



Iota Lambda Sigma Journal for Workforce Education

Journal for Workforce Education (JWE_d)

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The Iota Lambda Sigma Journal for Workforce Education, an official publication of *Iota Lambda Sigma*, an Honorary Professional Society in Workforce Development, is published two times a year. The purpose of the Journal is to stimulate research and development and the creation of new knowledge and ideas related to workforce education and training. Through the dissemination of this new knowledge and ideas to the public it is hoped that it will result in improved efficiency and effectiveness of individual and group productivity and quality.

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Introductory Issue

Articles

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Career and Technical Education, The Missing Key Element: A Reaction to the Alliance for Excellent Education Elements of a Successful High School

By Virginia R. Jones

Abstract

This reaction is to an article entitled *Elements of a Successful High School* from The Alliance for Excellent Education. The article listed 10 key elements that every school must embrace to ensure success for all students. It further claimed this guide would assist parents, educators, business stakeholders, and concerned citizens in analyzing, identifying, and then improving their high schools. A serious omission was the inclusion of the contributions career and technical education makes to a successful high, both for the students and all other stakeholders. This article delineates element by element the ways career and technical education ensures a successful education for all high school students by focusing on career pathways, academies, real-world applications, and rigor associated with today's career and technical education courses.

Career and Technical Education, the missing key element: A Reaction to the Alliance for Excellent Education Elements of a Successful High School

The April 2008 edition of *Education Digest* published a reprint from the Alliance for Excellent Education (www.all4ed.org) entitled *Elements of a Successful High School*. The article listed 10 key elements that every school must embrace to ensure success for all students. It stated this guide would assist parents, educators, business stakeholders, and concerned citizens in analyzing, identifying, and then improving their high schools. A conspicuous omission in this guide is the inclusion of career and technical education as an integral component of a successful high school education. Career and technical education (CTE) courses provide the exposure and preparation needed to form realistic career plans prior to high school graduation (Hoachlander, 2007). "CTE is to some students what Advanced Placement and honors courses are to others" (Gray, 2004, para. 6). To ensure success for all students, the Alliance must consider students' educational and workforce aspirations.

There are debatable statements in the opening paragraph of this article. The article states it "draws from the work of leading researchers and educa-

tors" (Education Digest, 2008, p. 43) but has omitted the contributions of career and technical education. Research shows that CTE concentrators score higher on their math, reading tests, have opportunities for a 5% to 8% higher income after graduation, and enter college at a rate consistent with all high school graduates (United States Department of Education, 2004; Arizona Department of Education, 2006). Other prominent research is the work of the Southern Regional Education Board (SREB) in developing the High Schools that Work (HSTW) model in 1987, which instituted its own 10 key practices. The design of this model ensures success for all high school students by blending challenging academic content with rigorous career and technical education courses (Bottoms, 2007). The HSTW 10 key practices are similar, yet more detailed than the ones supported by the Alliance for Excellent Education. The paragraph concludes with an appeal to business owners in need of a well-trained workforce yet offers no indication of how the students will obtain this training other than through challenging academic coursework (Education Digest, 2008). CTE programs contribute to the development of workforce skills by having students apply academic and employment skills in the classroom (Association for Career and Technical Education, n.d.).

Dissection and examination of the 10 key points begins with the first point of providing challenging classes. It states students must learn advanced skills for college success and for the workplace. It believes to achieve these skills all students should take demanding classes in the core subjects of English, science, history, and math. It also stresses students have the opportunity to earn industry certifications and college credits through programs such as Advanced Placement, International Baccalaureate or community and local college credit (Education Digest, 2008). This point overlooks career and technical education as a source of challenging classes. CTE has embraced the rigor, relevance, and relationships outlined in the Perkins Act of 2006 and the No Child Left Behind Act of 2001. CTE offers students a chance to prepare for both college and a career while in high school (Hoachlander, 2008). Career and technical education coursework offers 36% of the total secondary dual enrollment courses nationwide, which positively affects student success in high school and postsecondary education (Association for Career and Technical Education, 2007).

Point 2 supports personal attention for all students either by providing a small high school or a high school divided into smaller units so that teachers and students know each other as individuals. It also calls for detailed plans for graduation, especially in the identification of required courses that will ensure success in high school and beyond (Education Digest, 2008).

CTE supports the development of programs of study, also called career pathways, typically offered through specialized smaller learning communities entitled career academies. Career academies employ the smaller learning community model to assist with social problems and low academic performance evident in large high school settings (Cramer, 2006). This school-within-a-school approach offers a more personal and engaging environment for the learner. It also assists in developing relationships between the learners and teachers. Learners benefit from personalized instruction and caring relationship with adults. Teachers benefit by learning more about their students' strengths and weaknesses. These factors have an impact on the student success (Kerka, 2000). Academies also establish clear achievement goals by giving the learners a degree of personalization for their studies and dramatically improving the teaching and integration of academic content into the focal area (Association for Career and Technical Education, 2006b).

CTE has redeveloped its curriculum to a career planning focus including an emphasis on industry standards, employability skills, and technology. CTE employs sixteen pathways that appeal to the career aspirations of students. A strong point of the career pathways approach is the integration of academic and workplace standards providing a wide focus on education for all students; whether college, tech-prep or workplace bound (Hoachlander, 2007). Pathways also enhance the pursuit of postsecondary education through work-based learning (apprenticeships, internships, and school-based activities) and a strong guidance and career counseling service.

Point 3 emphasizes extra help for those who need it. This is an on-going concern as many high school students disengage and become apathetic when they feel overwhelmed. This challenge traces to a lack of clarity about the specific goals of a high school education. Many students do not understand the relevance of a predominantly out-of-context high school curriculum (Wiggins & McTighe, 2008). Career and technical education focuses on attention to relevance and rigor. This focus reinforces content worthiness to the students. Research has concluded that many people learn better, faster, and retain the information longer when taught concepts in context (Hoachlander, 2008).

Point 4 ties in closely with point 3 in that it requires the school to bring the real world into the classroom. CTE uses contextual learning to reinforce relevance and relationships to the course content. Contextual learning helps make abstract concepts tangible through hands-on applications. Research shows that career technical education engages and motivates students by offering them real-world learning opportunities thus leading to lower dropout rates and greater earnings for high school graduates (NGA Center for Best Practices, 2007).

Point 5 encourages family and community involvement in the high school community. Career and technical education has supported this component of successful high school education for many years through advisory boards and student organizations. CTE utilizes advisory boards to develop local working partnerships with businesses. These partnerships help the business realize the students receive an education in academics as well as business specific certifications or applications. Businesses also benefit through the job internship program. Students learn firsthand the work ethics and employability skills needed to succeed in the work place.

Career and Technical Student Organizations (CTSOs) enhance students' learning and sense of civic and community involvement. CTOSs stress leadership qualities and teamwork, both of which are essential in today's global economy. Leadership development is a major focus of the organizations and offers students many opportunities to experience all facets of leadership. The students learn that the formula for career success begins with classroom learning combined with membership in career-specific, student-led organizations. CTOSs also offer students opportunities to compete in numerous competitions such as business education, marketing, or agricultural. Students' interest in the competitions is the only limitations to these opportunities.

A safe learning environment is the focus of point 6. Career and technical education courses offer students a rigorous, connected pathway of education that instills in students a sense of purpose. This sense of purpose engages students effectively reducing the apathy, boredom, and sense of "why am I here?" (Gray, 2004). The more students feel engaged and purposeful in their educational pursuits, the less likely they are to engage in or tolerate disruptive behaviors from others (United States Department of Education, 2006; McPartland, Jordan, Legters, & Balfanz, 1997).

Skilled and well-trained teachers are the requirement in point 7. The Perkins Act of 2006 specifically man-

dates professional development requirements stressing continuous improvement for the educators, consistent with the accountability standards for students of continuous improvement. Nationally, the Perkins Act requires performance and evaluation of scientific based research to improve preparation and professional development programs for pre-service and in-service programs for educators. Also mandated is the integration of in- and pre-service training with academic content standards and student academic achievement standards (Brustein, 2006). Teacher preparation programs instruct the beginning teacher in integrating academic and vocational instruction, designing curriculum applications based on real-world concepts, the proper use of technology, and teamwork along with leadership skills (McCaslin & Parks, 2002).

Point 8 states the high school must possess strong leaders who can effectively manage and supervise not only the employees but also the finances and general operations of the school. The leader must also embrace the vision of academic excellence and be the curriculum leader for the school (Education Digest, 2008). Career and technical education requires accountability for leaders in funding allocations and curriculum alignment through the Perkins Act. Site and local leaders are also responsible for ensuring the CTE educators are highly qualified by meeting the technical and local industry certifications for their specialty area.

Point 9 is the issue of necessary resources and is not an area of disagreement. CTE provides resources in technology for all students to experience success. Point 10 requires user friendly information be available to all community members. This information includes the school's graduation statistics (rate, requirements, and dropouts) and student performance on state tests (Education Digest, 2008). Career and technical education has a strict set of accountability standards, state reports, and concentrator reports. CTE provides this information to stakeholders to highlight the program's accomplishments and improvements. It also reports areas of needed improvements for programs and students.

Career and technical education engages students and guides them through a career pathway for postsecondary education or workforce training. CTE keeps students in schools with its mission of "learning for understanding" (Wiggins & McTighe, 2008, p. 36) and preparation for the world beyond the school building. It provides rigor in its academic content, relevance with its real-world applications, and relationships through student organizations and advisory groups. All of these factors are contained in the 10 key elements supported by the Alliance for Excellent Education. Career and

technical education provides more than the 10 key elements by providing the last "r" of results. Results showing that in 2005, high school graduates in the United States took, on average, four Carnegie units of CTE, which is as many or more units than any other high school subject except English. Also more than 60 % of all students elected to take three or more CTE classes during their high school career (Hoachlander, 2008). The students understand career and technical education has the key elements to be successful in school and life. It is time for the academic world to appreciate the same by working with CTE to ensure the success of all students in high school.

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Students' Perceptions of Careers and Career and Technical Education (CTE)

Virginia R. Jones

Abstract

Within public school systems, students in the eighth grade are required to make critical academic decisions that ultimately determine their placement into a college or a Career and Technical Education track during high school. The study examined the influence of educational attainment (semester averages in core courses) and gender and ethnicity on eighth grade students skills assessment rating and the career assessment rating as measured by the Coin Career Community[®] assessment. The sample in this study consists of a convenience sample of eighth grade students at Halifax County Middle School, in Halifax County, Virginia. The hypotheses were tested using hierarchical multivariate analyses of data from the Coin Career Community[®] and the Student Information Software (SASI[®]) at Halifax County Middle School. The first hypothesis seeks to determine how well gender and ethnicity predict eighth grade students' skills assessment ratings. The findings from the statistical analysis prove that gender is predictive of a student's skill assessment rating. In all the multiple regressions, gender played a significant role. Gender was strongly correlated to the skills assessment rating and just slightly less correlated to the career assessment ratings (23% versus 15%). This shows that gender influences a student's skill levels as well as their desires for specific careers. Based on these results, English, math, and science semester grade averages appear to offer little additional predictive power beyond that of the student gender data.

Introduction

To have a promising career in the current economy, today's students need technical and academic skills as well as the ability to think and work collaboratively with others (Lynch, 2000). Being a digital native, a person who grew up with accessible electronic media, is not enough for students to be competitive in today's digitally driven economy. For more than 80 years Career and Technical Education (CTE) was grounded in blue-collar-type jobs and training students for jobs in that economy (Lynch, 2000). Realizing the need to meet the new technologies, CTE has changed its course focus to meet these needs by providing students with the content and skills necessary in this increasingly complex technical world.

Career and Technical Education courses provide the exposure and preparation needed to form realistic career plans prior to high school graduation. The Association for Career and Technical Education (ACTE) (Issue Brief, 2007) states that 24 of 30 fastest growing occupations require postsecondary education and training culminating in a vocational award or academic degree. Research also shows that CTE concentrators score higher on their math and reading tests, have opportunities for a 5 to 8% higher income after graduation, enter college at a rate consistent with all high school graduates, and obtain their degree or certificate within two years of study (NAVE Summary, 2004; Arizona Department of Education, 2006). Career and Technical Education coursework offers 36% of the total secondary dual enrollment courses nationwide, which positively affects student success in postsecondary education (ACTE, 2007). Increased acceptance of the academic content of Career and Technical Education classes and intentional career planning will assist parents in advising their child in planning for a rewarding, relevant career.

Statement of the Problem

Within public school systems, students in the eighth grade are required to make critical academic decisions that ultimately determine their placement into a college or a Career and Technical Education track during high school. These early decisions are made with limited career awareness and information about how the values of work and knowledge of higher education affects the student's future career and college success. Data confirms negative outcomes of these decisions in that nearly half of college-bound students request assistance in making career decisions (Hornak & Gillingham, 1980). Because of the long-term impact on students' future academic and career success and the importance of early career awareness, research is needed to determine the success of parental/child relationships, academic success, and career assessment programs.

To provide insight into influences on students' career choices, the researcher explored three research questions. First, how well do gender and ethnicity predict eighth grade students' skills assessment ratings? Second, do students' grades in core classes (math, science, and English) accurately predict their skill assessment rating obtained from the Coin Career Community[®]? Third, how do parent/child relationships affect

the social and academic development of adolescents regarding career selection and educational attainment?

These questions are relevant since studies have shown that career intervention and real-world applications of Career and Technical Education at an earlier age in a child's development will provide a more mature basis for their career decisions. Informing students prior to entering high school about career choices and courses available in CTE will improve their career outlook immediately upon graduation from high school. It will also assist students in preparing for postsecondary education by taking prerequisite courses while still in high school.

Literature Review

Most children possess immature attitudes of careers by focusing on the glamorous aspects of a career and not the actual foundations necessary to achieving the career (Arrington, 2000; McMahon & Watson, 2005). Students rely on peers, media, and parental influences to develop their perceptions of careers (Perry & Van Zandt, 2006). Students, however, must have a foundation of career awareness and career exploration experiences to consider career plans in-depth prior to high school graduation. Career development is a projection activity based on a student's past, present, and ideals and dreams (Millar & Shevlin, 2007). There are numerous variables influencing these distinct stages of career development, including parental education levels and career, parental knowledge of other careers, socio-economic status, ethnic background, and the academic ability of the child.

The purpose of this study was to analyze the data that provided the researcher with a better understanding of how students' perceptions of careers and Career and Technical Education classes and their educational achievement (grade averages) relate to the choices they make in course selections.

Student Perceptions

At the secondary level, more specifically middle school, children are expected to formulate a clear goal of their academic or workforce aspirations and plan their educational futures accordingly (Arrington, 2000). Studies (Arrington, 2000; Fadale, 1975; Johnson, 2000; Phipps, 1995) reported that the developmental needs of 11-14 year olds are compatible with the concepts of future goals, interests, an awareness of work and an ability to develop positive attitudes towards work. However, Johnson (2000) found in a study of 194 sixth grades and 179 ninth graders that most have

a shallow understanding of how school related to work and limited awareness of the knowledge and skills needed for work. More specifically, students had little or no awareness of the type of work involved in their career aspiration.

A middle school poll prepared for the National Association of Secondary School Principals (NASSP) and Phi Delta Kappa (PDK) (Markow, Liebman, & Dunbar, 2007) reports nine out of ten middle school students (92%) plan to attend college. However, nearly 7 out of 10 (68%) have no information about how to choose the appropriate high school courses to prepare them for postsecondary education. Students know what they desire in a post high school career or educational pathway but do not possess the knowledge or tools to achieve their dream.

A significant factor of an adolescent's career aspirations is gender perception of specific careers. Gender differences play a significant role in the career development of adolescents (McMahon & Patton, 1997). The effect of gender role socialization is far reaching; a significant consequence is that many students only perceive a narrow gender-based range of future options, particularly in relation to education and career opportunities. Eighth and ninth grade students report more satisfaction and desire to participate in careers, especially careers dominated by their own respective gender (Ji, Lapan & Tate, 2004; Post-Kammer & Smith, 1985). Studies substantiate the tendency of adolescents to employ gender role socialization and self-segregate into career clusters (Ji, et al., 2004). This self-segregation is consistent with immature "cognitive architecture" (McMahon & Watson, 2005, p. 240) where students employ superficial and peer guided input to formulate their theory of careers and associated CTE courses.

Studies show that career maturity is important in understanding career development (McMahon & Watson, 2005). Predictors for career maturity include self-efficacy, age, career decidedness and work commitment (Creed & Patton, 2003). Exposure to careers and career exploration early in secondary education provide a foundation for students to begin the maturation process needed to make wise career choices. College retention research has shown that a student's ability to make appropriate and relevant career choices and decisions greatly increases the commitment to remain in college and graduate (Herr, 2000; Hornak & Gillingham, 1980; Luzzo, 1995). The research does not show, however, how well this maturity could predict future career satisfaction. This satisfaction is important for students to realize fully their career goals and needs. Further studies comparing maturity and satisfaction will enhance understanding the connection be-

tween career maturity and planning early in the student's educational career and long-term career satisfaction.

Parental Influences

Significant research evidence indicates that parents influence their children's career development and choices. Parents, through their daily modeling, are their child's foremost teacher of career education. Research shows that parents provide a standard for work values, and they educate their child about life roles, sex roles, and employability skills (Lankard, 1995). Consistent with this role, parents perceive a child's career performance is directly a reflection of their parenting skills. Parents feel that their child's career planning skills increase with age, but also feel that offering career exploration earlier in the child's education is important (Bardick, Bernes, Magnusson, Witko, 2005).

Various career development theories address the influences of family on career development. Many career choice theories indicate that the family plays a role in shaping the values and needs of its members. Super's (1957) theory suggests that the family influences the development of the child's self-concept, which shapes their abilities, interests, values and career choices. Crites and Savickas' (1962) theory suggested that the amount of parental identification is reflected in the interests of their children and in turn, the careers that they pursue. One body of research asserts that parental education has the greatest impact on career choice (Lankard, 1995) yet another body supports the effects of close family relationships as indicators of career exploration and risk taking (Kerka, 2000). In this study of relational influences on career development, researchers use the attachment theory of close family or caregiver support. Supporters of this theory propose that family functioning is more influential in a child's career development than parent's educational or socio-economic levels. Social learning theory also points out possible influences the family has on students' career choices, since its premise is that individual's personalities and skills are a direct result of their instrumental and associative learning experiences. Parents reinforce this theory through punishment or rewards for certain behaviors that either encourage or discourage certain interests or abilities (Mitchell & Krumboltz, 1990). Significantly, all theories agree that parent child interactions and connectedness assist the child in developing risk-taking, exploration skills and are the primary sources for the child's career knowledge (Kerka, 2000) To achieve this interaction, the parents frequently rely on their knowledge of careers or their experiences in the work place to counsel their child regarding careers (Kerka, 2000). In an age of rapidly advancing technology and related changes in the work

place, parental counseling often only skims the surface of career opportunities. Research shows educators and parents know more about *what* occupations children desire than what they *know* about the occupations (Phipps, 1995). From the literature, it seems apparent that the quality of the parental-student relationship, especially attachment to parents, is a reliable predictor of educational or career aspirations (Garg, Kauppi, Lewki, & Urajnik, 2002; Juang & Silbereisen, R., 2002).

Literature Review Summary

Increased acceptance of the academic content of Career and Technical Education classes and intentional career planning will assist students in planning for a rewarding, relevant career. Research shows that career exploration ensures that all students comprehend the importance of designing their life-long career focus in stages consistent with their educational stage in life (Kinney, 2007). Research has shown that family influences are pervasive but findings indicated they are not the only variable in career choice. A child chooses a career based on his internal concepts and idealizations of careers. These are formed by exposure to career exploration at school, parental influence, and peer acceptance. Research substantiating family influence was prevalent but not conclusive as to how it advanced the child's career maturity. The research did show that family influence is important to the child's development of internal concepts and thereby his concepts of careers.

Research Design

Sampling techniques

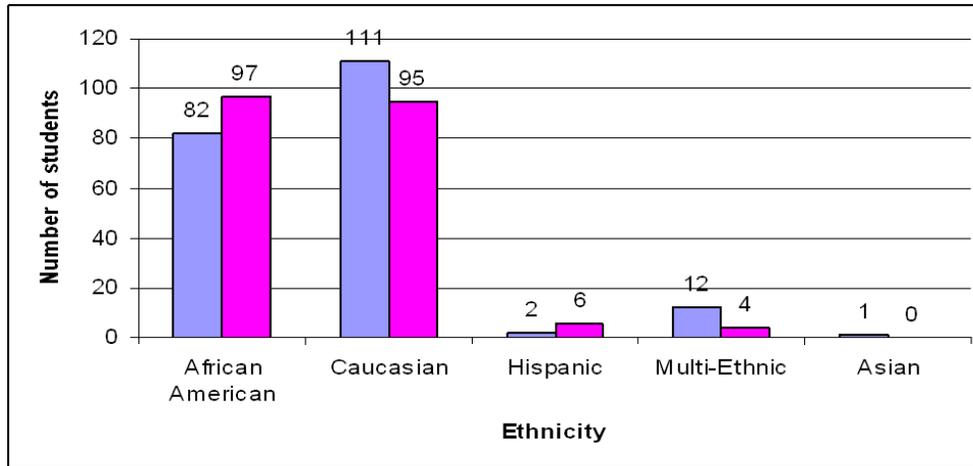
The sample in this study consists of a convenience sample of eighth grade students at Halifax County Middle School, in Halifax County, Virginia. All eighth grade students were given the opportunity to complete the Coin assessment program during their regular school day. Out of the total grade level number of 448 students, 38 students did not complete the assessment due to absences, Individualized Education Plan (IEP) restrictions, or other undefined reasons. Students took the assessment in the school's Career Lab during one of their core (regular) classes. The resulting sample size was 410 ($N = 410$).

Sample

Existing demographic data (gender and ethnicity) and semester averages from English, math and science were obtained from SASI[®], the school system's student database. The sample size was 410 students

consisting of 202 females and 208 males. The ethnic breakdown was 206 Caucasian students (50.2%), 179 African American students (43.7%), 8 Hispanic students (2.0%), 16 Multi-Ethnic students (3.9%) and 1 Asian student (.2%). See Table 1.

Table 1
Ethnicity and Gender data for Halifax County Middle School 8th Grade Students



Data Source

For the purpose of this study, pre-existing data from the Coin Career Community[®] was used for analysis of skill assessments. Grade averages and demographic information was extracted from SASI[®], which is a student database that manages data regarding enrollment, student demographics, attendance, discipline, grades, scheduling, and other school requirements. The individual teachers using an integrated grading program called InteGrade Pro entered the semester average information used in these analyses. This data was transferred electronically into SASI[®] and entered into each student's database record. Other demographic information such as gender and ethnicity was entered from student cumulative folder (paper version maintained at the school) and updated by parents annually through the use of a take home form, a CR-5, Annual Update of Student Information. The school support staff enters changes to demographics manually.

The Coin Career Community[®], an online guidance and curriculum program, uses a research-based 32 question career cluster assessment to provide information on the top five career clusters that best match student interests and a 41 question skills assessment that ranks the top 20 occupations matching student skill strengths (Coin Career Community, n.d.). These as-

sessments provide teachers, parents, and students with obvious connections between skills being learned in the classroom with real-world applications of those skills. Halifax County Middle School granted permission for use of these data sources for the purpose of conducting this statistical analysis.

Materials and Measures

The researcher used the skills assessment rating from the Coin Career Community[®] which consisted of 41 questions designed to assess a student's skill strengths in various occupations. The results match the skills to the top 20 occupations in the job market. This skills assessment rating was the criterion variable. The independent or predictor

variables were ethnicity and gender, and English, math and science semester averages. Data for these variables was obtained from SASI[®], the student database system used by Halifax County Public Schools.

Design

The hypotheses were tested using hierarchical multivariate analyses of data from the Coin Career Community[®] and the Student Information Software (SASI[®]) at Halifax County Middle School. The following are the constructs and variables used in the design. Five predictors or independent variables were used. They are gender, ethnicity, and English, math, and science semester grade averages. The independent variables were entered in blocks to assess their relationship with the criterion variable. Two blocked sets were used. The first is the gender block composed of gender and ethnicity, and the second is the semester averages block composed of English, math, and science semester grade averages. Social studies, another of the core courses was not included as research has not shown its importance to success in postsecondary education (Ting, 1997).

Data Analysis

The data was first examined to identify possible problems with multicollinearity. The independent variables were examined for multicollinearity, the relationship

between the independent variables, due to its confounding effect of multiple regression models (Meyers, Gamst, Guarino, 2006). Correlations among the independent variables were conducted to assess multicollinearity (See Table 2). None of the independent variables were highly correlated ($r > .7$) thus the data passed this assumption.

I Table 2 *Pearson's Correlations for all Variables in Skills Assessment*

	Skills Assessment	Gender	Ethnicity	English	Math	Science
Skills Assessment	1.00*	0.48	-0.09	0.08	0.03	0.04
Gender	0.48	1.00*	-0.11	0.16	0.03	0.03
Ethnicity	-0.90	-0.11	1.00*	0.07	0.03	0.06
English	0.08	0.16	0.07	1.00*	0.51	0.51
Math	0.03	0.03	0.03	0.51	1.00*	0.63
Science	0.04	0.03	0.06	0.51	0.63	1.00*

Note: Values have been rounded to two decimal places.

Table 3
Means and Standard Deviations for All Variables in Skills Assessment (N = 410)

	Mean (M)	Standard Deviation (SD)
Skills Assessment	7.07	4.87
Gender	0.49	0.50
Ethnicity	1.15	1.05
English	84.12	7.85
Math	84.36	8.47
Science	82.82	9.55

Note: Values have been rounded to two decimal places.

The means and standard deviations for all the variables are presented in Table 3.

Three multiple linear regression analyses were conducted to predict the skills assessment ratings for eighth grade students from the overall student data (gender, ethnicity, and semester grade averages in core subjects of English, math, and science) for eighth grade students at Halifax County Middle School. The hypotheses were tested using multiple linear regressions since there were two sets of predictors that could impact a student's skill assessment.

The first regression performed was unordered to determine the significance of each predictor. The independent variables were gender, ethnicity and English, math

and science semester averages and the dependent variable is the skills assessment rating. The predictors were the five student data indices, while the dependent or criterion variable was the skills assessment ratings. The student data predictors were entered unordered to determine the significance of each predictor. A second, ordered regression entered the data in sets, set 1 (gender and ethnicity) and set 2 (semester grade averages). The predictors were then entered a third time, in reverse order, set 2, then set 1 to see the difference between the sets to determine if one set should come before the other. An alpha level of .05 was used for all statistical tests.

A gender and ethnicity block was included because these variables have been shown to affect career de-

velopment factors in young people (Post-Kammer & Smith, 1985; Ji, Lapan, & Tate, 2004). A second block of semester averages (math, science, and English) was used to predict skills assessment ratings correlation with students' actual semester grade averages in core curriculum courses.

The sample size was relatively small and limited to

of the skills assessment rating, $R^2 = .23$, adjusted $R^2 = .22$, $F(5, 404) = 24.48$, $p < .01$. The prediction equation for the standardized variables is as follows:

$$Z_{\text{Skills}} = .48 Z_{\text{Gender}} - .04 Z_{\text{Ethnicity}} + .01 Z_{\text{English}} + .00 Z_{\text{Math}} + .04 Z_{\text{Science}}$$

Table 4 shows the indices to indicate the relative

Predictors	Correlation between each predictor and the skills assessment ratings	Correlation between each predictor and the skills assessment rating controlling for all other predictors
Gender	.48*	.47*
Ethnicity	-.09	-.04
English	.08	-.01
Math	.03	.00
Science	.04	.03

* $p < .01$

only eighth grade students at Halifax County Middle School. The researcher made no distinctions between students repeating the eighth grade and age appropriate students. There were also no distinctions made between Special Education and regular students. There were no distinctions made between levels of core courses such as Inclusion courses, Honors, and different levels of mathematical study available in middle school (Math 8, Pre-Algebra, Algebra 1, Part A, Algebra 1 Part B, Algebra 1, and Algebra 2).

Potential intervening variables include the influence of gender and family on the student's ideas of career (Blustein, Walbridge, Friedlander & Pallandino, 1991; McMahon & Patton, 1997). No criteria were established to determine whether students came from single versus two-parent, blue-collar versus white-collar, families. Another limitation is the socio-economic status of the school district and the county. The county in this study is considered economically depressed, with a marked decline in manufacturing and agriculture related job opportunities. This decline potentially affects student's career aspirations.

Results

The multiple regressions analyses were conducted to predict the skills assessment rating for eighth grade students from two sets of predictors. The first set of predictors consisted of ethnicity and gender. The second set of predictors. Semester averages, includes the students' semester grade average for core curriculum classes consisting of English, math, and science. The regression equation with all five of the predictors was statistically significantly related to the criterion variable

strength of the individual predictors.

A second, ordered regression analysis was performed to evaluate the relative importance of gender and ethnicity predictors and semester averages was conducted and the results indicated that the gender and ethnicity significantly predicted the skills assessment rating, R^2 change = .23, $R^2 = .23$, $F(2, 404) = 59.46$, $p < .01$. Gender accounted for 23% of the variance in the skills assessment rating. The zero-order correlation between gender and skills assessment ratings was .48, $p < .01$. The correlations between these two variables partialling out the effects of all other predictors was .47, $p < .01$.

A third, ordered regression analysis was conducted to evaluate the contribution of semester averages over and above gender and ethnicity. The results of this third regression indicated the semester grade averages in English, math, and science did not predict significantly over and above gender and ethnicity, R^2 change = .00, $R^2 = .23$, $F(3, 404) = .18$, $p = .91$. These averages did not explain any of the variance in the skills assessment rating as determined by the R^2 change of .00. Based on these results, English, math, and science semester grade averages appear to offer little additional predictive power beyond that of the student gender data.

Based on limited results of the above analyses, the researcher decided to perform the multiple regressions again this time using as the criterion variable the career assessment rating. The independent variables, gender, ethnicity and English, math, and science semester grade averages remained the same. The Ca-

reer Assessment rating differs from the skills assessment rating in that it measures career aspirations or strong interests in a career pathway. The skills assessment is based on skill strengths or assessable knowledge about careers. The career assessment measures strong interests and matches the top five careers to their reported interests.

The same statistical procedures were followed. Three multiple linear regressions were conducted to predict the career assessment rating for eighth grade students from two sets of predictors. The first set of predictors is gender and ethnicity, and the second set includes English math, and science semester average grades. The criterion variable is the major change in this analysis, changing from skills assessment to career assessment ratings. This change in variable represents a change from analyzing skills strengths and abilities to analyzing career aspirations and desires.

The regression equation for all five of the predictors was statistically significant related to the career assessment rating, $R^2 = .15$, adjusted $R^2 = .14$, $F(5, 404) = 14.24$, $p < .01$. The prediction equation for the standardized variables is as follows:

$$Z_{\text{Career}} = .36 Z_{\text{Gender}} + .05 Z_{\text{Ethnicity}} + .10 Z_{\text{English}} - .05 Z_{\text{Math}} - .02 Z_{\text{Science}}$$

Table 5 shows the indices to indicate the relative

strength of the individual predictors. The correlations between these two variables partialling out the effects of all other predictors was $.36$, $p < .01$.

A third, ordered regression analysis was conducted to evaluate the contribution of semester averages over and above gender and ethnicity. The results of this third regression indicated the semester grade averages in English, math, and science did not predict significantly over and above gender and ethnicity, R^2 change = $.01$, $R^2 = .15$, $F(3, 404) = 1.25$, $p = .29$. Based on these results, English, math, and science semester grade averages appear to offer little additional predictive power beyond that of the student gender data. These averages did not explain any of the variance in the skills assessment rating as determined by the R^2 change of $.01$.

Discussion

The study examined the influence of educational attainment (semester averages in core courses) and gender and ethnicity on eighth grade students skills assessment rating and the career assessment rating as measured by the Coin Career Community[®] assessment. Another area of interest was the impact of parents on students' career choices and educational attainment.

Predictors	Correlation between each predictor and the skills assessment ratings	Correlation between each predictor and the skills assessment rating controlling for all other predictors
Gender	.37*	.36*
Ethnicity	.02	.06
English	.14	.10
Math	.01	-.04
Science	.02	-.02

* $p < .01$

strength of the individual predictors.

A second, ordered regression analysis was performed to evaluate the relative importance of gender and ethnicity predictors and semester averages was conducted and the results indicated that the gender and ethnicity significantly predicted the career assessment rating, R^2 change = $.13$, $R^2 = .15$, $F(2, 404) = 29.80$, $p < .01$. Gender accounted for 15% of the variance in the skills assessment rating. The zero-order correlation between gender and skills assessment ratings

was $.37$, $p < .01$. The first hypothesis seeks to determine how well gender and ethnicity predict eighth grade students' skills assessment ratings. The findings from the statistical analysis prove that gender is predictive of a student's skill assessment rating. In all the multiple regressions, gender played a significant role. Gender was strongly correlated to the skills assessment rating and just slightly less correlated to the career assessment ratings (23% versus 15%). This shows that gender influ-

ences a student's skill levels as well as their desires for specific careers. The literature reviewed showed a strong tendency for middle school students to self-segregate into gender specific careers clusters and to employ gender role socialization (Ji, Lapan & Tate, 2004; McMahon & Watson, 2005; Post-Kammer & Smith, 1985). This immaturity in selecting careers and relying on superficial and peer guidance is problematic. Students need to make appropriate career and educational choices when matriculating to high school. Middle school children are expected to formulate a clear goal of their academic or workforce aspirations and plan their educational futures accordingly (Arrington, 2000). According to research from the National Association of Secondary School Principals and Phi Delta Kappa 92% of middle school students plan to attend college but 68% of them have no information about how to choose the appropriate high school courses to prepare them for college (Markow, Liebman & Dunbar, 2007). Using inappropriate gender perceptions hinders the students not only in high school but also in postsecondary education or career pursuits.

The analysis of ethnicity showed that it was not a predictor for the skills assessment ratings. This finding was opposite of what was hypothesized. Ethnicity had a negative correlation to other predictors of -.04. Based this correlation, students' skills assessment ratings predicted that ethnicity was not a factor in determining a student's particular skill strength. The career assessment correlation was stronger, .06, but still not statistically significant.

The second hypothesis explores how students' grades in core classes (math, science, and English) accurately predict their skill assessment rating obtained from the Coin Career Community[®]. Conventional wisdom and pre-college assessments such as Scholastic Aptitude Test (SAT) and the standardized Achievement Test (ACT) promote high educational attainment scores and grade point averages (GPA). The review of research literature does show that parents influence students in their educational attainments through shaping their values and needs which in turn affects their self-efficacy. All theories agree that parent child interactions and connectedness assist the child in developing risk-taking, exploration skills and are the primary sources for the child's career knowledge (Kerka, 2000). The statistical analysis showed little predictive power of core semester averages in regard to skills or career assessment ratings.

The third hypothesis of how do parent/child relationships affect the social and academic development of adolescents regarding career selection and educational attainment examines the current literature available for a definitive answer or the need for more re-

search. The literature shows that parents do provide a strong influence to their child. It also shows that parental support is a complex process as it relates to guiding their children in their career development journey. Another theory supported by research is that students who feel that their parents are supportive and place an importance on achievement in school and work are more likely to engage in career development activities. The family support of career development emerged from the literature and theories reviewed (Crites & Savickas, 1962; Lankard, 1995; Kerka, 2000; Mitchell & Krumboltz, 1990; Super, 1957). One important factor to consider in examining the family's role in promoting career development is how the family can transmit values, beliefs and attitudes about careers (Phipps, 1995). A parent's emphasis on school, work activities and competitiveness were associated with students valuing work and career in their lives. Overall the values emphasized within the family environment were important in relation to the child's career development. Parental knowledge of careers and avenues of career support play a vital role in students' career explorations and career knowledge.

Conclusion

Overall, gender and family support are the factors that affect students' career and educational attainment. Gender was a strong indicator of career preference or skill regardless of the analysis performed. Gender roles may be a significant issue to explore in that careers may be different meanings in the lives of males and females. In addition, parents' ideas about gender roles for specific careers may influence a student's career acceptance and desire.

Educational attainment, although an important indicator of student achievement, does not significantly predict the skill or career assessment ratings. Since educational pursuits are tailored to providing the student with a career or profession, maintaining a high level of educational achievement is still a priority for students. Students must, however, continue to explore new careers and professions that fit into both their educational and skill/career assessment plans.

Career awareness and development is an important facet of all students' educational endeavors. Careers are not only a way of life, a way to provide financial means, it is also an aspect of life that is rewarding, and enjoyable (Association for Career and Technical Education, 2007; NAVE Summary, 2004). Melding the career assessments rating, the careers to which students' aspire, with the assessed skills and educational background will assist students in finding the career of their dreams. Career and Technical Education is designed to offer students this opportunity through the

academic rigor, relevance, and dual enrollment opportunities. CTE courses provide the exposure and preparation needed to form realistic career plans and achieve success in high school and postsecondary careers, training, or education.

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A Study to Determine What Factors Contribute to Student Success in DECA's Competitive Events

Michael Kosloski

Abstract

The factors that contribute to student success in competitive events for DECA, An Association of Marketing Students, were examined, in an effort to determine if competitive events success could be predicted. One emphasis was to determine if students with more academic success—as determined by grade point average—had a competitive edge. 2816 DECA members were asked to identify their level of success in competitive events, as determined by competition placement, as well as to identify how a variety of elements related to their lives, in an effort to correlate these factors into student success. A discriminant analysis was conducted, identifying amount of preparation time as the leading predictor in student success, followed by grade point average and participation in extracurricular activities. It was recommended that a follow-up study be conducted to determine which types of preparation have the greatest impact on student success.

Introduction

An integral element of workforce education, high school career and technical education is a program of study that offers a sequence of courses that provides individuals with the academic and technical knowledge and skills they need to prepare for further education and careers (Brustein, 2006). Career and technical education student organizations have played an inseparable role in career and technical education since the passage of the Smith-Hughes Act in 1917 (Alfeld, Stone, Aragon, Hansen, Zirkle, Connors, et al. 2007). The career and technical student organization corresponding with marketing education is DECA, An Association of Marketing Students. DECA is a co-curricular high school student organization that offers students opportunities to apply learning activities in marketing, management, and entrepreneurship through the marketing education curricula (DECA, 2008).

DECA provides opportunities for students to learn leadership and the application of technical and academic skills, knowledge, and attitudes. One aspect of the student organization that makes it appeal to high school students is the opportunity to compete against other students in marketing related competitive events such as selling, advertising, hospitality, and other marketing oriented topics. The concept of competition—as well as the opportunity to network and to travel—appeals to many high school students, acting as a mo-

tivator to engage students. In Virginia DECA students enter the competitive route on a regional or district level. Generally students that win at the district or regional level continue on, earning a coveted competitive spot in state competition. Those who do well at state-level competition move on to compete at the international level. There are forty-one competitive events for students to choose from that reflect their career interests and coursework. Competitive events are co-curricular, and reflect a specific element of the marketing education curriculum. They are an application of workforce education, and student learning is enhanced and reinforced through preparation and execution of competitive events (Stone, Kowske, Alfeld 2004).

Each year students enroll in marketing education, in part with the anticipation of participating in these competitive events. Some chapters perennially have a large number of students that qualify for both state and national competition. Other programs, however, do not share the same competitive success. For many chapters, having a single student to earn their way through the competitive ranks is considered a very successful year with respect to competitive events. In some school systems marketing education is a highly sought after elective, and as a result, attracts many students who are academically advanced. Other chapters have the reputation of being not so academically advanced, and predominantly consist of students that have been academically challenged, looking to directly enter the workforce. Because of the dichotomous population amongst chapters, teachers and students alike tend to informally attribute student success in DECA to the academic background of their respective students. Whether or not this is a legitimate foundation for success is the question addressed by this research. Because career and technical education calls for the integration of technical education and academics, it would seem logical to assume there is validity to this statement (Brustein, 2006). Others have suggested otherwise. Darmody and SeEVERS (1994) have asserted that success is a result of three variables; achievement expectancy, participation in leadership activities, and gender. Camp, Navaratnum, and JeffreyS (1987) found that participation in career and technical student organizations (CTSO) competitive events produced a positive contribution to student academic achievement, not the other way around. Huff (2003) recognized several variables and their correlations to competitive success, including demographics, teacher experience, preparation, curricular materials, and classroom instruction. These variables were ex-

amined from a teacher's perspective. Examining some of these variables from a student's perspective is what will be considered in this study.

Purpose of the Study

One important implication of this study was to determine whether or not students with higher grade point averages necessarily meet with more competitive success than their counterparts with lesser academic success, as measured by grade point average. The purpose of this study was to determine what factors contribute to student success in DECA's competitive events as determined by competition placement. Students who won at higher levels were considered to be more successful than those who did not. The highest level of achievement, for the purposes of the study, was to earn one's way to international competition. It should be noted that in the state of Virginia—as well as many other states—students do not always have to directly earn their way to the state level of competition. Some students prepare lengthy written manuals, and spend months in doing so. These students, if granted permission by their teachers and other stakeholders, are permitted to compete at the state level, circumventing a district level of competition. Generally there is no district level competition for these events. However, the variables in question still apply. Generally these students are selected by their teachers as achievers, and still must earn their way through competition at the state level. The independent variables considered were participation in sports, participation in other high school organizations, amount of time spent in preparing for competition, year in high school, student grade point average, region, post-high school aspirations, gender, and ethnicity. A discriminant analysis was conducted to determine whether or not these factors could predict competitive success.

Methodology

Students enrolled in marketing education throughout the State of Virginia were invited to participate in the study. A Web-based form was created and posted on the Virginia DECA Web site. A notice was sent to DECA chapter advisors around the state, and the form was made available to all students. Limitations of the study include the fact that, although the form was intentionally difficult to find by routine Web navigation, any student could have potentially completed it, as there was no verification of student membership. In addition, it is possible that a student could have inadvertently omitted a question, and it would not have been detected. All questions were set, by default, with a "0" setting, which means an omitted question would yield a result of "0".

Thirteen cases were deleted from the study, as the results of each of these thirteen cases yielded all zeros in their response. While this is possible, it is highly unlikely, and more likely that a student inadvertently submitted the form before it was completed. The remaining 2816 cases were used for this study.

The dependent variable was the level of competitive success. This variable originally had 6 levels, and was recoded into the following three categories; did not compete beyond the district level, competed at the state level but did not compete at the international level, and competed at the international level. The predictor variable pertaining to involvement in sports was recoded to include only two options, asking students whether or not they participated in high school sports. The variable pertaining to involvement in other clubs and organizations was recoded to include only two options, asking students whether or not they participated in other high school clubs and organizations. The next predictor variable identified the amount of hours spent directly in preparation for competitive events, both in and out of the classroom. The variable pertaining to the respondent's year in school was recoded to include only three options; seniors, juniors, and underclassmen. Freshmen and sophomores were combined and recoded because there were not a sufficient number of freshmen who had actually competed at any level. The variable asking about grade point average segregated the respondents' GPA into the following categories; 0-2.01, 2.01-2.5, 2.51-3.0, 3.01-3.5, 3.51-4.0, and >4.0. All grade point averages are on a 4.0 scale. Next respondents were asked to identify whether or not they were from the Eastern, Western, or Northern region. The variable pertaining to the respondents' postsecondary plans was recoded to include only three options, including entering directly into the workforce, attending a four-year university, or attending another type of postsecondary educational institution. Participants were asked to identify their gender. The variable pertaining to the respondents' ethnicity was recoded to include only three options; white, black, or other, as the number of non-white and non-black responses was very limited.

A discriminant analysis was conducted to determine whether the predictor variables above could predict competitive success. The overall Wilk's lambda was significant, $\lambda = .64$, $\lambda^2(26, N = 2816) = 1256.37$, $p < .001$, indicating that the overall predictors differentiated among the competitive success groups. The Wilk's lambda for the secondary function was also significant, $\lambda = .984$, $\lambda^2(12, N = 2816) = 45.88$, $p < .001$, indicating that the predictors separated significantly on the competitive groups after partialling out the effects for the first function. Because these tests were significant, both discriminant functions will be interpreted.

Table 1a shows the within groups correlations between the predictors and the discriminant functions, as well as the standardized weights. Based on these coefficients, the number of hours spent in preparation for competitive events exhibit the strongest relationship with the first discriminant function, while grade point average and club participation show a weaker relationship. In analyzing the second function, participation in clubs and organizations demonstrates the strongest relationship, while participation in sports shows a weaker negative relationship.

It can be noted that while both functions are significant, the lateral separation of function one appears to be

greater than that of function two.

When competitive events success was predicted from the variables, a cross-validation revealed that 72.0% of the original cases were correctly classified. In order to take into account chance agreement, a Cohen's kappa coefficient was computed and obtained a value of $\kappa = .462$, $p < .001$, a moderate value, attesting to the fact that this model is an improvement over chance prediction.

Summary, Conclusions and Recommendations

The purpose of this study was to determine what factors contribute to student success in DECA's competi-

Table 1a

Standardized coefficients and correlations of predictor variables with the two discriminant functions.

Predictors	Correlation coefficients with discriminant functions		Standardized coefficients for discriminant functions	
	Function 1	Function 2	Function 1	Function 2
prep	.843(*)	.125	.821	.084
GPA	.424(*)	.046	.313	-.024
Less_than_4yr	-.231(*)	.098	-.157	.166
Eastern_Area	-.173(*)	-.084	-.082	.063
Black	-.093(*)	.048	-.053	.024
Clubs_partic	.293	.453(*)	.035	.592
athletic participation	.094	-.366(*)	-.497	-.497
Western_Area	-.099	.360(*)	-.118	.375
underclass	-.262	.326(*)	-.292	.617
No_college	-.127	-.236(*)	-.050	-.220
Other	-.017	-.216(*)	-.057	-.167
junior	.064	.211(*)	-.040	.489
gender	.112	.150(*)	.115	.008

* Largest absolute correlation between each variable and any discriminant function
Standardized Canonical Discriminant Function Coefficients

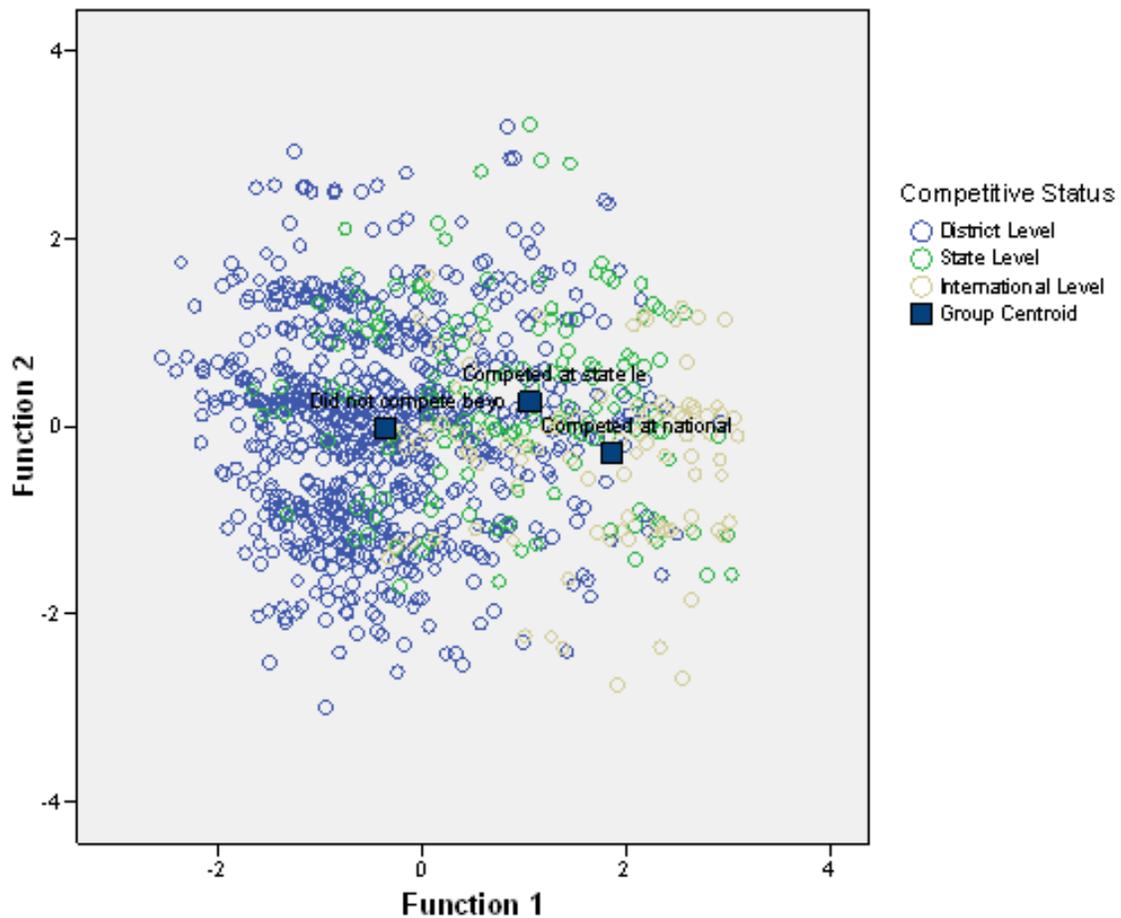


Figure 1b. Separation of groups on discriminant functions.

tive events as determined by competition placement, and whether or not these factors can be used in predicting participant success in competitive events. More specifically, the study was intended to identify whether or not students with higher grade point averages have a competitive advantage over those students with lower grade point averages. Given that the performance indicators for competitive events are curricular and accurately reflect the workforce, then performance in competitive events may parallel—or at the very least, lend an insight to—workforce performance. As a result

Simply put, the factor that appears to contribute most significantly to student success is the amount of preparation completed by the individual. Preparation for competitive events equates to curricular learning, often times self-directed. The implications, while they may appear to be “common sense,” are profound. Many

students are provided in-class preparation time, while others complete most or all of their preparation outside of class. Therefore, the more important competitive events and winning become to students, the more likely the student is to direct his or her own learning in search of the reward. This has been borne out in prior research. In one such article, Alfeld, Stone, Aragon, Hansen, Zirkle, Connors, et al. (2007) noted, “Positive outcomes for individual students could be enhanced by participation in CTSOs at high levels, particularly in competitive events, which we found to have effects on most outcomes.” The student organization provides the incentive, which results in self-directed student learning.

As one might expect, grade point average also had an impact on student success in competitive events. It would stand to reason that students who have achieved a high level of academic success in the

classroom would also be successful in additional academic endeavors. However, grade point average did not have the same level of impact as hours spent in preparation.

The third factor that was correlated to student success in DECA's competitive events program was participation in other non-athletic clubs and organizations. Research on athletic participation and academics shows mixed results, while the body of literature surrounding academics and extracurricular activity shows a positive correlation (Everson, Millsap, 2005). The results of this study are consistent with such research, differentiating between co-curricular activity and the above mentioned activity.

DECA's competitive events can be deemed as a valuable learning tool in marketing education. They provide learning exploration and self-direction, as well as the motivation to encourage students to participate. Knowing that increased levels of preparation can greatly enhance performance may motivate students to spend more time in preparation, and hence learning, and creates a desirable learning cycle between teacher, student, and curriculum. Teachers should integrate DECA's competitive events as learning tools to increase learning.

Because there are many different ways to prepare for competition, both in and out of the classroom, a follow-up study is recommended to determine specifically which types of preparation are utilized by the most successful students, determining which methods are most effective. In addition, research should be conducted to determine how much in-class preparation for competitive events truly enhances learning.

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Teaching Fashion Merchandising Students to Consider Consumers Unlike Themselves

By Sharon R. Davis and David L. Netherton

Abstract

This article describes two instructional strategies to overcome a weakness college fashion students were demonstrating for planning merchandising activities for target markets and segments that were different from themselves. Two activities were inserted into the curriculum of fashion merchandising classes that forced students to learn about market segments that were very different from themselves and then plan merchandising activities for the segments.

Introduction

College-aged fashion merchandising students are notoriously weak in planning merchandise assortments and services for markets that are different from themselves. To help them develop skills in planning design and merchandising solutions based on the target market, two initiatives were developed and implemented that proved successful.

Background: Old Dominion University's fashion merchandising program was developed along a marketing model that focused on a fashion business serving the customer while also meeting organizational goals and objectives. Over the past five years it has been evident in senior capstone classes that students continued to be weak in considering the wants and needs of prime customers when they planned businesses and the merchandise assortments. Inevitably their solutions were based on their own preferences rather than what the market required.

Marketing is "an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders." (Kerwin, Harley, Berkowitz, and Rudeilus, 2006, p. 8) The objective of a fashion merchandising business is to make a profit. If a retailer or producer is to make a profit, the firm needs an assortment of products and services that consumers perceive as desirable, and the product/service mix must appeal to potential customers in a way that makes them want to buy it. To do this, the organization must be marketing-oriented at all levels of the business. A fashion merchandising business that is marketing-oriented plans all of its operations around satisfying the customer's wants and needs. (Jernigan & Easterling, 1990, p. 13)

The content for a marketing-oriented fashion merchandising curriculum must include the integration of the concept that business planning and operations must focus on the wants and needs of the customer, whether the customer recognizes them or not. The fashion merchandiser who does not consider the customer at the center of his or her decision-making operates the business at his or her peril.

Problem: Old Dominion University's fashion curriculum incorporates a customer-focus in most of its merchandising courses. Students are constantly asked to consider who the customer is, what their preferences are, and what they need. Students are taught to identify both psychographic and demographic characteristics of the target population. One of the core courses, Social Aspects of Clothing, requires students to study the customer's perception of how clothes look and what they mean. They examine fashion in terms of gender, ethnicity, sexuality, and class. At the end of their program of study, seniors take a capstone course that calls for them to plan a fashion merchandising business. This requirement calls for them to use all the knowledge they have acquired in their program of study and present a plan for the business. The students then must present their plan to a panel of faculty and professional fashion merchandisers. The faculty not only assess the quality of the student's plan but also try to see patterns of weaknesses in the knowledge outcomes of the total fashion merchandising curriculum.

In presentations for the past two years it was apparent that students failed to adequately consider the customer in decisions about site selection, merchandise and service selection, and pricing. Inevitably, they made decisions based on their own personal desires and needs, not those of their identified customers. This outcome identified a serious shortcoming in the program's curriculum.

The faculty reviewed the assignments and requirements within the fashion program to determine where improvements could be made to emphasize the customer-focus content. It was agreed that an increased emphasis was not needed. It was agreed that the faculty needed to develop some new problems that required students to have to consider a customer much different from themselves and develop a fashion solution that would meet the customer's needs and wants.

The faculty developed two solutions. One was to have students to plan and conduct a fashion show for senior citizens. College-aged fashion merchandising students are notoriously weak in planning merchandise assortments and services for markets that are different from themselves. To help them develop skills in planning design and merchandising solutions based on the target market, two initiatives were developed and implemented that proved successful.

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The faculty developed two solutions. One was to have students to plan and conduct a fashion show for senior citizens and the second was to take common assistive devices and have students redesign them to make a fashion statement that appealed to disabled citizens. Both of these activities would require students to learn all about two segments of the population that most had no experience with.

The Fashion Show Assignment

The idea for the fashion show came in a request from Old Dominion University's Institute for Learning in Retirement. (ODU-ILR). This organization consists of retirement age learners dedicated to meeting the educational interests of its members. They set up their own college-level curriculum of short courses and lectures and participate as volunteers in the University's programs. In this case, a call was received from an ODU-ILR member who asked if there was any project for which "some old people" could volunteer to participate in. This call came in at the same time as the fashion faculty was looking for a project that had a target market different from the fashion student. It was apparent that "old people" and "fashion student" were quite dif-

ferent. In fact, after a non-scientific questioning of students, it became apparent that they had no idea of the buying interests and fashion needs of older adults. The faculty met with representative members of the ODU-ILR and they agreed that they would like to work with “they young people.”

It was decided that this initiative would be developed and implemented in our Fashion Show Production course. The course was designed to prepare students to plan, design and implement a fashion show. In this case it was decided that they would do this for a target market of men and women aged 55 and older. In order to have representative models for the fashion show, the ODU-ILR agreed to recruit models from their membership and serve as a on a panel to advise students about problems older citizens encountered when they shopped for apparel and accessories.

In true marketing fashion, students began working with their target market. They met with a panel of members from ODU-ILR to discuss their participation. They also asked questions about their interests in fashion and what problems they had in finding suitably sized and style of apparel for their generations. They found that like all markets there were niches who had different needs, wants and desires. Those who were in their late 50s saw things differently that those in their 60s and those in their 70s had different issues from those in their 50s and 60s. They learned about how bodies changed as they aged and that meant that clothing sizing needed to be adjusted. They also found that older people still wanted to be stylish but found it hard to know what was in style for them and where to find the merchandise.

Members of the ODU-ILR helped students learn about dress issues that older people have and the styles they were interested in. They helped students gather information about apparel preferences while considering the needs dictated by the demographic and psychographic characteristics of the Hampton Roads area. The students researched changing marketing strategies and developed a new awareness about this important \$2 trillion senior citizen market that controls over one third of the nation’s disposable income. Finally, the ODU-ILR began to recruit the fashion show models.

The fashion show planning remained fairly standard until the students began to work with the models. They found that these models communicated in a different language, had a different perspective about how to model clothing, and were suspicious of “these young college-aged students.” They learned the senior adults were very different from their college-aged peers. By leaning more about the needs of the target market, the

students found they were more successful. Among the lessons they learned was the need to gain the model’s respect and learn to adjust the music and choreography to the target audience. They also had to locate apparel stores that catered to senior adults and get their support for the fashion show. Finally, they learned to design scenes and staging that met the expectations of their market. It soon became apparent that the students were considering their target market when they chose a local high school in Virginia Beach, Virginia as the site for the show because it was close to where most of the adults lived so they would not have to drive a long distance in the dark.

It all came together and the show was a big success. The models were dressed stylishly and they strutted, as much as 60 and 70 year old people can, across the stage to music that met the expectations of the target audience. Both the students and the participating ILR-ODU members took great pride in planning and putting on this collaboration. From the faculty’s perspective, it was gratifying to see the students really begin to think in terms of their market. They made decisions that were based on the needs of the senior adults and they did this without prompting. It also gave them the opportunity to perform an important community service project while developing competency in their chosen field of study.

The Recycling Assistive Technology Design Assignment

A second initiative the faculty planned that would force students to think about a target population different from themselves was one that required them to take an item of assistive technology and complete a redesign as a fashion accessory. As part of this assignment, students had to study the market and determine its size and importance as well as what would be appealing to them. They found that . . .

“Aging is a normal process that affects the well-being of every person in some way. As we age, we may find it harder to climb stairs, drive cars, or remember what day of the week it is. Despite the challenges of aging, however, most of us want to continue with activities we have always enjoyed. We plan to continue to be in control of our lives. We intend to be independent and live comfortably in our own homes for as long as possible. Assistive technology is a powerful tool for achieving these goals.” (Honaker, R., Walsh, D., Krollman, B., Honeycutt, J.L., and Sharp, J., undated, p.3.)

Students found that by 2008 over 55’s would account

for 31.6% of total retail spending. By 2015, these “Baby Boomers” will make up the majority of the population. Americans over 50 years old own more homes than any other group, purchase 41% of all new cars, spend 74% more on a typical vacation, enjoy more than \$900 billion in income. And have \$1.6 trillion in buying power. They also found that this population was as interested in fashion as other segments of the total market.

Next students were introduced to assistive technology. They found that as people age their bodies tend to wear out. Increasingly older adults must find devices that will help them live a meaningful life. They were introduced to many of the items and they brainstormed ideas on how these could be designed to be fashionable accessories. Next they were provided with a mobility device such as a cane, a walker or a wheel chair. Their challenge was the following assignment:

1. Research your target market: What are the current trends and colors. Create a storyboard made up of tear sheets from magazines and other sources. Show styles, colors, textiles and other details that can influence or direct your product. Include inspirations that would have an impact on the product or theme.

Example: Vintage cars or music of the 1930's, 40's and/or 50's may be an influence. Anything that would relate to your theme could be cut from magazines or color-copied from a book to help make up a storyboard. Subdivide these into groups that relate to one another; e.g. fabric or material types, colors that could be grouped, stylings and trimmings. These steps will help clarify your design ideas and create focus. These swatches of inspiration should be applied to a board like a collage to build a story of your design.

2. Recreate the item to have fashion appeal.
3. Name your design
4. Present your design and storyboard in class

Some of the results are depicted in the pictures below:



“Harley Davidson Wheelchair” for a former rider.



Crutches with pockets.



Wedding cane

Results

While it is too early to determine the long term effect of these two assignments, it is clear in the short term that

the students began to see the need to fully understand the target market for fashion merchandising initiatives and to tailor their plans to reach that market on the needs, wants and desires of the market segment. These students demonstrated that principal as they planned their Senior Projects where they had to plan a fashion merchandising business for a target market. They were more successful than past classes in taking in consideration the market when they planned locations, merchandising assortments, advertising and promotion, and store designs.

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Virginia's Workplace Readiness Skills: Adding Relevance for the 21st Century

By Sarah J. Martin

Abstract

The United States faces a skills shortage that goes beyond academic and hands-on technical skills. Employers report entry-level workers lack the necessary "soft" skills needed for success in the workforce, thus causing them to look outside the U.S. to fill the employment void. These "soft" skills are recognized as workplace readiness skills (WRS). This study examines the steps high school career and technical education teachers are taking to bring their teaching methods in closer alignment with WRS. For the United States to be competitive in today's global economy, it is critical for us as a nation to provide every high school graduate the opportunity for a meaningful, productive life and to earn a decent wage.

Virginia's Workplace Readiness Skills: Adding Relevance for the 21st Century

There has been great concern among employers about the gap that exists between skill readiness and those exhibited by potential employees (ACT, Inc., 2006; Conference Board Report, 2006; Martin, Carrier, & Hill, 1997; National Center on Education and the Economy, 2007). According to the Conference Board Report (2006) "most young people entering the U.S. workforce lack critical skills essential for success" (para. 1). Without a pool of qualified workers from which to choose, U.S. industries have to look outside the country for their labor force. This has a direct impact on local businesses as they try to fill the employment void with less qualified workers than their national/international competitors. In essence, if our students are not learning how to problem-solve, work in teams and learn to clearly communicate ideas, then the United States economy will suffer as American companies will fulfill their employment needs through outsourcing to other countries (Friedman, 2005).

Background of the Problem

America's high schools need 'retooling,' our schools are not adequately preparing our youth for a global society (NGA, 2007). Governor's from all states, with support from business and industry, are spearheading an initiative to include workplace readiness skills into public education (NGA, 2007). Where will gradu-

ates learn the skills employers deem as necessary for success in the workplace? Whose job is it to teach such skills and how will they be assessed? This is a major goal for career and technical education (CTE). The original purpose of CTE, often still referred to as vocational education, was to prepare students for work following high school. Career and technical education focuses on career education including rigorous and challenging academic content standards and providing a non-duplicative sequence of courses leading to an industry-recognized credential or certificate, or an associate or baccalaureate degree.

According to the U.S. Department of Education, the Office of Vocational and Adult Education (2007):

Career and technical education is a massive enterprise in the United States. Virtually every high school student takes at least one career and technical education course, and one in four students take three or more courses in a single program area. One-third of college students are involved in career and technical education programs (para. 1).

During the 2005 National Education Summit on High Schools, sponsored by National Governor's Association (NGA) and Achieve, Inc., in partnership with the Business Roundtable, John Thomasian, Director of the NGA Center discussed the importance and value of CTE programs, "CTE programs can offer another avenue towards academic and career success. When paired with a rigorous academic platform, CTE programs make learning more relevant and engaging by better aligning with students' interests and career skill needs," (2007, para. 4). Therefore, it is only fitting that CTE be involved in providing the education and skills needed for students/graduates to succeed in the workplace.

Purpose of the Study

The purpose of this study was to explore the steps high school career and technical education teachers were taking to bring their teaching methods and instructional strategies in closer alignment with the Workplace Readiness Skills. A realignment of teaching strategies with the workplace readiness skills can lead to an increased marketability of program completers.

To guide this study the following research question was established: To what extent are teachers implementing the strategies prescribed in the workplace

readiness skills curriculum to increase the marketability of program completers?

Significance of the Study

Progressive business leaders have contended that vocational education should teach students to be adaptable, work in teams, solve problems, and make decisions to increase worker productivity and international competitiveness (Gregson, 1994). A national report, *America's Choice: high skills or low wages!* (Commission on the Skills of the American Workforce, 1990) suggested that vocational graduates must have such skills and attributes if U.S. industries are to become high performance work organizations. To meet this need, this research focuses on implementing workplace readiness skills into secondary career and technical education (CTE). High school graduates possessing such skills will, therefore, be better equipped to enter the workforce, become a valuable asset to their employer, and as a result increase their economic stability. In addition, the employers will have better qualified employees and be able to compete and grow in the marketplace.

Literature Review

Several studies have been conducted on the need for high school graduates to possess the skills deemed necessary by employers to succeed in the workplace (ACT, Inc., 2006; Conference Board Report, 2006; National Center on Education and the Economy, 2007). These skills have become known as workplace readiness skills and include such skills as reading and writing, critical thinking, problem solving, teamwork, and self-presentation. Previous research on workplace readiness skills has primarily focused on the need to incorporate the skills into public education but does not address the "how" to implement the skills into current educational practices (Conference Board Report, 2006; Gewertz, 2007; Holdsworth & Gearhart, 2002; McLester & McIntire, 2006; Mobley & Joyner, 1998). Secondary CTE legislation and programs have included instruction in employability skills since the early 1990s (Holdsworth & Gearhart, 2002). However, the need for project learning and management skills for high school and college graduates entering the world of work has been identified as a sorely missing component of the traditional K-12 and postsecondary school curriculum (Conference Board Report, 2006). The original purpose of CTE was to prepare students for work following high school (U.S. Department of Education Office of Vocational and Adult Education, n.d.). In keeping with its roots, not only does today's CTE instruction prepare students for the workplace, but also for

higher education. A hallmark of CTE is competency-based instruction, meaning instruction is learner focused. Students are required to effectively complete a project in a real life situation as it relates to the program of study. The essence of this type of instruction is rooted in the idea that the student actually performs a competency in practice and assessment. In support of competency-based instruction, this research focuses on specific instructional methodologies used to deliver instruction on workplace readiness skills incorporating the skills into a pre-existing course of study. *Workplace Readiness Skills*

To prepare young people to compete successfully not only in the global market, but also locally, schools must help students master the necessary reading, writing, math and computer skills required for employment. Further, students must be able to communicate, think critically, and function in group activities (Mobley & Joyner, 1998). In 1997, the Weldon Cooper Institute at the University of Virginia convened a panel of business representatives who created thirteen skills, including personal qualities called "soft skills" and academic skills, which employees need to be successful in the workplace (Martin, Carrier, & Hill, 1997). Virginia Beach City Public Schools developed a collection of lessons for each of the thirteen skills. In addition to the lessons, an assessment was developed by a third party national testing agency, the National Occupational Competency Testing Institute (NOCTI). The intent of the lessons was to provide teachers a resource for incorporating the skills in their classroom as part of the requirements set by the Virginia Department of Education Office of Career and Technical Education; the ability to demonstrate an understanding of Virginia's Workplace Readiness Skills is the first competency on each of Virginia's Career and Technical Education course task lists. The collection of lessons is divided by skill area. Each skill area presents several lessons which include a variety of instructional methodologies and strategies. The skills/lessons were not designed to be taught in sequence, rather to be reviewed by the classroom teacher and selected and aligned with their instructional plans on the best fit for the group of students based on the results of the pre-test. The idea was to have the classroom teacher pre-assess the students' knowledge of each skill area, using the NOCTI assessment, prior to teaching any of the workplace readiness skills. From the results of the pre-test, the skills in which the students scored the lowest were to be implemented and taught in a proper curriculum sequence as determined by the classroom teacher. A post-test assessment served as an indicator to determine if there was any growth in the skill areas after instruction during the length of the course.

Instructional Strategies

Problem-based learning (PBL) is one approach to teaching that motivates students and improves schools across the U.S. because it inspires students to learn, enables teachers to align their learning objectives for students, and blend academic and CTE studies to reflect 'real life' more accurately (Southern Regional Education Board, 2006; Wurdinger, Haar, Hugg & Bezon, 2007). In addition, PBL can help students learn the content, skills and personal qualities they will need in college or in careers through teaching applied skills integrated with core academic subjects (McLester & McIntire, 2006; Southern Regional Education Board, 2000). The importance of making learning relevant to the student allows them to see the authenticity of their work. Making this connection creates student 'buy-in' and helps to eliminate the dreaded question, "When am I going to use this again?" Previous research encourages emphasis on essential learning, teachers connecting with students as a means to increased student achievement, classroom adaptations for students' learning differences, and flexible use of classroom time to encourage application of instructional strategies that are consistent with how students learn best (National Association of Secondary School Principals', 2004; Wurdinger et al., 2007). The collections of lessons developed by Virginia Beach City Public Schools include several differentiated instructional strategies, particularly the use of the problem-solving process. This study examines the teaching methodologies and strategies used by CTE teachers to deliver workplace readiness skills and the ease or comfort level of the teachers in incorporating the skills into their pre-existing curriculum.

A review of literature supports the need for public education to incorporate workplace readiness skills for our students to be competitive in the workforce (ACT, Inc., 2006; Conference Board Report, 2006; McLester & McIntire, 2006; Mobley & Joyner, 1998). Employers confirm that high school graduates entering the workforce are lacking the ability to think critically, work in teams and problem solve. This affects a company's ability to hire locally and compete globally; thus they have to look outside the country for their labor force. In response to the employers cry for help, public education - specifically secondary career and technical education, is incorporating workplace readiness skills into pre-existing courses using a variety of instructional methodologies to deliver the content.

Methods

This study uses grounded theory as the general method of research. The goal of the researcher was to conceptualize 'what's going on' in the classrooms

and to determine how teachers were aligning instructional methodologies and strategies to the Workplace Readiness Skills in order to increase the marketability of program completers. The researcher chose to conduct classroom observations, instructor interviews, and a review of documents as the means in which to collect data to support the research question. The use of multiple methods helps to overcome the weakness or intrinsic biases and the problems that may arise from using a single method or single-observer as the only methods of data collection.

The role of the researcher was to serve as an objective observer and interviewer. The researcher was a former marketing education instructor which served as both a positive and negative force in this research. Having the subject knowledge proved to be beneficial to the study as the researcher knew the scope and sequence of the curriculum and was able to follow the thought process of the instructor. However, being a former classroom teacher, the researcher found it difficult to resist the urge to participate in the class discussion and to not offer help to students she saw struggling with an assigned class activity. The researcher relied heavily on the purpose of the study and the research question to guide their actions during the classroom observations.

Data Collection

Data for this study were collected through classroom observations, instructor interviews, and a review of documents. A checklist was used to record classroom observations. Researcher notes were transcribed on a paper tablet, which allowed the researcher to expand on the actions between the instructor and the students, take notes of the classroom environment, sketch the placement of furniture, and record what was included on the white boards and bulletin boards in the room.

Interviews were used to obtain information on why the teacher chose the instructional methodology used to deliver the Workplace Readiness Skills lesson, the reasons behind choosing a particular lesson over another, and their perception of the Workplace Readiness Skills curriculum. The interviews were purposefully conducted after the observations and served as a means of clarification to what was observed in the classroom.

The third method of data collection was a review of documents. The documents included unit plans, daily lesson plans, handouts, activity sheets, and background information on the workplace readiness skill. The participants presented the documents to the researcher in a folder prior to the classroom observation.

Participants

This study included two distinct groups of participants – classroom teachers and secondary career and technology education students. The classroom teachers included three secondary Marketing Education instructors, specifically those who teach Advanced Marketing. Collectively, the instructors' years of teaching experience total thirty-six. All three instructors were graduates of a traditional teacher preparation program who earned a Bachelor of Science in Secondary Education with a concentration in Marketing Education. One of the three instructors is currently enrolled in a Master's program seeking a degree in Educational Leadership with an administrative endorsement. All three instructors are female, Caucasian, with an average age of 38.5 years. The instructor participants represent a convenience sample as they volunteered to participate in this study as a favor to the researcher and are from the school division in which the researcher is employed.

The students being observed were high school seniors from a suburban school division, totaling 48; 40 Caucasian, 6 African American, 1 Indian, 1 Middle Eastern; 23 male and 25 female. These students were in their second year of marketing education, enrolled in the Advanced Marketing course. A majority of the students were involved in cooperative education, a method of instruction that combines career and technical education classroom instruction with paid employment directly related to the classroom instruction. Students who chose to participate in cooperative education worked a minimum of eleven hours per week in an approved marketing training station. Second year marketing education students generally have an interest in pursuing marketing as a major in higher education and/or entering the marketing industry after graduation.

Measures

Specific privacy measures were taken to protect the identity of the instructors and students who participated in this study. The teacher participants and the schools were assigned a random number. This number was used only by the researcher as an identifier on the observation checklists, interview sheets, and hand scribed notes. In addition to the randomly assigned number, the researcher did not use identifying statements or words to single-out students in either the notes or the findings of this study.

Procedures

The researcher contacted all advanced marketing

education teachers from the school division in which the researcher was employed, via email inquiring about the timeline of when workplace readiness skills would be taught during the months of October and November. From the email response, the researcher identified three classes to observe. Upon agreement from the teachers and approval from the Human Subjects Review Board, the researcher scheduled observation dates and times to conduct interviews with the instructors.

The researcher observed three Advanced Marketing classes, a second level marketing education course primarily serving twelfth grade students interested in furthering their education in marketing and management or entering directly into the workforce. The length of each observation was 90-minutes; this time period was equal to one block of instruction. The intent of the observations was to gather information on instructional methodologies and strategies used to engage students in the learning of workplace readiness skills. The observation instrument (see Appendix A) was developed by the local school division and modified by the researcher in June 2001 as a tool to observe classroom instruction, focusing on the characteristics most often found in a marketing education classroom. This checklist is used for the purpose of continuous improvement. The observation checklists and researcher notes were stored in a secured file cabinet in the researcher's office. The researcher is the only person who had access to the file cabinet. This data was retained until such time as it was no longer needed by the researcher, and was destroyed (i.e., shredded and burned).

The second form of data collection was teacher interviews. The interview questions were developed by the researcher as a follow-up to the classroom observations (see Appendix B). The purpose of the interviews was to obtain information on why the teacher chose the instructional methodology used to deliver the Workplace Readiness Skills lesson, the reasons behind choosing a particular lesson over another, and their perception of the Workplace Readiness Skills curriculum. In addition, the interviews served as a means of clarification to what was observed in the classroom. The interviews were conducted at the teachers' school during their planning period. The interview notes were kept confidential and remained in the sole possession of the researcher. The transcriptions were not shared with the faculty, administration, or any member of the schools staff. After the research was completed all data was destroyed (i.e., shredded and burned).

The third method of data collection was a review of documents. The documents included unit plans, daily lesson plans, handouts, activity sheets, rubrics, and

background information on the workplace readiness skills. The participants presented the documents to the researcher prior to the classroom observation. The documents review blueprint (see Appendix C) included 'non-negotiables,' those items that were required by the school division to be included in all lesson plans. The review of the lesson plans and supporting documents required clarification from the instructor; therefore, the document review took place after the classroom observation and prior to the teacher interview.

Data Analysis

The researcher coded the three methods of data collection separately then compared the findings looking for whether the three methods of data collection support each other. The observations were coded identifying similar observations from each classroom using different color highlighters. The characteristics and/or similarities in the settings were sorted by color and assigned a subheading/category. A concept or theme was considered significant when confirmed by a similar 'sighting' in one other observation.

The interviews were reviewed for similar responses to each question. Each response was re-written on a separate index card, sorted by question, and then grouped into larger, over arching categories. Similar responses were highlighted with a colored dot on the right hand corner of the index card. A response was considered significant if the response was supported by a similar response from a separate interviewee or viewed in the observation by the researcher.

A blueprint was used to review the documents. The purpose of conducting a review of documents was to search for supporting evidence of instructional strategies, differentiated instruction and connecting the skill to the current unit of study. Findings from the review were considered significant if they were supported by the observation and/or the interviewee's responses.

Findings

Classroom Routines and Arrangement

Information was noted for each classroom in regards to the way the rooms were configured, items placed on the walls, and the information posted for students. Classroom one was the smallest of the three classrooms but had the most inviting atmosphere. As you entered the room, the back wall of windows provided a feeling of warmth as they not only provided natural sunlight, but also heat from the sun. The walls were covered with student work and moti-

ational posters. A single bulletin board served as the communication center for school and classroom events posting current information that was neatly organized around themes – upcoming school activities, DECA events, and the Student Council Association food drive. A large white board prominently hung in the front of the room served dual purposes, as a screen for the projector and as a focal point to direct the students in the lesson objectives, daily journal entry, and reminders and due dates for projects, DECA dues, DECA Officer Installation. Tables and chairs were arranged in rows. The researcher chose a seat near the windows so that she could have a clear view of the entire classroom. Students filed into the room chatting about the upcoming football game, and weekend plans. The instructor manned the door addressing each student by name and providing accolades to those who were recognized on the morning announcements for academic achievement. The tardy bell rang and all students were in their seats with their journals open feverishly writing a response to the daily journal topic as the teacher took roll via computer. The instructor opened the class with housekeeping items – reminders of the due dates for projects and DECA activities/dues and then finishing with passing out DECA t-shirts for paid members. She quickly transitioned to the objective/goals for the class. Multiple instructional strategies were used to move students from one section of the lesson to another. The major activity for the lesson was a small group activity. The instructor gave the direction, "Use your nine o'clock partners," and the students immediately set out to locate their partners. It was apparent that established classroom routines were in place and used on a daily basis as the students moved about with ease and comfort and were able to re-arrange the tables in less than 30 seconds. There was limited conversation among the students as they formed their groups; however, once grouped the students were quick to get to the task and begin a dialogue. Students reached group consensus prior to reporting out to the rest of the class. Students were respectful of other groups as they listened intently and provided feedback for each group report out. This speaks volumes to the way the teacher established procedures and ground rules for presentations. The students' behavior supported posted class rule number one, "be respectful of others."

Classroom two was designed to mirror a training center with different learning centers separated only by the grouping of the furniture. From the doorway twelve computers lined the back wall anchored by a large printer and workstation table containing a three-hole punch, paper cutter, individual bins of post-it notes, markers, scissors, pens and pencils. The center of the room consisted of twelve six foot tables and 24 cushioned 'board room' style chairs arranged in an open U

shape facing a large white board. The teacher desk served as the head of the room and resembled that of a CEO. Framed art work (professional photographs containing motivational quotes) were hung on the wall beside the classroom mission statement (developed by the students). Prior to the start of class, the instructor laid out men's ties on a display bench beside the entrance to the classroom. The entrance ticket to class was to demonstrate how to tie a tie. This activity was an informal assessment for the previous class lesson on 'Dress for Success.' The instructor asked the researcher was asked by the instructor to serve as the evaluator of the tie tying. As the students entered the classroom they chose a tie and followed the steps to form a Windsor knot. As the researcher observed the students, they appeared to be comfortable in front of a 'stranger' and had no difficulty performing the task. After the students showed the researcher the final product they extended their hand without being prompted, gave a firm handshake and thanked her for her time. Students moved to their seats and were asked to finish up their journal assignment while the teacher began taking roll. The instructor opened the class with a review of the previous lesson and the objectives for the day. The instructor introduced the researcher to the class by providing them background information on the relationship between the instructor and researcher, the researchers 'rise up the corporate ladder' and then related this introduction to the lesson and activity for the day. In essence, the instructor modeled the activity the students were tasked with completing. After a 20-minute lecture on self-presentation, the students were asked to get into groups using shoulder partners as the grouping strategy. Students were tasked with interviewing and creating a feature/benefit presentation of their partner to report to the rest of the class. It was apparent that students use movement in their lessons frequently as the forming of small groups took less than 20 seconds. Students were excited about the activity as they laughed and made positive comments about who they were to interview. During the presentations, students were respectful of their classmates as they listened intently to the group presentations, often offering positive feedback and encouraging comments to those who felt nervous in front of the class. There was an obvious sense of trust in this classroom as no one displayed rude or disrespectful behavior. This speaks volumes to the way the teacher established procedures and ground rules for presentations.

Classroom three was located in a portable classroom outside of the main school building. Due to overcrowding in the main building, this school conducts several classes in portable buildings. Although this portable is earmarked as a Marketing Education classroom only, the walls were sparsely decorated

with marketing posters. Unlike the other classrooms observed, student work was not displayed. A small bulletin board provided information on school activities and events; however, the information posted was outdated. A flyer with a date of September 30 was still posted and was tattered and torn. This space did not present a feeling of student ownership. The classroom was dark and cold. Six of the 24 fluorescent lights were burned out and the door was propped open by a brick letting in the cold air. The size of the portable is much larger than the classrooms inside the main building; yet the learning space was pushed to one side of the room; the other side was 'wasted' space containing only one supply cabinet, a TV/VCR combo unit and stand, and a few broken desks. The classroom did not present an inviting feeling and left the researcher wondering whether this room functioned as a learning environment or a store room. Traditional student desks were arranged in straight lines that proved difficult to maneuver when students tried to form small groups for a class activity. Students entered the classroom briskly with their coats wrapped tightly around them. Several were complaining about the weather. The teacher addressed a few of the students as they walked in, reminding them to bring in hour and wage reports. The researcher did not hear a tardy bell, but witnessed a change in student behavior. A few students came running up the steps to the portable and were 'noticed' by the others already seated. Several students made the comment, "Late again?!" The teacher did not appear to notice those who were 'late' and she opened the lesson with a few housekeeping items – reminders about the Thanksgiving food drive, DECA movie night, and the upcoming District Leadership Conference. She transitioned into the lesson with a current event taken from the morning newspaper. Students were not able to make the connection between the article and the lesson objectives as they made the comments, "I think she was being selfish," and "She just didn't want to work." The instructor attempted to refocus the class, then 'gave up.' She transitioned to the group activity by assigning students to groups. The instructor requested one member from each group to come to the front of the room to pick out a target audience biography. Students were slow to get into their assigned groups, tripping over backpacks and personal belongings on the floor. The desks were not moved to accommodate the group members, and students were reluctant to form groups as each student 'looked out for themselves.' Students seemed unsure of the class activity and repeatedly asked for clarification on the assignment.

Pre-Planning and Structure Support Student Learning

A review of documents provided information on pre-planning and connectivity to prior lessons. Two of the three participants provided a daily lesson plan to the

researcher. The lessons were guided by the objective and supported by the scope and sequence outlined in the curriculum. It was evident that the participants who shared their lesson plans spent time on relating this lesson to the students' personal experiences and provided direction for future lessons. The lessons were outlined in detail and included a procedure for delivering the message, conducting an extension activity and making connections to the students' life outside of school.

Giving Voice to the Silent

The interviews were intended to gather information on the participants' perceptions and reactions towards the workplace readiness skills curriculum. All three participants found the workplace readiness skills curriculum a worthwhile resource commenting on the organization of the curriculum, the research information which was provided for each skill and the variety of the lessons for each skill. Each lesson was written to reflect relevancy to the needs of today's workforce:

"I buy into the need to teach the workplace readiness skills now more than ever. I assumed the students knew what was expected in the workplace only to find out that I was sadly mistaken. Just when you think today's students are more savvy in the 'ways of the world' you get hit between the eyes with reality – they still need our help in understanding what it takes to be successful in the workplace. When 85% of employees are losing their jobs due to poor human relations – it's time we step up and start teaching diversity and self-respect. The lessons included in this curriculum are right on target. They are similar in nature to the on-line diversity training all school employees are required to take, they provide case studies and scenarios in which students must come up with a viable solution."

The observations and instructor interviews support the research which proposes students today understand how to work in groups, but lack the understanding and skill to work as a team. One teacher made the comment:

"I use group work a lot in my lessons. Teaching on the block schedule [90 minutes] has taught me that you must move the kids around and change up teaching strategies every 20 minutes. I used to think group work and teamwork were the same. This curriculum [workplace readiness skills] has taught me something new. Coming to consensus, valuing other ideas and opinions and being able to share your ideas and

opinions are all a part of teamwork – not working in groups. There is a major difference – and my students are able to see that in the activities we do now; our focus has changed."

The observations supported the research on the importance of making connections between the classroom and life outside of class. Students made meaning of classroom instruction as they applied what they have learned to the workforce; they were able to see the 'big picture.' This promotes reflection and student 'buy in;' making the lessons relevant to the students' world is what hooks the students and keeps them engaged in their learning:

"I used a lesson from the 'big picture' unit to show the importance of why you should believe in the mission statement of the company you work for; if everyone isn't on the same page then you lose sight of why you're in business. I buy into [Virginia Beach Schools'] mission statement, if I didn't I wouldn't be here. I think the students realize that if their heart isn't in it [the work they do] they won't be happy or successful. We create a mission statement for our gift wrap business each year – it helps the students to focus on what is important and gives them meaning for providing this service to the public free of charge. Our tip jar is a true reflection of the students' belief in the mission statement they created."

Discussion

According to the research, the need to teach students how to problem solve and work in teams is critical for a company to be able to compete locally and globally (ACT, Inc., 2006; Conference Board Report, 2006; Martin, Carrier, & Hill, 1997; National Center on Education and the Economy, 2007). When students gain experience in critical thinking, problem solving, and teamwork, they are better prepared for the workplace. These skills, while often thought of being a natural part of the secondary career and technical education curricula, are not being presented to students as the skills needed for success in the workplace. The classroom observations provided a snapshot view of what is taking place in our schools as students are being prepared to function outside of the learning environment.

Reflecting on Classroom Practices

The researcher noted common themes in the classroom observations practiced by both the teachers and students; evidence of established routines and procedures were in place, instructors incorporated transition activities into the lesson to engage the students in their

learning, and the use of grouping strategies. Establishing routines and procedures early in the year ensures a smooth transition between activities, allows students to know what is expected of them, and creates a positive classroom environment (Wong & Wong, 1998). Each of the three classes incorporated some sort of routine to transition into class instruction. Two of the three classes used journaling as a means to 'hook' the students' interest, transition to the learning, and allowed the instructor time to take attendance. The ease of which this practice was accomplished supported the researcher's claim that classroom procedures were used on a daily basis. The third theme observed was the use of pre-determined grouping strategies. In each of the classes, students were engaged in a small group activity in which they had to physically move about the classroom to form groups. Two of the three classes moved effortlessly and readjusted to their new locations quickly; supporting the researcher's claim that small group activity occurred often in these classrooms.

Reflecting on Classroom Environment

Classroom environment can positively affect students' academic performance as well as their behavior. The overall feeling of the classroom can be attributed by the placement of the furniture and the display of student work which in turn affects the way students interact with their peers and the instructor. The arrangement of the furniture proved to be instrumental in instruction. In two of the three classrooms, the furniture was used as an extension of the learning, not a barrier. Students moved about with ease and were able to make adjustments in the placement of the furniture to support the goals of the assignment/activity. This movement and rearranging occurred as a natural part of the classroom and supports the claim classroom procedures were established early.

Displaying student work supports the trust and respect between the students and the instructor as well as provides a sense of ownership and pride in the room. Two of the three classrooms prominently displayed student work; a student created mission statement was appropriate in the classroom designed to mirror a training center, and student posters introducing themselves to their classmates which were created in September were still displayed in November. The supportive comments and reactions towards their peers during classroom presentations support the claim that classroom procedures and guidelines were established early and practiced often.

Implications

While themes were easy to detect in the classroom

observations, several implications emerged. One concern was the effort put forth by the instructors to incorporate the use of small group activity. While small group activity has been shown to increase student engagement, some secondary career and technical instructors may not purposefully group students which may impact the learning goals of the activity/assignment. Also, group activities may require students to rearrange desks and allow for temporary loss of control over the students. Instructors may be reluctant to allow for the time and student freedom it takes to accomplish this as they have not established clear classroom practices and procedures.

Another concern is the display of student work. As noted by the researcher, displaying student work created ownership and pride in the observed classrooms; however, many teachers are reluctant to display work as not all work is appropriate to hang. Deciding to hang one student's work over another may cause more discontent among the students than not displaying any work at all.

The final concern that emerged is the classroom structure itself. Not all classrooms are dedicated to one subject area. The overcrowding of schools is an issue in this particular school system; more and more classrooms are serving multiple disciplines. This could affect furniture placement and the displaying of student work impacting student ownership and pride in the class which impacts student behavior and attitude.

Conclusion

The observations, interviews, and review of documents support the contention that high school career and technical education teachers are bringing their teaching methods and instructional strategies in closer alignment with the Workplace Readiness Skills; however, it may not be happening to the extent originally proposed by the researcher. While the three instructors in this assignment made the effort to incorporate the workplace readiness skills into their existing curriculum, not all career and technical education teachers have done so, or will due to time constraints:

"It would be nice if each skill area were already aligned with our current curriculum; I think we'd have more teachers using the lessons. Right now, I bet there are more binders [workplace readiness skills curriculum] sitting on bookshelves than actually being used. It took me one semester to read through the entire binder – I read it while I was on hall duty. I made the effort to go through each lesson and pick the ones I felt comfortable teaching and plugged them into the competency list. If that was already done for

us I think more of the skills would be integrated into the classroom.”

While the purpose of this study was to examine the extent to which teachers are implementing the strategies prescribed in the workplace readiness skills curriculum, the research yielded a change in mindset of the three participants – going from a teacher-centered classroom to a student-centered classroom. The change in focus proved to have an impact on the student’s knowledge and understanding of the workplace readiness skills as they were putting into practice the skills through classroom assignments. This is significant because if students can use the skills in the classroom, it supports the idea they can transfer this knowledge into the workplace; thus increasing their marketability and filling the employers need for a more qualified workforce.

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