Curriculum For Today's Learner

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ABSTRACT

For the 21st century learner, the foundational principles of information development have grown exponentially. In many fields, the life of knowledge can be measured in months or years, with learning occurring in vastly different ways than in previous decades. Education as a continual process, can last a lifetime, and can be greatly facilitated by technological advances which alter the way in which people access information and think about the world. Faculty members in colleges and universities are challenged to provide a more complete and complex picture of the culture and world in which we live. Educators must maintain a curriculum to meet the demands of an ever-changing population of learners, while striving to diversity higher education curricula to provide a more rigorous educational experience.

Key words: Curriculum, Learning, Intellectual development, Expanded cultural knowledge, Acquisition of skills, Learning modalities, Global education

INTRODUCTION

When we look at educational practices throughout most of the twentieth century, a great deal of emphasis was placed on the typical learner who finished his or her formal education and entered a career which often lasted throughout one's lifetime. At that time in history, information development was, by today's standards, very slow (Siemens, 2004). "The life of knowledge was measured in decades. Today, these foundational principles have been altered. Knowledge is growing exponentially. In many fields the life of knowledge is now measured in months and years" (Siemens, p.1). Over the past four decades, there have been major changes in didactic policies. Learning today is occurring in a variety of different ways. Education is seen as a continual process, often lasting for a lifetime. The probability of lifelong learning is greatly facilitated by the capacity for technology in every household, thus altering the way the world thinks and people learn (Siemens, 2004).

In colleges and universities throughout the country, faculty members are challenged with the task of providing a more complete and complex picture of the culture in which we live (Humphreys, 1998; Driscoll, 2000, as cited by Siemens, 2004). Learning is defined as a persisting change in human performance or performance potential which must come about as a result of the learner's experience and interaction with the rest of the world (Siemens, 2004). This can only be achieved through maintaining a curriculum to meet the demands of an ever-changing population of learners. There is growing support to suggest that efforts involving the modification of curriculum are beginning to paying off. There is a nurturing of intellectual development, expanded cultural knowledge, and interracial understanding among today's college students. Recent research about current curricular change and trends across the country suggest that through efforts to diversify curriculum in higher education, a more rigorous educational experience for the learner has occurred (Humphreys, 1998).

LEARNING MODALITIES

While new courses are continually being added to expand instructional programming, many curricular changes are employed to improve existing courses and address the needs of a variety of learning modalities. This is evident in our specific population of students (Humphreys, 1998). According to Levine (2007), "A little reflection,

however, shows that the end of learning cannot be restricted to the mastery of facts, however broad, however privileged. For we also expect someone who has finished a course of education to be able to do some things he or she could not do, or do so well, beforehand. A second type of learning addresses this expectation. It involves the acquisition of skills." Good teachers help students develop their abilities to use their knowledge of facts and skills, so that they will be able to develop new ones. In this way, the student will be able to perform curricular activities in new and creative ways (Levine, 2007). Sensitivity to student's learning modalities requires teachers to be perceptive of the skills, talents and needs among individual students and possess the materials necessary to help students meet their learning goals. The good student, in response to sensitive teaching, strives to be open, courageous, and reflective, so the outcome of the learning experience is successful (Levine).

One theory presented within the field of education promotes the idea that learners may have preferred instructional methods by which they learn best. Some people may prefer one particular learning modality, while others develop learning skills through the combination of different learning strategies or modalities (Tozer, 2007). The premise of different learning modalities has been supported within the field of education, with learning seen as an attempt to examine how the human mind processes information through distinct senses (Tozer). The three basic learning modalities, by which the learner effectively processes information are: (1) visual, which can be explained as learning by seeing; (2) auditory, or learning by hearing, and (3) kinesthetic, or learning by doing. Most people learn best through one dominant modality, yet others have some form of balance between two or even three learning modalities (The Learning Curve, 2000).

Many students have good insight into their own learning abilities, but depending on the learner's preferred learning style different forms of instruction may have different consequences for the effectiveness of the educational experience. To be successful as a classroom teacher, a variety of different approaches must be utilized to address the different modes of learning. All students should be exposed to a variety of learning opportunities due to the differences in personal learning strengths (The Learning Curve, 2000).

LEARNING STYLES

Today's research suggests that 100% of all new information emerges every five years. Students, presently involved in grades one through three, will more than likely graduate in a time where, if this trend continues, there will be an influx of new information every 38 days (Mills, 2002). What kind of impact will this have on our educational system 10 years from now? By today's standards, we are exposed to new information on a daily basis. Understanding how today's learner processes his or her information will go a long way towards developing learning opportunities which are meaningful and relevant to today's learner (Mills).

AWARENESS: THE NEEDS OF TODAY'S LEARNER

As educators, we know that not all people are alike. Therefore, not all students are alike. Everyone has their own perception of today's world. Our perception of the society in which we live, has a direct influence on what we think, how we make decisions, and what we see as being central to our own experience. This perception will also determine ones natural learning strengths or learning style (Mills, 2002). Educators who are sensitive to the learning experience, know that students are all unique in their ability to learn and process information, but not all learners will profit from the same type of instruction (Mills, 2002). Although attractive to the movie going audience, to "stand and deliver" is not the answer to effective teaching.

It is a well known fact that students process information in a variety of different ways. Some learn best by seeing and hearing, others by reflecting and acting, some by reasoning logically and intuitively, and others through analysis and visualization (Mills). The presentation of curriculum should therefore be structured to address the needs of a diverse learning community. Some instructors lecture, others demonstrate or lead students to self-discovery, some focus on principles and others on applications; some instructors emphasize memory and others understanding (Felder, 2007). As educators we should all know that every individual has his or her own unique learning strengths and weaknesses. It is therefore vital to the success of every student that the instructor deliberately use a variety of methods to reach such a diverse group of learning abilities (Mills, 2002).

DEALING WITH DIVERSITY

The twenty-first century has brought with it a new meaning of globalization (Shaw, 2007). "Immigration from many parts of the world, especially Latin America and Asia, continues as a part of the American experience" (Yates, 1999, p. 1). This creates a society of increased diversity, a society built on old and new social issues which demand an informed and empowered public (Shaw, 2007). The transformation of our educational system is not easy, it was originally designed to help replicate society and dictate societal norms (Yates, 1999). Contemporary trends which are working toward the fragmentation of our society are counterbalanced with newer, faster, and more prevalent technologies. We are now living in an ever-changing world. A message sent via e-mail is received in less than 2 minutes. Distance is no longer a barrier to communication (Yates). Communication is quickly becoming the dominant curricular area in education. It is the one skill which allows everyone to share information, thus creating greater understanding and acceptance among different groups of people (Yates). "Communication in the form of writing will be a dominant means for individuals to learn, to express themselves, to effectively use technology, and to achieve empathetic understanding between themselves and diverse groups of people" (Yates, 1999, p.2).

THE UNFOLDING STORY

Much of the existing curricula being used in our schools today have been rendered obsolete by advances in knowledge in many disciplines. This existing curriculum, offered in our public schools, by today's standards is grossly misused, not so much in content, but in the way in which it is delivered. When curriculum is presented in the wrong way, it serves very little purpose in the educational process (Bosco, 2006). When we consider the history of civilization, a main theme continues to present itself. Civilization is all about the invention and use of tools, which has enabled mankind to create and sustain a culture. It also involves how that society can successfully pass on an existing culture from one generation to the next.

Throughout the history of mankind there have been few periods in written history as significant to our future as in this cultural and educational transformation (Bosco). "These are the seams of history when the means for creating and transferring the culture shifts from one era to another. We are in the midst of one such period" (Bosco, p. 7). The challenge educational leaders face involves the recognition of new realities and opportunities which exist to develop educational practices "that bring education into harmony with the way the world is, rather than how it use to be or even how we might wish it to be" (Bosco, p. 8). Thus, the future of education does not lie in what might occur a few years from now, but in "what can and should we do next week" (Bosco, p. 10).

When we look at contemporary trends and issues in education, along with advancements in technology, we must realize that this alone will not bring about change. Tools will not lead to educational reform. Change must come from teachers and policymakers. It takes the collaboration of the entire educational community to implement the change process, while advocating for the best interests of the learner **(**Nussbaum-Beach**,** 2006).

ASSESSMENT

Over the past few years, federal mandates have called for the need for better forms of assessing student success in the classroom. This has caused much controversy throughout the educational community. The overall benefits of assessment have been questioned, while many drawbacks are being realized. Is mandated assessment good for the success of the learner or is it merely a way of collecting data needed to compare learning in America to learning throughout the world? Many school districts have met federal demands, only to realize that many teachers use assessment tools to develop their educational curriculum. "Teaching to the test" has become a common concept to reach federally imposed educational standards. When one discusses curricular change, to keep up with the twenty-first century learner, one seriously doubt whether educational reformists will petition curricular change to meet federal demands, thus, having to spent vast amounts of money to develop new forms of assessment (IASA, 1996).

Is this the vision that our forefathers had in mind for the future of our country? To build an educational system which would identify the United States as the leading country in the world? Comparisons of traditional methods of assessment with alternative forms of assessment are limited by the diversity of newly imposed methods of measuring student success. Every newly developed assessment tool presents different issues, benefits, and

drawbacks. Research dedicated to the study of these systems has begun to indicate how newly developed plans for assessment compares to traditional multiple-choice tests, especially in regard to their impact on the school district's effect and use of instruction, equity, and cost (IASA, 1996).

GLOBAL EDUCATION

Over the past two decades many organizations have worked diligently toward furthering the cause of global education by producing curricula for the 21st century learner. These organizations have authored newsletters and books, developed new educational standards, conducted workshops and conferences, and provided support for a variety of different educational projects. Many of these organizations maintain World Wide Web sites describing their programs and sometimes featuring online versions of their publications and other resources (Pinhey, 2007). These efforts have resulted in increased exposure to all nations, as well as communication and interactions amongst them.

Many attempts at international cooperation are often marked by cultural misunderstandings. When citizens are duly informed about the cultures of other nations, the possibility of effective, interactions are improved. "In preparing today's students for the realities of life in the global age, global education is becoming crucial to the curriculum" (Pinhay, 2007, p.1).

It is vital to the preparation of today's learner for a world market, to incorporate the goals of global education into curriculum planning. This can be realized through the use of telecommunications technologies such as the World Wide Web, electronic mail, and teleconferencing (Pinhey). "These tools allow teachers to take global education beyond the textbook by connecting their classes with other students and even politicians, scientists, authors, CEOs, and other leaders from around the world" (Pinhey, 2007, p.1). Opportunities for students and teachers to talk and work with people in other nations via these new communication mediums are opportunities to dispel stereotypes and forge camaraderie. This sense of understanding is an elemental step toward building the mutual respect required for international relations in the global age. "A good global education curriculum consists of more than simply facts and figures about nations and their relations with one another; it also encourages understanding of cultural differences and similarities, tolerance, and a globally interdependent view of the world" (Pinhey, 2007, p. 1).

CURRENT ISSUES AND TRENDS

When we talk about occurrences within the educational community, with the purpose of meeting the needs of the 21st century learner, we become immersed in discussing current trends which have occurred in school districts throughout the country. In 2002, the National Clearinghouse for Educational Facilities (NCEF) published Ken Stevenson's *Ten Educational Trends Shaping School Planning and Design*. This publication has received its share of attention in the educational community. To better understand the nature of educational reform, a discussion of the author's key points is described below.

TREND ONE: SCHOOL CHOICE AND EQUITY REDIRECT FACILITIES PLANNING

In the past, planning strategies for many school districts provided school facilities with similar features as a matter of fairness and equality. In the case of multiple schools within a given district, if one school had two gyms, the facilities plan ensured that the second school should also have two gyms. "Today's trend calls instead for equity, defined as sufficient amenities to support and maintain the unique program and intended audience of a particular school" (Stevenson, 2007, p.1).

It is the growing consensus among an increasing number of educational policymakers that matching school facilities do not automatically render equal opportunities for the student. It is obvious that some students function better in one kind of environment while others perform better in another. In general, differentiation among learners is dependent upon the talents, abilities, and needs of that learner. "Today the focus has shifted away from developing district-wide plans providing equal facilities and toward plans providing specialized facilities that meet schools' individual program needs" (Stevenson, 2007, p. 1).

TREND TWO: SMALL MAY TRUMP LARGE

For a number of different reasons, planners and educators have been debating school size when considering a long-range resource program. Our educational literature is dominated by evidence that indicates the virtues of small neighborhood schools (Raywid1998; Cotton 2001; Vander Ark, 2002; Toch, 2003 as cited by Stevenson, 2007). Many states have been unsuccessful in trying to mandate exceptionally low school enrollments (Matus, 2005 as cited by Stevenson, 2007). Today's literature indicates that within the next quarter century, it is possible that many elementary schools may average 200 students. The literature also suggests that many middle schools may serve no more than 500 students and high schools, with an enrollment of 750 students or less, may become the norm (Stevenson, 2007).

TREND THREE: REDUCED CLASS SIZES?

With the understanding that smaller schools are more effective, it stands to reason there is growing interest in smaller class sizes as well (Achilles, 2003 as cited by Stevenson, 2007).). At this time the issue of class size is unresolved, although few policymakers would argue in favor of smaller class size, if at all possible. This particular issue may severely impact school planning and design in the near future. Smaller classes will certainly require more classrooms. This will mean more schools, with the cost of additional facilities as an expenditure that few districts will be able to afford.

One must consider research which suggests that smaller class size not only enhances academic performance, but improves student behavior and teacher morale (Finn & Pannozzo, 2003 as cited by Stevenson, 2007). Along with these studies, there is research that suggests that smaller classes particularly benefit at-risk students (Nye, Hedges, & Konstantopoulos, 2004 as cited by Stevenson, p.2). However, before we solely focus too quickly on the benefits of smaller class size, we need to be concerned about administrative priorities in regard to improving our educational system. "Before building new schools or adding to existing ones, planners and educators should thoroughly explore how to optimize class size, while bearing in mind the possibility of a diminishing tax base and conflicting research about what the definition of "optimal" class size should be" (Stevenson, p 2).

TREND FOUR: TECHNOLOGY GOES BIG TIME

Many teachers establish and maintain dual roles, assimilating responsibilities much like those of a general practitioner, often diagnosing and determining treatment (Stevenson, 2007). Through the relationship with the educational system, teachers often recommend educational intervention procedures to others. Today, advances in technology have made the likelihood of this instructional practice not only more possible, but probable as well (Stevenson, 2007). School districts will need to plan for additional costs while implementing more effective methods to control lower teacher-pupil ratios, higher energy prices, and reduced tax revenues brought on by federal mandates.

According to Reed (2004), the No Child Left Behind Act of 2001 (NCLB, 2002) has served as a catalyst in many school improvement efforts. Schools are responding to meet the challenge of these improvement efforts, although in doing so, some are caught in a decision-making and funding quagmire. They ask, "Where best should we focus our funds?" "What are core components of effective systemic change?" "How can we best support teachers so that all students can succeed?" Using technology as a means of closing achievement gaps is one option schools are considering more purposefully and effectively. This includes using assistive technologies for students with special needs and creating a systemic approach to change that benefits all students, including those subgroups identified by the NCLB Act (Reed, 2004, p. 1).

A likely solution to the education of all students, including those with special needs, would be by means of virtual education or e-schooling (Berge & Clark, 2005 as cited by Stevenson, 2007). In many districts, students who choose to participate in more advanced course work would have the option of taking classes via closed circuit television or could become involved in online learning. Many online and e-schooling courses are packaged curriculum programs that require fewer personnel and result in cost savings for the school (Stevenson). Teacher preparation and staff development for the effective use of technology will soon become priorities. School planners

need to rethink planning strategies to accommodate the 21st century school by visualizing a more flexible school environment to accommodate the shifting landscape of instructional practices and technologies.

TREND FIVE: THE MISSION MAY CHANGE

Policymakers and facility planners have to keep in mind that school missions must change to meet societal needs and demands. When such change occurs, structural and spatial requirements change the infrastructure of the educational environment. To stay abreast of our ever-changing society, flexibly is a key component when planning and designing new schools to accommodate these necessary changes. Many schools are now offering a variety of community services which may include greater community use. Education involves a collaboration between the school and the community; therefore, the very classrooms used during the day by students may be utilized by community members after required school hours (Stevenson, 2007). Throughout the country many school districts must provide accommodations for mission change. Many schools are struggling to maximize standardized achievement test scores. To do so often involves the modification of the curriculum to meet the needs of every learner. Students who struggle academically may be asked to take additional courses in their problem area to enhance scores on state or national tests (Stevenson, 2007).

In some cases students may be required to register for additional core classes rather than taking electives. Even those learners who excel in academics are encouraged to take more math and science, rather than non-academic electives to raise their school's academic profile. "As schools increase the focus on traditional academic subjects, demand for music, art, vocational courses, and even physical education may diminish. It is possible to envision some schools comprised primarily of academic classrooms, with few spaces for non-essential subjects." (Stevenson, 2007, p. 3).

TREND SIX: CLASSROOMS ARE BEING RECONFIGURED

In the past, students were assigned to classrooms in an attempt to create a balanced class size. A popular trend in education today involves student grouping in accordance with student learning styles (Porterfield, 2005 as cited by Stevenson, 2007). This type of classroom structuring will have an effect on the design of the school in two ways: it requires a variety of classroom sizes and configurations to accommodate different learning styles, and secondly, the entire facility may be modified to meet the needs of a specific learning style (Stevenson, 2007).

TREND SEVEN: SCHOOLS GO 24/7

It is becoming increasingly popular for schools to address the needs of the community by allowing the use of buildings and classrooms. A growing number of school districts are requiring students to spend more time at school due to rigid demands by policymakers. The school's open door policy also assists at-risk students, as a growing number of nontraditional students pursue additional education. Schools are now offering additional classes through local or regional colleges and universities. These classes are being offered before or after work and on weekends. When schools are not being used for school functions, they often remain open to better serve community interests (Stevenson, 2007).

TREND EIGHT: PAPER IS DISAPPEARING

The 21st century has ushered in the digital age for learners. Paper-based learning materials are becoming obsolete due to the availability of reference materials, journals and magazines, which are now easily accessed online. Many resources used for instruction are either found online or are being placed online, especially in higher education (Stevenson, 2007). In my classes, weekly assignments may be submitted, graded, and returned electronically. "Enrichment and remedial instruction may be individualized through the use of academic assessment software that provides each student with electronic assignments tailored to his or her past performance and learning style" (Stevenson, p. 4). In the very near future educational designers will need to consider how schools will accommodate the e-instruction of tomorrow (Stevenson).

TREND NINE: GRADE SPANS ARE CHANGING

Current research suggests that when students make the transition from one school to another there is a negative effect on learning and social relationships. Many communities maintain facilities to accommodate the K through 5th or 6th grade learner. From the elementary school setting, students enter middle school or junior high which generally serves 6th through 8th grade students. Following this transition, students are then asked to make another move to a facility which serves 9th through 12th grade learners. In some school districts, policymakers are trying to minimize the effect of transitioning from one school to another by adjusting grade span configurations. In some parts of the country, the K through 8 school system is staging a comeback, while other districts are seriously considering a return to K through 12th grade schools with all grades served under one roof (Stevenson, 2007).

TREND TEN: SPECIAL EDUCATION HAS GONE MAINSTREAM

In the traditional school setting there is a separate area designated for special-needs students. High functioning special education children are often mainstreamed into standard regular education classrooms where one teacher is responsible for up to twenty-five students. This may create a situation where the special education teacher feels their special-needs students are ignored. When attempts to work with mainstream special education children, in a general education classroom, the lack of appropriately designed space often generates conflict with the ongoing instructional activities of the supervising instructor (Stevenson, 2007). However, the needs of all students, those with and those without disabilities, will benefit by full inclusion because "special classrooms for most, if not all, classifications of disabilities should be intermingled with general instructional spaces. Classrooms and laboratories should be designed so that disabled students and their teachers are comfortably and effectively included in the instructional activities that support the school's curriculum" (Stevenson, 2007, p. 5).

CURRENT TRENDS IN EDUCATION AND THEIR EFFECT ON CURRICULUM

There has been ongoing concern regarding academic standards and life skills, as the central focus of the American high school curriculum which took center stage in the latter part of the twentieth century. A "*Nation at Risk"* has been the focus of educational reformists for the past thirty years. Recommendations from the "*A Nation at Risk"* report called for higher graduation requirements, more rigorous academics, and curricular tracking. The national response to this report resulted in "The Standards Movement" (Mintz, 2001).

By the end of the twentieth century, forty-nine of the fifty states had adopted academic standards based on the work of national organizations in all major subject areas. States began to hold students, teachers, and schools accountable to these standards through examinations. The reauthorization of the national *Elementary and Secondary Education Act*, known as the No Child Left Behind Act of 2001, reconfirmed this push for accountability by requiring states to develop annual testing programs for students in grades three through eight in reading and mathematics. "School districts must be able to show that all students reach proficiency or will be subject to corrective procedures" (Mintz, 2001, p. 12). One of the most fundamental approaches used to give educators and policymakers a framework for approaching curriculum planning is in the classification of different conceptions of education that revolve around persistent controversies. Eisner and Vallance (1974) pointed to other ways of framing debates which involved issues on curriculum: "child-centered versus society-centered; futurist, that is, socially reconstructive, versus adaptive; values-centered education versus skills-training; and humanist or existential versus behaviorist models of education and teaching" (as cited by Westbury, 1996, p. 2).

When one takes an unbiased approach to the characteristic forms of normative educational and curriculum philosophies it is evident that there is no directing force for the complexities of learning and teaching. It lies within curricular design and the offering of diverse forms of instruction that we find an explanation for the success of a school challenged by the diversity of race, class, and gender. A mixture that is now found in many of our school systems throughout the country (Westbury, 1996).

In the typical educational setting, one is subjected to racial, ethnic, gender, and religious diversity which contribute to the numerous differences and altered ways in which students learn. Some learners are more prone to visual cues and learn best with visual support of a concept. Others may thrive in an environment where lecture,

dictation, and auditory stimuli are the norm. To recognize that we also have a population of students who are hands-on and kinesthetic learners, creates a need for the instructor to model the behavior while allowing learners to become actively involved in the process. To recognize the diverse needs of all students is not as clear cut as these three categories suggest (Leinweber, n.d.). Many students work well with technology, some have interpersonal skills and work well with others, while other students prefer to work alone. We have mathematically inclined learners, as well as those who are musically oriented. When one considers the diverse population of learners in our classrooms, it is easy to ascertain that curricular change is upon us. Maybe curricular change is not seen so much in content, but it is certainly evident in the way our curriculum is presented to the active learner in our school or university settings.

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