-focused learning where the previous generations learned from text-based content that focused on the logical sequencing of knowledge and emphasized memorization and repetition. It was a ‘one size fit all’ approach that saw the teacher as the sole authority of knowledge. In contrast, the new gen-

eration requires a 'learner-centered model' where adult learners of color focus on understanding, construct knowledge using discovery methods, and active engagement. (p.11)

The aim for teaching practices for nontraditional minority students should be to tailor learning to be interactive and multifaceted. There is no doubt that the presence of nontraditional minority students in college classrooms has changed the structure of teaching and learning. Therefore, it is vital that higher education instructors understand the learner and how their construction of knowledge affects their learning and development (Fry, Ketteridge, & Marshall, 2009).

Understanding Learning

In recent decades, members of the higher education community have begun to evaluate directly what is taught, how it is taught, and what is learned (Stark & Lattuca, 1997). This process requires the examination of the concept of learning in the context of the classroom. Unfortunately, defining learning is a complex process (Fincher, 1985). Understanding the concept of learning requires the examination of knowledge acquisition through a plethora of ways (Fincher, 1985). Learning is about how we perceive and understand the world, and about how we conceptualize meaning (Marton & Booth, 1997). According to Fry, Ketteridge, and Marshalet (2009), learning is not comprised of a single thing; it may involve mastering abstract principles, understanding proofs, remembering factual information, acquiring methods, techniques and approaches, recognition, reasoning, debating ideas, or developing behavioral approaches to a specific situation. It is about change. Despite many years of research into learning, it is not easy to translate this conceptualization into practical implications for teaching (Fry et al., 2009). Specifically, Fincher (1985) defined learning within the realm of education as the following:

[Learning is] a process of acquiring and integrating through a systemized process of instruction or organized experience varying forms of knowledge, skills, and understanding that the learner may use or apply in latter situations and under conditions different from those of instruction (p. 420).

Further Fincher (1985) noted that learning is based on student capabilities as well as how faculty utilizes instructional practices in the learning process of students. For adult learners of color, learning becomes more meaningful when it relates to the learner's level of aspiration and more so, to the learner's personal experiences.

Strategies and Recommendations

Focusing on new conceptualizations of teaching and learning methods is an important area of study for college instructors. Thus, engaging in practical research may help instructors understand some of the pressing issues that affect the academic progression of this student population. Additionally, implementing different teaching strategies, incorporating a multicultural education curriculum, and integrating technology in the classroom are necessary areas of exploration in order to meet the various academic needs of nontraditional minority students.

Teaching Strategies

According to Fry et al. (2009), teaching is the process of conveying information, while learning is considered to be an active progression that requires the engagement of the student. Moreover, the learning process is an interactive exchange that requires an even balance between those who are teaching and those who are learning. For instance, the concept of teaching describes *what the teacher does* while the concept of learning describes *what the student as the learner does* (Fry et al., 2009). While different, these concepts describe the reciprocal interactions that occur in the classroom between the teacher, student, and environmental factors. In a comprehensive review of environmental correlates and determinants of human behavior, Moos (1986) concluded that the "arrangement of environments is perhaps the most powerful technique we have for influencing human behavior" (p. 4). Moos further stressed the notion between an ideal and an optimum environment. He concluded (1986):

There are no clearly defined criteria for an ideal environment that can meet everyone's requirements. But we are much more likely to achieve an optimum environment when critical decisions about constructing and changing the environment are in the hands of people who live and function in it. These decisions are currently in our hands, and to make them wisely we urgently need more reliable

information about human environments and their impact on human beings (p. 4).

The past 20 years have seen an evolution in higher education classroom environments and instructional practices (Fry, et al., 2009). These changes include the methods in which instruction is delivered, the types of students receiving the instruction, and the increase of technology in delivering instruction. For instance, instructors can aim to create an emotionally positive classroom climate. This type of setting enables nontraditional students of color to feel worthwhile and cared for, despite their cultural differences.

In order to integrate active teaching and learning practices, Angelo and Cross' (1993) College Assessment Techniques (CAT) may be used to assist college instructors in their facilitation of learning. A CAT activity that would provide instructors with greater insight into their student's levels of knowledge is the Background Knowledge Probe. According to Angelo and Cross (1993), the purpose of this activity is to help instructors determine "the most effective starting point for a given lesson and the most appropriate level at which to begin instruction" (p.121). In essence, this activity provides a focused approach on creating lessons that seek to connect the student's past constructed knowledge with the information being presented.

In order for educators to effectively meet the academic needs of nontraditional students of color, it is imperative that administrators and educators focus on new conceptualizations of teaching and learning. Graham (1998) suggested that colleges that build an integrated environment connecting learning, personal development, and out-of-class experiences can precipitate positive influences on adult students. Thus, to promote an optimal learning environment, it is critical that instructors utilize various technologies within the classroom. These include but are not limited to visual aids, multi-media devices, and social networking sites.

Customize Your Teaching Style

Educational researchers noted that millennial students learn more effectively with nonlinear and non-sequential modes of perceiving, thinking, and investigating (Faust, Laherty, Ginno, & Manuel, 2001). According to previous research, adult learners of color learn more effectively from educators who can customize teaching styles with the

learning preferences of learners, especially if they can tailor current technology to their teaching styles (Roberts, 2005). Good practice in undergraduate education also respects diverse talents and ways of learning (Chickering & Gamson, 1987). Because adult learners are a racially and ethnically diverse population, college instructors must implement differential approaches in their teaching practices. When possible, it is vital to give students a choice in how they present their modes of learning. Nontraditional college students of color may benefit from being able to choose how to express their knowledge of the material. Being able to choose how the assignment is done may also generate more enthusiasm and self-ownership toward that learning process. In addition to confronting challenges associated with technology, adult learners may require additional considerations such as their preference for active learning. Because students' talents and learning styles differ, instructors should use a variety of teaching and assessment strategies that focus on the individual capacities of the learner (Roberts, 2005). It is also important for instructors to be aware of the possibility that even though many assume that learning styles are correlated to race, ethnicity, gender, and culture, this assumption may be premature and based on limited research with college students (Gay, 2000). Instead, "students of all cultural and racial backgrounds should be encouraged to develop learning strategies that are flexible and suited for the specific demands and constraints of the problem at hand" (Gay, 2000, p. 255).

Multidimensional Mode of Thinking

Adult learners of color have a broad spectrum of interests and may not necessarily confine themselves to a single area of specialization. As a result, the role of college instructors becomes pivotal as they aim to expand the cognitive development of their students past the content of the course into a more multidimensional mode of thinking about their academic self. Thus, society and individual learners now have different needs in terms of what people need to learn and how they should learn the content (Fink, 2003). College instructors must first be willing to examine themselves as the facilitators of learning. For instance, an instructor can use the Content, Form, and Function Outlines activity, which allows students to write a short set of notes that address the "what, how, and why" questions of the topic (Angelo & Cross, 1993, p. 172). This process allows for diverse levels of understanding to be assessed. In essence, it is the role of the teacher to de-compartmentalize the vari-

ous methods of examining effectiveness among adult learners of color. According to Chickering and Gamson (1987), the instructor's role then is "to frame the course and supplement student interactions by providing resources and opportunities" (p. 11). Nevertheless, with the change in student demography, the faculty roles have also shifted from lecturing to being primarily "designers of learning methods and environments" (Barr & Tagg, 1995, as cited in Fink, 2003). Brookfield (1985) argued that the role of instructors is to "facilitate" the acquisition of knowledge, not "transmit" it. Further, the National Research Council (2000) proposed that the goal of education has shifted from an emphasis on comprehensive coverage of subject matter to helping students develop their own intellectual tools and learning strategies.

Student-faculty interaction. According to Kuh (2003), "student-faculty interaction matters most to learning when it encourages students to devote greater effort to other educationally purposeful activities during college" (p. 29). Frequent student-faculty contact can enhance students' motivation, involvement, and intellectual commitment, encouraging them to think about their own values and future plans (Chickering & Gamson, 1987). However, it is imperative for instructors to realize that it is the quality of the contact, not the quantity that matters (Cross, 1999; Kuh, 2003). Wlodkowski (1999) noted that:

In learning, there is a unity among worth and meaning and joy. As motivationally sound instruction becomes an inherently rewarding experience for both the learner and the instructor, it enables optimal learning. How much of this is science, or art, or intuition, I'm still not completely sure. But when it flows, when leaning between instructor and learner is reciprocal and respectful, it is an inspired dimension of being: not something one practices or performs but something one enters and lives (p. 337).

Furthermore, Cross (1999) suggested that successful students may be more likely than less successful students to seek contact with faculty and reap the benefits, and that perhaps "faculty who invite frequent student contacts are more likely to be the kind of people who stimulate educational satisfaction than faculty who are not so easily approachable" (p. 264). Therefore, emphasizing a cooperative learning environment is vital to creating a culturally cohesive classroom. In this classroom set-

ting, nontraditional students of color may have opportunities to learn together with the instructor, and to know each other as learners and as people. Therefore, as instructors prepare to reach nontraditional learners of color, it is vital for faculty to remain cognizant that teaching and learning practices within the college setting must continue to be a symbiotic process between them and their students.

Providing a Multicultural Education

By the year 2020, 46% of the students in the schooling system will be students of color and 20.1% will be students who lived in impoverished surroundings (Banks, 1997). Therefore, addressing the various learning needs of incoming diverse student populations will continue to be an area of concern for college instructors. Multicultural educational practices promote the transformation of the educational process to reflect the ideals of democracy in a pluralistic society (Banks, 1997). Essentially, multicultural education is about social change through education which requires critical thinking, imagination, and commitment to active learning (Banks, 1997). In essence, in order to make instructional strategies applicable to all learners, educators must adopt methods that cut across lines of race, gender, ethnicity, and class (Hooks, 1994). It might be helpful to use ethnographic procedures to learn about culturally diverse students. This means learning about the students' cultural backgrounds instead of basing teaching methods purely on general classroom observations. As an active multicultural instructor, understanding the entirety of students' experiences inside and outside the classroom setting is vital. This may be accomplished by utilizing a variety of different course activities including Angelo and Cross' (1993) Word Journal activity. Instructors who have their students write a Word Journal would be able to glance into the student's world by having them provide an abstract or a synopsis of their cultural experiences. Angelo and Cross (1993) assert that the Word Journal activity helps "develop [the student's] ability to synthesize and integrate information and ideas; further, this assignment develops the ability to holistically think" about one's experiences (p. 188).

In their classrooms, instructors can create positive educational environments for millennial students by integrating technology through online discussion forums and web-based assignments; implementing differentiation in teaching strategies by using group learning centers and student portfolios; and incorporating of multicultural education curricu-

lum by assigning culturally specific readings and diversifying the content (Fry et al., 2009).

Implementing Technology

Although the literature notes that adult learners of color have developed more experience with internet technology (Oblinger, 2003), their use of technology is often unrelated to their academic development (Fairchild, 2003). Therefore, when considering the magnitude of this cohort's technological expertise within the context of academics, it is vital not to generalize students' technological understanding. A survey of the literature revealed a limited amount of research on the academic needs of adult learners of color. Although a variety of studies have examined the academic needs of adult learners, no research was found which assessed adult learners of color and their academic needs as it relates to the integration of technology in the classroom, different teaching strategies, and multicultural education curriculum.

One of the main aims of technology in higher education is to deal with the individuality of users. Technology provides many different types of learning experiences, and students become aware of which type best matches their learning styles and needs (Testone, 2004). Recognizing the effectiveness of technology, Boyle and Rigg (2000) emphasized that the focal point of educational technology and human learning must consider students' cognitive styles, attitudes, and personal and interpersonal needs. Technology in higher education, such as computers, software, the internet, interactive television, and whiteboards, provides students with a wide array of choices that allows them to select courses with greater flexibility and modes of instruction that support their individual learning styles (Kinney & Robertson, 2003). Unlike the generations before them, millennial adult students of color have access to more information in regards to enrolling in college, than ever before.

Through the enhancement of technology such as internet access, interactive video, and other computer resources, information can be disseminated in a variety of methods. However, for many adult students of color, the luxury of having technology readily available is rare. This is primarily associated with their lower socioeconomic background. As a result, many adult students of color may lack the technological literacy to complete the electronic enrollment process, the ability to navigate a student information database (e.g., Banner and Jenzabar), or online course management systems (e.g., Blackboard and Moodle). Research

has indicated that 90% of colleges and universities in the United States use some type of online course management system (Hawkins, Rudy, & Madsen, 2004). As more colleges and universities move to a paperless environment, it is imperative that research be conducted to measure the impact of technology on the collegiate learning experience of nontraditional students of color.

Furthermore, in higher education institutions, technology has become an important tool used in virtually every sector of a college's operation. For example, it is present in human resources, faculty and administrative offices, computer labs, hybrid courses, campus communication systems, and financial aid and admissions. The future impact of technology in higher education is difficult to predict, but there are no signs that the use of technology will decrease. Therefore, with the growing number of nontraditional college students of color enrolling in higher education, it is imperative for higher education personnel to gain a better understanding of different ways of utilizing technology in higher education to meet the various academic needs of adult learners of color.

Conclusion

Higher education institutions are enrolling more and more nontraditional students each semester. Nontraditional students are the fastest growing population in higher education and a significant number are people of color. This trend and its impact on the collegiate environment is creating a need for higher education professionals to obtain a better understanding of addressing the unique needs of this population of students. This article concentrated on issues impacting higher education as a result of the influx of nontraditional students of color enrolling in colleges and universities. The authors identified several strategies that educators can use to assist adult learners of color with the transition into academia, specifically, diversifying teaching techniques and integrating technology. Nontraditional students from minority backgrounds have academic needs much different from their majority counterparts, so it is imperative to develop strategies that include various teaching methods, different ways of utilizing technology in the classroom and a curriculum based on multicultural education; otherwise, adult learners of color may feel less motivated to learn in an environment designed for traditional students. Educators will need to implement strategies in a manner that promotes an optimal learning environment connecting academic development, personal development, and past non-academic experiences.

Nontraditional students of color are forcing higher education to develop a complete understanding of their academic needs, cultural experiences, and learning styles; therefore academe has a responsibility for meeting the various needs of adult learners of color, especially with the projected growth of this population. Because of the unique characteristics of nontraditional students of color and the transitional issues they face, focusing on implementing the recommended strategies to prepare adult students of color for academic success is a good place to start. With the enrollment increase of this population of students, institutions of higher learning must modify their current practices that are built around traditional age students. Therefore, the sooner institutional practices embrace the academic needs of nontraditional students of color, the greater success we can expect of this diverse population in our colleges, workplaces, and, thus, in society.

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