The Creation of a Subculture: The Decline of the Arts in a Society Dominated by Technology, Science, and Economics
Ronda M. Mains, Associate Chair/Professor, Department of Music, University of Arkansas

Abstract
The concept of two cultures recognized by Charles Percy Snow may have implications beyond a lack of understanding and respect between two conflicting worlds of intellectuals. This widening chasm in the United States affects the education of our public school students. Technology and economics, intelligence testing, the No Child Left Behind Act, college entrance requirements, national standardized testing are some of the contributors to an educational value system skewed toward reading, math, and science. If Howard Gardner is correct in his theory of multiple intelligences then the public school education one-size-fits-all system may be detrimental to the success and self-confidence of children whose inherent intelligence is not in linguistics, mathematical reasoning, or science.

This paper examines some of the societal factors put on public school education such as political rhetoric, the disparity in grant funding between sciences and the arts, the pressures of curricula created by college entrance requirements, the role of technology in the economy, and the media’s preferential interest in success in math and science. There are observations of the decline of interest in the arts in society as well as in public schools and comments about the implications of an artistic subculture.

Introduction
The concept of two cultures recognized by Charles Percy Snow (1959)¹ may have implications beyond a lack of understanding and respect between two conflicting worlds of intellectuals. This widening chasm in the United States affects the education of our public school students. Technology and economics, intelligence testing, the No Child Left Behind Act, college entrance requirements, national standardized testing are some of the contributors to an educational value system skewed toward reading, math, and science. Further, societal factors such as popular culture, political rhetoric, and the media’s preferential attention to success in math and science have affected the nucleus of our public schools’ curricula.

Schools are reflections of the society in which they exist and American public schools and institutions of higher learning are no exception. Curricula are defined by the societal customs, traditions, judgments, laws, principles, manners, and honored standards in social, vocational and

avocational roles. What is important in a society will become a topic covered in its public schools; correspondingly only those subjects covered in public schools will likely endure in the wider culture.

**The Power of Societal Values**

Culture in the United States seems characterized by fast food, popular music, microchip technology, shopping malls, multimedia advertising, and theme parks. As Americans, we expect to drive a car, we expect our homes to be heated in the winter and cooled in the summer, we expect to have a television and a computer and we expect to have plenty of food to eat. Many Americans assume they can afford much more than they need to live. Even when the economy struggles, there is still an emphasis on consumerism. In so many ways, the bottom line defines our culture and knows no boundaries between the arts and sciences.

Big corporations now dominate what was traditionally intellectual property. Citizens with educated tastes do not buy enough scholarly literature, art music, or other academic media to make the bottom line profitable. While the number of CD’s of popular music is increasing, the number of classical music CD’s are dwindling. When business decisions are motivated entirely by the bottom line, a widespread decline of intellectual capacity is the inevitable consequence.

Perhaps more insidious than the bottom line dictating culture is the inclination in American society to be contemptuous of everything intellectual. Obvious examples of this dumbing down trend are celebrated in television situation comedies and in movies like *Forest Gump*. It may be that the very idea of equality in democracy has contributed to a universal scorn of everything...

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4 This concept implies the collapse of artistic, cultural, and intellectual values.
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considered to be elitist. Art music is generally associated with more cerebral endeavors, and thus to some it is enjoyed only by snobbish intellectuals. If the cultural milieu in American is actually anti-intellectual, it is no wonder that art music is scorned by so many.

Many factors may contribute to this trend, not the least of which is a public fixation on entertainment. Some of the more financially successful orchestras in the United States have lured their audiences by extra-musical tactics such as light shows or film clips. The public is inundated with entertaining sights and sounds. Nearly all commercial media, music, books, and Internet content are targeted for short attention spans. There seems to be a general reticence about engaging in activities that require effort and concentration during leisure hours. Popular forms of all the arts are created to entertain and are the most lucrative.

The Culture of Music

The world of music provides an example of what is happening in the arts in general; there are many parallel trends among all the arts. Each art form, including the visual and performing arts, has a superfluity of works that fall in a continuum between those that are considered classic by Western standards and modern works created solely for profit.\(^5\) Admittedly, many works would fall into more than one category.

Much music publicly broadcast is the musical equivalent of a comic book. Popular music is relatively short with repetitive rhythms, melodies, and harmonies that are easy to assimilate. Its purpose is to entertain and sell. Conversely, it takes effort and some musical knowledge to comprehend a piece of art music. Listening to a piece of art music requires concentration and

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\(^5\)In this paper the various forms of arts are differentiated between those created for entertainment and profit and those created for aesthetic experience only as a matter of example not as a value judgment. To distinguish between the two, arts in the first category are referred to as “popular” while the arts created only as an aesthetic experience will be referred to as art music or serious art. There is a conscious effort to avoid the term “classical”.
memory to decode and reconstruct various tiers of musical information. It can be argued that everyone can enjoy a Beethoven symphony; however, it is appreciated on a different level by someone with an understanding of the form, the timbres, and the cultural history of the piece. A Picasso painting may be a masterpiece to an art critic and a childish rendering of nonsense to someone with no background in serious art.

Even the venues of musical expression can be as diverse as the expressions themselves and may physically illustrate the cultural diversity. A concert hall with a symphony on a stage exudes a different aura than a stadium with a rock band. The rock music fan might feel uncomfortable attending a symphony concert because of such traditions as formal clothes, not moving around during the music, and knowing when to clap. On the other hand, the noise and energy of a rock concert may overwhelm the serious music aficionado. “The enjoyments, absorptions, and self-transcendence humans tend to experience while cognizing musical works arises when (and because) there is a match or balance between their current level of musical understanding and the cognitive challenges that a heard musical performance presents to their conscious powers (i.e., details of performance-interpretation, design, musical expression, representation, and cultural-ideological meanings).”

The various idiosyncratic musical styles such as folk, traditional, pop, hard rock, jazz, gospel, rap, punk, and art-music are often associated with subcultures. The term “subculture” is often used to identify specific youth-oriented factions defined by their predilection for a specific style of music, lifestyle, and clothing. All musical works identified with a particular culture “are not

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autonomous aesthetic objects but socially embedded, and socially mediated constructions. A listener is more comfortable when the musical meanings and emotions conveyed by a particular work correspond with their cultural values.

If a subculture is defined as a set of people differentiated from the larger culture by specific behaviors and beliefs, then the art music subculture would be generally characterized as older, educated people in formal clothing. This relatively small number of connoisseurs of art music hold tight to their values in spite of the pervasiveness of commercialism prevalent throughout the United States, but some indicators show their numbers are declining. In 1997 the Research Division of the National Endowment for the Arts funded a study in response to a New York Times article that cited the reason for declining audiences for arts events was because the audiences were growing old. This study looked at three groups of people, post baby boomers, baby boomers, and pre baby boomers and their level of participation in seven arts forms including classical music. It was found that the socialization process that takes place in arts education was a significant factor in art music attendance in all groups. Exposure through education is essential to the survival of the serious arts.

Exposure to art music is not a high educational priority in public schools because there is only modest value for it within society. Time and resources are devoted to teaching subjects that society deems crucial to the survival of the culture. Creative activities are more time consuming and challenging in assessment and accountability and therefore, are often difficult to justify in terms of time and costs. The very nature of classical music, the amount and expense of training,
makes it too exclusive for popular culture and a challenge for those committed to providing musical opportunities in a curriculum.

**Values That Shape Curricula**

The values that shape the curricula of public schools are most discernible in the political arena. Americans have focused on science and math achievement relative to students in other countries since the launch of Sputnik. Some of the most controversial issues in political battles often center on educational topics. On January 31, 2006 President George W. Bush addressed the United States and introduced an *American Competitiveness Initiative*. The applause after statements alluding to American success in global competition denotes the importance that our society places on being a leader.

First, I propose to double the federal commitment to the most critical basic research programs in the physical sciences over the next 10 years. This funding will support the work of America's most creative minds as they explore promising areas such as nanotechnology, supercomputing, and alternative energy sources.

Second, I propose to make permanent the research and development tax credit -- (applause) -- to encourage bolder private-sector initiatives in technology. With more research in both the public and private sectors, we will improve our quality of life -- and ensure that America will lead the world in opportunity and innovation for decades to come. (Applause.)

Third, we need to encourage children to take more math and science, and to make sure those courses are rigorous enough to compete with other nations. We've made a good start in the early grades with the No Child Left Behind Act, which is raising standards and lifting test scores across our country. Tonight I propose to train 70,000 high school teachers to lead advanced-placement courses in math and science, bring 30,000 math and science professionals to teach in classrooms, and give early help to students who struggle with math, so they have a better chance at good, high-wage jobs. If we ensure that America's children succeed in life, they will ensure that America succeeds in the world. (Applause.)

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It is questionable whether the method to “ensure that America will lead the world in opportunity and innovation”\textsuperscript{13} is to train students to answer more questions about math and science correctly. That certainly seems to be the popular solution.

There is certainly an inequity in public funding between arts and sciences. Just a cursory glance at the grant website for the United States government reveals an enormous disparity between arts funding and science/technology funding. There are fifty-four links on the Science and Technology Grant Page\textsuperscript{14} and five on the Arts page.\textsuperscript{15} This is only superficial evidence of the skewed funding between scientists and artists.

**Pressures of Standardized Tests**

Further evidence of American interest in math and science in public schools in the United States is made obvious by our obsession with test scores. The *No Child Left Behind* (NCLB) act signed into law by President Bush correlates national funding with test scores in reading and math at benchmark grades. The educational pressures of NCLB\textsuperscript{16} forces administrators to focus on the subjects that are tested and reduce or eliminate the funding and time of other subjects such as music, art, electives, and after school programs. When these standardized tests are the absolute gauge in a school’s accountability, there is a natural tendency to concentrate on the tested subjects to the detriment of more creative activities. Even worse, the methods of testing can establish the modes of instruction.\textsuperscript{17} Many studies have found that curricular decisions that focus on increasing test scores in reading and math result in less science, history, art, physical

\textsuperscript{13} Ibid.
\textsuperscript{16} Public funding is distributed according to the scores on this test, which is influential in making curricular decisions.
\textsuperscript{17} The Limits of Standardized Tests for Diagnosing and Assisting Student Learning, FairTest The National Center for Fair & Open Testing, http://www.fairtest.org/facts/Limits%20of%20Tests.html, (accessed April 6, 2006).
education and even recess.\textsuperscript{18} The rationale behind this thinking makes music classes less essential.

It is not just the pressures of standardized tests that suppress arts participation in secondary schools. High school graduation requirements are likely to be English, math and science intensive, leaving students limited choices in fine arts, foreign language or humanity electives. The number of these requirements relative to the limited number of class periods per day tends to minimize the importance of the arts and humanities. It is gratifying that the majority of states and the District of Columbia recognize the value of arts and humanity and do require some credits. The survey conducted by Arts Education Partnership in 2005 revealed that three states have at least a two-year requirement of arts/humanities, seven states have a two-credit requirement, twenty-one states have at least a one-credit requirement, four states have a half-credit requirement, and twelve states have no fine arts or humanities requirements at the state level.\textsuperscript{19} The remaining four states have distinct requirements; for example, Texas has two tracks, one for college-bound students.\textsuperscript{20} Superficially that is acceptable; however, in many cases the fine arts/humanities requirement can be met by a foreign language, a business or a vocational education class. College-bound students, already with limited elective choices, are restrained further by the admission requirements of their prospective schools. Thirty-six state systems of higher education require no fine arts credit for admission, but many of those do require foreign language.\textsuperscript{21} It is no wonder that many students choose courses other than fine arts classes.

\textsuperscript{20} Ibid.
\textsuperscript{21} Ibid.
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In addition, the standardized tests required for admission to many universities also force many high school students to take ACT and SAT test-preparatory classes at the expense of other educational experiences. Like the NCLB act testing that has caused many schools to redefine their curriculum, these tests delineate class choices for college-bound students. Further, Advanced Placement classes are now considered essential for serious college-bound students. Although music theory and art are among the thirty-four Advanced Placement Exam subjects, not every school offers a class to prepare students for these exams. In fact, there are few high schools that offer music theory at all, let alone an Advanced Placement class in it. In contrast, many high schools have Advanced Placement classes in math, science and English. There is pressure as early as the middle school years to score well enough in those subjects to be considered for the Advanced Placement classes. Thankfully however, many university leaders are realizing that the preoccupation with test scores hinders educational equity and has come at the expense of students’ other high school experiences.22

Social Implications in the School

A more insidious attribute of the Advanced Placements classes is the ambiance of intelligence surrounding the students involved in them. Students enrolled in the appropriate Advanced Placement classes are considered by school officials to be high academic achievers while those students who excel in the arts or other areas without advanced placement classes are left out of this smart-kid alliance. This happens even though many student leaders work hard to maintain a high grade point average and still participate in activities like music that are often considered co-curricular. Naturally, teachers are more likely to recognize the National Merit

Finalists over a first-place winner in a national music competition because those names are announced in the media. Much is this can be attributed to the publicity and political implications surrounding standardized tests.

The social climate of the public school itself can contribute to the perceived stratification of students. Many students, even if they excel in more than one area, may become identified with a clique because of a particular affinity. It would be nearly impossible not to be aware of contain certain connotations associated with cliques. Two examples are that athletes may be perceived as anti-intellectual, and the intellectuals may be perceived as nerdy. In truth a student may be gifted academically and athletically. Even so, the star athletes receive media coverage and large amounts of money for college while the academically bright students have their names on honor rolls and in honor societies. But the classification of academically bright students usually is limited to include students who excel in English, math and science while talented visual artists, actors, and musicians are on the fringe of the intellectual scene. Students themselves tend to marginalize the importance of the arts and minimize the achievements of artistically talented students. Even allowing that some students are drawn to the arts because of the appeal of a subculture with the academic environment, there is a second-class academic status associated with musicians, artists, and actors. Time, peer pressure, and the competitiveness of academic achievement make it nearly impossible for an adolescent to develop a new musical talent. Early exposure to music seems to be vital.

**Early Exposure to Music**

There is only a limited amount of time allotted for music in the public schools’ curricula if at all. At best, fine arts classes can do little more than provide a superficial exposure to the arts. As wonderful as the experience might be, band, choir, and orchestra programs strive more for the
teamwork essential for a good ensemble performance than for the musical education of individual students. Even the most dedicated educator cannot deliver more than basic information to all the students on the various instruments. People trained to perform competently on instruments or to sing well were likely born into families who could afford lessons and instruments. The students who excel in performance usually have private tutors.

Private tutors cost money and time. There are many children whose single parent is challenged just to pay the bills and depends on the school system to provide all the education for their children. Even in many two parent families, both parents work. There is evidence that suggests that families who struggle to make ends meet usually have children who struggle in school, and there is little possibility for music lessons in those families. Both family time and money is spent on necessities and acquiring basic skills. Even students from affluent families can be limited by time because they choose to work during the school year to pay for items like cars, car insurance, clothes, and cell phones. Long work hours combined with protracted academic contact hours per day allows little, if any, time for philosophical thinking, much less practicing an instrument. Further, many students have not learned to value the intrinsic nature of anything and complete only the minimum credits of schoolwork to graduate. The instantaneousness associated with television, computers, and electronic instruments has made practicing an instrument for hours seem like never-ending drudgery and certainly not worth all the years it takes to be successful.

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Even music educators sometimes overlook the intrinsic value of music because of the focus on performance and the pressures of constantly justifying music’s place in the curriculum. It is important to remember that all the arts are viable subjects in themselves. They provide unique ways of knowing and learning about the world. Gaining a new perspective through the arts should be a curricular goal. The intrinsic value of music in education was further devalued by the commercialism and media hype that accompanied the findings of the research project now recognized by the title *The Mozart Effect*.

**The Mozart Effect.**

The Mozart Effect refers to a theoretical phenomenon identified in the late twentieth century, by researchers Dr. Gordon Shaw and Dr. Frances Rauscher.\(^{24}\) They concluded that listening to the music of Mozart temporarily improved spatial temporal reasoning. There was a nearly immediate reaction to this news by publishing companies who wrote books for parents, by producers who sold CD’s of Mozart’s music to parents of small children, and by many music educators who rushed to use this as a rationale for their own existence. Music was touted as a remarkable tool for improving brainpower and a miraculous healing power\(^{25}\).

The consequence of this media hype was the message that music is a wonderful tool to acquire a result that is more important than learning about the aesthetic of music. Parents, with the noblest intentions, exposed their children to the music of Mozart hoping to enhance their children’s learning in other areas. Their interest in music was to improve test scores in other subjects, mainly math. Even music educators rushed to justify their existence in the public

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\(^{25}\) This project of Dr. Shaw and Dr. Rauscher is a landmark in educational research. Without a doubt, it has positively influenced educational values in the United States. In addition, however, it generated a plethora of commercialism and political hype. This is offered as another example of how educational philosophy can be influenced by nonacademic ideals.
school curriculum based on this research. In certain ways, their argument did more to emphasize the importance of math and related subjects than it did to justify music as a subject.

**Theory of Multiple Intelligences**

All of these factors influence the curricular concerns of schools and the decisions of students, but what has resulted may not be necessarily in the best interest of all students. Amid all the childhood developmental theories and theoretical approaches to developing intelligence is the premise that all children are not created equal and yet public schools do everything possible to make them equal in our educational system. In the interest of efficiency, which is a reality of public schools, most children are taught the same subjects in the same way. Howard Gardner believes that there are more intelligences than what is measured by the Stanford-Binet Intelligence Test. He affirms that among eight distinct forms of intelligence inherent in each individual, music is the one that emerges earliest.\(^{26}\)

If Gardner is correct in his theory of multiple intelligences then the uniformity of public school education may be detrimental to the success and self-confidence of children whose inherent intelligence is not in linguistics, mathematical reasoning, or science. Just the test-taking requirements of national standardized tests may discourage children who struggle with language because understanding the questions is essential to answering them. No one, including the teachers and staff who are under pressure to produce results, is happy with a child who does poorly on a test. Obviously there are a certain skills and bodies of knowledge that must be mastered and learned, but there should be encouragement to explore and identify strengths perhaps outside of the traditional core subjects. If “expertise kindles intellectual self esteem”\(^{27}\)


then withholding opportunities for every child to develop an expertise in a field will impair some children.

Because there are many families without the resources to risk lessons on an uninterested child, musical opportunities should be introduced in schools as early as possible to identify those who demonstrate interest. A music class may be the initial and only induction to a young potential musician. If talent is recognized most parents or communities would provide further necessary training. The music class cannot be the only source of training for an aspiring musician. After all, artistic proficiency requires attaining numerous intricate skills that can be acquired only with direction from someone who has mastered them already.²⁸

**Educational Rationale**

Current students will be faced with a variety of choices as adults. Two of their choices will be how to make a living and how to spend leisure time. If given the option, most people would choose lucrative careers that are personally satisfying. Adults tend to spend their leisure time in activities that they first enjoyed as children, like reading, playing ball, singing, acting, or watching television. A person’s education, to some extent, is a determinant of their available options. Educational experiences should prepare students for life.

Most careers in the arts are personally satisfying, but not as lucrative as those in science or technology. The market reality is that traditional arts careers are becoming scarce while other jobs, peripherally related to arts, are opening. There may be a higher number of jobs in music related fields, but it is unlikely that the skills needed to become a professional pianist are requisite in one of these jobs. Other nonmusical skills and knowledge in fields like communication sound engineering, and computers would be essential. In fact, the traditional

skills of musical performance would be secondary to these other skills. Many highly successful business people in these arts related fields have little or no background in the arts. On the other hand, many professional scientists are accomplished musicians and artists.

Although it may be unrealistic to expect a well-remunerated job in traditional musical performance, there are those for whom the personal satisfaction of a career is paramount. There are a few musicians employed by symphony orchestras under master wage agreements with guaranteed work up to fifty-two weeks, but many other musicians face relatively long periods of unemployment between jobs. When unemployed, many musicians and singers work part time in non-music occupations. Thus, their earnings usually are lower than earnings in many other occupations. Moreover, because they may not work steadily for one employer, some performers cannot qualify for unemployment compensation, and few have typical benefits such as sick leave or paid vacations. For these reasons, many musicians give private lessons or take jobs unrelated to music to supplement their earnings as performers.  

Musicians are fortunate to attain positions as professors. However, even when music applicants are successful in their professorial job search their salaries usually are in the lower half of the university pay scale. University positions are among the most secure in the music world while qualified scientists, business people, and engineers can find more lucrative occupations in the private sector. According to the Bureau of Labor Statistics “in fields with high-paying nonacademic alternatives—medicine, law, engineering, and business, among others—earnings exceed these averages. In others fields—such as the humanities and

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education—they are lower.” Robert Brown, President of Boston University, bemoans the reality of salary inequities. "Its kind of an ugly fact that we try not to talk about at universities," he said. "But, the truth is, different faculty and different disciplines get paid more than others because they are market-driven." Further, scientists bring large amounts of grant money to a university. Just the Federal government’s grant pages illustrates that this would be an unrealistic expectation for a music candidate.

Not every musically talented child should pursue a career in music nor should every child study an instrument, but every child should be given the opportunity to initiate an artistic interest that can be nurtured over a lifetime. If education is the significant element in arts appreciation, then opportunities to develop that appreciation should be an educational priority. Education within the public school system should be the foundation for adulthood of continual learning. Without early experiences in serious art and music, they are unlikely to be chosen pursuits later in life.

Conclusion

C. P. Snow bemoaned the inability of highly intelligent people from different disciplines to communicate. He was correct that science has determined much of our destiny, and this is

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32 A recent university employment advertisement emphasized the importance of the candidate’s ability to bring in grant money for an externally funded research program; “the successful applicant is expected to develop an externally funded research program” Academic Non Classified Position, University of Arkansas, http://hr.uark.edu/employment/listingsjob.asp?ListingID=3504 (accessed April 6, 2006).
34 Snow, 98.
reflected in the curricula of schools. This emphasis on science at the expense of other academic experiences does not seem to be improving the performance of our students. Further, the intellectual schism is splintering into fragments within our society. Of course, the educational goals of public schools should be to nurture different ways of knowing and understanding. The need to read well and understand math and science is evident, but the rewards of learning to experience the world through the arts are not as apparent. Our national fascination with science and the profusion of technology will guarantee its survival. Popular music and art will endure and thrive because of its common appeal and the profit it generates. In our society where the extrinsic motivation is the acquisition of possessions, there is only modest value for serious art and music. After all, there is little reward but personal satisfaction and enjoyment in the aesthetic of the arts.

Little or no exposure to arts, the *dumbing down* trend in American, consumerism, and the rigors and focus of the curricula have all contributed to a loss of national interest in preserving the culture of serious art and music. Changes in public education seem to be on obvious answer, but until the values of society change, education will remain as it is today. Even if the values changed, the economic reality that dictates our system of educating students in large classes for efficiency of delivery makes creative experiences in the school setting more challenging. Sadly, this economic reality is that the most serious apprentices of the arts are those lucky enough to be born into the right families. Throughout history, the culture of serious art and art music has never been mainstream, but the arts have survived this long and will continue to survive even if it will be as subcultures.

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35 If test scores are a valid measurement of the quality of education as asserted by proponents of standardized tests, then public schools are not meeting their objectives. Americans scores are about average among other countries, certainly not amid the top scores.


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