

A Seminar Paper

The attached seminar paper, by Clay Koenig, entitled, *Career Pathway Research and Relevance for One Rural School*, when completed, is to be submitted to the Graduate Faculty of the University of Wisconsin-Platteville in partial fulfillment of the requirements for the Master of Science in Education Degree, for which three credits shall be allowed, is hereby

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CAREER PATHWAY RESEARCH AND RELEVANCE
FOR ONE RURAL SCHOOL

A Seminar Paper

Presented to

The Graduate Faculty

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In Partial Fulfillment of the
Requirement for the Degree

Masters of Science

in

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by

Clay Koenig

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ABSTRACT

Does the career pathway that a high school student was in while in high school relate to their college major or career choice?

Some prior studies indicate that the career pathways are doing what they were meant to and some suggest that they are not.

Fletcher (2012) was able to breakdown the career choices of students using race, gender, and career track factors to determine what was the most likely career choice for those students. McCharen (2008) conducted a study on health career pathways and found that an alarming number of these career pathway students were not in a health career or studying to be in the health career. Hutchins and Akos (2012) conducted a study comparing rural districts to urban districts and which career readiness programs the districts offered to see if they could relate the data to help predict career readiness. Koivisto, Vinokur, and Vuori (2011) completed a study on career choice interventions on career preparation. Kim (2010) completed a study that showed high school students need proper career-related programs and motivation in subject areas.

I propose to take the career pathway the students were in and see if they are studying or working in a related career field. I will also see what career exploration opportunities the students' were involved in and what programs they thought were the most beneficial.

I believe that the career pathways while students were in high school will not be strongly related to either their chosen career or to what they are majoring in while in college.

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CHAPTER ONE

Introduction

Career education is something that is being brought to the attention of high schools all over the country as we try to make sure every student is career or college ready by the time they graduate. In Wisconsin, the Department of Instruction (DPI) mandated that schools should develop their own implementation of a career pathway for each student using 16 different career clusters with which students could become acquainted. The ongoing and new implementation can be found in Wisconsin Statute 115.28(59). The implementation is to ensure that high schools have a plan in place for academic and career planning services. As part of the process eighth graders take EXPLORE, an assessment designed for students to explore both high school and post-high school options, helping identify strengths and areas where intervention may be needed. All tenth graders take PLAN, an ACT predictor test, and then use that information to determine the students' skills, interests, plans, and goals. By their freshman, ninth-grade year, students are to have chosen the career pathway in which they want to concentrate. Then, during the remainder of their high school career, they will take classes that are directly related to their career pathway. The administration, teachers, and guidance counselor help the student's transition into the curriculum of their chosen track.

There are many factors that impact the success of this type of implementation. Research studies conducted earlier, were for the most part, inconclusive on the effectiveness of

having students select and study career pathways in high school (McCharen, 2008). From observation of students in a small rural high school, it indicates that a low percentage of students are employed in or are attending college in the career pathway of choice. High school staff and administrators can try to ensure that the students are in the correct cluster by having the students participate in workshops and other career exploration activities (Koivisto, Vinokur, & Vuori, 2011). Another method that we could use in assuring that students are in the correct pathway is by using indicators based on race, gender, and socioeconomic status (Fletcher, 2012).

There are a number of areas that could be examined to see if the high school career pathways are effective in helping students be career or college ready when they leave high school. School personnel need to make sure that what is being done is working the way it was intended and that the right activities are being implemented. Some high schools are offering career-readiness programs and offering apprenticeship opportunities for students to ensure that the students have a good idea of what their next step is when they graduate from high school (Hutchins & Akos, 2012).

The need for these types of implementations to be successful is starting early in the career planning process. Students need to have confidence in their career choice with little indecision. Making the career decision is only part of the process in becoming prepared for an adult career. The importance of career confidence and planning for the adjustment of youths in their early twenties cannot be overlooked (Stringer, Kerpelman, & Skorikov, 2012).

This study will assess the effectiveness of a small rural Midwestern high school's career education by comparing the career tracks of graduated participants to their career choice or college major. The study will also examine the factors that students believe positively impacted the career pathways experience and positively correlated with their future career choices.

Statement of the Problem

Does the career pathway that a high school student was in while in high school relate to their college major or career choice? What are the factors that positively impact high school student's transition from high school to college or the workforce?

Definition of Terms

Career Pathway - a coherent, articulated sequence of rigorous academic and career/technical courses, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry recognized certificate, and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business, and employers (<http://www.cord.org/career-pathways/>).

Support Category – a job category that is classified as support staff, such as office secretaries and administrative secretaries (Fletcher 2012).

Trades Category - Traditional building trades commonly include masonry, timber framing, log building, traditional roofing, carpentry and joinery, plasterwork, painting, blacksmithing, and

ornamental metal working. In addition to, "hands-on" skills and knowledge of building processes (https://en.wikipedia.org/wiki/Traditional_trades).

Dual General Track -may include the opportunity for secondary education students to acquire postsecondary education credits including through dual or concurrent enrollment (<http://cte.dpi.wi.gov/sites/default/files/imce/cte/pdf/cpaimpissues.pdf>).

Career Cluster -In their simplest form, Career Clusters are groupings of occupations/career specialties used as an organizing tool for curriculum design and instruction. Occupations/career specialties are grouped into the Career Clusters based on the fact that they require a set of common knowledge and skills for career success. The Knowledge and Skills represented by Career Clusters prepare learners for a full range of occupations/career specialties, focusing on the holistic, polished blend of technical, academic, and employability knowledge and skills. This approach enhances the more traditional approach to career and technical education in which instruction may focus on one or two occupations and emphasize only specific occupational skills (<https://www.wicareerpathways.org/Glossary>).

CTE - Career and Technical Education programs provide students with a foundation for a wide range of careers that reflect the contemporary workplace (<http://cte.dpi.wi.gov/>).

Career Plan - is a student-driven, adult-supported process in which students create and cultivate their own unique and information-based visions for post-secondary success, obtained through self-exploration, career exploration, and the development of career management and planning skills (<http://dpi.wi.gov/acp>).

College Major – An academic major or concentration is a college or university student's main field of specialization during his or her associates or undergraduate studies which would be in addition to, and may incorporate portions of, a core curriculum

(<http://www.collegetransfer.net/askct/whatisacollegemajor/tabid/2421/default.aspx>).

College Prep – A College preparatory course is a means by which college bound high school students may better meet the more stringent scholastic requirements for entry into colleges and universities (https://en.wikipedia.org/wiki/College_preparatory_course).

Vocational-Technical Prep - The amount of lapsed time required by a typical worker to learn the techniques, acquire the information, and develop the facility needed for average performance in a specific job-worker situation (<https://www.onetonline.org/help/online/svp>).

Cooperative Education - A structured method of combining classroom-based education with practical work experience (https://en.wikipedia.org/wiki/Cooperative_education).

School Based Enterprise - A school-based enterprise is an entrepreneurial operation in a school setting that provides goods/services to meet the needs of the market (<http://www.deca.org/high-school-programs/school-based-enterprises/>).

Delimitations of Research

This research will be based on a limited sample of the graduation classes from a Midwestern rural small high school during a four year span. The research will be conducted by means of a questionnaire that will be mailed back to the school. Possible biases might relate to

the student who respond and the response rate. A further limitation may be that the career pathways were implemented in 2010 for this small rural Midwestern high school. The earlier career pathways programs may not have been as well developed as later career pathway programs.

Method of Approach

A questionnaire was sent out to a random group of graduates from the years of 2010-2013 from a Midwestern rural small high school. To ensure that the results were random, a computer generated numbers and we picked the corresponding numbers to the class lists of the 2010-2013 graduating classes. The questionnaire requested opinions from students about career pathways, career choice, career exploration, and career/college major of choice. These results were analyzed quantitatively using interval data and ratio data. Interval data allows for the difference between items to be meaningful, such as comparing averages. Ratio data is used because of the importance of zero is important, such as using scales and comparing groups. In addition, various comparisons may be made, such as exploring grade point average as a predictor of whether or not the students stayed in their career pathway after graduation. See Appendix A for the questionnaire.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Statement of Research Area

Research was conducted by comparing the career choices or college majors of high school graduates to their chosen career track while they were enrolled in high school. The intent of the study is to determine if the career pathways program is effective in helping to prepare students for the workforce or their area of study in college. The study is also to determine what factors positively impacted student's career pathway experiences.

Fletcher (2012) conducted a study to predict occupational choices based on demographic variables and high school curriculum tracks. Four questions were examined. First, are occupational choices of individuals based on gender? The study found that the highest percentage of men were in the architecture and trades category while the highest percentage of women was in the support category. Are occupational choices of individuals related to race/ethnicity? Fletcher found that African Americans and Whites made up the largest percentage of workers in architecture and trades, while Hispanics were the largest group in the support fields. Third, are the occupational choices of individuals related to high school curriculum tracks? The largest group of college prep graduates was employed in support positions, while the largest group of career and technical education (career driven) graduates were in the architecture and construction fields, and the largest group of dual/general track students was in the architecture and construction cluster. Fourth, to what extent do demographic variables and high school curriculum tracks predict occupational choice? Fletcher found there was a connection between the career and technical education

students as well as the sex of the students revealing to us that predictors did in fact exist for all areas of career tracks. This research study found predictable factors for students entering the career world.

McCharen (2008) examined whether health career cluster programs were serving as the foundation to align and create programs of study leading to postsecondary education in the health fields and to meet the current and emerging demands of the health industry for high skill employees. McCharen questioned whether these cluster programs were working as they were intended, which was “promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instruction, and that link secondary education and postsecondary education for participating career and technical education students”(p. 207). There were three questions that guided McCharen’s work. To what extent do career cluster students continue to postsecondary education? To what extent are career cluster students employed after completing the program? To what extent do career cluster programs provide the foundation for a program of study? McCharen found that only 19% of those who completed a health career cluster followed up by going to a two-year or four-year university. Further, only 33% of the 4757 completers of the career cluster program were employed in a health career field. Finally, career cluster programs did not transfer well to colleges, as only 40% of the 4757 students who enrolled in career cluster programs graduated from a four-year university. These are very important findings as many schools are implementing career cluster programs of some sort all over the country and McCharen’s findings may be a sign that the career cluster programs are not working the way they were intended because only 19% of the 4757 high school graduates went on to a program of study in

a health career area. Of those 19% (904), 78% (708) completed the program of study or became employed in the health career field.

Hutchins and Akos (2012) explored the differences in School-to-Work programs in urban and rural districts. They focused their efforts around these areas: internships, job shadowing, mentorships, community service, and school-based enterprise for career explorations. They also looked at school-based learning opportunities, such as career plan, career major, college prep, vocational-technical prep, and cooperative education. Hutchins and Akos were able to determine three differences in School-to-Work choices between rural and urban areas. The first difference was that rural schools were more likely to have vocational-prep programs compared to urban schools. Next, rural schools were more likely to have job shadowing programs compared with urban schools. Finally, rural schools were less likely to have school-based enterprise than suburban schools. Hutchins and Akos' results help clarify why rural school students are more likely to be involved in technical or vocational careers after high school when compared to urban school students. Such findings may reflect the fact that rural schools typically place greater emphasis on career training to prepare non-college-bound youth for occupations in the home community, such as farming. Hutchins and Akos based their analysis on the most recent data from educational longitudinal studies.

Koivisto, Vinokur, and Vuori (2011) studied whether or not a one week workshop for freshman would enhance their career choice preparedness and attitude toward career planning. The objective of the study was to explore direct and indirect effects of career choice interventions. Their workshop was developed to last 15 hours and be highly structured and

intensive. Koivisto et al. had four hypotheses. The first hypothesis was that the intervention would increase career preparedness. This was confirmed by the study when compared to the control group. The second hypothesis was that the career workshop intervention would enhance positive attitudes toward career planning. The second hypothesis was also confirmed by the study because the participants' commitment to career choice behavior was significantly higher for the intervention group than for the control group. The third hypothesis was associated very closely with the second hypothesis, in that they wanted to show a direct correlation between career preparedness and positive attitudes' toward career planning. This too was proven; if the student was career prepared, then the student's attitude was better. The researchers confirmed this by using a baseline measurement that was associated with positive attitudes toward career planning. The fourth hypothesis predicted that career choice preparedness would enhance a subsequent positive attitude toward career planning. The results showed that in order for there to be a positive attitude, there needs to be an intervention targeting career planning. This was not proven. It appears that incorporating an extensive, structured workshop on career planning may promote a more positive attitude toward career planning, and provide the students a better idea of what they want for a career.

Kim (2010) studied students in three high achieving areas, two international baccalaureate programs and a governor school program. This study was selected because the top ten percent of a Midwestern rural high school may be similar to the students in the schools studied in this research. The students from these schools answered a questionnaire about career-related programs while in school. Some of questions dealt with parents' expectations, extracurricular activities, and school career-related programs. The students from the governor

school listed advanced placement courses and mentoring as their preferred career-related programs in high school. Students from the two baccalaureate programs listed career guidance and dual enrollment as their career preparation choices. Students from all schools stated that workshops were not effective because they were too vague.

Stringer, Kerplman, and Skorikov (2012) studied the transition from high school to college, work, or where the participants were 4.5 years after high school graduation. According to the study, career preparation is both predictable and can be adjusted to fit students' needs. Thus, schools should be allowed to make adjustments to a student's career plan while in high school. While in 12th grade, the career confidence of students should be relatively high, however there is still some adjustment even when they are in their last year of high school. The authors understood that indecision regarding careers, lack of planning, and confidence would play an important part of where the participants of their study were 4.5 years after graduation from high school. Also, included in their research were other factors such as: social adaptation, emotional stability, and self-actualization. Their results of the other factors indicated that emotional stability, social adaptation, and self-actualization played an important role in career or college choices. If the participants in the study were regarding themselves as high in these categories, they were more likely to have a smooth transition to college or the work force. If they were low, a lot of adjustments and changes were made regarding their career or college plans. Results for their study suggested that we need to better understand the process of career preparation over time and how it is associated with any adjustments during this critical time. Something that may help students deal with career planning is to discuss their career plan with their peers, who are also involved in career planning. This would be important for

social adaptation during career planning. Preparation plans are important and the students must be made fully aware of what career path they are actively involved. There are times when students are not completely aware of what career path they are following or what they are preparing for beyond high school. It was found that adolescents who make careful decisions about their careers and planned for them have more stability in their adult lives. These findings are relevant for schools because they suggest that helping youths identify their skills and strengths and matching career options and plans for potential careers is particularly important for high school aged students. Overall, youths should be assisted by school administrators in preparing them for adult and career decisions. This study was important to a Midwestern rural high school, as it is shown to be important to educate students on careers and career decisions and to work with each student.

Summary Statement

Based on the review of the literature, it is clear that schools are not doing enough to let students explore career pathways or introduce them to different careers. High school is an important time of the students' lives for making decisions about their future. Schools do offer a variety of career planning programs, but what works well for one school may not work well for the other. Just as each student is different, so is each school. The literature suggests that schools can do more for students, and that they must make sure what they are doing is successful in helping students make the correct career choices. Career pathways can help, but if they are not implemented correctly, they can be counterproductive.

Hypotheses

The career pathways that students study while in high school will not be strongly related to either their chosen career or to their chosen college major. Secondly, I believe that a higher grade point average from the student will indicate a greater chance that the student will stay in their career path to their chosen career or college major. Third, there are specific identifiable factors that impact student's transition from high school to college or the workforce.

CHAPTER THREE: METHOD

This chapter will include an explanation of how the subjects were selected, a brief description of the subjects, and a description of the questionnaire that was used, followed by data collection and analysis procedures.

Participants

Participants were selected from four graduating classes at a Midwestern small rural high school located in central Wisconsin for this study. This Midwestern small rural high school had a graduation rate of just below 100% for the last five years. Roughly, 73% of the graduating seniors went on to college. Of the 73%, 60% were enrolled in a 4 year university and the remaining 40% were enrolled in a 2 year college. Academic data shows that the students in this high school have composite ACT scores of 23, just above the state average of 22.1 and above the national average of 21. Students' proficiency in reading is matching the state average of 36.2% for advanced and proficient. The attendance rate at this high school is 96.2%. The graduating classes consisted of the years 2010, 2011, 2012, and 2013. The total number of students in the graduating classes was 47, 49, 46, and 42 with a total of 184. This group was selected because in 2010, a new state recommendation was made that required each high school to implement a policy of their choice to include all enrolled high school students in a career track while in high school. The effectiveness of that policy is being reviewed from the perspective of the students and from the data available on the student's college and career choices. The graduation class of 2014 was not included because they have graduated very recently and have not yet been in college or employed for one year. A random selection of 25-

30 participants from each class was selected using a random draw and comparing the numbers to the class rosters. The random drawing was done using a computer program at random.org where the data was entered from each class. The data consisted of the number of integers to be drawn (30) out of how many students. Once, the computer randomly came up with the numbers, they were compared to the number on the class list to select the student. By selecting the students in this fashion, it ensured the confidentiality of the student. This number of potential participants was selected in hopes of receiving responses from 50-80 participants for the data set. With all of the participants graduating from high school between the years of 2010-2013, all participants will be over 18 years of age. The confidentiality of the students was ensured by keeping the paired number and name of the student in a locked file in the guidance office along with all of the returned questionnaires and data compilations. After the study was completed all of the material used to gather the information was shredded.

Materials

The largest tool used for this study was a questionnaire developed by the researcher. The questionnaire was customized for the school district. The questionnaire asked 11 career-track and career-preparatory questions (See Appendix A). The goal of the survey was to try to find a direct link between the participant's career pathway and their major in college or their current employment. Included in the questionnaire was a set of career preparatory questions designed to determine if the participants felt they were career or college ready when leaving high school. There was also an area for the participants to give written feedback for

suggestions about improving the career preparatory opportunities at the Midwestern small rural high school.

Procedure

After having generated the questionnaire, participants were randomly selected from the potential pool of participants. With the pool of participants chosen, the potential participants were mailed the questionnaire, along with a consent form to gather confidential information from the school, such as grade point average. After a majority of the participants returned the questionnaire and the consent form, the participant's interview responses were divided into two different groups for comparison purposes. Group 1 included the graduating classes of the years 2010 and 2011. Group 2 included the graduating classes of the years 2012 and 2013. The two groupings were to see what group was more aware of their career pathway and also to see if the career pathway program is trending or becoming more useful for the most recent graduates. Grade point averages of the participant were reviewed to see if the higher grade point average participants are employed in a related field to their career path or if they are in college majoring in a similar field. The questionnaire was also reviewed to see which factors students' felt positively impacted career or college preparatory programs while in high school.

CHAPTER FOUR: RESULTS

Each question on the questionnaire was looked at individually and the results were broken down for analysis. Using the student generated information, each question has results listed and explained. Of the 120 randomly mailed questionnaires, 83 students returned the completed questionnaire. 69% of the students returning the questionnaire is a large amount compared to other studies that have been done. This could be attributed to many factors including they have not graduated that long ago, the mailing address has remained consistent, the parents passed the mail to them, and most of the students who returned the questionnaire had a grade point average of over 3.0. There may be many factors contributing to this, but it is possible that the high return rate was because of the rural nature of the district.

1.) Did the students recall if they were involved in a career pathway/career cluster during their high school years?

During the introduction and implementation of the career pathway/career cluster plans for public schools in Wisconsin, there seemed to be some questions regarding how this should be directed in the schools. Therefore, it was not surprising to see the 2010-2011 group split on even knowing that they were in a career pathway. At the beginning of the new recommendation for implementation, few high schools were prepared to initiate the new program with fidelity. The results for this group was 47% or 18 out of 38 stating that they were aware of the fact they were in a career pathway and the rest, 53% or 20 out of 38, stating

that they did not know they were placed in a career pathway. This is most likely because it was the first year of implementation the school. These results show significant change in the 2012-2013 group with 73%, or 33 of 45 stating that they knew they were in a career pathway tract, with only 27%, or 12 out of 45 not recalling that they were in a career pathway while being enrolled in high school. (See Chart 1)

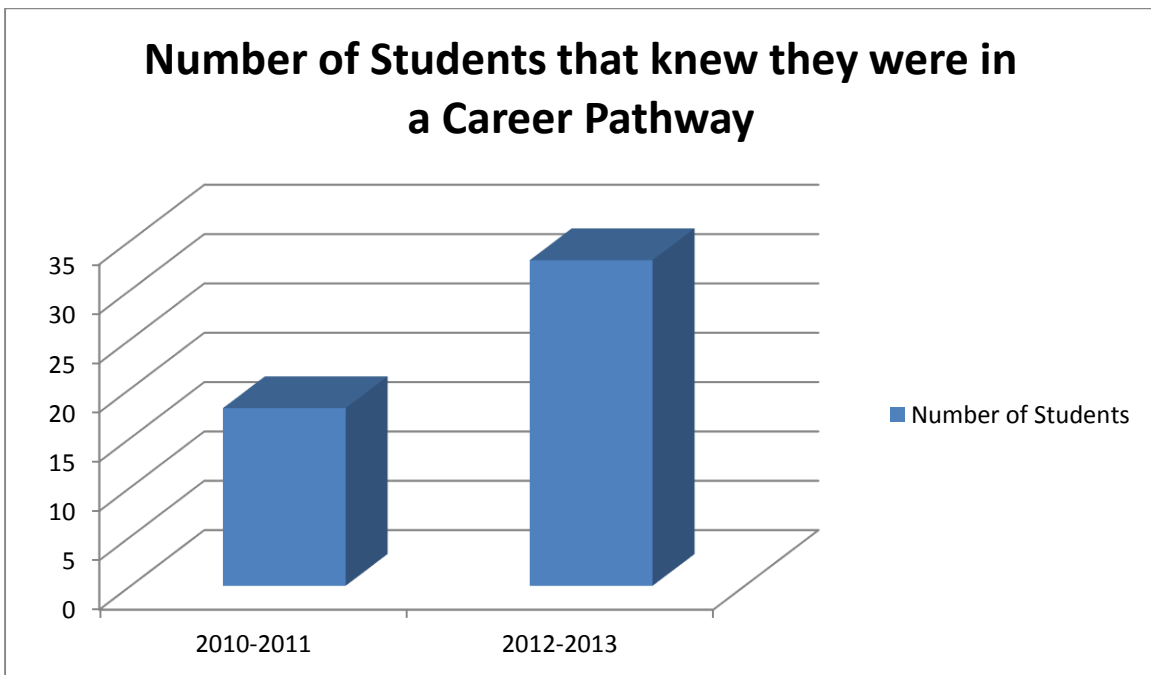


Chart 1

2.) If the students could remember being in a career pathway/career cluster, could they remember which one?

In the 2010-2011 group only 34% or 13 out of 38 could in fact remember which career pathway they were studying. In the 2012-2013 group, that number increased significantly, this time with 64% or 29 out of 45, being able to recall the career pathway that they were placed in.

3.) What careers or college areas of study are the most prevalent among the two groups?

If the participants were still in college, from both groups the most popular college majors were: education field, agricultural studies, engineering, and health services. If the participants are currently in the workforce, the most popular responses were: factory worker (line worker), agronomy (sales and production), and health services.

4.) Did the participants participate in any work study programs while enrolled in high school?

Both those who did and did not remember being in a career pathway took advantage of work study programs offered by the high school. The two work study programs that gathered the most responses were job shadowing and work release. The work study program is run by the school and allows students to leave school during regular school hours to report to a business for employment and the ability to learn skills of people in that business. The job shadowing program is run through the schools guidance program. It is offered to juniors, so they can choose a career interest and then have the opportunity to be placed with a professional in that career. The student would then spend up to 10 hours with that professional and return a prepared report for the guidance counselor. These participants could have done one or the other or both. In the 2010-2011 group 89% or 34 out of 38 took part in job shadowing at least once during their high school career. In the same group 31% or 12 out of 38 of the students took part in the work release program. The same 31% or 12 of 38 took part in both the work release program and the job shadowing opportunities offered by the school. In the 2012-2013 group 67% or 30 out of 45 of the participants took part in the job shadowing opportunity and 33% or 15 out of 33 took part in the work release program. This

same 33% or 15 out of 45 also took part in both programs/opportunities offered by the district.

(See Chart 2)

	Job Shadow		Work Release		Both	
2010-2011	N=34	89%	12	31%	N=12	31%
2012-2013	N=30	67%	15	33%	N=15	33%
Total number of participants: 2010-2011 = 38 2012-2013 = 45						

Chart 2

5.) Did the knowledge the participants gained from “Career Day” persuade them or make them change their minds on possible career jobs or college majors?

In the 2010-2011 group, a rather large number of 74% or 28 out of 38 stated that the “Career Day” did not play a part in persuading them into a career field or college program. This is almost in complete contrast to the 2012-2013 group in which those participants reported that 60% or 27 out of 45 said that the Career Day did persuade them or alter their college plans.

6.) For those of the participants that remembered being a career track, how well did they feel that the school prepared them for their job or college?

The information gathered from the research was not overwhelming in any way. The 2010-2011 group indicated that on a scale from 1-5 that the school prepared them, at an average of 2.7. This number was slightly larger in the 2012-2013 group with an average of 3.9 on the scale of 1-5. This compares to national averages of 40% not feeling prepared enough and 60% feeling prepared for college, according to achieve.org. These national percentages closely reflect this school district's averages, as they are around 50%.

7.) Did the participants feel that enough courses and career exploration was offered by the school to ready them for their career or college major.

Both the students who were knowledgeable of their career pathway while in college and the students who did not remember their career pathway indicated that the school was doing enough to prepare them for either college or their career after high school. The 2010-2011 group indicated that 89% of 34 of 38 felt that the school was doing a good job of getting them the knowledge necessary to prepare them for the future. The 2012-2013 group reported that 71% or 32 out of 45 of the participants felt as though the school prepared them for college or their career.

8.) What, if anything could the district do more to give the students information on careers or make them more college ready?

There were two areas identified by the 83 participants taking part in this survey that the school could improve upon to give the students a more well-rounded education. The first area that the participants would like to see improved would be to offer more elective courses. There were 12 responses out of 83 participants or 14% that indicated more elective courses would be beneficial. The second area that could be improved is the offerings for Advanced Placement classes or transcribed classes. There were 9 responses out of 83 or 11% that indicated this would be an improvement. The students that listed these areas of improvement are probably a good balance between college track students and vocational track students. The electives would be more geared toward the vocational students and the request for more AP courses would be a recommendation from the college track students. The district may lack these options due to the fact that the school has cut their Family and Consumer Science program due to budget restraints. The district has also not hired back some other teachers, which makes it difficult to cover the required courses, let alone to create new AP or transcribed courses.

9.) What job category did the participants say fits their career or anticipated career?

The following table shows how the 83 participants classified which career they are currently in or which college major relates the best their anticipated career. (See Chart 3)

Job Category or Field of Study if in College		
	Number	Percentage
Officials and Manger	9	11%

Office or Clerical	7	1%
Service Worker	12	14%
Professional	12	14%
Craft Worker	11	13%
Technician	18	22%
Sales Worker	6	1%
Laborer	8	1%

Chart 3

CHAPTER FIVE: DISCUSSION

The purpose of this study was to find out if the career pathways that the students were in while in high school would follow them to college or in to the career of their choice. In addition, the study examined whether a higher grade point average would translate into the career track being followed at a high percentage. Factors that would impact transition from

high school to the workforce or to college were also examined in relation to school-based activities.

For the study, 130 questionnaires were mailed out and 83 were received back for review. After being mailed it only took about 5 days for the first two completed questionnaires to come in. The questionnaires continued to come in for about 2 weeks at a steady pace. All 83 of the questionnaires used in this study were collected by the fourth week after the initial mailing. No additional questionnaires were mailed back after the fourth week.

Career pathways were relatively new to the public school system in 2010, which is the first graduating class included in this survey. As expected, those students that graduated in 2010 had less knowledge of career pathways, so the connection between high school career pathways and future college or workforce careers was not as close as from the graduating class of 2013. The results may have been skewed because career pathways may have not have been implemented as effectively in 2010 as it was in 2013. However, the results showed that the most recent graduating classes are staying with their career tracks at a rate of 64% or 29 of 45 students after high school. This was much better than the first graduation class that was included in this study that showed only 34% or 13 of 38 students were following their career track after graduation from high school. The findings showed that after longer implementation the percentage went up drastically, which was in directly in relation to the students' knowledge of the career pathway program. Surprisingly, the study proved that career pathways and career tracks are currently working effectively in a Midwestern small rural school setting.

Prior to this study, a higher grade point average was assumed to make it more likely that those participants would be following their career track after graduation from high school, however there were too few respondents from a lower GPA pool to be able to make any conclusions. All of the 83 questionnaires that were returned had grade point averages over 3.0. Of the 37 not returned, 5 had grade point averages over 3.0 and the remaining 32 had grade point averages below 2.87. This made it difficult to prove or disprove the hypothesis that the higher grade point average would relate to the higher success rate in the following of their career pathway. However, it did show that the better the student is academically, the more likely they will offer input into something that is strictly voluntary. This is important as an educator wants students to be well rounded individuals.

Most high schools will have part of their mission statement say something close to this, the district ensures that every student is either college or career ready when leaving high school. This study was extremely important for the Midwestern small rural school district because the results can inform the staff and administration to make necessary changes and also to recognize what is going well with the current career readiness program. Recognizing what is going well is easy to see as indicated by the information that was received back from the participants. For example, all of the students either took part in some sort of job shadowing or work release program. This is important as high school students need to explore as many career possibilities as possible before they leave high school. Also, the students all participated in a "Career Day" in which they are exposed to a minimum of 4 different careers. On scale of 1-5 with 5 being the highest, the most recent graduating classes indicated that they left the high school with an average of 3.9 on that scale to be either career or college ready. Another very

positive note is that over 77% of the students or 64 of the 83 students that participated in this study stated that the high school offers enough career exploration.

One of the weaknesses identified by this research is that the school needs to do a better job of informing students what a career pathway is and what career track they are following. When it was first implemented, it was not effective; more than half of the first grouping of students didn't recognize that they were identified in a career track. However, when looking at the second grouping of participants, the number of students who recognized their selected career path increased significantly from 47% to 73%. Another area of concern would be how the students are guided to their career track. Students seem to go into this with only careers that they have knowledge about when they are freshman. They are still young and have not had many opportunities to explore different career options. A suggestion would be to maybe wait until their sophomore year to place them in a career pathway. According to the questionnaire, the school district could offer more elective courses and Advanced Placement courses to help prepare the students for careers after high school. The results of this study will be used to help guide the career and college readiness for a Midwestern small rural school district.

CHAPTER SIX: REFERENCES

- Fletcher, E. C. (2012). Predicting the influence of demographic differences and schooling experience in adolescence on occupational choice in adulthood. *Career and Technical Education Research, 37*, 121-139.
- McCharen, B. (2008). The success of implementing programs of study in health careers through career clusters and pathways. *Career and Technical Education Research, 33* (3), 203-215.
- Hutchins, B. C., & Akos, P. (2012). Rural high school youth's access to and use of school-to-work programs. *The Career Development Quarterly, 61*, 210-225.
- Kim, M. (2010). Preferences of high achieving high school students in their career development. *Gifted and Talented International, 25* (2), 65-75.
- Koivisto, P., Vinokur, A. D., Vuori, J. (2011). Effects of career choice intervention on components of career preparation. *The Career Development Quarterly, 59*, 345-366.
- Stringer, K., Kerpelman, J., & Skorikov, V. (2012). A longitudinal examination of career preparation and adjustment during the transition from high school. *Developmental Psychology, 48* (5), 1343-1354.
- In *Achieve Incorporated*. Retrieved from <http://www.achieve.org/about-us>
- In *Distributive Education Clubs of America*. Retrieved from www.deca.org
- In *American Job Center*. Retrieved from <https://www.onetonline.org/help/online/svp>

In *College Transfer*. Retrieved from

<http://www.collegetransfer.net/askct/whatisacollegemajor/tabid/2421/default.aspx>

In *Wikipedia*. Retrieved from www.wikipedia.org

In *Wisconsin Career Pathways*. Retrieved from <https://www.wicareerpathways.org/Glossary>

In *Wisconsin Department of Instruction*. Retrieved from <http://dpi.wi.gov/acp>.

In *National Career Pathways Network*. Retrieved from <http://www.cord.org/career-pathways/>

CAREER PATHWAY AND CAREER/MAJOR CHOICE QUESTIONNAIRE

Instructions: Please answer all questions to the best of your ability and be as detailed as possible when answering the questions.

1. To the best of your recollection, were you involved in a career pathway/career cluster while in high school?

YES / NO

2. If yes, can you remember what career pathway/career cluster you were involved in? If yes, please list.

3. If you are in college, what is your major/field of study?

4. If you are employed, what is your job title and what company employs you?

5. Did you participate in any work study programs while in high school? (Examples would be job shadowing, internships, or work release.) If yes, please list.

6. River Ridge offers a "Career Day" every other year. Did the "Career Day" make you change your mind or persuade you into the career or college program you are in today?

7. How well do you think that your career track prepared you for your job or for college after you left high school? Answer on the following scale.

Totally Unprepared 1 2 3 4 5 Totally Prepared

8. Do you feel River Ridge offered enough courses to introduce you to your job or ready you for your college major?

YES / NO

9. What factors lead you to choosing your college major or career choice?

10. Do you feel you received enough career exploration while in high school?

11. If anything, what would you suggest River Ridge do to make our students more career or college ready? This can be brief, but please be detailed.

12. What job category would you say your career fits? Circle one

Officials and Manager

Professional

Technician

Sales Worker

Office or Clerical

Craft Worker

Operative

Laborer

Service Worker

Please list an email address so I can send you the results of the study and discuss with you the importance of your participation.

Email address: _____

Thank you for your time completing this survey. Please mail the questionnaire and the consent form back using the self-addressed envelope that came with them.