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Understanding the need to transition high school students from school to work

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UNDERSTANDING THE NEED TO TRANSITION HIGH SCHOOL STUDENTS FROM SCHOOL TO WORK

By
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Masters of Arts Degree
Of
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ABSTRACT

Christopher Armstrong
Understanding the Need to Transition High School Students From School to Work
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Advisor: Dr. Kathy Sernak
Educational Leadership

The purpose of this study was to determine what employers were looking for in recent high school graduates. The study also tried to determine if high schools were currently meeting the needs of employers. A survey was sent to one hundred employers in the Southern New Jersey area asking about the importance of skills taught in high schools. Southern New Jersey is comprised of rural and suburban communities. The most widespread industries in Southern New Jersey are construction and hospitality/gaming. The survey asked questions about the importance of academic skills, social skills, work readiness skills, and higher level thinking skills. Of these surveys forty-one surveys were returned before the cut off date of March 1, 2002. The major conclusions found from this research were that most employers felt that social skills, such as settling differences with coworkers, and basic skills such as attendance are very important skills for high schools students to acquire before graduation. Employers could not agree on the importance of academic skills.

MINI-ABSTRACT

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Table of Contents

Chapter 1

The Problem

The United States Census Bureau states that the high school drop out rate hit an all time high in 1970 with a rate drop out rate of 6.7%. The drop out rate steadily declined to an all-time low in 1990 with a drop out rate of 4.0%. The rate has increased over the past few years to 5.4% in 1995 (United States Bureau of the Census, 1995). Today's high school dropouts will be affected more dramatically than those of the past because of their failure to gain a high school diploma. The American labor market has experienced a transformation over the past 30 years. Between 1970 and 1993 the proportion of all United States workers employed in manufacturing fell by 41% (United States Departments of Commerce, 1994). The employers in the United States are looking for more educated, more highly trained, and more skilled workers in some of today's fastest growing fields such as home health aids, physical therapy aides, computer engineers and scientist.

Many of these fields can offer satisfying careers to students who do not plan on attending college. It is imperative that these students gain a high school diploma and receive skills that can transition students to the workplace. Schools can make themselves more attractive to students who do not plan on attending college by offering transitional education classes that will prepare students for life after high school. This will help give meaning to school for some students and lower drop out rates. School should ask themselves the questions: "How is work changing?" "What skills are needed in the workplace to maintain a healthy, happy and productive life after high school?" Schools

should do their best to answer these question and many others in order to prepare students for life after high school.

Purpose

By interviewing potential employers of students entering the workforce directly following high school it is hoped to determine what type of skills employers are looking for in high school graduates. The purpose of this study is to provide information necessary to improve understanding of present practice of secondary schools and project vocational and occupational need of students. This project will provide information needed for future planning and decision making about necessary changes in the educational system. Interviews of employees will attempt to identify how employers perceive high school youth and their educational background. These interviews are not only important because they gather data, but are a necessary step to begin relationships and dialogues between educators and the business community.

Definitions

School to work transitions means preparing students in a formal way to enter the workforce.

Transitional education is formal teachings intended on moving students form school to the workplace.

School to work and school to career are uses interchangeable in this paper. Most experts use these two terms interchangeable, but some prefer school to career because the word career cogitates a job that is long lasting and allows for advancements.

Limitation

The sample size is small. The sample will be drawn from one geographical area, Cape May and Atlantic counties in Southern New Jersey. This sample is not representative of the entire United States. The interviews are semi-structured and will not allow for respondents to determine the topics for discussion. Thus, real issues, concerns, problems, or perceptions vital to the project may have been overlooked.

Setting

The site for this study will be Atlantic and Cape May Counties in Southern New Jersey. The principal industries in Atlantic and Cape May Counties are casino hotels, agriculture, fine china production, fishing, yacht building, aviation testing/engineering, pharmaceutical research and promotion, and tourism related services (Atlantic County, 2001, Fast Facts section, p.1). This study will interview employers who have entry level employment opportunities for students transitioning directory for high school to the workforce. These students will be entering the workforce with no additional training following high school.

Significance

The significance of this study is to provide a knowledge base that will be used when implementing transitional education classes. The quality preparation of secondary students for the labor force is a vital concern to businesses and education. The identification of skills and knowledge for the workplace will improve economic security

for students and allow for future economic development in the communities involved in this study.

Overview

Chapter 2 will consist a review of existing research on the topic of transition form school to work. In Chapter 3, the design of the study will be explained. Chapter 4 will present the finding of the research. The conclusion, implications organizational change and further study needed will be discussed in Chapter 5.

Chapter 2

Review of Research

People will spend the majority of their lives doing one of two things, being educated or working. Work depends on education like a child depends on his mother. Unfortunately, all people do not share this thought. Despite their interdependence, educators and employers rarely, if ever, communicate. This has caused a lack of trust between the economic and educational systems.

When asked if schools are doing a good job at preparing students for work, only 4% of business leaders in a 1995 survey said "yes". In the same survey, 44% of teachers and 68% of school superintendents said they felt schools were doing a good job preparing students for work. Because business people do not trust the educational system, they do not use high school transcripts or other measurements of school performance to make hiring decisions (Olson, 1997).

A growing number of high school students plan on attending college. Many will succeed in getting accepted into college, but only a minority of students will actually graduate. Only 25% of young people will earn a college diploma and ease into the work force (Resnich, 1996). Most young people in their twenties cycle through dead-end jobs, some schooling and periods of unemployment before finding their way into a steady career (Olson, 1997). This leaves 75% of young people with limited opportunities and no college diploma.

What role should the educational system play in preparing students for work? This is a hotly debated question. Business leaders tend to discuss the low skill levels of entry level work, but are often unclear about how to improve these skills or exactly what

skills are missing. Should schools aim at improving economic success for their students and the community? Should schools develop thoughtful democratic citizens? Should schools focus on transmitting a fixed body of knowledge? Should schools put effort into developing lifelong learners (Cushman, 1999)? The answer to these questions are unclear, but what is clear is that most business leaders feel that schools do not do a good job fulfilling any of these requirements. Business leaders feel that the education system is failing its students and their communities.

Regardless of the major philosophy or mission statement of a school district, most districts feel some responsibility to prepare students for the workforce. Unfortunately many of today's students will work in jobs that do not yet exist, producing goods and services that are not currently invented. How can school districts prepare students for today's changing society? Education philosophers have developed four primary components that are necessary for a successful school-to-career education: The awareness stage, the exploration stage, preparation stage, the employability skills stage and the employment stage. Each of these descriptors will be combined with employment traits such as attitude, personality characteristics, employer-employee relations, communication skills, decision-making, behavioral characteristics, career development, personal finance, consumerism, and health and safety (Wircerski, 1986).

The Texas Transition Model (1998), which was created at the university of Texas at Austin, begins its school-to-career education in kindergarten. The awareness stage takes place from kindergarten to sixth grade. The objective of the awareness stage is to inform students of career options and responsibilities of adult life. During this stage, students will lay the foundation for a good work ethic and social skills needed in the

workplace. Students will also gain an understanding of career choices based on their own likes, dislikes, academic strengths, and weaknesses.

The exploration stage takes place from 7th grade to 10th grade. While in these grades, students will have a more realistic perception of work and independent living. Students will match occupations with their own interests, needs and abilities. Students will also complete pre-occupational training skills such as interviewing skills, filling out applications and understanding employee responsibilities.

The preparation stage begins during grade 10 when students receive more specific preparation skills in order to prepare them for immediate employment or advanced training. This stage addresses technical skills, employee skills and independent living skills. During stage three technical skills are taught either on the job, in a lab, or a shop. Employee and independent living skills are taught in a classroom. Stage four begins in the final years of high school and continues after graduation. During this stage students will actually move from secondary schools to work. These students will be given help as needed, ranging from full support to limited support. Students should find full time continual successful employment. If students are fired or laid off from their job, they should possess the skills to find and maintain new employment.

The Northern Arizona University Assistant Professor, Kathryn Lund (1985), supports the four phase approach to transitional education in her report "project INTERACT: Job-Related Social Skills to Facilitate School-to Work transition". She also identifies the need to stress social behaviors associated with successful job performance. Skills include are communication skills, problem-solving and decision-making skills, networking skills and self-monitoring skills.

The Area Vocational-Technical Learning Centers in cooperation with the University of Missouri-Columbia (1996) suggest a transition to work in stages. These stages are similar to Northern Arizona University and University of Texas at Austin's stage of transition. The area Vocational-Technical learning Center states two major goals: to have students become productive citizens of society and provide students with basic academic skills to make career choices. The program should begin in middle school with career awareness and exploration, and should continue in stages until a suitable off campus program can be found for students. Five types of off-campus programs are available, including an academic program, cooperative vocational education programs, work experience for special education students, career exploration programs, or apprenticeship programs.

Most programs stress academic skills in traditional and non-traditional areas. Traditional skills that are most commonly stressed are writing and oral communications, reading, and computation. Some of the non-traditional areas that are stressed are behavioral characteristics, career selection, job applications, job interviews, managing personal finances, business agreements, community resources, and good citizenship (Cappelli, 1995; Carford, 1996; Lund, 1985; Wircenski, 1986).

If schools are going to educate students in non-traditional subject matters, educators will need to be prepared to instruct and assess students in non-traditional means and in non-traditional settings. A project-based education is one way to solve real world problems and offer greater authenticity as an example of what might be expected in the world of work. These projects should be an integral part of the curriculum and should test traditional academic skills. These allow students to choose in what areas they are

going to work, and should also provide an opportunity for students to display skills in multiple areas of intelligence (Resnick, 1996). Adrian Steinberg (1999) suggests that projects should attempt to incorporate the six A's: authenticity, academic rigor, applied learning, active exploration, adult connection, and assessment practice. Rather than teaching material and asking, "How does this apply to the real-world?" teachers should start with a real-world problem that needs to be solved by connecting back with academic concepts that have been taught in school. Students will be assessed in nontraditional manners. Gone will be the weekly quizzes and charter test. Students will work on on-going projects, and teachers will help guide the students along the way. Teachers will evaluate the students' work at certain checkpoints during the project. At this point teachers will provide feedback and give students credit for progress on the project, but will not grade the work. Upon completion of a project, the students will present the information to a group of teachers, classmates, or members of the business community. At this time, the project will be deemed acceptable or unacceptable. Acceptable projects will be entered into a portfolio. Unacceptable projects will be returned to students for revision. When students graduate, they will have a portfolio that contains the projects on which students worked. This portfolio can be presented to employers at a job interview, and can be more useful at identifying students' skills, than a transcript that contains numerical averages and letter grades. It has been shown that businesses do not use traditional transcripts when choosing employees (Resnick, 1996).

Another way to accommodate the need to transition students from school-to-work is to form a partnership with businesses and industries. This is exactly what happened in Tulsa, Oklahoma. A program known as "Craftsmanship 2000" was developed by

bringing Tulsa City Schools, Tulsa Technology Center, Tulsa Junior College, the mayor's office and six of the area's largest businesses together. The project prepared students for the trades through a four-year apprenticeship that began in the eleventh grade and culminated with an associate degree. Students worked with a mentor in the apprenticeship program a few days a week and also attended classes that pertained to their field of study. Students experienced a seamless transition from high school to junior college when they demonstrated readiness (Olson, 1997). Charter schools have been formed based on business and school partnerships. These schools have curriculums that insist that all students get out in the community to learn what employers want. Students perform real life employment task and the kind of market research on which businesses depend (Lesgold, 1997).

These types of approaches are not new. Other countries have more widely developed school-to-work programs. Foreign training systems feature strong links to employment. The clearest example of employer involvement in preparing young people for the work place is found in Germany. Young Germans participate in a dual system in which students train as apprentices on the job under experienced masters while also pursuing classroom instruction for one or two days a week. Upon completion of mandatory full time schooling at the age of 15 or 16 students enter the apprenticeships. Students have strong motivation to do well academically in school because the highest performing students are rewarded with the highest quality training slots (Hansen, 1994).

Japanese students attend mandatory school for nine years. Following nine years of schooling, 26% of Japanese students attend a high school that is vocational in nature. After high school, students find jobs through their schools. Employers form links with

schools, and teachers nominate and rank students for jobs. Employers interview these candidates and make the final decision based on teacher recommendations. This is a very important process because in Japan there is little job mobility. Most people work for one employer for their entire life.

Australia and Britain have made efforts to improve school-to-career training in order to combat high unemployment and low wages for students who do not attend college. In both countries, students attend compulsory schooling until age 15 or 16. It is at this time that students choose to either stay on an academic track or go into a vocational program. Local government and industries support these vocational programs (Hansen, 1994; Steinberg, 1999).

If schools are going to prepare students for the world of work, there needs to be educational reform. Creating smaller more personal learning communities is a key towards more student-centered active learning classrooms. Large schools can accomplish this by being divided into small autonomous schools that operate within a larger school. This keeps students and teachers together in stable and heterogeneous learning groups. By doing this, schools can break down large high schools into career academies, pathways, or clusters, organized around real world themes and problems (Olson, 1997; Doty, 1985).

All students at Hoover High School in San Diego, California follow a pattern of studies aimed at fostering personal connections and career pathways. During ninth grade students study humanities, math, science, and introduction to careers which includes community service. Tenth-grade students study humanities, biology, physical education, and continue with career exploration. If needed, students will study English as a second

language. Students move into one of three units for their junior and senior years in high school. The school of Health and Human Services specializes in health classes such as physiology, child development, psychology and physical therapy. The School of Business and Communication Arts specializes in accounting, business careers, marketing, and computer applications. The School of Design and Engineering Technology specializes in technology courses, architectural drafting, drafting technology, construction technology, and communication (Steinberg, 1999).

The David Douglas High School, located on the outskirts of Portland Oregon, has created a school around seven career fields. The Law Network has approximately 60 students who are interested in law-related careers. Students study integrated law, sociology, mock trials, American literature and communication. Every Tuesday students attend field trips to jails, courtrooms and forensic laboratories. Some students who were interviewed are looking forward to careers as lawyers, police officers, social workers or juvenile psychologists. Students feel that they did better in school because they worked on what they were interested in, and they were given a choice of what to study. Students also stated that as in the work place, teachers would not accept substandard work (Olson, 1997).

Some educational professionals suggest the problem with school-to-career education is that it does not support academic excellence. Many proponents of school-to-career education suggest that transitional education is most valuable for special education students, at-risk students, or students who do not excel academically. Some proponents of school-to-career education feel that it is academically appropriate for all students (Steinberg, 1999). Stan Koki (1998), of the Pacific Resource for Education and

Learning, feels that all students can benefit from school-to-career education. He feels that a new set of content and performance standards should be created to include vocational and workplace standards. Combining academic standards and workplace skills standards can unify an approach to education. This will satisfy educators who feel schools need to prepare students for work and those educators who feel school should be academically rigorous. A unified education system would have most students remaining in traditional educational setting for most of their schooling. All students would be expected to achieve a high level of preparation for the workplace and academic skills. Students would be given a choice of what to study based on their interests and talents.

School-to-career reformers have made it clear that in order to achieve their goals, schools need to widen their circle of support, both for practical and philosophical reasons. School-to-career education cannot be accomplished within the four walls of the school building. Linking schools to the world beyond the school building is possible only when community support occurs. Jobs for the Future, a group promoting school reform, has proposed what they feel are the keys to foster change in the educational system. A strong leadership group needs to serve as an advocate for the change process. A staff member needs to facilitate employer and community involvement. Change must also occur in the ways student achievement is measured and the way teachers are trained. Staff members and employers should organize the connection between classroom and community. Members of the educational and business communities should agree upon high common standards for academic and work-based learning. This can lead to an establishment of standards and assessment measures that holds schools accountable for academic knowledge in a real-world setting. Strategic uses of professional development for the

teaching staff and a use of data collection to evaluate student achievements and improvements can be used to determine how successful a school is at preparing students for the workplace or further education (Steinberg, 1999).

High schools and businesses have had a lack of communication for decades. This has taken a toll on the American educational system. In order to change, schools need to not only look at new requirements for graduation, but also at a new arrangement of time and schedules and new curriculum. Reformers need to convince schools and employers to work together. They must convince parents that the school-to-career is not a dilution of academics, or a new version of vocational education (Olson, 1997). Improving the skills of tomorrow's workers will lead to a more knowledgeable and better-prepared work force. In the end, both the community and schools will improve through communication and the development of a shared vision of success.

Chapter 3

Description of the Subjects

One of the first goals of this project is to identify the needs of business and industry, and employers' perceptions regarding the preparation of high school students for work. The participants in this study are employers from Atlantic and Cape May Counties. These employers will provide work for recent high school graduates who have not received any further formal training or education after high school. Employers that were selected were chosen because they represent a cross-section of the employers in Atlantic and Cape May Counties. The selection of employers was not a random selection. This was a stratified sample. The attempt was to choose a group that represents the communities in which the study takes place. These employers represent both large industry and small business. The employment that is provided for the recent graduates will be in the construction, landscaping, food service, hospitality, and retail sales industries. These employers have between five and fifty employees.

Description of the Site

The site of this study is Atlantic and Cape May Counties located in southern New Jersey. This area is comprised of rural and suburban communities. The most widespread industries in these two counties are the construction and hospitality industries. Many of the employers will hire employees with little or no training following high school. If an employee can maintain employment in these industries they should be able to maintain a good quality of living.

Description of the instruments

The first step for the collection of data was to choose a survey instrument that has been validated. The Business and Education Survey Number Three: Employer and Employee Perception of School to Work Preparation, was chosen. This survey was used to do similar research in the state of Wisconsin. This research was completed by a consulting business known as the Parker Project, Charlotte M. Oinonen project director. The survey was developed with the help of several chambers of commerce from across the state of Wisconsin. The group used studies from New York, Boston, Chicago, and Colorado to supplement the survey form. A consultant from the research center in Ohio helped review and eliminate questions that would not yield meaningful data. Drafts of the survey were sent to the Parker Project Board to be reviewed and critiqued. A subsequent draft was reviewed by the University of Madison-Wisconsin Survey Research Center, which developed the final form. This survey can be duplicated in other parts of the country using similar techniques. This survey was chosen because of the information that it provides for educators. The information can be used to shape curriculums base on the needs of local employers. Students educated using these curriculums will be more competitive when seeking employment.

Collection of Data

The Business and Education Survey Number Three was mailed to employers. Fifty surveys were mailed in order to establish a statistically valid base. It was felt the sample should include all business populations because of the number of employees involved and the number of applicants included in any hiring process. Small businesses and the agriculture or agri-business was included because this makes up a large number of employers in Cape May and Atlantic Counties. Many prior studies have excluded small businesses. Survey packets were mailed to businesses. This packet contained a cover letter (Appendix A) with instructions for completing the survey, the survey (Appendix B) and mailing envelopes. The survey was to be completed by general administrators, managers, presidents, chief executive officers, personnel officers, personnel managers, persons responsible for hiring new employees, or immediate and direct supervisors of new employees, or the person most responsible for supervising recent high school graduates. If none of these types of people were available the person with the most knowledge about the recent high school graduate who is an employee was asked to complete the survey.

The survey asked questions about the name and title of the person completing the survey. A phone number will also be obtained in case any information needs to be clarified after the survey is returned. The employer will be asked about the major activity of the business. The employer will provide information about the numbers of years the business has been in operation and the average number of employees the business had in the past twelve month period. The employer will also be asked if the business has any linkage, partnership, or cooperative arrangement with a high school, post-secondary,

vocational-technical, or adult educational system. If there is any work partnership the employer will be asked for the name, address and telephone number of the school. The survey that was used asked thirty-four questions in the area of work skills and competencies. These questions were designed to acquire information in seven different areas. These areas include academics skills, social skills, work readiness skills, technical skills, basic skill such as speaking and listening, and the responsibility of high schools in preparing students for work. This survey asked seven questions in the area of academics, seven questions about social skills, seven questions concerning work readiness skills, three questions about higher level thinking skills, two questions about technical skills, five questions about basic skills, one question about the responsibilities of high schools and one open ended question. The open ended question allowed for the employer to provide any additional information they felt would be helpful in preparing students for work. A list of work place skills or competencies were listed on the survey, and the employer was asked how important each workplace skill or competency is. The employer was asked to circle one of five responses based on their importance for employers, ranging from very important to not important. The survey completion date was March 1, 2002. Any survey that was returned after that date is not included in this study.

Data Analysis

The data was analyzed based on the responses provided by the employers. The statistical package SPSS was used to analyze the information. The figures were converted to a standard score. The data was represented using T scores. The T score expresses how far a score is from the mean in terms of standard deviation units. All forms were

manually checked for response completion. All comments from the open ended questions were coded by type. The additional information from the survey was retained manually through word processing. These include names and addresses of respondents. It also includes employers who state a willingness to help local schools develop a school-to-work educational program. Some forms included blank responses to questions. These responses were not included in the final analysis of the data. The questions will be grouped into categories that include academic skills, social skills, work readiness skills such as attendance and tardiness, and higher level thinking skills such as problem solving and decision-making. The data was examined to see if patters emerged on the responses for each question, or for each subcategory of questions. Comparisons were made for individual question as well as overall scores.

Chapter 4

Data Analysis

Introduction

One hundred surveys concerning the skills employers desire most in recent high school graduates were sent to businesses in Atlantic and Cape May counties in Southern New Jersey. Of the one hundred surveys forty-one surveys were returned. This chapter includes an analysis of the data from the surveys that were answered by employers. This analysis includes the mean score, the standard deviation, and the frequency for each survey question. These questions have also been sub-divided into categories. These categories include academic skills, social skills, work readiness skills, technical skills, basic skills, and higher level thinking skills. The analysis includes the mean score, the standard deviation, and the frequency for each category of questions. The survey also included an open-ended question. Unfortunately most employers chose not to answer this question. These answers will be included in this chapter but because the sample size is so small these answers are not statistically significant. There were also questions included to determine the size of the business, how long the business was in operation, and what type of work the business conducted.

Demographics

The first four questions determined the demographics of the employers answering the survey. The employers were first asked to answer a question that best described the major function of their business. Of the employers responding to this survey three described themselves as farmers, eight described themselves as construction companies, two described their work as manufacturing, three described themselves as transportation

or communication, four were involved in retail trade, four described their business as finance, insurance, or real estate. The largest group responding to the survey was in the service industry. Seventeen employers were involved in the service industry. Employers were asked how many years has the business been in operation. The mean number of years is 22.357. The median number of years was 24.5. The employers were asked the average number of employees employed by the business during the past twelve months. The mean number was 24.6, and the median was 37.5. The employers were asked if their business had a cooperative arrangement with a high school or vocational school. Of the forty-one respondents only one had a linkage with a school.

Table 4.1
Summary of the Demographics
Of Employers

Type of Business	Number of Employers
Services	17
Construction	8
Retail Trade	4
Finance, Insurance, Real Estate	4
Farming	3
Transportation or Communication	3
Manufacturing	2

Average Numbers of Employees

Mean	Median
22.4	24.5

Average Numbers of Years in Business

Mean	Median
24.5	37.5

Table 4.1 represents the demographics of employers responding to the survey. The sample is representative of the overall population of employers in Atlantic and Cape

May counties. The service industry is the largest employer in both counties, and makes up the majority of the employers who responded to the survey.

Analysis of Data

The employers who responded to the survey were asked what skills they felt were most important for high school students entering the work force with no formal education after high school. The frequencies, the mean, and the standard deviation have been computed for each question. The responses of the employers were used to determine what skills employers are looking for in recent high school graduates. The frequencies can be found in Chart 4.2, the mean in Chart 4.3, and the standard deviation in Chart 4.4.

Frequency Table 4.2

Frequency Distribution of Questions 1-31

	Very Important 4	Somewhat Important 3	Not Very Important 2	Not Important At All 1	No Opinion
Question 1	24	17	0	0	0
Question 2	26	14	1	0	0
Question 3	24	17	0	0	0
Question 4	17	21	3	0	0
Question 5	15	23	3	0	0
Question 6	14	17	8	2	0
Question 7	10	14	14	3	0
Question 8	24	17	0	0	0
Question 9	24	17	0	0	0
Question 10	4	15	19	3	0
Question 11	9	6	23	3	0
Question 12	17	17	7	0	0
Question 13	17	17	7	0	0
Question 14	29	10	2	0	0
Question 15	36	5	0	0	0
Question 16	32	9	0	0	0
Question 17	16	17	8	0	0
Question 18	40	1	0	0	0

Question 19	**40**	**1**	**0**	**0**	**0**
Question 20	**6**	**11**	**14**	**0**	**0**
Question 21	**18**	**15**	**8**	**0**	**0**
Question 22	**16**	**25**	**0**	**0**	**0**
Question 23	**0**	**6**	**24**	**14**	**0**
Question 24	**6**	**6**	**21**	**14**	**0**
Question 25	**6**	**8**	**23**	**3**	**0**
Question 26	**17**	**21**	**3**	**0**	**0**
Question 27	**24**	**16**	**1**	**0**	**0**
Question 28	**20**	**21**	**0**	**0**	**0**
Question 29	**17**	**24**	**0**	**0**	**0**
Question 30	**11**	**20**	**8**	**2**	**0**
Question 31	**1**	**20**	**15**	**5**	**0**

Table 4.2 displays the frequencies of responses to each question. The frequencies along with the mean and standard deviation will be used to determine what skills are most important. This conclusion will be discussed later in this chapter.

Mean for questions 1-31

Chart 4.3

Survey of Employers

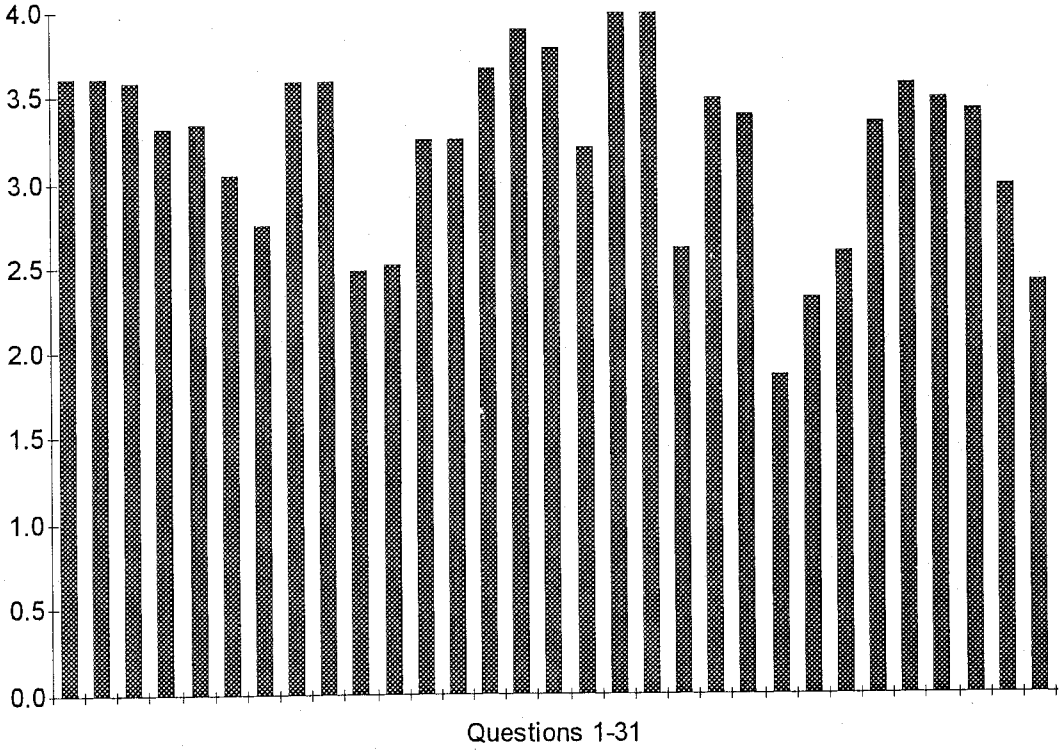


Chart 4.3 and Chart 4.4 indicate that employers rate social skills as the most important skills in recent high school graduates. Social skills are followed by basic skills, work readiness skills, higher-level thinking skills, technical skills and academic skills respectively. Employers indicate that the single most important characteristic of a first-rate employee is the ability to have good attendance and be punctual. The skill employers gave the least highest rating was the ability to spell.

Standard Deviation for Questions 1-31

Chart 4.4

Survey of Employers

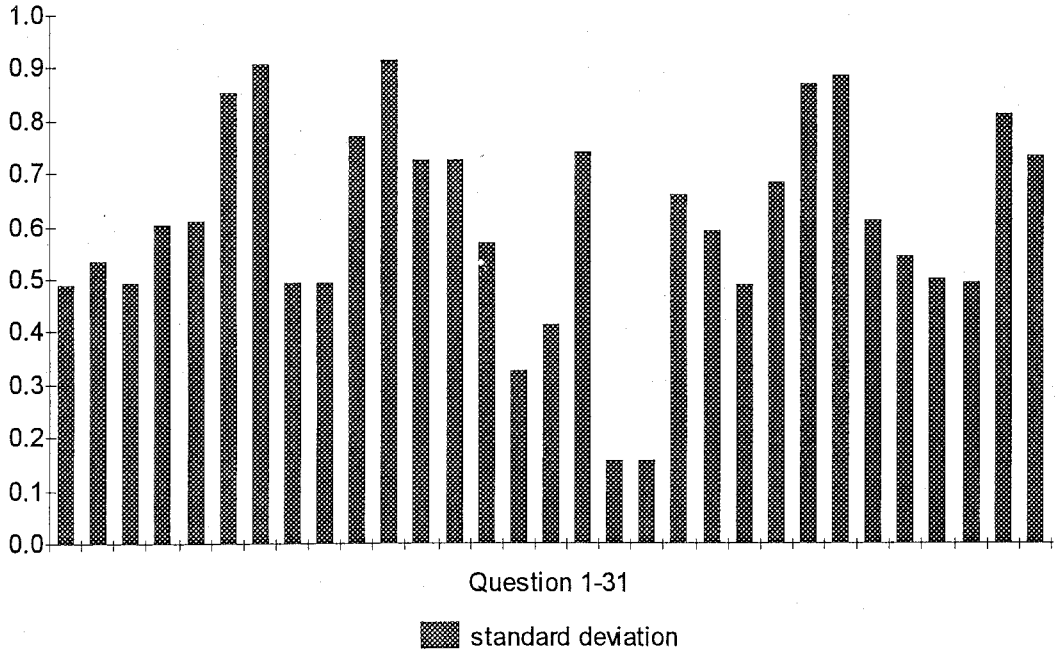


Chart 4.4 indicates that the questions about mathematics, reading, writing, spelling and grammar have the highest level of standard deviation. The questions concerning attendance, and being on time have the lowest level of standard deviation.

The questions from this survey have been sub-divided into categories. This survey includes six questions about social skills, five questions about basic skills, six questions about academic skills, five questions about higher level thinking skills, seven questions about work readiness skills, and two questions about technical skills. Questions 1,2,3,4,15,26, ask about the importance of social skills in the workplace. Questions 8,9,18,19,25, ask about basic skills such as speaking and listing and their importance to employers. Questions 5,6,7,10,11,29, ask about the significance of academic skills. Questions 13,14,16,24,27,28,31, ask about the importance of work readiness skills. Questions 12 and 29 ask about technical skills.

Frequency Table 4.6

Frequency Distribution of Questions Sub-divided Into Categories

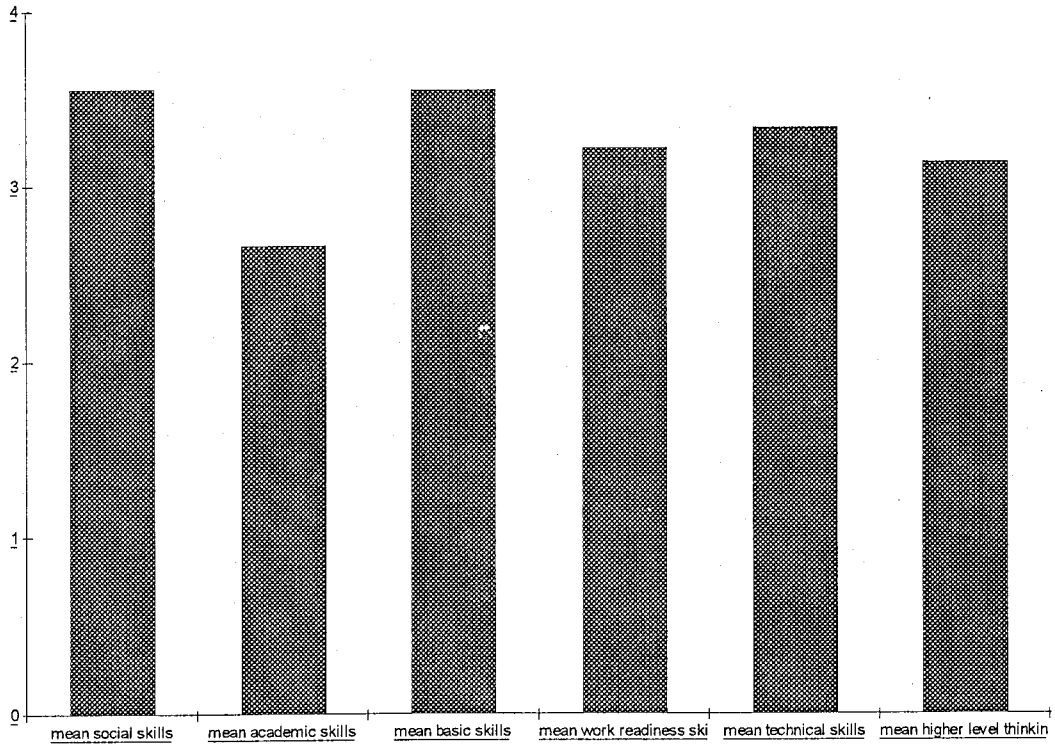
Categories of Questions	Very Important 4	Somewhat Important 3	Not Very Important 2	Not Important At All 1	No Opinion
Social Skills	172	116	7	0	0
Academic Skills	51	81	88	26	0
Basic Skills	134	44	22	3	0
High Level Thinking Skills	63	85	32	2	0
Technical Skills	58	57	8	0	0
Work Readiness Skills	97	59	56	12	0

The questions from the survey have been grouped into categories. These categories include social skills, academic skills, higher level thinking skills, technical skills, and work readiness skills. The responses have been combined by category and, are displayed in table 4.6. Table 4.6 indicates the importance of each type of skill to employers. The frequency and the mean responses to each group of questions have been used to determine what skills are important to employers. These results are presented following chart 4.7.

Chart 4.7 demonstrates the mean responses to the survey questions after the questions were grouped by category.

Chart 4.7

Survey of Employers



The results displayed in table 4.6 and chart 4.7 indicate that employers find social skills such as the ability to work with co-workers in order to settle personal differences, and general attitude toward work as the most desirable skills in high school graduates. Social skills were followed by basic skill such as attendance, listening, and speaking. Technical skills such as the ability to use tools and equipment were rank third most important. Work readiness skills and higher level thinking rank forth and fifth respectively. There was a significant drop in the ranking in the importance of academic skills for high school graduates.

Chart 4.8 demonstrates the standard deviation responses to the survey questions after the questions were grouped by category.

Chart 4.8

Standard Deviation

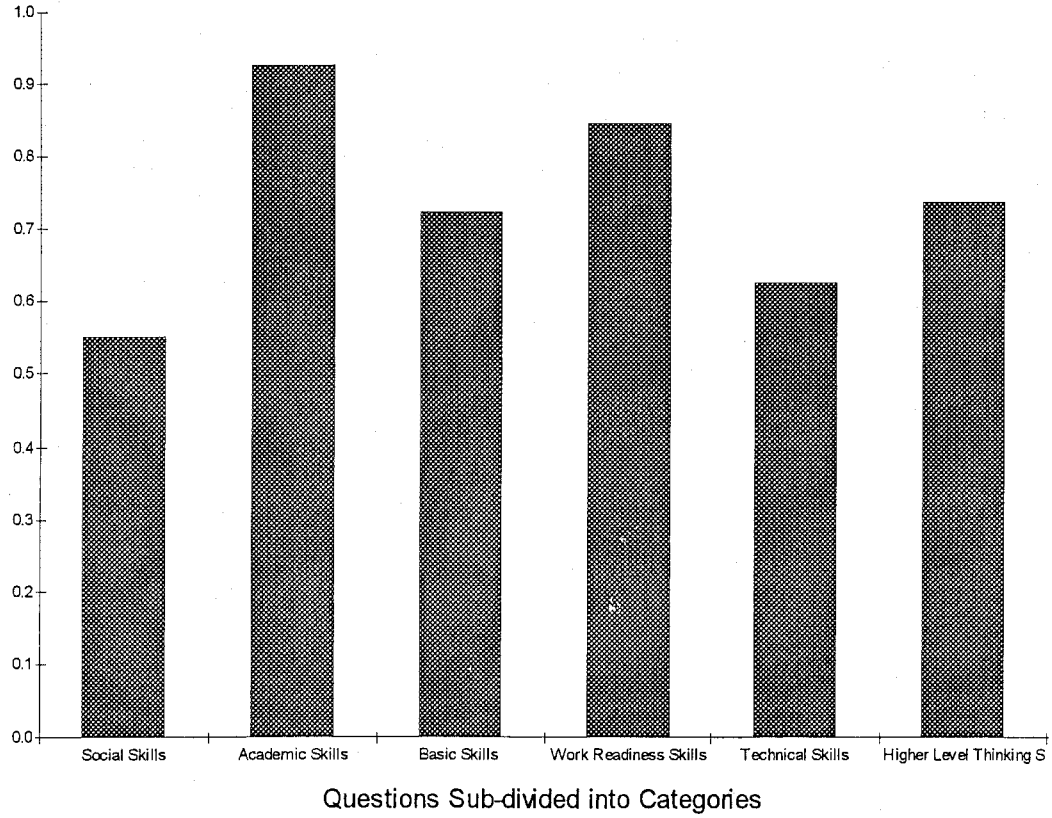


Chart 4.8 demonstrates the standard deviation of the employers' responses after they have been grouped by categories. This chart shows that academic skills had the highest level of standard deviation followed by work readiness skills, higher level thinking skills, basic skills, technical skills and social skills. This indicates that there was not a high level of agreement on the importance of academic skills, but there was a significant level of agreement on the importance of social skills.

The final two questions of the survey asked the respondents whose responsibility it is to provide training for the workplace. The employers were asked if they strongly agreed, agreed, disagreed, or strongly disagreed with the following statement.

"It is the responsibility of our high schools to provide high school graduates with a comprehensive vocational education program which leads to competencies and job preparation skills for the world of work"

Nineteen employers strongly agreed with this statement, seventeen employers agreed with this statement, four disagreed and one strongly disagreed with this statement.

The final question of the survey asked employers if they had any additional comments regarding recent high school graduates, their competencies and skills, factors relating to employment, or other general comments about high school preparation for the world of work. This was an open-ended question, and only five employers chose to answer this question, because this sample size is so small the responses to this question lack significance. These answers will be included in this section, but no conclusion will be drawn from these responses because of the lack of significance.

Employer 1:

" I feel high school should prepare all students for work in the real world. I feel they should be trained to work with others and be trained in various life skills"

Employer 2:

"Most if not all students come to my place of employment with little or no skills for the work place. Vocational training would be a godsend!"

Employer 3:

"Prospective employees who have completed vocational training in construction seem to have basic competencies and understand the construction field."

Employer 4:

"It is difficult to find students, or recent graduates that have a strong work ethic. Today's young adults do not seem to understand that when you start a job out of high school you must work your way up the career ladder. Most young adults expect to be permitted to start halfway up the ladder. They view many aspects of the job below them."

Employer 5:

I believe it is the responsibility of high schools to give the students the tools to learn, think, understand and grow after high school. The students must be responsible for developing their vocational or professional skills. This may be an

idealistic view, but four years is too short to teach someone skills that will employ him or her for the next 30, 40 or 50 years. Students must have the skills and the preparation to continue to learn."

CHAPTER 5

Conclusions, Implication and Further Study

Conclusions:

The purpose of this research was to determine what skills employers of high school graduates were looking for in high school graduates. In addition to determining what specific skills employers wanted, questions were grouped into subcategories in order to determine what type of education prepares high school students best for the world of work. The employers that were surveyed operated businesses that hired high school graduates with little, or no formal training following high school. The results of the survey questions were used to establish this information.

The major conclusions found from this research were that most employers felt that social skills, such as settling differences with coworkers, and basic skills such as attendance are very important skills for high school students to acquire before graduation. Employers could not agree on the importance of academic skills in recent high school graduates. This study also concludes that most employers feel it is the educational systems responsibility to provide some kind of educational program that leads to competencies, and job preparation skills for the world of work. Although most employers felt it necessary to provide preparation for work most do not have any partnership, or cooperative arrangement with any high school.

The current educational systems spends most of its time concentrating on academic skills even though the research shows that most students will not graduate from a four-year college. This information is supported in the literature review in chapter two.

This study has shown that there is employment opportunity for recent high school graduates from the Cape May and Atlantic County area who do not choose to attend college. These graduates can have successful careers if they enter the workforce with the proper skills. Employers are looking for employees who will be on time, and show up for work everyday. Employees must have the ability to speak and listen well enough to carry on a meaningful conversation. These employers want their workers to be concerned with quality of work, and have the ability to accept advice and supervision. Employees must also possess the ability to settle differences with coworkers, and must show a willingness to improve his or her job skills.

Schools should consider providing some type of training for students who will enter the workforce following high school. Schools could provide a transitional education program that would include vocational and technical training, leadership development, and character education. Vocational and technical education can ensure a labor market an intake of qualified skilled staff, and at the same time give young people an education and training program that is meaningful to their personal goals. This may inspire further education by providing education value for those students who no longer see the importance of high school. This will also contribute to the students' personal and social development. Leadership development can enhance, and further develop the leadership potential of students as they prepare to become the employers of tomorrow. Leadership development can inspire students to reach their educational and professional potential through individual and group interaction with business, community and political leaders. Character education programs can combine the teaching of specific skills with the opportunity to clarify personal and group values. It will help students to learn about

consequences, and see that he or she has extensive choices that will affect the future. Character education helps students set goals, recognize patterns, identify options, and then make choices. This will help students learn the social and emotional skills they need in order to live by their own principles and values.

Schools in this country do not have a connection with business and employers. Of the forty-one employers responding to this survey only one had a connection with a high school, this was a special services school. No employers had a connection with a comprehensive high school. Schools should reach out to the communities, and make a connection with employers. This has been done extensively in countries such as Germany and Japan. Our educational system should look at these countries as a model and try to duplicate their school to work programs. The first step to doing this is to expand the mentoring programs. Mentoring programs can allow students to make connection to adults who have positive attitudes, who are employed, and who care about young people. Students could choose a mentor who shares the same interest and has similar career goals. A mentor can become a role model, who can make a difference in a student's life. A mentoring program can be helpful to both students who plan on attending college, and students who will enter the workforce following high school.

This researcher is not trying to suggest that students who do not attend college will have the same type of career opportunities or financial benefits as students who graduate from a four-year college. The literature has shown that college graduates have more opportunities for financial benefits than non-college graduates. This researcher is only trying to suggest that students who do not have the academic, or financial ability to attend a four-year college should enter the workforce with some type of training.

Implication:

The results of this survey gave the researcher an understanding of the importance of a school to work transitional education program. Schools need to revise the current curriculum to include programs that will help students who do not attend college. These programs should provide a seamless transition from high school to meaningful careers. These programs could include vocational and technical programs, character education, leadership development and mentoring programs. Educators have already begun this change process. Many physical education programs in high schools now concentrate on project adventure instead of competitive games. Project adventure stresses cooperation, teamwork, communication, and planning in order to accomplish a certain task. Change cannot be forced upon teachers. Teachers must be provided with the proper time to make changes to the current curriculum. All areas of the curriculum can stress cooperation, communication, and social skills by having students work together. Teachers should be given significant professional development in order for them to understand how to successfully teach work readiness and social skills. Teachers and students should be provided with release time from school in order to become involved in the mentoring program.

Further Study:

In order to improve further study about skills employers are looking for in high school graduates, the number of employers surveyed should be increased. It would be advantageous to interview employers from a wide geographical location in order to discover if the results of the study would change as the type of employment changes.

It could also be beneficial to change the demographic of employers to determine if the results of the study would differ between urban and rural areas. A follow up interview would be helpful to allow employers to clarify their answers.

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Appendix A

Letter to Employers

Christopher Armstrong

7 McDonald Dr.
Seaville, NJ 08230

Mr. Oves
Oves' Seafood Restaurant
4th and Boardwalk
Ocean City, NJ 08226

Dear Mr. Oves:

My name is Christopher Armstrong and I am in the process of conducting educational research. Only through the communication of the business and educational community is educational progress possible. I know this is a busy time of year, but I would appreciate a few minutes of your valuable time. It has come to my attention that your business hires many recent high school graduates. Most of these graduates come to your business with little or no training following high school. Through my research I hope to determine what types of skills employers are looking for in high school graduates. Enclosed you will find a survey. This survey should take less than ten minutes to complete. Please complete this survey, and return it in the enclosed addressed stamped envelope. Thank you in advance for your help.

Sincerely,

Christopher Armstrong

Appendix B

Survey of Employers

1. What is the major activity of you business? (Check one)

1. _____	Farming	6. _____	Retail Trade
2. _____	Construction	7. _____	Finance, Insurance, Real Estate
3. _____	Manufacturing	8. _____	Service
4. _____	Transportation Communication		
5. _____	Wholesale Trade	9. _____	Recreation
		10 _____	Other _____

Does your business employ recent high school graduates of dropouts? (Check each of the appropriate categories below.) Also indicate to the right of each category the approximate

2. How many years has you business been in operation? Number of years: _____

3. What was the average number of employees in your business during the last 12 months?

   Number of employees:_____

Does your business have a linkage, partnership, or cooperative arrangement with a high school or post-secondary? Vocational-Technical and Adult Education system?

High School	_____ Yes	_____ No
Vocational-Technical and Adult Education System	_____ Yes	_____No

If yes, please indicate the name, address, and telephone number of a person in your business to contact for information about the linkage, partnership, or cooperative arrangement.

Name:_____

Address: _____

Telephone:_____

Directions: Please rate the importance of job preparation skills for high school graduates who may apply for a job at your business within the next three years. (Circle your answer using the 4-point scale for each of the competencies or skills)

COMPETENCIES/SKILLS

	Very important	Somewhat Important	Not very important	Not important at all	No opinion
Ability to work with co-workers, settle differences	4	3	2	1	9
Willingness to improve skills on the job	4	3	2	1	9
General attitudes toward work	4	3	2	1	9
Understanding the value of work	4	3	2	1	9
Mathematics	4	3	2	1	9
Reading	4	3	2	1	9
Writing	4	3	2	1	9
Speaking well enough to be understood	4	3	2	1	9
Listening well enough to understand	4	3	2	1	9
Spelling	4	3	2	1	9
Grammar	4	3	2	1	9
Use of tools and equipment	4	3	2	1	9
Quantity of work, output of satisfactory amount	4	3	2	1	9
Quality of work, accuracy and level of waste	4	3	2	1	9
Accepting advice and supervision	4	3	2	1	9
Ability to follow through on assigned task	4	3	2	1	9
Initiative, ability to plan and direct own work	4	3	2	1	9
On-time	4	3	2	1	9
Attendance	4	3	2	1	9
General knowledge of how business operates	4	3	2	1	9
Ability to recognize a problem and solve it without being told	4	3	2	1	9

Ability to make a decision within their scope of work	4	3	2	1	9
Understanding the American economic system	4	3	2	1	9
Applying and interviewing for a job	4	3	2	1	9
Understanding personal health	4	3	2	1	9
Good appearance (including grooming and dress)	4	3	2	1	9
Safety conscious	4	3	2	1	9
Flexible	4	3	2	1	9
Specific skills required to perform the job	4	3	2	1	9
Applying job skills to a new task or situation	4	3	2	1	9
Understanding career ladder and career advancements	4	3	2	1	9
Other (specify):	4	3	2	1	9

In light of the fact that about 60% of recent high school graduates do not complete either a post-secondary vocational or collegiate program, how much do you agree with the following statement?

> "It is the responsibility of our high schools to provide high school graduates a comprehensive vocational education program which leads to competencies and job preparation skills for the world of work."

Strongly agree

Agree

Disagree

Strongly disagree

If you had any other comments to make regarding recent high school graduates, their competencies and skills, factors relating to successful employment, or other general comments about high school preparation for the world of work, please write below.

What is the name and telephone number of the person responding to this questionnaire?
Name:_____ Telephone: ( )_____

Title: _____

Biographical Data

Name	Christopher Armstrong
High School	Ocean City High School Ocean City, NJ
Undergraduate	Bachelors of Science Health and Physical Education Trenton State College Trenton, NJ
Graduate	Master of Arts Educational Leadership Rowan University Glassboro, NJ
Present Occupation	Special Education Teacher Egg Harbor Twp. High School Egg Harbor Township, NJ