



UNIVERSITY of ARKANSAS

1871®

Vocational Education and the Great Divide: Have Student Needs Been Overlooked?

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Abstract

This paper is an examination of the divide that exists between academic and vocational curricula in American public high schools. This divide is a separation of the two curricular pathways which induces students and others to see vocational education as an inferior curriculum. Due to this perception many students may choose the academic curriculum route even though they have no aspirations of earning a college degree. The history of this divide is explored in a literature review to give some insight as to its origin. The effect the current split in the curriculum has on high school students in their quest for a bright and fulfilling future is examined. A review of the literature implied that this separation was probably initiated in an attempt to correct a perceived failure of the school system in the area of math and science. The gap was further widened with the advent of standardized curriculum to preclude yet another imagined failure in the education system. The net effect on school systems was a separation of the curriculum that made the vocational curriculum subordinate to the academic curriculum. In the final analysis there are many possible means of bridging or narrowing this separation of the curricular. One of these many possibilities is discussed in this paper.

Vocational preparation has taken a back seat to college preparation for many years. Here the divide that currently exists between the vocational and academic high school curricula is explored along with one possible bridge between the two. The background of this split is examined to discover its beginnings. A look at the current condition of education suggests how this split has been perpetuated. Finally one possible avenue to bridge this divide is discussed. Mullen and Kohan (2002) claim the school system has inherited a legacy of dualism that splits academic and vocational education.

What is the purpose of a high school education? Each student is looking for something different from high school and each must be allowed to be successful in his or her quest for a prosperous future. Many educators, students and parents would agree that high school is mainly about controlling teenagers and keeping them off the streets. Some may say high schools should teach students to be good citizens. Other students, parents and educators would claim that the purpose of high schools is to prepare our young ones for success in post secondary education. A few may hasten to point out that high school opens a doorway to a future career. Shapiro, Benjamin, and Hunt (1995) make this point, "Beset by conflicting and changing purposes and demands by the American Society and unclear about our educational aims and goals, schools often lack focus" (p. 75).

Must high school be limited to one specific purpose? Can high schools teach students to be good citizens, prepare some for a post secondary education, and show others that a future awaits that does not require a 4-year college degree? Ansell (2004) points out that federal legislation has stressed the standardization of student learning. The No Child Left Behind Act of 2001 (NCLB) is an excellent example of this. This standardization is also evident from the implementation of standardized test that contain only academic questions and the failure of the federal or state government to provide adequate funding for vocational programs. Researchers continue to debate several aspects of the high school experience.

The Great Divide

Bill, Joe, and Sally are three typical high school juniors; each is interested in having fun now but wants to be a "success" in the future. The three have similar but separate stories.

Bill

Bill was reared in an upper middle class family. He plays football and baseball for his high school and other students see him around school with the "in" crowd. All of Bill's teachers know he is planning to go to college and become an engineer. They are happy when they see he is enrolled in one of their classes since he is such a "good" student and always makes an "A" or "B" on his report cards. Bill always completes his assignments and engages his teachers in opinionated conversation about the subject at hand. When Bill has a problem with scheduling classes the counselor readily fixes the

problem and ensures he gets just the right classes to prepare him for college.

Sally

Sally is the daughter of a single mother who works two jobs to pay the bills and take care of Sally and her two siblings. Now eighteen, Sally has been working after school and on weekends since she was sixteen. There is never enough money for luxuries, but always enough for the necessities. Sally does not have time for extracurricular activities because she needs to work to help with the bills. At school other students do not seem to notice her as she walks from class to class. In class the teachers assume she will not have her homework done even though it is completed and turned in on time. Questions asked of Sally by her teachers are limited to those that can be answered with a yes or no and never involve the opinions Sally may have. Grades are important to Sally and she usually makes either a "B" or "C" in every class by working on homework late into the night after work. Sally dreams of becoming a cosmetologist but no one seems to know or care. When it comes to class schedules Sally often learns that classes are full and that she will just have to take whatever is available. Sally tries to tell her counselors what her dream is, but their standard answer is that there is no program available for training in that area. However, if she wants to go to college they can help.

Joe

Joe, whose dad is a construction supervisor and mom a secretary for a local real estate company, attends the same school. By all accounts his is a normal middle class family. One problem plagues their otherwise seemingly idyllic existence. Joe is a "slow learner." This "disability" was identified while he was in middle school and Joe was placed in special classes to accommodate his disability. At school Joe tends to "hang" with the kids in his special classes and is usually ignored by the other students. In class, especially in "regular" classes, Joe never gets called on to answer questions. Teachers seem to think that because it takes Joe a little longer to catch on he is wasting their time and the time of the students who are going to "make something" of themselves. Despite this Joe has managed to make average grades on all his report cards and on occasion has brought home a few above average ones. Joe's dream is to one day be a diesel mechanic and work on the "big-rigs" he sees at the truck stop near his home. In the past he tried to talk with counselors about his dream but they did not seem to want to listen. Their response was usually that

there was no program available to help him in that area but, if he wanted to go to college there may be a program.

Not all students are looking for a 4-year college program. Their only interest is doing something that is interesting and enjoyable for them. For these students a vocational training program may be just what they are looking for to ensure them a bright future.

Current Conditions in Education

Each school day, more than 14 million students report to public high school classrooms across the United States (National Center for Education Statistics, 2004). The reason for each student's attendance varies. Some attend simply because the law mandates attendance. Others see high school as a social event to be used to make contacts and friendships. For many, high school is the only way to meet the requirements for acceptance into a post secondary institution. For a few, high school is the first step along a path to a successful career. The students who are of concern here are those who are not necessarily going to college.

Students who are not going to college deserve as much attention and assistance as do those bound for college. But, it is precisely those students who are most often forgotten. They sometimes go off to college where the vast majority will not succeed because they are not adequately prepared. Some will try finding a job in the professional ranks only to discover they have not been prepared for the workforce. Others will find a job as an unskilled laborer and may spend their entire adult life wondering if they could have made a better choice in their career path. This decision will not only impact their lives but also the lives of their children. Perhaps this decision was not entirely theirs but was forced on them by an educational system that was not responsive to their needs. Blank and Scaglione (1992) state that even a casual observer will notice the separation between the vocational and academic programs in our modern high schools. Perhaps this separation is partially at fault for the system not being responsive to their needs.

We can easily divide high school students into three categories, upper, middle and lower academic levels using criteria similar to what Gray and Herr (2000) used in their classification of students. It is easy to see where our three students mentioned above fall. Bill would be considered by most to be in the upper academic classification. The upper academic class can easily be seen around school. They are the ones who every teacher wants in their

class because they are known to be good hardworking students. These students can be seen on campus because they are athletes or the academically "gifted" students who almost everyone wants to be like. Some may see them as the "social elite" in school, belonging to the "in' crowd. These upper academic level students will have the grades and the standardized test scores to back up their position in the hierarchy. Teachers and counselors will do all within their power to ensure these students receive the very best the school has to offer. These students are ensured a place in a 4-year college and will probably be successful in their academic endeavors unlike most of those in the academic middle.

The students in the academic middle are the "ghosts" on campus; seen but yet not seen. These students rarely get involved in extracurricular activities preferring to watch rather than participate. They may have excellent grades on report cards and adequate scores on standardized test but no one seems to care. These students do not belong to the "in" crowd and they do not "hang" with any particular group. In fact they may even be loners when it comes to their social life. Some of these students take "college-prep" courses while others are found in the "regular" classes and some in the "vocational" areas. Most of these students have no interest in a 4-year college degree (Gray & Herr, 2000). They may have interest in being trained to do a specific job and probably know what career they are most interested in pursuing. Sally knew what she wanted from her high school experience but could not get anyone to help.

The lower level academic students are not necessarily the ones with the lowest potential for grades or test scores. In fact they are very much like the middle level academic students in areas such as extracurricular activities and social interaction. The major difference is that they have been identified as being low performing and as such are entitled to some "special" programs in education. Unfortunately according to Shapiro et al. (1995) students placed in lower ability tracks will usually learn less than they would if placed in other tracks. They may have specially trained teachers or be located in classrooms reserved solely for students with their needs. These students can also be found in "regular" classrooms where they have special accommodations made for them to ensure they have an "equal" chance to succeed.

The fact that these three groups exist is not the problem - the problem arises in what we do for each group. Special curricular programs are in place

to assist those in the lower academic levels to succeed and flourish after high school. This includes special curricular, specially trained instructors and in some cases specially trained tutors to assist them. Students in the upper academic levels also have special curricula to ensure they will succeed in college. Included here would be the college-prep curriculum taught by teachers with special qualifications. The education system seems to have forgotten the students in the academic middle.

Students in the academic middle have no special programs or curricula to ensure their success. In fact many consider students in the academic middle to be the forgotten majority of academia (Gray & Herr, 2000; Parnell, 1986). Students in the academic middle have been left to choose to exist in the forgotten middle or to try to move into the upper level arena. Over the years this migration of the academic middle into the college preparatory classes has resulted in a bifurcation of the college preparatory curriculum partially to ensure the upper level academics are challenged in their high school curriculum (Gray & Herr, 2000).

These students hear from family, friends, teachers, and career counselors that in order to ensure a bright future in a high paying job they must go to college and get at least a bachelor's degree. This is clearly disputed by Gray and Herr (2000) when they point out that 43% of college graduates will not find work commensurate with their education. The monthly labor review expects 5 million job openings annually from 1996 to 2006. Only 24% of these will require a 4-year degree or higher (Gray & Herr, 2000). These two facts by themselves are enough to cause many to reconsider the need for a college degree except for those who intend to enter a profession that requires a degree.

Background Issues Affecting Americans' View of Public Education

On October 4, 1957 Russia launched Sputnik I. Americans were told that the Russians had beaten them into space because our school system was failing. Prior to the launch of Sputnik education was in the business of meeting the needs of every student. Vocational programs were plentiful and students were taught the skills necessary to succeed in life. After Sputnik the school system went through a tremendous reform as a result of the National Defense Education Act of 1958 (NDEA).

Math and science were the focal point of education due to the NDEA (1958). Money was taken away from other areas of schooling and concentrated in the math and sciences. Teachers were invited to attend seminars to improve their

ability to teach math and science and paid a stipend for attending. The general belief was that the United States had to catch up with the Russians and the way to do that was to improve our educational system. To improve the present system it was thought that math and science needed to be the focal point and all other areas were secondary.

I remember when I was a high school student. In the mid-1960s, there was a "railroad" building at my school where students were trained for a career working for the railroad. Several of my school companions took advantage of this curriculum and continued on to have successful careers in the railroad industry. They retired after thirty years with a pension large enough to live comfortably for the remainder of their years. This practice was stopped, at least partially, because of the shift in concentration away from vocational training and toward academics.

This shift came about because the government thought its money and teacher resources could better be utilized on math, science and other academics rather than vocational programs. The general impression of many Americans was that the Russians were ahead of us and to catch up and surpass the Russians in the "space race" we must improve in the academics especially math and science. The NDEA (1958) allocated millions of dollars towards student loans for those studying science, engineering, and foreign language, and for the purchases of scientific equipment for schools.

In April 1983, The National Commission on Excellence in Education (NCEE, 1983) released its findings in *A Nation at Risk: The Imperative for Educational Reform*. This again placed the importance of academic programs before many vocational programs. The NCEE (1983) made the following recommendations for high school graduation requirements:

“We recommend that State and local high school graduation requirements be strengthened and that, at a minimum, all students seeking a diploma be required to lay the foundations in the Five New Basics by taking the following curriculum during their four years of high school: (a) four years of English; (b) three years of mathematics; (c) three years of science; (d) three years of social studies; and (e) one-half year of computer science. For the college-bound, two years of foreign language in high school are strongly recommended in addition to those taken earlier” (NCEE, 1983, para 5).

Again one easily sees from the commission’s report that vocational training has taken a "back seat" to academics. This appears to be a step by the federal

government to eliminate vocational training. High school graduation requirements have not changed even in the face of the eighteen-hour high school graduation program now in effect in Florida. This program appears to have been originally designed to get students out of high school and into college earlier. There is a "vocational" track; however the requirements for graduation are the same math, science, and other academic courses. The only difference seems to be the allowance for career and technical education electives (Florida K-20 Education Code, 2003). The design of both tracks allows students to complete their high school education in three years instead of the current four required years.

Forces that Widen the Vocational-Academic Gap in Curriculum

Floridians are now seeing the beginning of a new imperative from state and federal government. This new message is that all students will attend post secondary education institutions (Florida K-20 Education Code, 2004). This has effectively crippled many vocations programs. The government advocates an emphasis on academic training and the continuation of education beyond high school; not training for a career or profession. Yes there are short lived vocational programs like school-to-work and tech-prep, but these programs are only funded for a short period then are expected to continue without funding. The Florida public education system is even referred to in state law as a K-20 education system with the emphasis on students continuing to community college and beyond after high school graduation (Florida K-20 Education Code, 2004). This is again evident with the early graduation program currently in place in Florida.

The U.S. government is not the only organization to help eliminate vocational training in high schools. With funds dwindling, local school districts must choose which parts of the curriculum to fund. True the amount of money spent per student constantly rises but at the same time so too does the expense, or only at a faster rate. Florida instituted the Florida Comprehensive Assessment Test (FCAT, 2004a) which requires a passing score prior to graduation for each student and a passing grade for the school (Florida Comprehensive Assessment Test, 2004b). This in itself is not a bad idea. However, it also takes money away from struggling schools and redistributes funds to high performing schools. This test only covers reading, writing, and math. The federal government has started checking adequate yearly progress using the scores from the FCAT (No Child Left Behind, 2001). If a school

fails to make adequate yearly progress again the school loses money from their Title I funds. With the state and federal government pushing for academic performance it is not a hard choice for many administrators. Vocational training must take a "back-seat" to academics.

Americans are experiencing institutionalized failure of our students in the academic middle. Parents, teachers, counselors, administrators, and peers are attempting to convince them the only way they can be successful in life is to have a 4-year college degree. This propaganda campaign starts when the student first enters school and continues even after high school graduation. They hear it from every source with which they come into contact.

Since the end of World War II, when many ex-service men and women were able to attend college using the GI Bill, there has been an increase in the desire of Americans to receive a college degree. This desire has led to pushing many students into the college ranks with little regard for their preparation. Parents, teachers, administrators, counselors, and peers have "brain washed" students into believing the only way they can be successful is to receive a college degree.

My own son was no exception. He heard from teachers, counselors, and peers that a college degree was an essential part of growing up. After high school graduation in 2002, Marcus went to the US Coast Guard Academy. After a year he was diagnosed with a debilitating disease and returned home a disabled American Veteran. One year later, he is employed by the state Corrections Department, going to Corrections Officer School, and making a good salary with a bright future and terrific benefits. This push toward a college degree has always been done with the best interest of the student at heart. However, as has been pointed out, this is not always what is truly best for everyone. My son has made a career for himself without the need for a 4-year college degree. Gray and Herr (2000) make the point that 40 percent of all jobs today can be learned in two weeks. With apparent disregard for this, many students are being guided toward college degrees without much obvious concern for their own desire.

This insistence on a college degree has come from several sources according to Gray and Herr (2000). Parents want their children to have a better life than they did, so they advocate going to college with the idea that with a college degree a successful future is assured. Public school teachers and administrators throughout the nation can be heard telling students that in order to ensure a bright future they must attend college. Students can also be heard touting

the advantages of going to college in an attempt to convince their friends to join them in their quest for a secure and successful future.

Post secondary institutions need to convince students to go to college. The United States has an overabundance of baccalaureate degree granting colleges mainly due to the increasing numbers of institutions between 1980 and 1990 (Gray & Herr, 2000). This growth period has left most colleges and universities in the position of having to fill seats left empty due to a decrease in the number of high school graduates in the same time period. Therefore, there has been an outreach to high school students and their parents to encourage post secondary education.

One final group that is assisting in perpetuating this idea of going to college is the money lenders. They want everyone to go to college and take out loans to pay for this education. These money lenders take no risk. They can lend money to every student in college with the federal government guaranteeing the loan. When a student leaves college, with a degree or not, the lender will get back the principle loaned and interest either from the student or the government. This is a win-win situation for money lenders. With the number of students graduating high school and entering college each year the money lender has an almost unlimited supply of customers. The United States graduates about 71 percent of our high school students (Greene, 2002). This insistence, that a college degree is vital to success in life, has been so effective that almost three fourths of high school graduates will attend college even if they are not adequately prepared for success. Of those about half will leave college before they complete their degree (Gray & Herr, 2000). Most of these students find themselves in debt and looking for a job. They look without any special job training, training that could help to improve their chances of finding a higher paying job. A quality career preparation program would offer these students an alternative to college that would result in many students being successful in their search for the secure future all seek.

Recommendations for the Future Education of Our Students

The future of vocational education is not only that of an educational curriculum. It is in some ways a mirror of the future of the United States in general. As a nation we are constantly in a battle to keep up with other countries in many areas such as industrial manufacturing and technical/computer development. Parnell (1986) defines career education as being a delivery system which helps students develop competencies that are required to function in real-life roles. Without a trained workforce this battle is all but lost before it has begun. This workforce

will depend little on the 4-year college graduate and greatly on the well trained "blue collar" worker.

To ensure a well trained workforce, there are a few steps that must be taken with each individual. One major point of contention is the need to cease looking at students as a group to be molded into what is perceived by some to be best for all and look at each individual to determine his/her strength, weakness, and desires. As a parent and teacher I encourage young people to find what they like to do and concentrate on that area. If you are going to commit your life and livelihood to a career, it should be one you get joy from, not one that was decided for you. A program used to assist a student select his or her future can not be a short-lived and ill-conceived affair. It must be well thought out and revisited on a regular basis.

Teachers from middle school through high school receive training in the procedures and requirements of any program if it is to be successful. During the students' sixth and seventh grade years they receive exposure to a variety of occupations on numerous occasions. This exposure ideally will come in the form of guest speakers from area business of all types, government offices, technical/trade schools, and colleges. In addition to visits from area professionals the students will also receive exposure to occupations outside the local area by whatever means are available to each school. Students will receive encouragement to seek information on each career that interests them then share that information with classmates and faculty members.

During the students' eighth-grade year, career counselors hold conferences with the student, parents, and teachers. These conferences are designed to help the student make a preliminary career choice based on interest and past academic history. These choices are preliminary and are in no way binding to the student. These conferences may be informal in the beginning. However, they will culminate with the beginning of the student's Individual Career Plan (ICP), which will follow the student throughout the remainder of his or her career training. The ICP is a working document, which will undergo many changes as the student matures and interests change. The ICP, a planning tool, should not to be used as filler in the student's cumulative academic folder but should be reviewed and updated often. This review and update must always include the student, parents, teachers, and counselors.

Upon entering high school the ICP will take on a much more important roll as a planning tool for the student's academic future. Students receive assistance in exploring various career paths and exposed to actual on-site experiences when

possible. All students will take the same standard curriculum in the ninth and tenth grades. Specialized curricula will not start until the beginning of the eleventh grade year. In order for students to participate in a special curriculum path they must be in the eleventh grade and have passed the FCAT, in Florida, or other standardized test as required. School systems need at least three curriculum paths from which the student may choose or be guided toward. Based on exhibited interest and future plans the student, parent, guidance counselor, and teachers will develop a curriculum path for the student.

One of these career paths may lead to the college preparatory curriculum. Ideal for Bill since he knows he wants to study engineering. This curriculum is designed to prepare the student for success in a community or 4-year college curriculum. With the cooperation of colleges this curriculum is designed to ensure students will meet all prerequisites for acceptance into their institutions. This curriculum path will not have much modification from what exists now in many high schools except that it will be concentrated in the last two years and not the entire high school experience. Current "dual enrollment" programs can be modified to allow a more diversified class offering. The major difference with this and existing college preparatory curricula is that now selected local colleges have guaranteed acceptance to any student who completes this curriculum. This curriculum is modified for the individual student based on their chosen field of study after high school and in-depth and ongoing consultations with parents, teachers and counselors.

The second of the new curricula pathways is the career preparatory curriculum. Parnell (1986) points out that career education is a learner-centered bridge to help individuals cope with modern life. This will be the most involved and demanding to setup and continue. A survey must be done of local industries, businesses, technical/trade training centers and possibly community colleges. Training centers such as those for real estate and insurance will also have to be surveyed. The local school system and each of these centers will have to work collaboratively to establish a curriculum that will meet the requirements for entering students. Local business and industry should be persuaded to establish an on-the-job training program that students can participate in as part-time employees. These positions may be paid positions but will also serve as a means to earn high school credit toward graduation requirements much the same as the current diversified cooperative education program. Post graduation job offers are the primary concern for all involved. The guarantee of a post graduation job offer is at the forefront of negotiations between the school system and the private organization.

In addition to developing a curriculum that will ensure students have met the necessary prerequisites for entry upon high school graduation, training centers and community colleges work with the local school system to establish "dual enrollment" classes where appropriate.

Training centers that prepare candidates for special certification test are also involved in the career preparation curriculum. These centers could work out an agreement with the school system to offer classes for students and help in their preparation for certification. This pathway is ideal for students like Sally who know their careers will require some sort of certification.

The final curriculum pathway discussed is the standard or "regular" curriculum. This path way is designed for those students who, for one reason or another, can not or will not make a choice concerning their future. This pathway concentrates on ensuring each student receives a well-rounded education in their final two years of high school. This education ensures they have the basic knowledge to make wise choices in their future. While these students may not have chosen a career path the school system must continue to bring to their attention various careers that may interest them.

High school students deserve the opportunity to succeed in their chosen career paths. High schools and school systems have an obligation, if not a mandate, to ensure students succeed. Assuming these two statements are, in essence, true, why are so many students being forced into a curriculum path they do not desire? It is possible the answer is as simple as "money." The answer, however, may be so complicated as to defy explanation at this time. The purpose of this paper was not to answer this question but to offer one possible alternative to forcing students into pathways they may not wish to take. Presently, many students are routed into curriculum pathways simply because no viable alternative exist. By establishing the curriculum pathways mentioned in the paper, more students would have the opportunity to make guided decisions that would impact them well into their futures.

Although forgotten, overlooked, or deemphasized by events, the basis for these pathways currently exists in the public school system. The commitment and cooperation of all stakeholders is needed to ensure all students are valued whether they are bound for college education, career education, or another alternative in their future. With this commitment a program can be developed and continued that will ensure each student receives an education tailored to his or her specific needs and desires.

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