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Baus, Susan L. *Perceptions of Career and Technical Education, Two-Year Technical Colleges, and Four-Year Institutions That Potentially Influence Students' Post-Secondary Choices*

Abstract

Currently, there is limited matriculation of local high school graduates in the Sturgeon Bay area into technical or vocational colleges (Sturgeon Bay School District Post-Secondary Plans, n.d.) despite the growing need for skilled workers. There is also no research as to what factors may contribute to this limited matriculation. The purpose of this research project is to gain an understanding of the perceptions of Sturgeon Bay High School sophomore and junior students' parents/guardians and Door County Counselors regarding CTE, two-year technical college, and four-year institutions. A survey was created for both Sturgeon Bay High School sophomore and junior students' parents/guardians and Door County Counselors to determine those perceptions. While survey results from both Sturgeon Bay High School parents/guardians and Door County counselors showed that their perceptions of CTE, two-year technical colleges, and four-year institutions were mixed; the results found that overwhelmingly parents/guardians are most concerned with the rising costs of a post-secondary education and want their children to get an education for a job that will provide them a life-sustaining wage without going into significant debt to attain it.

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Chapter I: Introduction

In their 2011 report, *Pathways to Prosperity*, the Harvard Graduate School of Education focused on an unfortunate reality in the workforce of the United States: we are not preparing today's students to meet the workforce needs of the future.

The report stated:

The underlying assumption has been that an education focused on the academic requirements needed to enter four-year colleges will prepare nearly all adolescents for success. Although this approach has produced marginal gains, it's clear that it's not working for everyone. We are leaving millions of young adults behind. If we don't alter our approach, these young adults are in danger of becoming a wasted generation.

(Symonds, 2012, p. 36)

While the push for adolescents to attend four-year colleges has grown; these students are not necessarily seeing a corresponding increase in their employability skills, career opportunities, and over-all earnings. Instead, they are finding themselves with degrees that have limited employment opportunities, minimal skill or job training for the positions that are available and are riddled with student debt. Researchers, as part of two continuation programs of the *Pathways to Prosperity* project *Jobs for the Future* and the *Middle Skills Gap Initiative* stated the following:

There's a huge loss in potential income among young people. Too many kids go off to college with no career plan, choose majors with no thought about the labor market, and then graduate with upwards of \$25,000 of debt and few employable skills. And those are the kids that finish college. College dropouts — roughly four in 10 who enroll in a four-year college — are even worse off in the labor market. And in worst shape of all are the 3

million 16 to 24-year-olds who aren't in school or in work. They either dropped out of high school or completed high school without any job experience. So, at both ends of the continuum, among both relatively successful students who make it through college and those who never get started, there are significant consequences of our failure to pay more attention to preparing young people for work and careers.

We're trying to build systems that span the last years of high school and first two years of postsecondary education, particularly community and technical colleges. We want to help more kids achieve that first postsecondary credential, either a certificate or a two-year degree with value in the labor market, and then get them started in fields with high growth and high demand. For example, there are hundreds of thousands of jobs in fields like IT and health care that require some training beyond high school, but not necessarily a four-year degree. (Shafer, 2017)

These gaps in education, career training, and ultimately job placement is apparent in today's workforce and shown in a Manpower Group survey that found for the fourth year in a row, that the area of skilled trades (which includes careers such as electricians, carpenters, welders, bricklayers, and plasterers) continues to be ranked number one in the roles employers find hardest to fill (Manpower Group, 2016). Even more alarming Lockard and Wolfe (2012) found that this trend will continue to be present through at least 2020 since many of the job areas experiencing growth require technical skills such as construction, manufacturing, and transportation.

Where did this disconnect between education and available jobs in the workforce come from? Despite the demands for careers that can be attained through completion of training and degrees attained from two-year technical colleges, data from the National Center for Education

Statistics (NCES) shows that enrollment into a technical or vocational college is low compared to that of a traditional four-year college (NCES, n.d.). For the Sturgeon Bay school system during the 2014-2015 school year, only 25.7% of students were planning on attending a technical or vocational school compared to 68.9% planning on attending a 4-year college (Wisconsin DPI, n.d; Northeast Wisconsin Technical College, n.d.).

Similar data is being seen nationally. For 2017, NCES showed that out of the 20.4 million students that were attending post-secondary institutions, only 34.3% were going to be attending two-year colleges while 65.7% were going to be attending four-year institutions (NCES, 2017). Given the labor market demands for careers that require degrees attained by attending two-year colleges and that the educational opportunities to pursue those career pathways exist, why aren't more students considering this as a viable option for their future?

One consideration is the influence of individuals around the student and how their perceptions may affect a student's decision to choose one educational pathway over another. In a 1992 study, Downing and D'Andrea found that parents in England, Switzerland, and the U.S. would discourage their children from pursuing a "working class activity" in favor of pursuing a degree from a university. They also found that parents expressed a "strong bias in favor of their children attending a university and for careers requiring such education and were disinclined toward their children pursuing working-class careers" (Downing & D'Andrea, 1992, p. 121).

This type of perception about the lack of validity of CTE is not unique to parents of secondary age children. It is also prevalent amongst educators, secondary school staff, and the public as well. After surveying fellow Mississippi teachers in 2015, Gammil found that many still felt that students who "can't hack" traditional academic classes or who have no plans of going to college are the only ones suited for CTE courses. In a 2010 University of Nebraska

public perception study of CTE, 47% of respondents indicated that “CTE classes tend to focus on students who probably won’t go to college” (p. 2) and 49% agreed that “students in CTE programs are not as respected as students who take more traditional classes” (p. 2). These studies show that the perceptions of CTE, by both the general public and educators, is that these are lesser programs and they are not held in the same high regard as four-year programs.

Unfortunately, this is a lingering problem for CTE and two-year colleges. Finally, Gaunt and Palmer (2005) discussed:

Previous research studies have revealed that image and perception problems have plagued the Career and Technical Education (CTE) community for some time. CTE has had an image problem, due to the perception that it provides poor quality education for the worst students. (p. 44)

While studies speak to what is happening within the larger CTE community, there is no research conducted on whether similar perceptions like these are prevalent within the school districts in Door County, Wisconsin. Therefore, by gaining a better understanding of what the perceptions are of CTE, two-year technical colleges, and four-year institutions; and how these perceptions might affect post-secondary enrollment into technical or vocational colleges, efforts can be put in place to better educate the population on the benefits of CTE. This should assist in increasing enrollment and ultimately completion in programs for these needed skilled careers.

Statement of the Problem

Currently, there is limited matriculation of local high school graduates in the Sturgeon Bay area into technical or vocational colleges (Sturgeon Bay School District Post-Secondary Plans, n.d.) despite the growing need for skilled workers. There is also no research as to the

perception of CTE by key individuals who may impact student decision making for post-secondary education.

Purpose of the Study

The purpose of this research is to gain an understanding of the perceptions of Sturgeon Bay High School sophomore and junior students' parents/guardians and Door County Counselors regarding CTE, two-year technical college, and four-year institutions.

Research Objectives/Questions

The following questions will guide this research:

1. What are the perceptions of Career and Technical Education held by high school counselors in Door County?
2. What are the perceptions of Career and Technical Education held by parents/guardians within the Sturgeon Bay School District?
3. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by high school counselors in Door County?
4. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by parents/guardians within the Sturgeon Bay School District?
5. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a 4-year degree?
6. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a certificate, technical diploma, or associate degree from a technical college?

Definitions of Terms

The following terms are defined to clarify their meaning within the context of this study.

Career and Technical Education (CTE) programs. Career and Technical Education programs that specialize in the skilled trades, applied sciences, modern technologies, and career preparation for example: welding, diesel technology, agriculture, nursing (The Glossary of Educational Reform, n.d.)

Door County. A county located in Northeast Wisconsin with a population of 27,554 (Wisconsin Demographics, n.d.).

Influencers. Any person who may interact with a student in an influential way; for the purpose of this study, will be limited to parents/guardians and high school counselors.

Perceptions. A way of regarding, understanding, or interpreting something; a mental impression (Merriam-Webster, n.d.).

Chapter II: Literature Review

There are a variety of choices a student may select for their post-secondary plans. This includes technical and other two-year colleges; four-year institutions, military service, or entering straight into the workforce. But what factors contribute to secondary students' decisions to pursue a post-secondary path and are these decisions leading students to viable careers in addition to meeting economic demands?

Development Process of Adolescents

Before looking at the specific ways an adolescent determines their post-secondary and career choice, we must first understand the development process of an adolescent. According to Ginzberg et al., the initial fantasy stage during early to mid-childhood (up to age 11) is where children will engage in playful acts that simulate occupations such as firefighter or race car driver. This is then followed through the early teenage years by the tentative stage, when individuals begin to think about their interests, capacities and values. In the realistic stage during late adolescence to the early twenties, the individual shifts from a focus on subjective needs and interests to an appraisal of what the world has to offer, where they will explore their options and ultimately decide on a post-secondary path (Career research, n.d.). Donald Super expanded upon the Ginzberg theory not only with the addition to two more stages (the first being maintenance for individuals now in a career looking to solidify or strengthen their place within their chosen field and secondly the decline stage for individuals transitioning out of the workplace) but also by placing heavy importance on the idea of self-concept (Overview of Career Development Theories, n.d.). The dictionary defines self-concept as an idea of the self, constructed from the beliefs one holds about oneself and the responses of others. It is crucial to then understand how

those responses from others, specifically for this research parents and counselors, effect the student's idea of self and what that means for their post-secondary and career choices.

Post-secondary and Career Choices: How They are Made

Since 2015 and as part of Wisconsin Act 20, academic and career planning has been made a mandatory component of every secondary student's school experience by:

1. Requiring Wisconsin Department of Public Instruction (DPI) to ensure that, beginning in 2017-18, every school board is providing academic and career planning services to pupils enrolled in grades 6 to 12 in the school district.
2. Requiring DPI to procure, install, and maintain information technology, including computer software, to be used statewide by school districts to provide academic and career planning services to pupils in grades 6 to 12.
3. Requiring DPI to provide guidance, training, and technical assistance to school districts and school district staff, including teachers and counselors, on how to implement model academic and career plans, including training and technical assistance that is necessary to implement the information technology provided for this purpose. (Wisconsin DPI, n.d)

Having legislation like this in place would suggest that every student would be exploring a wide range of post-secondary options to determine the path most suitable for them. However, the primary facilitators of this type of prep within a high school falls on the counselor and based on a 2014 study conducted by the American School Counselor Association, the ratio of students-to-school counselor is 491 to 1 for the US and 459 to 1 for the state of WI specifically (American School Counselor Association, 2014). The result of these immense student to counselor ratios leaves minimal time per student for counselors to adequately spend on career planning.

Therefore, it is challenging for counselors to provide this type of planning for their students even though they are a primary source for information. Feller (2003) stated:

Historically, school counselors have served an ancillary role. They are now central to the educational mission as key information brokers regarding educational options, curricular development, and occupational opportunities. (p. 262)

The ability to have exposure to a variety of information on both school and career options during state mandated academic and career planning is only a portion of the factors a student will utilize to ultimately make their post-secondary decisions.

In their 2014 study of upper secondary students, Holmegaard, Ulriksen, and Madsen found that there were four themes regarding post-secondary decision making:

1. Struggling to make the right choice of study – represented itself in a fear of making a decision that doesn't align with their expectations of who they are and who they want to become.
2. Matches their interests and an attractive horizon – education and career choices are not only of personal interest but meet other needs as well such as pay or development.
3. Individual choice – ultimately the decision-making falls on the student.
4. Choices are informed and adjusted within social practice – outside influencers affect a student's choice by either encouraging or discouraging the choice. (p. 29-34)

The final theme demonstrates that while a decision is ultimately that of a student, heavy consideration is given to the opinions of those influential individuals surrounding the student as well. In 2015, Workman found that parental influence emerged as a key factor in the student decision making process for college choice, major, and over-all career planning. (p. 23)

Kniveton also found in his 2004 study that parents' influence on career choice was ranked

highest with teachers/counselors coming in second on a student's selection of career (p. 51). The significance of this weight was also apparent in a 2004 study by Biggart et al. that found that of 5088 students, 48% stated that their parents and 18% stated that teachers/counselors offered the best advice for what to do after S4, Scotland's secondary school equivalent (Biggart et al., 2004).

Since this data shows that the opinions of these two groups play a significant role in a student's post-secondary decision-making process, it is crucial to understand what these opinions and perceptions might be.

Perceptions of Academic and Career Choices

Over the years, the push for a college education (and more specifically the push for a four-year college education) has steadily increased. Some of this push and influence has been found to come from parents/guardians. In a 2000 study, Ocker found that influencers like parents play a significant role in the post-secondary decision making for high school students. She found that high school counselors believed parents are very influential in impacting a student's decision to attend a four-year college (50.0%) but have little influence on students attending a technical college (8.9%). She also found that counselors perceive that attending a technical college is not a "status" symbol for students (p. 35).

But what happens when parents are focused only on a four-year track for their children and how do counselors then continue with career planning? Hoyt (2001) stated:

When counselors try to interest both students and their parents in considering other options in addition to colleges offering bachelor's degrees, strong parental resistance is often encountered. In voicing their objections, many parents appear to be asking "What's the matter with my child? Why shouldn't he or she enroll in a college offering the

bachelor's degree?" So long as parents continue to express this point of view, it will be very difficult for counselors to discuss other alternatives with students. (p. 6)

In his 2001 study, Hoyt also found that:

Data presented made it clear that it would be poor reasoning to assume the "best" path every high school graduate could follow is to seek a bachelor's degree. Yet that, in effect, appears to be the situation in most places today. (p. 12)

Where the push for a "college education" has been shown to actually mean four-year institutions and caused significant growth in enrollment into four-year colleges and resulting bachelor's degrees; there has not been similar growth in enrollment into technical colleges that provide education toward certificates, technical diplomas, and associate degrees (United States Census Bureau, 2016). But why has there been such a difference?

Jackson and Hasak (2014) believe that:

Some of what plagues CTE is an image problem still tarnished by the perception of it as an education track for students who should not attend college. It is time to transform the notion of "shop class" into one of several worthwhile options available to students. (p. 36)

Rossetti (1990) found these negative perceptions of CTE to drastically and negatively impact post-secondary enrollment. She found that adults providing guidance to 54 students present (four-year) college as the only choice for some students and vocational training for high school students whom they perceive as non-college bound. (p. 53-54)

In their 1994 study, Downing and D'Andrea found that 66.4% of US parents would encourage their child to follow a career path that required a university education where-as 62.8% of parents would discourage their child to follow a working-class career. (p. 119) In his 2012

study of Ashwaubenon high school graduates, Olenski found that 94 graduates (69 percent of the respondents) answered that yes, they felt more encouraged to attend a four-year institution over other options. Thirty-two graduates (24 percent of the respondents) felt somewhat encouraged to pursue a four-year college career over other paths, and only 10 graduates (7 percent of the respondents) did not feel that they were encouraged to attend a four-year institution over other career paths. (Olenski, p. 35) He also found that 12 graduates (9 percent of the respondents) felt they were encouraged to attend a two -year college/institution over a four-year institution. Fifty-three graduates (39 percent of the respondents) answered that they felt somewhat encouraged, and seventy-one graduates (12 percent of the respondents, answered that they did not feel encouraged at all to attend a two-year college/institution. (Olenski, p. 36)

In his 2010 report, Herian found public perception of CTE in Nebraska was very negative: almost 47% of respondents agreed that, “CTE tends to focus on students who probably won’t go to college,” and 49% agreed that, “students in CTE programs are not as respected as students who take more traditional classes” (p. 2). This data clearly shows a not only negative attitudes toward CTE but then a resulting bias toward universities or 4-year institutions vs. two-year technical or vocational educational programs since one is significantly encouraged over the other.

By having these types of perceptions or biases either themselves or via those influencers around them, students are less likely to view a technical education as a valid post-secondary option. Instead many students are pushed toward either a four-year degree without a clear idea of what the labor market has in store or how to best prepare for jobs that meet their aptitudes and interests (Gray and Herr, 1995).

Summary

The goal of this research is to determine what are the perceptions of parents/guardians within the Sturgeon Bay School District and Door County school counselors of CTE and two-year technical colleges vs. four-year institutions. More specifically the research will determine if negative perceptions like CTE is only a track for the non-college bound student, CTE programs do not have the same rigor as other educational programs, and a decision to follow a two-year technical pathway would be discouraged (and a four-year college would be encouraged) are prevalent. Once the perceptions have been identified, more can be done to either change or eliminate any negative ones about CTE and two-year college which would ultimately increase post-secondary enrollment into these programs and institutions.

Chapter III: Methodology

As there is currently no research regarding the perceptions of CTE, two-year technical colleges, and four-year institutions in the Sturgeon Bay area; the purpose of this study was to identify common themes of parent/guardian and counselor perceptions of these three areas.

Specific research questions guiding this research were:

1. What are the perceptions of Career and Technical Education held by high school counselors in Door County?
2. What are the perceptions of Career and Technical Education held by parents/guardians within the Sturgeon Bay School District?
3. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by high school counselors in Door County?
4. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by parents/guardians within the Sturgeon Bay School District?
5. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a 4-year degree?
6. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a certificate, technical diploma, or associate degree from a technical college?

This chapter will discuss subject selection, survey instrumentation used, data collections procedures, data analysis, and limitations related to the research.

Research Design

The research design for this study utilized a survey methodology. The purpose of this research was to determine parental and counselor perceptions of CTE, two-year technical

colleges, and four-year institutions. This knowledge is important as these perceptions might influence students' decisions on whether to enroll in CTE programs. The research design guiding this study will contain both quantitative and qualitative components due to the study survey questions asked.

Subject Selection and Description

The target survey respondents are all parents/guardians of sophomore and junior students from Sturgeon Bay High School as well as counselors from Southern Door, Sturgeon Bay, Sevastopol, Gibraltar, and Washington Island school districts in Door County, Wisconsin. There are currently 96 sophomore and 93 junior students Sturgeon Bay High School (Wisconsin Information System for Education, n.d.) and 9 counselors between the 5 school districts within Door County.

For the 52 parent/guardian respondents: the majority of them at 76.32% were female, 83.79% completed at least an associate degree or higher for their educational attainment (with 32.43% earning a master's degree or equivalent), and 92.11% were currently employed with 85.71% employed full-time. The majority (63.16%) never attended a two-year technical college during their education, have two children (55.26%), and from households which earn at least \$40,000 per year (78.94%).

For the counselors, 3 of the 9 (33%) responded. Each is female and have earned their master's degree or higher. However, none of them had attended a two-year technical college during their educations.

Instrumentation

A two-part survey was created for each group of respondents: parents/guardians (Appendix A) and counselor (Appendix B). The first part of each survey featured a series of

quantitative questions and open-ended questions designed to solicit data specifically related to the research questions. The second part focused on strictly demographic questions to identify the make-up of the survey participants. For the quantitative questions, respondents answered questions based on agreement using the following five-point Likert scale: 1. Strongly agree, 2. Agree, 3. Neither agree or disagree, 4. Disagree, 5. Strongly disagree. For the qualitative questions, respondents were able to identify words and phrases of their choosing.

Data Collection Procedures

Parent/guardian surveys were sent electronically via Qualtrics by the School Administrator at Sturgeon Bay High School via their email database. This included approximately 400 email addresses for the parents of their sophomore and junior students. It was requested that all email addresses were listed as BCC for confidentiality. Prior to accessing the survey, potential respondents were informed that participation was voluntary, all answers and personal information would be kept confidential, and included instructions for completing the online survey. A three-week timeline was established for completion of the survey and a reminder email was sent by the Sturgeon Bay High School Administration one week prior to the survey close date.

For the counselor survey, the researcher sent an eleven-question survey electronically via the Qualtrics email system with an accompanying email that stated participation was voluntary, all answers and personal information would be kept confidential and not used to identify participants and provided instructions for completing the online survey. A three-week timeline was established for completion of the survey. The researcher sent reminder emails via Qualtrics one-week prior to the closing of the survey and again on the final date of the survey was open.

Data Analysis

The demographic and quantitative survey data was analyzed using the electronic survey capabilities to create simple descriptive statistics. The qualitative data from the survey was analyzed for themes and supported by specific quotes from respondents. Commonalities of survey responses were coded and quantified to identify key phrases and ideas. Common responses, amongst the sampling group, are noted and presented in the research findings.

Limitations of the Study

The following are assumptions and limitations of this study:

1. Influencers will be limited to parents/guardians and school counselors as these are typically the individuals that a student will have predominant contact with.
2. This study focuses on the parents/guardians for the Sturgeon Bay High School in Door County and findings may differ from other areas throughout the county, state, and country.
3. This study focuses on the counselors in Door County and findings may differ from other areas throughout the county, state, and country.
4. The study is limited to survey responses received from the parents/guardians and counselors that chose to respond and may not fully represent perceptions of the larger group. Of the combined 189 sophomore and junior students currently attending Sturgeon Bay High School, 52 (27.5%) parents/guardians responded and 3 of the 9 (33%) counselors responded. As this survey was only sent to those parents/guardians with active email addresses within the Sturgeon Bay High School's internal database for sophomore and junior students, there were 21 (11.1%) set(s) of parents/guardians without email addresses that did not receive the survey.

5. This study did not account for duplicate emails for those parents/guardians who may have had children in both grades and were listed under both within the Sturgeon Bay High School database.

Chapter IV: Results

Given that no prior research has been completed on perceptions of CTE, two-year technical colleges, and four-year institutions within the Door County area, the purpose of this study was to identify Sturgeon Bay High School parent/guardians' and Door County counselors' perceptions of those three areas: CTE, two-year technical colleges, and finally the perceptions of four-year institutions.

To obtain this data, a twenty-two-question electronic survey was created for the parents/guardians and an eleven-question electronic survey was created for the counselors; both surveys were designed and maintained through the Qualtrics survey program. The survey link was disseminated to the parents/guardians by the Sturgeon Bay High School administration using their email database for sophomore and junior students and the counselor survey was sent confidentially by the researcher using the Qualtrics email group tool.

Parent and Guardian Demographic Data

Fifty-two parent/guardian surveys were completed, and respondents were given the option to complete the demographic information. Of those respondents that chose to complete the demographic data survey questions, the respondents were found to be mainly female with at least an associate degree or higher. The majority had not attended a two-year technical college during their education and are currently employed full-time. The raw data for these demographics are below and additional demographic data can be found in Appendix C.

Of the 38 respondents that completed the gender question, 9 (23.68%) were male and 29 (76.32%) were female.

Table 1

Gender

Answer	Response Number	Percentage
Male	9	23.68%
Female	29	76.32%
Total	38	100%

Regarding, the level of educational attainment category, the highest percentage of respondents had a Master's degree or equivalent with 12 (32.43%) followed by respondents with either a Bachelor's or Associate degree each with 7 (18.92%), High school diploma or some college with 4 (10.81%), some graduate school with 2 (8.11%), and last Doctorate, law, medical degree or equivalent with 2 (5.41%).

Table 2

Level of Educational Attainment

Level of Attainment	Response	Percentage
Some high school	0	0%
High school diploma	4	10.81%
Some college	4	10.81%
Associate degree	7	18.92%
Bachelor's degree	7	18.92%
Some graduate school	3	8.11%
Master's degree or equivalent	12	32.43%
Doctorate, law, or medical degree or equivalent	2	5.41%
Not sure/not applicable/prefer not to answer	0	0%
Total	39	100%

Of those degrees completed, the following top three career clusters for areas of study were identified: education/special education/education leadership (17.75%), business/economics/management (11.44%), and social work/sociology (5.7%). Additional career clusters were identified by respondents and can be found in Appendix C.

Of the 38 respondents, 14 (36.84%) had attended a two-year technical college during their education and 24 (63.16%) had not.

Table 3

Attended a Two-year Technical College

Answer	Response Number	Percentage
Yes	14	36.84%
No	24	63.16%
Total	38	100%

Of the 38 respondents, 35 (92.11%) are currently employed and 3 (7.89%) are not. Of the 35 that responded that they are employed, 30 (85.71%) are currently working full-time while 5 (14.29%) are currently working part-time.

Table 4

Employment

Answer	Response Number	Percentage
Yes	35	92.11%
No	3	7.89%
Total	38	100%

Table 5

Type of Employment

Answer	Response Number	Percentage
Full-time	30	85.71%
Part-time	5	14.29%
Total	35	100%

Of the 38 that responded to the survey question: Yearly Household Income: 13 (34.21%) earned \$100,000 or more, 9 (23.68%) responded \$40,000-\$69,999, 8 (21.05%) responded \$70,000-\$99,000, 5 (13.16%) responded \$10,000-\$39,999, and 3 (7.89%) preferred not to answer.

Table 6

Yearly Household Income

Answer	Response Number	Percentage
Less than \$10,000	0	0%
\$10,000-\$39,999	5	13.16%
\$40,000-\$69,999	9	23.68%
\$70,000-\$99,999	8	21.05%
\$100,000 or more	13	34.21%
I prefer not to answer	3	7.89%
Total	38	100%

Participants were also asked to identify the number of children they had in their household. The majority of the 38 respondents with 76.31% had 2 or 3 children with only one

respondent (2.63%) having more than 5. Additional details on children in the household can be found in Appendix C.

The final demographic survey question asked respondents to designate if their children had identified a career area of interest. As respondents were able to choose all the career areas their children had expressed an interest in, there were 62 responses. This shows that some respondents may have chosen more than one career area of interest. The highest career area of interest was health science with 13 (39.39%) followed by science, technology, engineering, & mathematics with 11 (33.3%); arts, A/V technology, & communications with 8 (24.24%); agriculture, food, & natural resources and architecture & construction as well as the other category each had 4 (12.12%) responses. Business, management, & administration; education & training; information technology; law, public safety, corrections, & security had 3 (9.09%). Transportation, distribution, & logistics and hospitality & tourism had 2 (6.06%). Manufacturing and finance each had 1 (3.03%) identified response while marketing and government & public administration did not have any responses.

Table 7

Identified Career Area of Interest

Area of interest	Response	Percentage
Agriculture, Food & Natural Resources	4	12.12%
Architecture & Construction	4	12.12%
Arts, A/V Technology & Communications	8	24.24%
Business, Management & Administration	3	9.09%
Education & Training	3	9.09%
Finance	1	3.03%
Government & Public Administration	0	0%
Health Science	13	39.39%
Hospitality & Tourism	2	6.06%
Information Technology	3	9.09%
Law, Public Safety, Corrections & Security	3	9.09%
Manufacturing	1	3.03%
Marketing	0	0%
Science, Technology, Engineering & Mathematics	11	33.33%
Transportation, Distribution & Logistics	2	6.06%
Other	4	12.12%
Total	62	100%

Counselor Demographic Data

Of the 9 counselors that received the survey link, 3 (30%) completed the survey. All 3 (100%) respondents have their Master's degree or equivalent. The areas of interest for these degrees include: human services, psychology, counseling; counseling, psychology, business; and psychology (B.S) and school counseling (M.S). Finally, none of the respondents had ever attended a two-year technical college during their educations.

Overview of Non-demographic Data

The non-demographic based questions were grouped into three categories: questions about CTE, questions on two-year technical colleges, and four-year institutions. The first set of questions about CTE asked both the parents/guardians and counselors: what three words or phrases come to mind when they thought about CTE. They were also asked to describe a CTE student. Finally, they were asked to describe the type of job/careers that they believed would be considered as CTE. The parent/guardian survey included an additional fourth question to rate on a five-point Likert scale: whether they wanted their child to pursue a career that would be considered CTE.

The second group of questions asked both parents/guardians and counselors about two-year technical colleges: what three words or phrases came to mind when they thought about 2-year technical college. They were asked to describe a student that attends a 2-year technical college and to describe the type of job/careers that they believed would be considered as those attained through attending a 2-year technical college. The parent/guardian had two additional questions: they were asked to describe how they would feel if their child chose to attend a 2-year technical college and then rate on a five-point Likert scale whether they agreed or disagreed to

the following statement: I want my child to pursue a career that would be attained through attending a 2-year technical college:

The final group of questions asked both parents/guardians and counselors about four-year institutions: what three words come to mind when they thought about 4-year institutions; describe a 4-year institution student in at three words and describe the type of job/careers that they believed would be considered as those attained through attending a 4-year institution; The parent/guardians had two additional questions: describe how they would feel if their child chose to attend a 4-year institution and rate on a five-point Likert scale whether they agreed or disagreed to the statement: I want my child to pursue a career that would be attained through attending a 4-year institution.

Counselor Perceptions of Career and Technical Education (CTE)

Three survey questions were asked to answer the first research question which was as follows: what are the perceptions of Career and Technical Education held by high school counselors in Door County.

The first CTE perception question asked counselor to identify what three words/phrases came to mind when they thought about CTE. As this was an open-ended question which allowed for respondents to answer freely, the responses of the 3 respondents were varied. However, there were similar phrases that did emerge within the responses.

Table 8

Words and Phrases That Describe Career and Technical Education From Counselors

Comment/phrase	Response	Percentage
Post-secondary planning	1	11.11%
Hands-on experiences	3	33.33%
Relevant learning opportunities	1	11.11%
Practical	1	11.11%
Job ready	2	22.22%
Elective	1	11.11%
Total comments/phrases	9	100%

The second question used to identify the counselors CTE perceptions asked them to describe a CTE student. This question was also open-ended and allowed respondents to answer freely. While there were varied individual responses, the following phrases were used:

Table 9

Descriptions of a CTE Student by Counselors

Description	Response	Percentage
Student involved in agriculture, computer science, technology education, health education, FACE	1	14.29%
Hands-on learners	2	28.57%
Work well inside and outside the classroom	1	14.29%
Ready for employment	1	14.29%
More focused on skill or job as supposed to theory	1	14.29%
Some of my favorite students to work with	1	14.29%
Total comments/phrases	7	100%

The final questions that was used to identify the perceptions of CTE by counselors asked them to describe the types of jobs/careers they believed would be considered CTE. This question was open-ended and allowed for multiple responses given from 3 respondents. The general types of career clusters are listed below:

Table 10

Descriptions of Jobs/careers Counselors Believe are Considered CTE

Jobs/careers	Response	Percentage
Computer programming/computers	2	9.09%
Construction	2	9.09%
Nursing	1	4.55%
Marketing	1	4.55%
Advertising	1	4.55%
Management	1	4.55%
Administration	1	4.55%
Cook/food service/culinary	3	13.64%
Entrepreneurs	1	4.55%
Business	2	9.09%
Agriculture	1	4.55%
Manufacturing	1	4.55%
Healthcare	1	4.55%
Trades	1	4.55%
Graphic design	1	4.55%
Too many to name	2	9.09%
Total	22	100%

Parent/guardian Perceptions of Career and Technical Education (CTE)

The second research question looked at a similar topic but focused on the parent/guardian perceptions of CTE. To answer this research question, four survey questions were asked.

The first parent/guardian CTE perception question asked them to identify three words/phrases that came to mind when they thought about career and technical education (CTE). As this was an open-ended question which allowed for respondents to answer freely and with multiple words and phrases, the responses of the 41 respondents were varied. While there were 81 different words and phrases identified, there were common themes and phrases that did emerge within the responses such as financially responsible/less expensive/affordable (12.3%), career-focused (9.9%), timely/2 years or less (8.6%), and skilled trades/vocational (8.6%). The complete data for words/phrases given to describe CTE is located in Appendix D.

The second CTE perception question asked parents/guardians to describe a CTE student. This question was also open-ended and allowed respondents to answer freely and with multiple words/phrases. While there were 41 varied individual responses, the following themes were found:

Table 11

Descriptions of a CTE Student by Parents/guardians

Comment/phrase	Response	Percentage
Focused/determined/goal oriented/hard working	7	11.7%
Clear about career path/wants to get into career	9	15%
Not interested in the “college experience” party scene	1	1.66%
Hands-on student	6	10%
Love of mechanics	1	2%
Likes to keep busy/strong work ethic	3	5%
Wants further education but doesn’t want to attend a four-year college	4	6.7%
Wanted to learn a skilled trade	3	5%
Wants to use math, science, writing in real world situations	1	1.66%
Wants to get their education faster	2	3.3%
Self-motivated	1	1.66%
Frugal/financially constrained/can’t afford a four-year	5	8.3%
Teenager who wants to expand potential by focusing on interests and skills	1	1.66%
Does not think they can attend a four-year college	1	1.65%
Develops skills to gain higher paying employment	1	1.65%
A professional or skilled worker enhancing or advancing his skills	1	1.65%
All students/me	3	5%
No interest in learning about topics not specifically related to chosen career/not interested in “book learning”/no focus on liberal arts	3	5%
Part-time student	1	1.65%
Smart but not a good core student	3	5%
Problem solver	1	1.6%
Creating opportunities	1	1.6%
Unknown	1	1.6%
Total	60	100%

Most respondents felt that CTE students are clear about their career path/want to get into a career (15%), are focused/determined/hardworking (11.7%), are a hands-on type of student (10%) and are frugal/financially constrained/can't afford a four-year school.

The third question used to identify parent/guardians' perception of CTE asked them to describe the types of jobs/careers they believed would be considered CTE. This question was open-ended and allowed for varied responses given from 41 respondents and the following careers groupings were found:

Table 12

Descriptions of Jobs/careers Parents and Guardians Believe are Considered CTE

Job/Career	Response	Percentage
Law enforcement/fire service/EMS	2	2%
Substance abuse counselor	1	1%
Diesel mechanic/any mechanic	7	7%
Nursing/nursing assistant/health care	16	16%
Plastics	1	1%
Hospitality/service industry	3	3%
Computers/web design/IT	6	6%
Utility work	3	3%
Welding/metal fabrication	8	8%
Teaching/pre-school education/early childhood education	4	4%
Project Management	1	1%
Engineering	4	4%
Production	1	1%

Plumbing/electrician/construction	14	14%
Chef/restaurant	2	2%
Manufacturing	3	3%
Business/marketing	2	2%
Customer service	1	1%
Graphic arts/photography	2	2%
Secretarial	1	1%
Industrial	1	1%
Drafting	2	2%
HR jobs	1	1%
Jobs that just want workers, not thinkers	1	1%
College prep	1	1%
Hands-on trades	8	8%
Any career	4	4%
Any career requiring an associate degree	1	1%
Total	101	100%

The majority of the careers identified (37%) would be considered the stereotypical trades-type positions: plumbing/electrician/construction, diesel mechanic/mechanic, welding/metal fabrication, and unidentified “hand-on trades.” However, parents/guardians also identified nursing/nursing assistant/healthcare (16%) as a career that would be considered CTE.

The final question used to identify parents/guardians’ perceptions of CTE asked them to rank on a five-point Likert scale whether they wanted their child to pursue a career that would be considered CTE. There were 44 responses: 1 (2.27%) respondent strongly disagreed, 2 (4.55%)

respondents disagreed, 19 (43.18%) respondents neither agree nor disagreed, 12 (27.27%) respondents agreed, and 10 (22.73%) respondents strongly agreed.

Table 13

Parent/guardian Rank of Wanting Their Child to Pursue a Career That Would be Considered CTE

Rating Scale	Response	Percentage
Strongly Disagree	1	2.27%
Disagree	2	4.55%
Neither agree nor disagree	19	43.18%
Agree	12	27.27%
Strongly Agree	10	22.73%
Total	44	100%

Counselor Perceptions of Four-year Colleges as Compared to Two-year Technical Colleges

To answer the research question of how counselor perceptions of four-year institutions compare to those of two-year technical colleges, three similar sets of survey questions were used. The first set of questions asked counselors to identify three words or phrases that came to mind when they thought about four-year institutions and then identify three words or phrases that came to mind when they thought about two-year technical colleges. For the first question on words and phrases used to describe four-year institutions; there were 3 individual respondents but as this was an open-ended question which allowed for counselors to identify more than one word or phrase, there were multiple responses. The words and phrases identified are as follows:

Table 14

Words and Phrases That Describe Four-year Institutions From Counselors

Comment/phrase	Response	Percentage
Liberal arts	1	11.11%
Expensive	3	33.33%
Student loan debt	1	11.11%
Well-rounded	1	11.11%
Involved	1	11.11%
Culture	1	11.11%
Theory (not skills) based	1	11.11%
Total	9	100%

While the majority of responses were only used once, all three counselors identified that word “expensive” to describe four-year institutions.

The second question asked counselors to identify three words or phrases that came to mind when they thought about two-year technical colleges. There were 3 individual respondents. Words and phrases identified area as follows:

Table 15

Words and Phrases That Describe Two-year Technical Colleges from Counselors

Comment/phrase	Response	Percentage
Affordable	3	30%
High job placement rates	1	10%
In demand	1	10%
Efficient	1	10%
Relevant	1	10%
Timely	1	10%
Hands-on	1	10%
Innovative	1	10%
Total	10	100%

Like the question asking counselors to identify words and phrases for four-year institutions, most of responses were used only once. However, for this question and in direct opposition to what was used to describe four-year institutions, the word “affordable” was used by all three counselors to describe two-year technical colleges.

The second of set of survey questions used to identify how counselors’ perceptions of four-year institutions compared to those of two-year technical colleges asked counselors to describe a student that attends a four-year institution and then to describe a student that attends a two-year technical college. Each of these questions was open-ended and allowed respondents to answer freely. For the responses to the four-year institution question, there were 2 varied individual responses and the following words and phrases were identified:

Table 16

Descriptions of a Four-year Institution Student by Counselors

Description	Response	Percentage
Not possible – all different	1	14.29%
Expensive	1	14.29%
Well-rounded	1	14.29%
Involved	1	14.29%
Bright	1	14.29%
Eager to learn	1	14.29%
Motivated or driven by cultural norms/peer/family pressure	1	14.29%
Total	7	100%

This question regarding the descriptors for a two-year technical college student had 3 varied individual responses and the following word and phrases were identified:

Table 17

Descriptions of a Two-year Technical College Student by Counselors

Description	Response	Percentage
Not possible – all different	1	16.67%
Matter of fact	1	16.67%
Likes applied learning	1	16.67%
Conscientious	1	16.67%
Wise	1	16.67%
Eager to enter workforce and earn a paycheck	1	16.67%
Total	6	100%

These two questions did not show any overlap between the three counselors as each used their own identifiers for a four-year student and a two-year technical college student.

The third set of questions used to identify counselors' perceptions of four-year institutions as compared to two-year technical colleges asked counselors to describe the types of jobs/careers they believed would be attained through attending a four-year institution and then those attained by attending a two-year technical college. These questions were open-ended and allowed for multiple responses. Two respondents described the careers they believed could be attained by attending a four-year institution and the following career were identified:

Table 18

Descriptions of Jobs/careers Counselors Believe are Attained From Attending a Four-year Institution

Jobs/careers	Response	Percentage
Teachers	1	25%
Engineers	1	25%
Nurse	1	25%
More white collar	1	25%
Total	4	100%

Three respondents described the types of jobs they believed could be attained by attending a two-year technical college and the following careers were identified in Table 19. While there were minimal careers areas identified for those attained by attending a four-year institution, there were many more identified as being attained by attending a two-year technical college. Of the 22 careers identified as being attained by attending a two-year technical college,

only 9 (41%) are careers typically associated with a stereotypical “trade” where-as the rest encompassed a wide range of careers.

Table 19

Descriptions of Jobs/careers Counselors Believe are Attained From Attending a Two-year Technical College

Jobs/careers	Response	Percentage
Plumbers	1	4.55%
Welders	1	4.55%
Entrepreneurs	1	4.55%
Managers	1	4.55%
Computer programmers	1	4.55%
Nurses	1	4.55%
Construction workers	2	9.09%
Electricians	1	4.55%
Photographers	1	4.55%
Website designers	1	4.55%
Graphic designers	1	4.55%
Mechanics	1	4.55%
Early childhood teachers	1	4.55%
Massage therapist	1	4.55%
Business	1	4.55%
Agriculture	1	4.55%
Food service	1	4.55%
Manufacturing	1	4.55%
Too many to name	2	9.09%
Same as CTE	1	4.55%
Total	22	100%

Parent/guardian Perceptions of Four-year Colleges as Compared to Two-year Technical Colleges

To answer the research question of how parent/guardians' perceptions of four-year colleges compared to those of two-year technical colleges, four sets of survey questions were asked. The first set asked parents/guardians to identify three words or phrases that came to mind when they thought about each type of college. For the four-year institution question, there were 35 individual respondents and multiple and varied responses. Of the 84 words/phrases identified, the most common word or phrase used to describe a four-year institution was high cost/expensive/debt (28.57%). Other key words and phrases used to describe a four-year institution were the following: higher level academic requirements/academia/intellectual (7.14%), well-rounded (7.14%), and no job guarantee/market saturation (5.95%). The full data set of responses for this survey question can be found in Appendix E.

For the question, what words or phrases come to mind when you think about a two-year technical college, there were 38 individual respondents but as this was also a subjective question, there were many multiple responses. Of the 74 word and phrases identified, affordable/value/no debt/inexpensive was the most prevalent with 13.51%. Other key words and phrases identified were the following: hands-on (9.46%), targeted/focused (6.76%), practical (6.76%), and trades (5.41%). The complete list of all words and phrases can be found in Appendix F.

The second set of questions designed to identify parent/guardian perceptions of four-year institution as compared to two-year technical colleges asked parents/guardians to describe a student that attends a four-year institution and then to describe a student that attends a two-year technical college. Each of these questions were open-ended and allowed respondents to answer freely with the possibility for multiple words or phrases. There were 35 varied individual

respondents who identified 66 words and phrases to describe a four-year institution student. The top responses describe a four-year student as ready/committed/motivated/hard-working (16.67%) and seeking an excellent education/motivated for higher learning (15.15%). Parents/guardians also described four-year students as may not having a career choice determined (10.61%), well-rounded/diversified (9.09), and kids that enjoy school/book smart (7.58%). The complete list of all word and phrases identified can be found in Appendix G.

For the question that asked parents/guardians to describe a two-year technical college student, there were 36 varied individual respondents which identified 52 words and phrases. The top responses were ready to go to work/know what career they want (13.46%) and goal-orientated/motivated (13.46%). Other top words and phrases identified were the following: wants to learn a skilled trade/specific training (7.69%), expand potential (5.77%), wants an affordable education/limited income (5.77%), and any student should attend/me (5.77%). The complete list of words and phrases identified can be found in Appendix H.

The third set of questions used to identify parents/guardians' perceptions of four-year institutions compared to two-year technical colleges asked parents/guardians to describe the types of jobs/careers they believed would be attained by attending a four-year institution and then those that they believed could be attained by attending a two-year technical college. Both of these questions were open-ended and allowed for multiple responses to be given. From the 33 respondents that described what careers they felt could be attained by attending a four-year institution, 99 descriptors or careers were identified. The top careers given were: teacher/education (14.14%), doctor (10.10%), management/leadership roles (9.09%), engineer (8.08%), accountant/banker/finance (7.07%), and law/lawyers (7.07%). The complete data for the jobs/careers identified can be found in Appendix I.

For the careers parents/guardians believed could be attained by attending a two-year technical college, there were 36 individual respondents and 96 jobs/careers or descriptors were identified. The most frequently identified jobs/careers were in the following areas: nursing/nurse/CNA (13.54%), auto mechanic/mechanic/diesel (10.42%), welder/metal fabrication (6.25%), dental hygiene (6.25%), electrician/plumber (4.17%), and the general descriptor of “trades” (4.17%). Please refer to Appendix J for the complete list of data.

The fourth set of questions used to identify parent/guardian perceptions of four-year institutions as compared to two-year technical colleges asked them to describe how they would feel if their child chose to attend a four-year institution and then how they would feel if their child attended a two-year technical college. Both questions allowed for varied responses. Thirty-six unique respondents described how they would feel if their child chose to attend a four-year institution with 42 varied comments. However, some themes emerged within the responses: 16.67% of parents/guardians commented that they would be worried about the financial burden/hoped they could afford a four-year school and 14.29% would be good with their child’s decision to attend a four-year institution if they felt it was the right path and were certain on their career goals. A combined 30.94% of parent/guardians commented positively (happy/satisfied/proud) for how they would feel if their child chose to attend a four-year institution. Table 20 shows the complete list of comments made by parents/guardians.

Table 20

*Description of How Parents/guardians Would Feel if Their Child Chose to Attend a Four-year**Institution*

Description	Response	Percentage
Good education	1	2.38%
Good if they felt it was the right path/certain on career goals	6	14.29%
Up to them/their decision	3	7.14%
Happy/good	3	7.14%
Unless they were certain on their chosen path, I would not support putting my child in debt for years	2	4.76%
Very happy/joyous	3	7.14%
Supportive	2	4.76%
Ok if they could not get what they wanted out of a two-year school	3	7.14%
Proud for their accomplishment	4	9.52%
Will have more of an advantage in being able to do the type of work they want to do	1	2.38%
Worried about financial burden/hope they can afford it	7	16.67%
Satisfied	1	2.38%
No problem	1	2.38%
Depends on the child	1	2.38%
Unhappy	1	2.38%
Preferred	1	2.38%
Fine if degree is in an employable field	1	2.38%
Happy they are pursuing a higher paying career path	1	2.38%
Total	42	100%

For the comments for how parents/guardians would feel if their child chose to attend a two-year technical college, there were 37 unique respondents and they identified 41 comments to describe how they would feel. The full list of responses can be found in Table 21.

Table 21

Description of How Parents/guardians Would Feel if Their Child Chose to Attend a Two-year Technical College

Description	Response	Percentage
It's a good education	1	2.44%
Daughter and husband both attended	1	2.44%
Feel they have spent their money well	1	2.44%
Great	2	4.88%
My first child is not a good fit based on her career goals, needed a four-year degree	2	4.88%
My second child might be ok at a 2-year program – too early to tell	2	4.88%
His/her decision	2	4.88%
No problem	3	7.32%
I would feel good about the decision	2	4.88%
If that's the path they want, I am ok	5	12.20%
Very proud	3	7.32%
Neutral	1	2.44%
I would feel hopeful, seems to be plenty of opportunities for careers	1	2.44%
Happy	2	4.88%
I would love it, best way to transition to an adulthood and career or higher education	1	2.44%

Whatever makes them happy if they can find a job and support themselves	3	7.32%
Satisfied	1	2.44%
OK	1	2.44%
If that is what is best for them, I would be supportive	1	2.44%
Happy as it will cost less, and they can live at home	1	2.44%
Fine if their chosen career matched the school's offerings	1	2.44%
Support 100%	1	2.44%
I would be thrilled if my daughter knew what career she wanted to pursue and knew the most efficient and cost-effective way to get there	1	2.44%
I would be glad they are getting a practical degree, but I would want them to go back to finish their bachelor's at some point	1	2.44%
I would be ecstatic because we must be realistic about tuition and they can test drive what it takes in a given "occupation"	1	2.44%
Total	41	100%

The majority with 12.20% commented that "if that's the path their child wanted, it's ok."

The other top comments were no problem (7.32%), very proud (7.32%), and "whatever makes them happy as long as they can find a job" (7.32%). The remaining comments were only identified by one or two individuals and ranged from positive to neutral.

Parents/guardians' Feelings Toward Their Children Pursuing Careers That Require a Four-year Degree

For the research question on identifying how parents/guardians felt toward their children pursuing careers that required degrees from a four-year institution, two questions were used. The first asked parents/guardians to describe how they would feel if their child chose to attend a four-year institution and the second asked parents/guardians to rank on a five-point Likert scale

whether they wanted their child to pursue a career that would be attained through attending a four-year institution. For the first question, there were varied answers from 36 respondents and they identified 42 unique comments.

The top two responses were concerned about the financial burden/whether they could afford it (16.67%) and good if they felt it was the right path/certain on their career goals (14.29%). Table 22 has the complete data for this question.

Table 22

Description of How Parents/guardians Would Feel if Their Child Chose to Attend a Four-year Institution

Description	Response	Percentage
Good education	1	2.38%
Good if they felt it was the right path/certain on career goals	6	14.29%
Up to them/their decision	3	7.14%
Happy/good	3	7.14%
Unless they were certain on their chosen path, I would not support putting my child in debt for years	2	4.76%
Very happy/joyous	3	7.14%
Supportive	2	4.76%
Ok if they could not get what they wanted out of a two-year school	3	7.14%
Proud for their accomplishment	4	9.52%
Will have more of an advantage in being able to do the type of work they want to do	1	2.38%
Worried about financial burden/hope they can afford it	7	16.67%
Satisfied	1	2.38%

No problem	1	2.38%
Depends on the child	1	2.38%
Unhappy	1	2.38%
Preferred	1	2.38%
Fine if degree is in an employable field	1	2.38%
Happy they are pursuing a higher paying career path	1	2.38%
Total	42	100%

For the second question that asked parents/guardians to rank whether or not they would want their child to choose to pursue a career that would be attained by attending a four-year institution on a five-point Likert scale: there were 38 responses with 3 (7.89%) respondents strongly disagreed, 1 (2.63%) respondents disagreed, 20 (52.63%) respondents neither agree nor disagreed, 8 (21.05%) respondents agreed, and 6 (15.79%) respondents strongly agreed.

Table 23

Parent/guardian Rank of Wanting Their Child to Pursue a Career That Would be Attained Through Attending a Four-year Institution

Rating Scale	Response	Percentage
Strongly Disagree	3	7.89%
Disagree	1	2.63%
Neither agree nor disagree	20	52.63%
Agree	8	21.05%
Strongly Agree	6	15.79%
Total	38	100%

Parents/guardians' Feelings Toward Their Children Pursuing Careers That Require Degrees From a Two-year Technical College

To answer the research question on identifying how parents/guardians felt toward their children pursuing careers that required degrees from a two-year technical college, two questions were used. The first asked parents/guardians to describe how they would feel if their child chose to attend a two-year technical college. The second asked parents/guardians to rank on a five-point Likert scale whether they wanted their child to pursue a career that would be attained through attending a two-year technical college. For the first question, there were varied answers from 37 respondents who identified 41 unique comments. The top response was “if that’s the path they want, I’m ok with it” with 12.20%. Table 24 shows the full list of comments identified by parents/guardians.

Table 24

Description of How Parents/guardians Would Feel if Their Child Chose to Attend a Two-year Technical College

Description	Response	Percentage
It’s a good education	1	2.44%
Daughter and husband both attended	1	2.44%
Feel they have spent their money well	1	2.44%
Great	2	4.88%
My first child is not a good fit based on her career goals, needed a four-year degree	2	4.88%
My second child might be ok at a 2-year program – too early to tell	2	4.88%
His/her decision	2	4.88%
No problem	3	7.32%

I would feel good about the decision	2	4.88%
If that's the path they want, I am ok	5	12.20%
Very proud	3	7.32%
Neutral	1	2.44%
I would feel hopeful, seems to be plenty of opportunities for careers	1	2.44%
Happy	2	4.88%
I would love it, best way to transition to an adulthood and career or higher education	1	2.44%
Whatever makes them happy if they can find a job and support themselves	3	7.32%
Satisfied	1	2.44%
OK	1	2.44%
If that is what is best for them, I would be supportive	1	2.44%
Happy as it will cost less, and they can live at home	1	2.44%
Fine if their chosen career matched the school's offerings	1	2.44%
Support 100%	1	2.44%
I would be thrilled if my daughter knew what career she wanted to pursue and knew the most efficient and cost-effective way to get there	1	2.44%
I would be glad they are getting a practical degree, but I would want them to go back to finish their bachelor's at some point	1	2.44%
I would be ecstatic because we must be realistic about tuition and they can test drive what it takes in a given "occupation"	1	2.44%
Total	41	100%

For the second question that asked parents/guardians whether or not they would want their child to pursue a career that would be attained by attending a two-year technical college on

a five-point Likert scale: there were 40 responses where 0 (0%) respondents strongly disagreed, 2 (5%) respondents disagreed, 20 (50%) respondents neither agree nor disagreed, 8 (20%) respondents agreed, and 10 (25%) respondents strongly agreed.

Table 25

Parent/guardian Rank of Wanting Their Child to Pursue a Career That Would be Attained Through Attending a Two-year Technical College

Rating Scale	Response	Percentage
Strongly Disagree	0	0%
Disagree	2	5%
Neither agree nor disagree	20	50%
Agree	8	20%
Strongly Agree	10	25%
Total	40	100%

Chapter V: Discussion, Conclusion and Recommendations

As there is currently no research regarding Sturgeon Bay High School parents/guardians' and Door County Counselors' perceptions of CTE, two-year technical colleges, and four-year institutions; the purpose of this study was to identify common themes of parent/guardian and counselor perceptions of these three areas. The specific research questions guiding this research were:

1. What are the perceptions of Career and Technical Education held by high school counselors in Door County?
2. What are the perceptions of Career and Technical Education held by parents/guardians within the Sturgeon Bay School District?
3. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by high school counselors in Door County?
4. What are the perceptions of 4-year colleges as compared to 2-year technical colleges held by parents/guardians within the Sturgeon Bay School District?
5. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a 4-year degree?
6. What are Sturgeon Bay High School parents/guardians' feelings toward their children pursuing careers that require a certificate, technical diploma, or associate degree from a technical college?

This chapter will summarize the study conducted including methods and procedures, report major findings, identify conclusions based on the sample taken, and make recommendation for further study or action.

Summary

The research design for this study utilized a two-part survey that focused on two groups of respondents: parents/guardians (Appendix A) and counselors (Appendix B). The first part of each survey featured a series of quantitative and qualitative questions designed to solicit data specifically related to the research questions. The second part focused on strictly demographic questions to identify the make-up of the survey participants. For the quantitative questions, respondents answered questions based on agreement using the following five-point Likert scale: 1. Strongly agree, 2. Agree, 3. Neither agree or disagree, 4. Disagree, 5. Strongly disagree.

The target survey respondents were all parents/guardians of sophomore and junior students from Sturgeon Bay High School as well as the nine counselors from the Southern Door, Sturgeon Bay, Sevastopol, Gibraltar, and Washing Island school districts in Door County, Wisconsin. There are currently 96 sophomore and 93 junior students Sturgeon Bay High School (Wisconsin Information System for Education, n.d.) and 9 counselors between the 5 school districts within Door County.

After the survey was delivered electronically to each respondent group, subjects were given three weeks to complete the survey. Once the survey completion window closed, the demographic and quantitative survey data was analyzed using the electronic survey capabilities to create simple descriptive statistics. The qualitative data from the survey was analyzed for themes and supported by specific quotes from respondents. Commonalities of survey responses were coded and quantified to identify key phrases and ideas. Common responses, amongst the sampling group, are noted and presented in the research findings.

Conclusions

Based on the findings of this study the following conclusions were drawn:

1. Parents/guardians in the Sturgeon Bay School District have both positive and negative perceptions of CTE, four-year institutions, and two-year technical colleges.
2. Parents/guardians in the Sturgeon Bay School District are most concerned over the high cost of four-year institutions and worry about whether or not their children will be able to afford it. Conversely, they perceive two-year technical colleges are being affordable.
3. Parents/guardians in the Sturgeon Bay School District were more affirmative (50%) for wanting their child to pursue a career that would be considered CTE than negative (6.8%).
4. Parents/guardians in the Sturgeon Bay School District believe that four-year institutions and their students are more academically focused and well-rounded.
5. Parents/guardians in the Sturgeon Bay School District believe that two-year technical colleges and their students are more hands-on, and career driven.
6. Parents/guardians in the Sturgeon Bay School District see careers attained by attending a two-year technical college as being varied but still more focused on traditional skilled trade area (such as mechanics or construction).
7. Counselors in Door County perceive CTE and two-year technical colleges to be a viable option for students.
8. Counselors in Door County perceive four-year institutions as expensive and two-year colleges as being affordable.

Recommendations

While this study focused on the parents of sophomore and junior students at Sturgeon Bay High school and the counselors in Door County, the over-all demographics are not overly

varied so the results may not be indicative of other communities where there could be more economic or cultural diversity. It would be important to consider the dynamics of a given population during any repetition of this research, as it may provide a clearer understanding of the perceptions of CTE, four-year institutions and two-year technical colleges for that particular market.

Given that there was a small sample of counselor respondents to the survey, it is also recommended that future research increases the subject pool to include more counselors from other school districts within the northeast Wisconsin. This will provide for more data to be collected and compared.

Relative to the study, it will be important for local educators both at the high school and post-secondary level to continue to educate parents and students about all the potential post-secondary education and career options available. This will allow students and parents to have the most and best information available when making their post-secondary decisions. By educating parents on the viability of utilizing a two-year technical college to not only get a valuable education that will lead to an in-demand career but could potentially be a stepping stone to a four-year institution; this could offer more post-secondary opportunities for their children. In both instances, this could help alleviate parental concerns about a four-year education being too expensive and their children not being able to cover the cost post-graduation.

Finally, while the perceptions of counselors seemed generally positive about CTE and two-year technical colleges, it will be important for ongoing partnerships between the counselors and the technical college to ensure that they are properly educated in any offerings that might be of benefit to their students.

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Appendix A: Survey – Parents/Guardians

The following survey is designed to obtain an understanding of the perceptions of various educational opportunities and how they are related to career preparation. All answers will be kept confidential and there will be no identifying information retained to preserve anonymity. Participation in this survey is completely voluntary and you have the right to stop the survey at any point in time. The survey will take no longer than 30 mins to complete and you may answer as many questions as you choose.

By completing the following survey, you agree to participate in the project entitled, Perceptions of Career and Technical Education, 2-year technical colleges, and 4-year institutions

The following 4 questions relate to your perceptions of Career and Technical Education (CTE).

1. When you think about Career and Technical Education (CTE), what three words or phrases come to mind?
2. Describe a CTE student?
3. Describe the type of job/careers that you believe would be considered as CTE?
4. I want my child to pursue a career that would be considered CTE:
 Strongly disagree
 Disagree

The following 5 questions relate to your perceptions of a 2-year technical college

1. When you think about 2-year technical college, what three words or phrases come to mind?
2. Describe a student that attends a 2-year technical college?

3. Describe the type of job/careers that you believe would be considered as those attained through attending a 2-year technical college?
4. Describe how would you feel if your child chose to attend a 2-year technical college?
5. I want my child to pursue a career that would be attained through attending a 2-year technical college:

Strongly disagree

Disagree

The following 5 questions relate to your perceptions of 4-year institutions.

1. When you think about 4-year institutions, what three words come to mind?
2. Describe a 4-year institution student in at three words?
3. Describe the type of job/careers that you believe would be considered as those attained through attending a 4-year institution?
4. Describe how would you feel if your child chose to attend a 4-year institution?
5. I want my child to pursue a career that would be attained through attending a 4-year institution:

Strongly disagree

Disagree

Demographic information

1. What is your gender:

Male

Female

2. Please indicate the level of educational that you have completed:

(Please check all that apply)

- Some high school
- High school diploma
- Some college
- Associate degree
- Bachelor's degree
- Some graduate school
- Master's degree or equivalent
- Doctorate, law or medical degree or equivalent
- Not sure/Not applicable

For any degrees completed, please identify the area of interest

3. During your education, did you ever attend a 2-year technical college?

- Yes No

4. What is your estimated yearly household income?

- Less than \$10,000
- \$10,000 - \$39,999
- \$40,000 - \$69,999
- \$70,000 - \$99,999
- \$100,000 or more

I prefer not to answer

5. Are you currently employed? Yes No

6. If you are employed, are you employed full-time or part-time? Full-time Part-time

7. Number of children in your household:

1

2

3

4

5+

8. If any your children have indicated a career interest, please designate any that apply:

Agriculture, Food & Natural Resources

Architecture & Construction

Arts, A/V Technology & Communications

Business, Management & Administration

Education & Training

Finance

Government & Public Administration

Health Science

Hospitality & Tourism

Human Services

Information Technology

- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics
- Other: _____ (please list)

Appendix B: Survey – Counselors

The following survey is designed to obtain an understanding of the perceptions of various educational opportunities and how they are related to career preparation. All answers will be kept confidential and there will be no identifying information retained to preserve anonymity. Participation in this survey is completely voluntary and you have the right to stop the survey at any point in time. The survey will take no longer than 30 mins to complete and you may answer as many questions as you choose.

By completing the following survey, you agree to participate in the project entitled, Perceptions of Career and Technical Education, 2-year technical colleges, and 4-year institutions

The following 3 questions relate to your perceptions of Career and Technical Education (CTE).

1. When you think about Career and Technical Education (CTE), what three words or phrases come to mind?
2. Describe a CTE student?
3. Describe the type of job/careers that you believe would be considered as CTE?

The following 3 questions relate to your perceptions of a 2-year technical college

1. When you think about 2-year technical college, what three words or phrases come to mind?
2. Describe a student that attends a 2-year technical college?
3. Describe the type of job/careers that you believe would be considered as those attained through attending a 2-year technical college?

The following 3 questions relate to your perceptions of 4-year institutions.

1. When you think about 4-year institutions, what three words come to mind?
2. Describe a 4-year institution student in at three words?
3. Describe the type of job/careers that you believe would be considered as those attained through attending a 4-year institution?

Demographic information

1. Please indicate the level of educational that you have completed:

(Please check all that apply)

- Some high school
- High school diploma
- Some college
- Associate degree
- Bachelor's degree
- Some graduate school
- Master's degree or equivalent
- Doctorate, law or medical degree or equivalent
- Not sure/Not applicable

For any degrees completed, please identify the area of interest:

2. During your education, did you ever attend a 2-year technical college?

Yes No

Appendix C: Demographic Data – Parents/Guardians

Degree Areas of Interest for Educational Attainment

Area of interest	Response	Percentage
Science	1	2.8%
Theology	1	2.8%
Architectural Design	1	2.8%
Business/economics/management	4	11.44%
Education/special education/education leadership	6	17.15%
Counseling psychology	1	2.8%
Computer technology	1	2.8%
Liberal art degree	1	2.8%
Math	1	2.8%
Industrial technology/manufacturing engineering	1	2.8%
Gerontology	1	2.8%
Natural resources	1	2.8%
Music education	1	2.8%
Biology/veterinary science/veterinary medicine	1	2.8%
Medical	1	2.8%
Art	1	2.8%
Speech language pathology	1	2.8%
Geography/cartography	1	2.8%

Electronics/electro-mechanical	1	2.8%
Engineering	1	2.8%
Social work/sociology	2	5.7%
Health and beauty	1	2.8%
Science education	1	2.8%
English/creative writing/library media	1	2.8%
Paramedic	1	2.8%
Travel	1	2.8%
Total	35	100%

Number of Children in Household

Answer	Response Number	Percentage
1	5	13.16%
2	21	55.26%
3	8	21.05%
4	3	7.89%
5+	1	2.63%
Total	38	100%

Appendix D: Words and Phrases Parents/Guardians Used to Describe CTE

Words and Phrases That Describe Career and Technical Education From Parents/guardians

Comment/phrase	Response	Percentage
Financially responsible/less expensive/affordable	10	12.3%
Focused career objectives/specific	8	9.9%
Timely/2 years or less	7	8.6%
Interested	1	1.2%
Involved	1	1.2%
Lifelong skills	1	1.2%
Skilled Trades/vocational	7	8.6%
STEM	1	1.2%
NWTC/technical college(s)	5	6.2%
Hands-on	6	7.4%
Alternative to university/individuals not suited to a four-year degree	3	3.7%
Less competitive	1	1.2%
Much needed/in demand careers	6	7.4%
Practical	6	7.4%
Education	1	1.2%
Male dominated	1	1.2%
Factory worker/manufacturing/machinery	2	2.5%
Continuous education and development for employers	1	1.2%
Only skills training/no personal development/to get a job	2	2.5%

Employment opportunities that provide middle income	1	1.2%
Not a real college/less value than four-year degree	1	1.2%
Low income	1	1.2%
Good income	1	1.2%
Computer programing/heath field	1	1.2%
Exposure	1	1.2%
Plumbers/electricians	1	1.2%
Streamlines students	1	1.2%
Finding your passion/lifestyle	1	1.2%
State of the art	1	1.2%
Unknown	1	1.2%
Total	81	100%

**Appendix E: Words and Phrases Parents/Guardians Used to Describe Four-year
Institutions**

Words and Phrases That Describe Four-year Institutions From Parents/guardians

Comment/phrase	Response	Percentage
High cost/expensive/debt	24	28.57%
4-year commitment or more	3	3.57%
More partying/frat parties	3	3.57%
Higher level academic requirements/academia/intellectual	6	7.14%
Live on campus/far from home	3	3.57%
Strong research focus	1	1.19%
Less focus on specific career	1	1.19%
Insulated	1	1.19%
Liberal	2	2.38%
Black cloud	1	1.19%
Unnecessary	2	2.38%
Perseverance/commitment	2	2.38%
Grad school	1	1.19%
No job guarantee/job market saturation	5	5.95%
Well-rounded	6	7.14%
Humanities	1	1.19%
Less value	1	1.19%
Return on investment low for some career choices	1	1.19%
Prodigious	1	1.19%

Over-attended	1	1.19%
Professional degree/career	3	3.57%
More advancement	1	1.19%
More fun	2	2.38%
Expands perspective/experience	3	3.57%
Unrealistic	1	1.19%
At their mercy	1	1.19%
Privilege	1	1.19%
Credible	1	1.19%
High-income	1	1.19%
Time consuming	1	1.19%
Worth it	1	1.19%
Traditional	1	1.19%
Right for some	1	1.19%
Total	84	100%

**Appendix F: Words and Phrases Parents/Guardians Used to Describe Two-year Technical
Colleges**

Words and Phrases That Describe Two-year Technical Colleges From Parents/guardians

Comment/Phrase	Response	Percentage
Highly motivated/goal orientated	2	2.7%
Work-force ready	3	4.05%
Trade(s)	4	5.41%
Targeted/focused	5	6.76%
Convenient	1	1.35%
Fast-track to career/quick/short time in school	7	9.46%
Do not live on campus	1	1.35%
Apprenticeship	1	1.35%
Hands-on	7	9.46%
Affordable/value/no debt/inexpensive	10	13.51%
Acceptable	1	1.35%
Narrow	1	1.35%
Experience	1	1.35%
In-demand careers	3	4.05%
Education	1	1.35%
Advancement	1	1.35%
Starting place/foundation	2	2.7%
Practical	5	6.76%
Smart	2	2.7%

Applicable for most students	1	1.35%
Only half of the education in life/less social experiences	2	2.7%
Associate degrees	2	2.7%
Tech school	1	1.35%
Less pay/low income	2	2.7%
Student did not achieve as much as they could	1	1.35%
Smaller college	1	1.35%
Quality education	1	1.35%
Specialized degree	1	1.35%
Doesn't work for all jobs	1	1.35%
Same as CTE	2	2.7%
This makes no sense	1	1.35%
Total	74	100%

**Appendix G: Words and Phrases Parents/Guardians Used to Describe a Four-year
Institution Student**

Descriptions of a Four-year Institution Student by Parents/guardians

Description	Response	Percentage
Seeking an excellent education/motivated for higher learning	10	15.15%
May not have a career choice determined	7	10.61%
Looking for campus experience/worldly	4	6.06%
Well-rounded/diversified	6	9.09%
Independent	2	3.03%
Social	1	1.52%
Rich/prep/come from money	3	4.55%
Scholarship student	1	1.52%
Misdirected/uninformed	1	1.52%
Ready/committed/motivated/hard-working	11	16.67%
Partying	1	1.52%
Involved	1	1.52%
Traditional	2	3.03%
Smart	2	3.03%
Common	1	1.52%
For kids that enjoy school/book smart	5	7.58%
Stressed	1	1.52%
Scared	1	1.52%

Unhappy	1	1.52%
In debt/expensive	4	6.06%
All types	1	1.52%
Total	66	100%

**Appendix H: Words and Phrases Parents/Guardians Used to Describe a Two-year
Technical College Student**

Descriptions of a Two-year Technical College Student by Parents/guardians

Comment/Phrase	Response	Percentage
Ready to go to work/know what career they want	7	13.46%
Goal-orientated/motivated	7	13.46%
Wants to learn a skilled trade/specific training	4	7.69%
Don't want to attend a four-year school	2	3.85%
Can't afford a four-year college	2	3.85%
Disciplined	1	1.92%
Decisive	1	1.92%
Not necessarily scholarly or like academics	1	1.92%
Expand potential	3	5.77%
Has responsibilities/personal constraints that limit opportunities for a four-year school	2	3.85%
Wants accessible education	1	1.92%
Wants affordable education/limited income	3	5.77%
Hands-on job	1	1.92%
Practical	1	1.92%
Completing basic coursework before university	2	3.85%
Continuing education for professionals and skilled workers	2	3.85%
Any student should attend/me	3	5.77%
Kinesthetic/hands-on learner	2	3.85%

Program available	1	1.92%
Dislikes challenging courses	1	1.92%
Smart/strong in assigned field	2	3.85%
Mid-level class rank	1	1.92%
Strong work ethic	1	1.92%
Same	1	1.92%
Total	52	100%

**Appendix I: Jobs and Careers Parents and Guardians Identifying as Being Attained by
Attending a Four-year Institution**

*Descriptions of Jobs/careers Parents and Guardians Believe are Attained From Attending a
Four-year institution*

Jobs/careers	Response	Percentage
Same as a technical college, just different approach	1	1.01%
Higher level skill set positions	2	2.02%
Management/leadership roles	9	9.09%
Research based positions	1	1.01%
Teacher/education	14	14.14%
Engineer	8	8.08%
IT manager	1	1.01%
Accountant/banker/finance	7	7.07%
Nursing	3	3.03%
Journalist	1	1.01%
College professor	1	1.01%
Therapist/counselor	3	3.03%
Social Worker	2	2.02%
Doctor	10	10.10%
Scientist/chemist	5	5.05%
Athletic trainer/physical therapist	2	2.02%
Law/lawyers	7	7.07%
Politics	1	1.01%

Technology	1	1.01%
Urban development	1	1.01%
STEM opportunities	1	1.01%
Professional	5	5.05%
High-paid desk jockeys	1	1.01%
Actor/musician	3	3.03%
Architect	1	1.01%
Business	1	1.01%
Could be anything but does not guarantee a job in their desired field	1	1.01%
Step to advanced degree	3	3.03%
Something that would pay off loans before you die	1	1.01%
All/any	2	2.02%
Total	99	100%

**Appendix J: Jobs and Careers Parents and Guardians Identifying as Being Attained by
Attending a Two-year Technical College**

*Descriptions of Jobs/careers Parents and Guardians Believe are Attained From Attending a
Two-year Technical College*

Jobs/Careers	Response	Percentage
Criminal justice/police	2	2.08%
Fire service	2	2.08%
Some nursing/nurse/CNA	13	13.54%
Golf course management	1	1.04%
Hospitality	2	2.08%
Welder/metal fabrication	6	6.25%
Auto mechanic/mechanic/diesel	10	10.42%
Web design/IT	3	3.13%
Dental hygiene	6	6.25%
CAD/drafting	3	3.13%
Civil engineering tech	1	1.04%
Manufacturing	1	1.04%
X-ray tech	1	1.04%
Engineering	1	1.04%
Graphic design	1	1.04%
Business/administration	2	2.08%
Marketing	1	1.04%
Customer Service	1	1.04%

Preschool education	1	1.04%
Electrician/plumbing	4	4.17%
Administrative assistant/office professional	3	3.13%
Construction	3	3.13%
Hands-on type of work	3	3.13%
Photography	1	1.04%
Sewing	1	1.04%
Substitute teacher certification	1	1.04%
GED	1	1.04%
Medical technician	1	1.04%
Utility worker/linesman	1	1.04%
Careers in high demand	2	2.08%
Many options/diverse options	3	3.13%
College Prep/shortened from a four-year	2	2.08%
Trades	4	4.17%
Health/medical	3	3.13%
Technical	2	2.08%
All	1	1.04%
Any career that requires an associate degree	2	2.08%
Total	96	100%
