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Abstract

This study analyzed the educational and career choices of secondary students; specifically the relationship of the number of courses taken in Career and Technical Education. The study examined if taking courses in Career and Technical Education impacted students for future enrollment and career choice. Participation in articulated coursework also was looked at to determine if those courses have an impact on student future enrollment or career choice. Findings releveled that students who had enrolled in articulated courses did make a clearer future college or employment choice but that choice did no always fall into the area where those students enrolled within the Career and Technical Education spectrum.

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Chapter I: Introduction

As you walk the hallways of many schools in the United States you will surely come across students who know that their next stop is a four-year college or possibly a technical college. The class valedictorian of your class may enroll in a four-year university. Some students may choose a military path and some may choose to go directly into the workforce. Some students may be unable to walk across the graduation stage because they need to take a few summer courses to meet graduation requirements. No matter the path a student chooses the goal of school is the same, to educate a student to be successful no matter what their career choice (Graham, Van Bergen, & Sparks, 2015).

Many parents in the United States would say that the American dream for their children would include a good education and a good paying job. Often times when parents think about good paying jobs they believe higher education is the first stepping stone. But that is not necessarily what is happening nationally, 53% of incoming freshman do not return to college for their second year (Stoltzfus, 2015) and overall about 33% of students at any college level dropout yearly (Stoltzfus, 2015). In addition parents worry about the average cost of $13,000 per year to attend public colleges in the United States and $30,000 for private colleges per year (Anthony, Burkette, & Sparks, 2007).

Not only do students drop out of college at an alarming rate, but almost 40% of all college students change majors at least once (King, 2015). Switching major's often leads to students staying in college longer, thus spending more money.

Are these young people who switch majors going to enjoy their new career path? Although there are a number of influencing factors like pay and benefits, 21% of young

professionals change jobs (Joy & Radhakrisknan, 2012). College students have difficulty choosing a major, and after they enter the workforce they apt to change jobs.

Completing a degree is great but individuals also need the skills be successful in the workplace. Unemployment rates since the recession of 2007 have been a rollercoaster, soaring as high as 10% in 2010, but now settling to pre-recession rates at around 5% (U.S. Department of Labor, 2016). During that same time period teenagers and young adults have had the highest unemployment rates and this trend continues (Symonds, Schwartz, & Ferguson, 2011). Young people are not gaining work experience.

Classroom instruction regarding careers is a good tool for students to gain a general understanding about what different careers may be about. Do students truly get the chance to see, hear, and feel what different careers are about? For example, the nursing field has been using work-based learning for centuries. This work-based learning helps to develop individuals in a way which the classroom is unable to (Williams, 2010). Classroom instruction may not be the preeminent way to help students choose a career pathway.

Statement of Problem

In Washington County and surrounding counties in Wisconsin there is a large demand for people with technical skills. Career and technical education programs are in place to teach technical skills, workplace standards, and competencies that lead to careers within the area. Area programs offer a variety of certificates for work-based learning experiences to help meet the workforce demands. As local demands of workers grow, there is a need to identify if students that take multiple courses in an established career pathway actually continue in that career field. Also, how does enrollment in Youth Apprenticeship or Skill Certificates influence students

career choices. Analyzing these aspects can lead leadership teams in our area to make better informed decisions about career and technical education and how it should be conducted.

Purpose of Research

The purpose of this research is to identify how career pathways in a high school that include articulated courses, work-based learning, and skills certificate programs impact student career choices.

Research Questions

The following questions where created to help concentrate the research.

1. What impacts does gaining true work place experiences or Youth Apprenticeship have on a student to pursue or continue a career?

2. Are students who complete a program of study or gain a Skills Certificate in a CTE secondary pathway likely to continue in education or employment in that field?

3. Does enrollment in technical college articulated courses have an impact on a career pathway or college choice?

Significance of Topic

The average retirement age is 65 years according to the U.S. Census Bureau in 2008 (Holder & Clark, 2008). Most students are 18 years old or will be shortly after high school graduation; this means 47 years until they reach average age of retirement. Finding some satisfaction in the career that one chooses would most likely make those 47 years more enjoyable and less of a burden. Two recent news topics:

1. Millenniums change careers more than any generation has ever ("Millennials Know," 2015).

2. College debt for students is at all-time high (Porter, 2012).

Millenniums are the newest era in the workforce and also considered some the hardest to understand in the workforce. The old adage of getting a job and making a career out of that job is not how millenniums act. In fact, millenniums will often change jobs with in the first two of starting a job, often times not for money (Landrum, 2017).

Millenniums are changing jobs to not just find a job and more importantly a workplace that fits them. Millenniums often will not consider retirement packages but rather small benefits that the business offer (Porter, 2012).

Parents are also supporting college students less causing student debt to raise. More young professionals now more than ever before enter the workforce with college debt bills lurking over them (Porter, 2012). Debt is not looked at as it once was by older generations its more accepted by young workers and they tend to seek jobs that they are happy in and that has small perks to keep them happy.

Doing the most for career exploration for students while in secondary schooling will have long lasting effects. This study is intended to see if workplace learning and career focused classes are an effective method for CTE programs to support students with career exploration and experiences to prepare them for their postsecondary path or the workforce.

Definition of Terms

The following terms are commonly used throughout this study.

Articulated course. Is a course that is taught in high school but college credit is given as the curriculum is that of a local college (Kim & Bragg, 2008).

Concentrator. Earning two or more credits within a pathway (U.S. Department of Education, n.d.).

Program of study. Also known as a career pathway students can complete a career pathway by enrolling in a minimum of three courses within the pathway (Kroyer-Kubicek, n.d.a).

Skills certificate. Is a certificate that students can earn by showing mastery of workplace skills that are valued by employers (DPI, n.d.).

Work-based learning. Where a student learns by participating in the work which one day could become a career (Keiser, Lawrenz & Appleton, 2004).

Youth apprenticeship. A program offered to high school juniors and seniors to expose students to skills within a specific occupation (State of Wisconsin Department of Workforce Development, 2015).

Limitations of the Study

Within this research study, there are limitations that restrict the data's effectiveness in creating outcomes.

1. Results only include local high school students at one high school who were willing participants.
2. Research was conducted at the end of the school year.
3. Many districts offer a variety of work-based learning opportunities to their students, causing challenges in writing questions that pertain to student understanding about the content.

Chapter II: Review of Literature

The purpose of this study is to examine the use of work-based learning and articulated career courses within a Kewaskum School District. There is a demand for Career and Technical workers in the Washington County area (U.S. Census Bureau, n.d.). With the cost of college increasing it will be ever more important for a student to have a solid career pathway chosen or it may cost them financially by switching jobs or majors in college (Anthony, Burkette, & Sparks, 2007).

The Wisconsin State flag is a good representation of Wisconsin's industry background. The shield on the state flag represents the four main industries in the state upon becoming a state, agriculture, mining, manufacturing and navigation. Manufacturing is very strong in the greater Washington County where 23% of the working people in the county work in a manufacturing setting (U.S. Census Bureau). These manufacturing places of employment as well as other high-skill high demand work places are or will be in need of workers.

History of Career and Technical Education

Long before Career and Technical Education (CTE) was around the apprenticeship model was used in homes by parents to train children, for trades and homemaking (Hogg, 1999). At the turn of the century, the industrial revolution changed the way goods where produced thus changing the ways workers were trained and educated (Rodgers & Tyack, 1982).

Between 1910 and 1920 John Dewey and the team of Charles Prosser and David Snedden would debate how students should be educated, eventually their debate would be called CTE (Doolittle & Camp, 1999). Dewey (2008) believed in a constructivist approach where students learned through occupations. Prosser and Snedden believed in a behavioristic approach where students where trained based upon one's family's social class (Doolittle & Camp, 1999). In the

early 1900's Prosser and Snedden's approach gained popularity and was implemented in CTE education (Doolittle & Camp, 1999).

Funding for CTE education in the early 1900's was achieved by The Smith Hughes Act of 1917. This act established funding for CTE programs to being in the 7th grade and provide vocational education and training thought out high school as well. Within this era, Prosser and Snedden's approach was providing occupational success and sustainable workforces (Scott & Sarkees-Wircenski, 2008).

As time went on the U.S. economy went through a transition from an agriculture based economy to an industrial based economy. Through the Great Depression, World War II and the Cold War, technological and vocational revolutions where taking place resulting in a shift towards Dewey's approach to CTE education. In 1963, The Vocational Education Act that combined theory and practice was passed. In this timeframe, secondary and post-secondary vocational education programs exploded and did very well in filling jobs that would provide for families (Gardner, 1983).

In 1983, a federal report called *A Nation at Risk*, came out. This report changed how education would be looked at in the U.S. The report pointed out that U.S. students lacked math and science skills when compared to other countries (Gardner, 1983). The report suggested and the higher education institutions agreed that admissions standards for students would change. Students would now need to take more English, math, science, social studies credits as well as a computer science course in high school to be able to enter college (Gardner, 1983). Thus, resulting in CTE programs to suffer and be known as place where non college bound students enrolled in courses, a common conclusion still today (Balakrishnan, 2014).

To counter *A Nation at Risk* a new educational outlook was formed, it was called the two-plus two program and was developed for students who found themselves often in the CTE courses that where forced upon them as a result of the new college admission credentials. Two-Plus two was introduced in, *The Neglected Majority,* 1985. Dale Parnell (1985) came up with the idea that students who could not meet the needs demanded by colleges have a way fit into society. His two-plus two approach was one that a student would enroll in two years of vocational education in high school and then two years of technical college to complete a technical college degree leading them to then enter college to complete a bachelor's degree is wanted (Parnell, 1985). Either way these students would have gained skills necessary to enter the workforce as well. Parnell, exposed a problem with American education that needed to be looked into. Post-Secondary Education and Training (PSET) for all created a need to evaluate the philosophy for CTE education, pragmatism emerged (Scott & Sarkees-Wircenski, 2008). Pragmatism builds a understanding that society will be ever changing and within it problems will have to be solved (Miller, 1985).

Students were prepared for future careers, opportunities and societal challenges through CTE by incorporating academic work with experiences that involved career education and preparation through contextual learning (Dewey, 2008). Students also developed academic and career plans, sought out certifications, and searched for PSET while developing skills that would help them in society and the workforce (Rojewski, 2002). These methods of learning are examples of Dewey's constructivist learning theory those that build upon one's previous experiences (Dewey, 1997; Doolittle & Camp, 1999). Constructivism is supported in modern day CTE practices and work-based learning. The greatest influences for high school students career pathway is that of their own experiences and interests. Although others like parents,

teachers, coaches, family members and others do impact one's own experiences are those that most influence someone (The Manufacturing Institute et al., 2015).

Many European countries have educational guidelines set up where students enroll in specific pathways while in their early years of secondary education and then are enrolled in more work-based learning through the last years of their education (Symonds, Schwartz, & Ferguson, 2011). Germany is a great of example of a country that has an apprenticeship system where students take classes related to the career and also work in the field, resulting in about half of the apprenticeships staying with their training company (Westervelt, 2012).

National Career Clusters

National Career Clusters Framework has Career and Technical Education (CTE) courses organized into 16 Career Clusters. These clusters are a very expansive grouping of careers and sometimes rather wide ranging within each cluster, which includes 79 career pathways (National Association of State Directors of Career Technical Education Consortium, 2015). The career clusters are:

1. Agriculture, Food & Natural Resources

2. Architecture & Construction

3. Arts, Audio/Video Technology & Communications

4. Business, Management & Administration

5. Education & Training

6. Finance

7. Government & Public Administration

8. Health Science

9. Hospitality & Tourism

10. Human Services

11. Information Technology

12. Law, Public Safety, Corrections & Security

13. Manufacturing

14. Marketing, Sales & Service

15. Science, Technology, Engineering & Mathematics

16. Transportation, Distribution & Logistics

To create the pathways for students, CTE programs use work-based learning along with industry standards and practices to create real world work-based experiences for students to explore a career pathway (Keiser, Lawrenz, & Appleton, 2004).

Wisconsin has their CTE programs of study organized by the standards set by the National Career Clusters Framework. Below are Wisconsin's clusters and the pathways within the cluster.

Sixteen Career Clusters and Their Pathways	
Agriculture, Food and Natural Resources Agribusiness Systems Animal Systems Environmental Service Systems Food Products and Processing Systems Natural Resources Systems Plant Systems Power, Structural and Technical Systems **Architecture and Construction** Construction Design/Pre-Construction Maintenance/Operations	**Hospitality and Tourism** Lodging Recreation, Amusements and Attractions Restaurants and Food/Beverage Services Travel and Tourism **Human Services** Consumer Services Counseling and Mental Health Services Early Childhood Development and Services Family and Community Services Personal Care Services

Arts, Audio/Video Technology and Communications
Audio and Video Technology and Film

Journalism and Broadcasting

Performing Arts

Printing Technology

Telecommunications

Visual Arts

Business Management and Administration
Administrative Support

Business Information Management

General Management

Human Resources Management

Operations Management

Education and Training
Administration and Administrative Support

Professional Support Services

Teaching/Training

Finance
Accounting

Banking Services

Business Finance

Insurance

Securities and Investments

Government and Public Administration
Foreign Service

Governance

National Security

Planning

Public Management and Administration

Information Technology
Information Support and Services

Network Systems

Programming and Software Development

Web and Digital Communications

Law, Public Safety, Corrections and Security
Correction Services
Emergency and Fire Management Services

Law Enforcement Services

Legal Services

Security and Protective Services

Manufacturing
Health, Safety and Environmental Assurance

Logistics and Inventory Control

Maintenance, Installation and Repair

Manufacturing Production Process Development

Production

Quality Assurance

Marketing
Marketing Communications

Marketing Management

Marketing Research

Merchandising

Professional Sales

Science, Technology, Engineering and Mathematics
Engineering and Technology

Science and Math

Transportation, Distribution and Logistics
Facility and Mobile Equipment Maintenance

Health, Safety and Environmental Management

Regulation	Logistics Planning and Management Services
Revenue and Taxation	Sales and Service
Health Science	Transportation Operations
Biotechnology Research and Development	
	Transportation Systems/Infrastructure Planning, Management, and Regulation
Diagnostic Services	
Health Informatics	Warehousing and Distribution Center Operations
Support Services	
Therapeutic Services	

Figure 1. Wisconsin's career clusters. (Kroyer-Kubicek, R. (n.d.a)

These standards will prepare students with both core curriculum and technical skills to be successful within a given career pathway (WTCS & DPI, 2011). Organizing the programs of study this way allows for collaboration between states, K-12 education, post-secondary education and businesses within each pathway thus holding them to a high standard (Shumer & Digby, 2012). Students end up benefiting from the work that businesses and places of education do together and end up either working in or enrolling in a CTE career pathway (Symonds, Schwartz, & Ferguson, 2011). Often times young people who work in an established career pathway earn more with less education because of secondary exposure that their counterparts with more education (Symonds, Schwartz, & Ferguson, 2011)

Job growth was projected to rise steadily in most of the 79 career pathways from 2013 to 2020 (Carnevale, Smith, &Strohl). Not all of the jobs that are projected to grow require a four-year degree. Some jobs are very skill orientated (Carnevale, Smith, & Strohl). One way for students to gain skills is to partake in a specific job or multiple jobs. Participating in multiple work-based learning settings during a student's last two years of high school can not only crate skills for a specific job but also show a student that one job does not interest them (Benz, Yovannoff, & Doren, 1997).

Work-Based Learning

Molding students to be career or college ready is not an easy task. Education involves a variety of general core and non- core career specific subject areas, the goal of Career and Technical Education (CTE) in America and Wisconsin is to provide and prepare students with a wide range of career experience (Evers, 2013). To accomplish this, CTE programs use a variety strategies including, work- learning, industry standards and practices, workplace policies and practices and real world experiences. All of which help prepare and expose students to a future career (Keiser, Lawrenz, & Appleton, 2004).

Creating partnerships with businesses where students, staff and industry can work together to help fill the job pool is important for all three of those areas. If CTE programs can work with industry to offer certifications and work based learning opportunities everyone will win. Students benefit by learning skills that could lead them into a career or post-secondary education opportunities. Students also benefit from higher earnings after leaving college. Students in work based learning environments also have a more positive outlook on education as a whole and better employment rates than their peers (Yamaguchi, Garland, & Jonas, 2014).

Providing students with opportunities to concentrate in specific career pathways aligned with post-secondary and industry standards allows Wisconsin CTE programs to address the main component of Dewey's purpose of education while providing students a successful foundation for their own chosen pathway.

Work-based learning is the backbone for pathways to provide a quality experiences for students. With work based learning students can learn technical competence through challenging work, gain a general understanding for certain industry, be on the receiving end of expectations and feedback from and industry side of things as well as crate a relationship with a career mentor

(Hamilton & Hamilton, 1997). Many times schools have relationships through such work-based programs where students are paired up with a mentor from the industry side that communicates back to the school work-based learning coordinator to help bridge the gap from school to industry. By having that coordinator in place, soft skills that students may lack can also be worked on as well. Often times students do not know how to handle themselves in certain situations because they have never been in that situation before. The classroom is very different from the workplace and to be successful it takes a different set of social skills in the workplace (Lewis & Stone III, 2011). Through work-based learning students can concentrate in a chosen industry, and with the help of a mentor, refine the career goals and interests and work on skills they lack (Esters & Retallick, 2013).

Cognitive science research has shown that students benefit from work- based learning. Work-based learning experiences allows for skills and theories to be learned faster and retained longer due to hands on learning in real world contexts (Hoachlander, 2008). Across the country and the globe, work-based learning participants benefit from improved access and awareness of post-secondary and career opportunities, professional network of potential references and a clearer vision of how the connection between work and school (North Carolina Department of Public of Instruction, n.d.). Students in Ohio who participated in in work-based learning experiences where shown to have an increased interest to learn more about areas they were studying as well as a higher likelihood of following a career pathway (Gleason, 2001). In Canada, students who completed apprenticeship programs had higher rates of employment and where more likely to work in a field related to their training when compared to students who did not work in the field during their training (Anderson, et al., 2011). Germany, a country that has for a long time had students choose a career pathway at a young age sees that students tend to

stay with the company which they complete their apprenticeship with (Westervelt, 2012). Having a quality CTE program that incorporates work-based learning experiences outside of the class is beneficial to the current student. Students are able to not only practice the skills learned in the classroom but also make real world connections and ultimately help them in making their own decisions when choosing to either go into a career or college after high school.

Work-Based Learning Programs in Washington County

Employment amongst American teenagers is at its lowest level ever (Carnevale, Smith & Strohl, 2013). Many reasons for this can be identified including; lazy, phones, video games, parents don't make them etc. However, we need these youth to be productive citizens to insure economic stability. Washington Counties Work Force Alliance shared some statistics about the youth work force. Employees of participating businesses polled their young workers found that of those younger workers who worked while in high school through school to work and Youth Apprenticeship jobs all of them stayed within their career field and are happy in their job placement (Washington County Work Force Alliance, 2016). However, the number of students participating in school to work and Youth Apprenticeships is lower than it was a decade ago (Washington County Work Force Alliance, 2016).

Employability Skills Certifications are not nearly as strict as apprenticeships. The requirements are more broad or could be applied to other careers whereas in the Apprenticeship program course work in high school is very focused on just one industry. Skills Certifications promotes students having skills that are needed in any workplace. These skills include but are not limited to being able to collaborate with others, communicate effectively, and set personal goals. In this program student are required to complete 90 hours of work-based learning and have a classroom connection but the requirements of the course work although direct to creating

a work connection is not as industry focused as the apprenticeship high school courses need to be. (DPI, n.d.)

Both programs have one common goal – work-based learning. The level at which each makes connections to the classroom does differ as does the industry connection but both are designed to allow students to explore career pathways to help chose career and possible college pathways. These programs are the career pathways many times that districts use. When students have the opportunity to make connections or at least can be in position to make connections between core, elective/career courses and the workplace it helps make school meaningful to the student. Dewey thought that education needed provide students with an education that would provide students with skills needed to develop them into a functioning member of our society (Dewey, 1934). Work-based learning provides students with a way to learn how to build skills to become a functioning member of our society with the help of our school system thus bridging the gap for students from school to work.

Wisconsin has a Youth Apprenticeship program as well as a Skills Certificate program. However, they look much different in comparing Wisconsin's programs to other countries. Youth Apprenticeship blends school and work-based learning together. The student must be enrolled in related coursework at school and also have a job placement within the career pathway (DWD, 2015). In this program of study the student needs to complete 450 hours of documented work with cooperating business along with taking a related class. The class could be through the traditional courses at the school or through a local technical college or other place of education (DWD, 2015).

Skills Certificates are vastly different and less true work place experience is required of them. A student needs to demonstrate that they have obtained the skills needed within the

industry, can communicate in a work place with others, take initiative and set personal work related goals. Participants only need to complete 90 hours of true work place experience. Thus it is a blending of work place skills and classroom skills to show proficiency of the skill set required for the job (DPI, n.d.).

Articulated courses are when a student is enrolled in a course through a high school that is actually a college course. Not only will the high school pay for these courses but students will get exposed to courses that are otherwise not possible through the high school. While enrolled in the courses students also tend to take on a sense of urgency and focus better on the task at hand as this is a higher level of learning that may challenge the student in new ways (Kanny, 2015).

Enrolling in articulated courses has a tendency to raise graduation rates in those that are enrolled in the courses. Not only does articulation increase graduation rates but those students who are enrolled are more likely to get a degree from higher education than those that are not enrolled in articulated classes (Berger, 2013).

Funding for Technical Education

The Carl Perkins Act by the federal government to increase the quality of technical education by providing funding for school districts across the country. Funding began in 1984 and has been renewed many times (U.S. Department of Education, 2007). The funding is provided through the Carl Perkins Act to help schools develop, implement and refine programs, promote non- traditional gender enrollment and act as a governing force for CTE programs across the country (ACTE, 2015). Grantees are held accountable for results, program improvements, increased coordination within the CTE system, academic and technical integration, connections between secondary and post-secondary education and business and industry connections (ACTE, 2015). Data is collected and evaluated as part of this process. In

Wisconsin, Carl Perkins funding uses Career and Technical Education Enrollment Reporting System (CTEERS). Data is collected from all high schools in Wisconsin and to qualify for funding certain criteria of CTEERS must be meet or have a goal in place to meet requirements to receive funding from Perkins (Thao M. C., n.d).

There are many data points that CTEERS collects. Data is collected on all 11th, 12th and 13th grade level students in Wisconsin (Thao M. C., n.d). This data is used by the state to complete a performance report for the federal government. The major data collection items are course enrollment by student to see if they have areas of concentration, especially in a CTE area. Students having more than two classes in a CTE area are known as CTE concentrators. These students are tracked in the following years to see if there experiences in CTE courses where meaningful. Basically did the student graduate high school, move onto college, become employed in the CTE concentrated area. School districts must have a 80% rate in these areas for each group or a plan of improvement must be created by the school district to receive funding (Thao M. C. & Wisconsin Career and Technical Education Team, n.d.)

Carl Perkins funding is often an important factor for school districts in today's educational funding picture. Programs are directly measured on their effectiveness of students who are taking two or more courses within a pathway.

Summary

The purpose of this study was to examine the impact of work-based learning options within a high school setting with the goal of being career or college ready upon graduation. Research indicates that work-based learning experiences like Skills Certificates, Apprenticeships and articulated courses are a good starting point for a well-rounded education. However, a more local approach could help meet the needs of our local industries.

Providing work-experiences brings in the real world for students and allows them to start to understand life after high school. Work-based experiences also helps school districts create pathways that are needed to receive Carl Perkins funding.

Chapter III: Methodology

The purpose of this study was to examine the role of a student enrolling in career pathway specific courses along with the possibility of a youth apprentice, skills certificate or articulated coursework and the influence it had on post-graduation. The research addressed questions related pathway courses and continuance in that pathway post- graduation. The research also looked into seeing if students knew about or elected to partake in a Youth Apprenticeship or Skills Certificate program. This section will describe how the study was conducted and how the data was analyzed.

Research Design and Data Collection

Case and Field data research was used to complete this research. Research questions were sent out to high school 10th, 11th and 12th graders via paper during homeroom to find out the impact of programs of study, apprenticeships, and Skills Certificate programs. Case and Field is being used since the concentration group being examined is limited to one high school in greater Washington County. Questions where created to examine what the high school is currently doing to see if in fact it is effective. The school has a program that they call school to work. They also refer to students who attend school part of the day and work part of the day as a CO-OP. The school does receive Perkins funding and has established pathways.

Programs of study in the area where identified as:

- Accounting

- Animal Systems

- Construction

- Design

- Early Childhood

- Engineering and Technology

- Family and Community Services

- General Management

- Marketing

- Plant Systems

- Power

- Printing Technology

- Production

- Restaurants and Food Beverage Services

Each week students are in a homeroom which are organized by grade level. Each staff member has this same group of students for the entire school year. In this homeroom each grade level can cover things that directly impact each grade level. Often times, this is when whole class announcements are read and discussed that only pertain to certain grade levels. During this homeroom time the survey was distributed by staff members who had 10th, 11th and 12th grade students. Overall 425 students had the opportunity to choose to take the survey. Staff members were given a brief description about the survey and asked to offer the survey to students. The description read as follows. "Today if you choose to, a survey is available to obtain information about student enrollment in Career and Technical courses. Feel free to complete the survey and know that this just a tool used to gather general information about Career and Technical courses here at Kewaskum High and how they have or may serve you in your future. Do not include your name on the survey when completed place it in the folder that is provided at the front of the classroom."   See Appendix A for the survey that was distributed to students.

Sample

A total of 82 students completed the survey. Within the sample of 82 surveys returned each grade level that the survey was given to was represented as well as male and females.

Data Analysis

A quantitative data, descriptive stats analysis was completed to determine the outcome for each question asked. Each question was unique in its own way and the relatively small data collection pool allowed for the data to seen in clear manner.

Limitations

This methodology has validity issues due to the fact that that the sample size is small. This study was only conducted in one high school. It was the end of the school year, to allow for the most exploration of classes to be completed by the student body. The survey was sent to 425 students in grades 10, 11 and 12. Eighty-two (25%) surveys where returned. Case and Field studies are those that specially concentrate on specific groups. These subjects have been selected purposely to see if the local and district efforts are having an impact.

Chapter IV: Results

This study reviewed how one school districts practices impacts students enrolling in CTE courses, articulated classes and if these practices lead to employment, enrollment at Technical College or four-year college. The survey asked students to self-identify what courses they took and how they feel these choices will affect them in their futures.

Each chart will identify the main source of data that was collected. The outcome of the data collected will be used to determine if what the school is doing is effective for and their students as they move forward.

Table 1

Grade of Students Participating

Response	Sample (n=82)	Percentage
10th	16	19.5%
11th	30	36.5%
12th	36	44%

Overall 12th grade students had the most partication with 36 students completeing the survey while 29 students in 11th grade and 16 students in 10th grade completed the survey.

Table 2

Gender of Student

Response	Sample (n=82)	Percentage
Male	36	43.9%
Female	46	56.1%

Female students where more willing to take the survey. Overall 46 females and 36 males completed the survey.

Table 3

Job Earning Paycheck

Response	Sample (n=82)	Percentage
Paycheck earned	58	70.7%
No paycheck	24	29.3%

Overall 58 of the students working where receiving a paycheck. This information is important to keep students who do work for parents but do not collect a paycheck from answering yes.

Table 4

Job Part of Districts School to Work Program

Response	Sample (n=58)	Percentage
Yes	12	20.6%
No	46	79.4%

Only 12 of the students who are working are enrolled in the school to work program offered by the school.

Table 5

Youth Apprenticeship Job

Response	Sample (n=58)	Percentage
Yes	2	3.4%
No	54	96.6%

Of the 12 students who are enrolled in the school to work program through the school only 2 of those students are part of Youth Apprenticeship.

Table 6

Sense of Responsibility is Gained Through Job

Response	Sample (n=58)	Percentage
Yes	58	100%
No	0	0%

All students reported that they are gaining responsibility of some kind through their current job.

Table 7

Job is Helping Choose a Career

Response	Sample (n=58)	Percentage
Yes	28	48.2%
No	30	51.8%

Twenty-eight of the students who have a job stated that the job is helping them chose a career.

Table 8

Job is Helping Choose a College Program

Response	Sample (n=58)	Percentage
Yes	12	20.6%
No	46	79.4%

Of the 58 students who have a job 12 of those students feel their job is helping them choose a

college and or college program.

Table 9

Current Job Leading to Career

Response	Sample (n=58)	Percentage
Yes	12	20.6%
No	46	79.4%

Of the 58 students who have a job, 12 of them feel that their current job could become a career for them.

Table 10

CTE Concentrator

Response	Sample (n=50)	Percentage
Agriculture	6	12%
Family Consumer Science	10	20%
Business	18	36%
Technology & Engineering	16	32%

Not all students who took the survey are considered CTE concentrators, many of them that are tend to be upper classmen.

Table 11

Pursue a Career in CTE Concentration Area

Response	Sample (n=50)	Percentage
Yes	29	58%
No	21	42%

Overall more students who have taken two or more classes in a given CTE area feel they will pursue a career in the CTE area.

Table 12

Taken a Moraine Park Technical College Course while in High School

Response	Sample (n=82)	Percentage
Yes	29	35.3%
No	48	58.5%
Plan to in Future	5	6.2%

Overall 29 students who completed the survey have taken a Moraine Park Technical College (MPTC) course while in high school. Forty-eight have not taken a MPTC course and 5 plan on taking a MPTC course in their futures.

Table 13

Moraine Park Technical Course Enrollment Positive Impact

Response	Sample (n=29)	Percentage
Yes	13	44.8&
No	16	55.2%

Of the 29 students who have taken a Moraine Park Technical College (MPTC) course 13 felt it made a positive impact on their education.

Table 14

Future Plans of 12th Grade Students

Response	Sample (n=36)	Percentage
College	22	61.1%
Technical College	7	19.4%
Workforce	6	16.6%
Military	1	2.9%

Overall more students that are graduating plan on attending college than any other option that was provided on the survey.

Table 15

12th Grade Students Enrolling in Post-Secondary or Working within a CTE Concentration Area

Response	Sample (n=36)	Percentage
Yes	8	22.2%
No	28	77.8%

Eight students in the 12th grade where CTE concentrators in at least one area of CTE during their high school career.

Chapter V: Discussion

Kewaskum High School where study was conducted takes a unique approach with the students in work-based learning. Kewaskum has17 articulated courses with a local technical college and provides students with options of a school to work program and some Youth Apprenticeship options. This research was conducted around the following questions.

1. What impacts does gaining true work place experiences or Youth Apprenticeship have on a student to peruse or continue a career?

The data did show that 21% of students feel that they may make their current job a possible career. This indicates that many of the jobs these young people have are just that a job. However, 100% indicated that they are learning job responsibilities through their employment. The study suggests that often times students are simply working a job to do just that work, as there are not many jobs that connect to concentration areas. Of the 58 students who had jobs 12 students were enrolled in the school to work program in some way. Two of the 12 jobs where in the Youth Apprenticeship program.

2. Are students who complete a program of study or gain a Skills Certificate in a CTE secondary pathway likely to continue in education or employment in that field?

Data here showed that 58% percent of students who complete two or more courses within a CTE concentration area feel they may pursue a career or college within that pathway. Fifty-eight percent is a rather high number. Students are making connections to careers through what they are learning while enrolled in a CTE concentrated courses.

3. Does enrollment in technical college articulated courses have an impact on a career pathway or college choice?

Forty-three percent of respondents felt that taking the articulated courses helped them make career or college choices. This does not mean that the articulated course failed that student, instead some students may have found out that a certain field was not for them through enrollment in that course. Overall 70% of students surveyed have never taken or did have the opportunity to take articulated courses; suggesting that of the students who have taken articulated courses it helped all but 5% of students in making a career or college choice. Of the 23% of 12th graders moving on to work or study in a CTE related field all of them took articulated classes.

Conclusions

Of the 82 students who filled out the survey, two have jobs in the Youth Apprenticeship program and 12 students are in school to work program. All of these students have completed two or more courses in a CTE concentration area and of these students have taken articulated courses. Eight of these students are going to attend Technical College the other 4 a four-year college to obtain a degree in the areas where they took two or more CTE courses. The limited number of Youth apprenticeship students makes it difficult to determine the impact of Youth Apprenticeships.

Students taking CTE courses especially two or more courses in one CTE pathway helps students make career choices. Overall 58% of students who took two or more CTE courses in one pathway will take more courses in that pathway in high school or college. Plus 58% of students who took two or more CTE courses in one pathway say they will pursue a career in that field.

Recommendations

The Kewaskum School District should note that when a student is in school to work or Youth Apprenticeship those students seem confident in their career and college choices. The

CTE department in this district is working towards getting students interested in careers in specific areas through the pathways. Articulated courses are working when students enroll in them. The research recommended that the school to work program also seems to support career and college readiness. Some of the results are driven by students signing up for courses to be with friends. To better serve students and for students to make better choices on their futures the research recommends that it would be in the best interest of the student and the school to develop a new approach in how students enroll in courses. Students entering 9th grade would need to choose a pathway determined by their interests, career exploration in middle school, and their career goals. This would give learning a purpose and thus schools would see less students taking courses to be with friends. Rather more students would be focused on their post-secondary pathway and start that journey towards a career within a pathway.

References

Anderson, S., Douglas, M., Drewes, T. Kreppner, J. McMullen, K., Rodgers-Sturgeon, K., …

    Wiggers, R. (2011). *Assessing apprenticeship outcomes: Building a case for pursuing*

    and completing an apprenticeship. Retrieved from

    http://www.nald.ca/library/research/caf/apprenticeship_outcomes/apprenticeship_outcom

    es.pdf

Anthony, M. S., Burkette, G. D., & Sparks, S. G. (2007). Financing a college education using a

    historic income projector model. *Journal of Financial Service Professionals, 61*(6), 62-

    71. Retrieved from

    http://web.a.ebscohost.com.ezproxy.lib.uwstout.edu/ehost/pdfviewer/pdfviewer?vid=1&s

    id=5fce1500-cb81-4ba2-b19a-6a07e1bf92ae%40sessionmgr4007

Association for Career and Technical Education (ACTE). (2015). *The Carl D. Perkins career*

    and technical education improvement act of 2006. Alexandria, VA: Association for

    Career and Technical Education. Retrieved from https://go-gale-

    com.ezproxy.lib.uwstout.edu/ps/i.do?id=GALE%7CA461513914&v=2.1&u=stout&it=r

    &p=AONE&sw=w

Balakrishnan, S. (2014). *Missing makers: How to rebuild American's manufacturing workforce.*

    Retrieved from http://gradsoflife.org/wp-content/uploads/2017/06/Missing-

    Makers_Single-Pages.pdf

Benz, M. R., Yovanoff, P., & Doren, B. (1997). School-to-work components that predict post

    school success for students with and without disabilities. *Exceptional Children, 63*(2),

    151-165. Retrieved from

    http://web.b.ebscohost.com.ezproxy.lib.uwstout.edu/ehost/pdfviewer/pdfviewer?vid=1&s

    id=35f8aa7d-c9a8-40af-8d4a-eb0be635d62c%40sessionmgr103

Berger, A., Turk-Bicakci, L., Garet, M., Song, M., Knudson, J., Haxton, C. … Cassidy, L.

    (2013). *Early college, early success: Early college high school initiative impact study*.

    Washington, DC: American Institutes for Research.

Carnevale, A., Smith, N., & Strohl, J. (2013). The Road to Recovery: Projecting U.S. Job

    Growth and Higher Education Demand through 2020. *Community College*

    Journal, 84(3). Retrieved from

    http://web.a.ebscohost.com.ezproxy.lib.uwstout.edu/ehost/pdfviewer/pdfviewer?vid=1&s

    id=baa781f5-5f9a-4f58-b9d2-90e04002b0d8%40sessionmgr4006

Dewey, J. (1934). Individual psychology and education. *The Philosopher, 12.* Retrieved from

    http://www.the-philosopher.co.uk/2016/08/individual-psychology-and-education-

    1934.html.

Dewey, J. (1997). *Experience and education.* New York, NY: Touchstone. (Original work

    published 1938).

Dewey, J. (2008). *Democracy and education.* Radford, VA: Wilder Publications. (Original

    work published 1916).

Esters, L. T., & Retallick, M. S. (2013). Effects of an experiential and work-based learning

    program on vocational identity, career decision self-efficacy, and career maturity. *Career*

    and Technical Education Research, 38(1), 69-83. doi:10.5328/cter38.1.69

Evers, T. (2013). *Learning that works for Wisconsin: Career and technical education* (pp. 2-5). Retrieved from http://cte.dpi.wi.gov/sites/default/files/imce/cte/pdf/ctebrochure.pdf

Gardner, D. P. (1983). *A nation at risk: The imperative for educational reform: An open letter to the American people: A report to the nation and the Secretary of Education.* Retrieved from http://files.eric.ed.gov/fulltext/ED226006.pdf

Gleason, J. R. (2001). *Work-based learning: Tips and techniques for maximum results.* Columbus, OH: Marketing Education Resource Center.

Graham, L. J., Van Bergen, P., & Sweller, N. (2015). "To educate you to be smart": Disaffected students and the purpose of school in the (not so clever) "lucky country". *Journal of Education Policy, 30*(2), 237-257. doi/abs/10.1080/02680939.2014.953596

Hamilton, M. A., & Hamilton, S. F. (1997, May). When is work a learning experience? *The Phi Delta Kappan, 78*(9), 682-689. Retrieved from https://www.jstor.org/stable/i20405893

Hoachlander, G. (2008). Bringing industry to the classroom. *Educational Leadership, 65*(8), 22-27. Retrieved from http://www.ascd.org/publications/educational-leadership/may08/vol65/num08/Bringing-Industry-to-the-Classroom.aspx

Holder, K., & Clark, S. (2008) Working beyond retirement-age. Retrieved from https://www.census.gov/people/laborforce/publications/Working-Beyond-Retirement-Age.pdf

Hogg, C. L. (1999). Vocational education: Past, present, and future. In A. J. Pautler Jr. (Ed.), *Workforce education: Issues for the new century* (pp. 3-20). Ann Arbor, MI: Prakken Publications, Inc.

Joy, J., & Radhakrisknan, R. (2012). Changing jobs: Influencing factors. *SCMS Journal of Indian Management, 9*(1), 59-68. Retrieved from https://search-proquest-com.ezproxy.lib.uwstout.edu/docview/1536043892?accountid=9255&rfr_id=info%3Axri%2Fsid%3Aprimo

Kanny, M.A. (2015) Dual enrollment participation from the student perspective. *New directions for Community Colleges*, *2015*(169), 59-70. doi:10.1002/cc.20133

Keiser, J. C., Lawrenz, F., & Appleton, J. J. (2004). Technical education curriculum assessment. *Journal of Vocational Education Research, 29*(3), 181-194. Retrieved from http://scholar.google.com/scholar_url?url=https://scholar.lib.vt.edu/ejournals/JVER/v29n3/pdf/v29n3.pdf%23page%3D30&hl=en&sa=X&scisig=AAGBfm0YeK3GP8XQXt1CRvleAwHI289P8g&nossl=1&oi=scholarr

King, B. (2015). Changing college majors: Does it happen more in STEM and do grades matter? *Journal of College Science Teaching*, *44*(3), 44-51. Retrieved from http://web.b.ebscohost.com.ezproxy.lib.uwstout.edu/ehost/pdfviewer/pdfviewer?vid=1&sid=6986b4fe-83c7-42f5-97a1-5e67fc81484d%40pdc-v-sessmgr02

Kim, J., & Bragg, D. (2008). The impact of dual and articulated credit on college readiness and retention in four community colleges. *Career and Technical Education Research,* (2), 133-158. Doi: 10.5328/CTER33.2.133

Kroyer-Kubicek, R. (n.d.a). *Career Clusters and Programs of Study*. Retrieved from http://dpi.wi.gov/cte/pathways/career-clusters

Landrum, S. (2017, November 10). Millennials aren't afraid to change jobs, and here's why.

    Forbes. Retrieved from

    https://www.forbes.com/sites/sarahlandrum/2017/11/10/millennials-arent-afraid-to-

    change-jobs-and-heres-why/#4395bce719a5

Lewis, M. V. & Stone III, J. R. (2011, March 1). Should your school offer apprenticeship

    training? *Techniques: Connecting Education & Careers*, *86*(3), 16-21. Retrieved from

    https://eric.ed.gov/?id=EJ926063

Millennials Know Job Hopping Looks Bad, yet 86% Would Not Think Twice About Leaving

    Their Job, RecruitiFi Survey Finds. (2015, July 21). *PR Newswire.* Retrieved from

    https://www.prnewswire.com/news-releases/millennials-know-job-hopping-looks-bad-

    yet-86-would-not-think-twice-about-leaving-their-job-recruitifi-survey-finds-

    300116005.html

Miller, M. D. (1985). *Principles and philosophy for vocational education.* Columbus, OH:

    National Center for Research in Vocational Education, Ohio State University.

National Association of State Directors of Career Technical Education Consortium. (2015).

    Career clusters. Retrieved from http://www.careertech.org/career-clusters

North Carolina Department of Public of Instruction. (n.d.) *Benefits of work-based learning.*

    Retrieved from http://www.ncpublicschools.org/cte.curriculum/work-based/benifits/

Parnell, D. (1985). *The neglected majority.* Washington DC: Community College Press.

Porter, A. (2012). T-day: as student debt hits $1 trillion, yds swings into action. *Democratic Left, 40*(1), 13-14. Retrieved from https://uwi-primoalma-prod.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_proquest1026945554&context=PC&vid=STOUT&lang=en_US&sea rch_scope=Search_Stout&adaptor=primo_central_multiple_fe&tab=default_tab&query= any,co ntains,Porter,%20A.%20(2012).%20T-day:%20as%20student%20debt%20hits%20$1%20trillion,%20yds%20swings%20into% 20action.%20Democratic%20Left,%2040(1),%2013-14.&offset=0

Rodgers, D., & Tyack, D. (1982). Work, youth, and schooling: Mapping critical research areas. In H. Kantor & D. Tyack (Eds.), *Work, youth, and schooling: Historical perspectives on vocationalism in American education* (pp.269-294). Stanford, CA: Stanford University Press.

Scott, J. L., & Sarkees-Wircenski, M. (2008). *Overview of career and technical education* (4th ed.). American Technical Publishers, Inc.

Shumer, R, & Digby, C. (2012). The future of CTE: Programs of study. *Techniques: Connecting Education and Careers, 87*(1), 36-39. Retrieved from http://web.b.ebscohost.com.ezproxy.lib.uwstout.edu/ehost/pdfviewer/pdfviewer?vid=1&s id=e55e2a5e-d996-4af0-a720-046f92c29ecf%40pdc-v-sessmgr06

State of Wisconsin Department of Workforce Development. (2015). *Youth apprenticeship program information.* Madison, WI: State of Wisconsin Department of Workforce Development. Retrieved from https://dwd.wisconsin.gov/dwd/publications/dws/youthapprenticeship/detw_9654_p.pdf

Stoltzfus, K. (2015). College-completion rates continue to decline. *Chronicle of Higher Education. P. A12.* Retrieved from https://go-gale-com.ezproxy.lib.uwstout.edu/ps/i.do?&id=GALE|A437057772&v=2.1&u=stout&it=r&p=AONE&sw=w

Symonds, W. C., Schwartz R., & Ferguson R. F. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century.* Cambridge, MA: Harvard University Graduate School of Education

Thao, M.C. (n.d.) *Career and technical education enrollment reporting system.* Retrieved from https://dpi.wi.gov/cte/data/cte-data

The Manufacturing Institute, Educational Research Center of America, & SkillsUSA. (2015). *Attracting the next generation workforce: The role of career and technical education.* Retrieved from http://www.themanufacturinginstitute.org/~/media/313BCA4C3721444CA8C48F7304F32027.ashx

U.S Census Bureau. (2016). Retrieved from https://counties.uwex.edu/washington/files/2010/07/Economic-Characteristics-2010-2014.pdf

U.S. Department of Education. (2007, March 16). Carl D. Perkins Career and Technical Education Act of 2006: Reauthorization of Perkins. Retrieved from http://www2.ed.gov/policy/sectech/leg/perkins/index.html

U.S. Department of Education (2019, September). Bridging the skills gap: Career and technical education in high school. Retrieved from https://www2.ed.gov/datastory/cte/index.html

U.S. Department of Labor. (2016). Databases, Tables and Calculators by Subject. Retrieved,

  from https://data.bls.gov/timeseries/LNS14000000

Washington County Workforce Alliance (February, 2018) Monthly Meeting

Westervelt, E. (2012, April 4). The secret to Germany's low youth unemployment. *Wisconsin*

  Public Radio NPR News & Classical Network. Retrieved from

  http://www.npr.org/2012/04/04/149927290/the-secret-to-germanys-low-

  youthunemployment

Williams, C. (2010). Understanding the essential elements of work-based learning and its

  relevance to everyday clinical practice. *Journal of Nursing Management, 18*(6), 624-632.

  Retrieved from https://onlinelibrary-wiley-

  com.ezproxy.lib.uwstout.edu/doi/full/10.1111/j.1365-2834.2010.01141.x

Wisconsin Department of Public Instruction. (n.d.b). *Wisconsin's employability skills certificate:*

  Implementation guide. Retrieved from:

  http://dpi.wi.gov/sites/default/files/imce/cte/pdf/esimpleguide.pdf

Wisconsin Department of Public Instruction Career & Technical Education Team. (n.d.b). *Work*

  based learning. Retrieved from https://dpi.wi.gov/cte/career-development/work-based

Severson, A. Schmit, S., Bitters, B., Westrich, A., Larson, E., & Johnson, M. … Westfall, G.

  (2011). *A guide for implementing programs of study in Wisconsin: Based upon the*

  national career cluster & pathway framework. Madison, WI: Wisconsin Technical

  College System

Yamaguchi, R., Garland, M., & Jonas, D. (2014). Long-term outcomes of high school CTE

  completers in Virginia: Employment status and wages. Retrieved from:

  http://media.wix.com/ugd/731040_22396fe01109456e819b3c6186e291fd.pdf

Appendix A: Student Survey

1. Please select what grade you are currently in
   o 10th
   o 11th
   o 12th

2. Gender
   o Male
   o Female

3. Do you have job where you collect a paycheck?
   o Yes
   o No

If you answered No to the question above go to the next page.

4. Is your job part of the school to work program?
   o Yes
   o No

5. Is your job part of the Youth Apprenticeship program here at school?
   o Yes
   o No

6. Do you feel you are gaining knowledge about responsibility through your job?
   o Yes
   o No

7. Do you feel your job is helping you find a career or choice?
   o Yes
   o No

8. Do you feel your job is helping you choose a college?
   o Yes
   o No

9. Do you feel you will continue a career in your current job?
   o Yes
   o No

10. Identify areas where you have taken two or more classes in any of the areas listed below? For example if you have taken two classes with Mrs. Dorst in Family and Consumer Science, circle that area. You may circle more than one area.

> Family and Consumer Sciences
>
> Business
>
> Technology and Engineering
>
> Agriculture

If you circled no areas in the above question please go to the next page.

11. Do you think you will take more classes in this area where you have taken two or more courses?
    o Yes
    o No
    o No as I'm a senior
    o Yes in college as I am a senior

12. Do you think you may pursue a career in the area where you took two or more courses?
    o Yes
    o No
    o Undecided

13. Have you taken any Moraine Park Technical College articulated courses?
    o Yes
    o No
    o No, but plan to in future years.

If you answered Yes, continue. If you answered No thank you for your time, turn in the survey.

14. Have these classes had an impact on your course selections while in high school or now when enrolling in college? Please answer all that apply
    o Yes, impact on future high school courses
    o Yes, impact on college courses
    o No
    o No, through the class I found it was not for me.

15. Has enrollment in a Moraine Park Technical College course helped make a career or college choice for you?
    o Yes
    o No

16. If you answered yes what is the career or college choice you have made? Please fill out on the lines below your career choice and college choice. If you are undecided at this time put undecided on the line or lines.

Career Choice _____

College Choice _____

Appendix B: University of Wisconsin-Stout IRB Approval

STOUT
UNIVERSITY OF WISCONSIN
WISCONSIN'S POLYTECHNIC UNIVERSITY

Office of Research and Sponsored Programs
152 Vocational Rehabilitation
University of Wisconsin-Stout
P.O. Box 790
Menomonie, WI 54751-0790
Phone: 715-232-1126

May 29, 2018

Brett Zimdars
Teaching, Learning & Leadership
University of Wisconsin-Stout

RE: **Preparing for Life After High School**

Dear Brett,

The IRB has determined your project, *"Preparing for Life After High School"*, is **Exempt** from review by the Institutional Review Board for the Protection of Human Subjects. The project is exempt under **Category # 2** of the Federal Exempt Guidelines. Your project is exempt for 5 years from **May 29, 2018**. If a renewal is needed, it is to be submitted at least 10 working days prior to the approvals end date. Should you need to make modifications to your protocol, please complete the modification form.

Informed Consent: All UW-Stout faculty, staff, and students conducting human subjects' research under an approved "exempt" category are still ethically bound to follow the basic ethical principles of the Belmont Report: 1) respect for persons; 2) beneficence; and 3) justice. These three principles are best reflected in the practice of obtaining informed consent from participants.

If you are doing any research in which you are paying human subjects to participate, a specific payment procedure must be followed. Instructions and form for the payment procedure can be found at http://www.uwstout.edu/rs/paymentofhumanresearchsubjects.cfm

If you have questions, please contact the IRB office at 715-232-1126, or buchanane@uwstout.edu, and your question will be directed to the appropriate person. I wish you well in completing your study.

Sincerely,

Elizabeth Buchanan
Interim Director, Office of Research and Sponsored Programs; Human Subjects Protections Administrator, UW-Stout Institutional Review Board for the Protection of Human Subjects in Research

CC: Diane Klemme

*NOTE: This is the only notice you will receive – no paper copy will be sent.