CAREER DEVELOPMENT STUDENTS WITH LEARNING DISABILITIES

by

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Abstract

“What do you want to be when you grow up?” This is a question that everyone has been asked and one that everyone has asked. For students with learning disabilities, this question is one that does not foster hope and excitement; this is the question that creates dread and frustration. Students with learning disabilities struggle through school without seeing the meaning in education as pertains to their life and future career. Findings from career development and exploration studies along with what is already known about the outcomes for students with learning disabilities will be synthesized within this paper so as to define better practices to assist our students with learning disabilities in their fight for a more meaningful future.
Chapter I:
Introduction

While working at our local hospital as a housekeeper, there were many conversations about how bad housekeeping jobs were. The majority of the women involved in the conversation, did not have any education past high school. The majority of them did not have any career dreams when children. One of my favorite questions to ask high school kids is, “What do you want to be when you grow up?” The answers to this question are always interesting and tell a lot about each student. Even my own father, a truly gifted builder, a profession he happened into, said he wanted to be a Marine Biologist when he grew up. In the movie “Mr. Deeds,” the main character asks a room full of successful businessmen if their current careers were really what they had always dreamed they would be. Ironically, one man said that he had always wanted to be a Veterinarian but currently ran a chain of slaughterhouses. How do some people get so far from their dream job and how do some people never even have a dream job?

Selecting proper goals and appropriate career aspirations is a struggle for students with learning disabilities. While working with freshman students, in the spring of 2008, this struggle was quite apparent and concerning. These students were all learning disabled, to different degrees, and only a few of them were even in general education classes. Very few of these students will be graduating from high school with a standard diploma. While completing an interest survey about careers, they all answered "yes" to questions concerning subjects they have never studied. When talking to them about "what they wanted to be when they grew up," the responses varied from veterinarian to underwater welder to air traffic controller. These students because of their lack of maturity were not making informed, realistic choices. When we are kids,
we think we can be anything and do anything. How many kids wanted to be police officers or doctors? As we get older, those aspirations change as our experiences and personalities change. Lindstrom (2002) referred to this change in attitude as the development of occupational aspirations. According to Rojewski (1996), occupational aspirations are formed by our knowledge and beliefs about ourselves, or self-concept. Obtaining a successful, satisfying career is not based on these students’ occupational aspirations but come from their reflection of past experiences and the barriers that they see (Rojewski, 1996). If occupational aspirations are generated based on past experiences and perceived barriers, then these students know at least what they like to do, but need help directing those aspirations into reality.

Career exploration and vocational training are mandatory but not always practiced thoroughly (Lindstrom, 2002). Reforms pertaining to career exploration and vocational training are being made throughout the country (Shin, 2000). Many ideas and options for creating positive outcomes for students with learning disabilities exist; the matter is now promotion and implementation.

Career awareness and exploration have to begin earlier than currently practiced. Just this semester, a freshman student with learning disabilities was asked what his plans were for after high school. His response, “I don’t know. I have a few more years to think about it.” This does not seem to be a valid argument, however. According to a survey conducted in Oklahoma, 50% of parents thought schools should provide information on career exploration (Arrington, 2000). Career explorations should be a lengthy process throughout a student’s educational experience. Students need to be prepared for the possibility of college, employment, finances, keeping a home, and having positive social relationships. Creating better career development programs, that begin at an earlier stage, especially for students with learning disabilities, can prepare them
for their future and ensure the relevance of their education.

From experience participating in a transition meeting for a sixth grade student, the process was not very extensive and resembled just another hurdle to be jumped or another blank to be filled in. Exploration and inquiry into what this particular student really needed or wanted for their adult life was sorely lacking. If transition plans are mandatory, why are they not given much thought and development? Mandatory transition plans are a perfect start to what students with learning disabilities need for future planning. Within these transition meetings, a student’s strengths and weaknesses are discussed as are what they need from their teachers to be successful. This information, although included on the students IEP, is just words on a page. No further steps are taken with this information. No further discussion of what might be necessary for this student to have their dreams realized. Educators, guidance staff and schools can offer this development for their students with learning disabilities.

Fortunately for those interested in developing better career programs for middle school students with learning disabilities, these students are not weighed down by frustration and poor attitudes. In a study on relevance of school to career, Johnson (2000) discovered that, when asked “How useful is school?”, in general, most of the 6th and 9th grade students rated school as useful. When comparing these responses between grade levels, the researchers found that 6th graders still truly believed that school was more useful to their future careers than the 9th graders (Johnson, 2000). These 9th grade students had already developed dissatisfaction over their school experience and had given up. When referring to students with learning disabilities, the frustration that is felt is even greater and more ingrained in the psyche. When these students began school, they experienced learning difficulties that may not have been diagnosed until after the damage of falling behind and poor grades had already sunk in. Even after a diagnosis and
appropriate accommodations, educators continue to throw new and important information around and the perceived hole some students with learning disabilities find themselves in, gets deeper and darker.

Definitions:

**School Engagement**: “School engagement involves positive attitudes toward school, teacher, classmates, and academic learning…” “Students with high levels of school engagement tend to be actively involved in their schoolwork…” (Kenny, 2006, p. 272)

**Career Planfulness**: “…involvement in career planning activities and knowledge of occupations.” (Kenny, 2006, p.274)

**Career Awareness**: “…not only helping students become aware of career clusters o groups of occupations…helping them understand the role of work.” (Arrington, 2000, p.104)

**Career Exploration**: “…helps students discover their individual interests, abilities, career values, and needs by exploring jobs and how they fit into the world of work.” (Arrington, 2000, p.104)

**Self-Efficacy**: “…whether or not they believed themselves capable of successfully performing the educational and job duties for each career.” “…confident of their ability…” (Lapan, 2000, p.220)
Chapter II:

Review of Literature

Setting the Stage for Career Development

The concept of school engagement is a one that educators and parents fight for everyday. Students are not always “present” in their educational career and rarely see that what they are learning, will affect their future. This future is not only affected by a student’s level of school engagement, but also by that student’s level of preparation. One way a student can prepare for their future is through career development and all the parts contained within that concept.

Kenny et al. (2006) intended on explaining the relationship between school engagement and career development. More specifically, the most important focus of this study was how career development and school engagement were related across a given time period. Participants for this study were 9th grade students recruited from a larger study of 883 students. The students chosen for this particular study had completed two questionnaires administered by University faculty. The 416 students within this study were from two large schools located in the urban northeast where 85% of the student population was Black or Hispanic with this same percentage of students qualifying for the free or reduced lunch program within their school. The majority of students within the study were either 14 or 15 years of age with female students representing the majority with 51%.

Facilitators of this study used three different questionnaires to generate qualitative research concerning school engagement and career development (Kenny et al., 2006). The first was the Identification with School questionnaire. This questionnaire is meant to assess the emotional aspects of school engagement like the degree to which students feel a sense of belonging to their school community. The second instrument used for this study was the
Outcome Expectation Scale (OE). This scale uses a Likert 4-point scale to assess a student’s career expectations. The third instrument used was the Career Development Inventory, or CDI. This inventory is used to gauge a student’s level of planfulness for the future. Low scores on the CDI suggest a low level of planfulness, while higher scores suggest the student is aware of career planning and the need to take part in career exploration. Like the Outcome Expectation Scale, the CDI uses a 4-point Likert scale for students to rate their knowledge.

Again, the focus of this study was how career development and school engagement were related across a given time period. The authors of this study named career development as a latent variable that is defined by both career planfulness and expectation (Kenny et al., 2006). School engagement was named as another latent variable that is defined by a sense of value and belonging. These two variables, evaluated at two different times, were analyzed as a two-wave cross-lagged path. From this analysis, it was found that the levels of school engagement, at Time 2, were better predicted by examining the career development levels at Time 1. Along with this finding, the authors of the study report that connection from career development to school engagement is stronger than the opposing direction.

Kenny et al. (2006) found a strong relationship between career development and school engagement over a given period of time. Indications are that higher levels of career planfulness and expectations are associated with school engagement, but school engagement does not lead to career development. According to Kenny et al., the 9th grade students entering high school with a higher level of career planfulness and positive expectations for school in general, were more likely to develop the sense of belonging, but that this engagement in school itself does not mean a student will raise their level of career planfulness. What this connection suggests is that an internal motivation and education that is deeply valued have to be an underlying belief in
students.

One limitation of this study is that the information on the students that are most disengaged is limited. This means that perhaps a true study of school engagement, or the lack of school engagement, cannot be really qualified. However, this limitation lends itself to making a connection between this study and the career development issues of students with learning disabilities. Many students with learning disabilities are not engaged in school due to a "history of frustration and failure" within school. (Morrison, 1997, p.53) Positive expectations, like those needed to heighten the levels of career development, are also often lacking in students with learning disabilities. Students with learning disabilities tend to see themselves as “dumb” and unable to be good at schoolwork. Unfortunately, by the time these students get to middle school and high school, this belief about themselves is so ingrained, that there is very little that can be done to hurdle it. Students with learning disabilities are particularly affected by the finding that school engagement is not a predictor of career development. Students with learning disabilities need higher levels of career development because they have to work harder to overcome more obstacles than the average student.

The Relevance of School to Career

In 1983, the Department of Education, through its article, "A Nation at Risk," advised that steps needed to be taken so that American students did not fall behind other countries (Johnson, 2000). The United States changed their educational system by requiring higher graduation standards, making curriculum more rigorous, and by assessing outcomes in schools. Even though these steps were taken, an international study done in 1994 showed that American students still finished last in being able to apply their classroom knowledge to real-life problems as compared to ten other countries included in the study (Johnson, 2000). This suggests that what
our students are learning either cannot be connected to the outside world, or that our American students are not able to make those connections freely. This study was developed to gauge the level of student awareness in regards to the relevance of school and how that relevance is related to career development.

In order to create this study, the authors chose 6th and 9th grade students because it is at these two time periods that students face a "critical juncture" in their educational experience (Johnson, 2000). These students came from a primarily white, middle-class school in Long Island, New York. Students numbering 389 were originally chosen with only 373 6th and 9th graders actually used for analysis. The authors concede because the sample of students used came from a relatively advantaged area, the sample may not have been the most representative of all socioeconomic factors. Between the two grades, there were an equal amount of males as females with 52% of the students in the 6th grade and none of the students identified as learning disabled (Johnson, 2000). Both sets of students were interviewed over a period of two days in their Social Studies classes by graduate students who thoroughly described the task, read the questions aloud, and checked students for understanding. The original instrument the author used in this study was designed specifically to meet the goals set forth by the study. According to Johnson, this type of instrumentation, with open-ended interview questions, most accurately measured the level and nature of a student’s awareness about the relevance of school. The protocol items in this qualitative instrument were developed to connect with the students competencies in career planning, self-knowledge, and educational and occupational exploration. Two examples of questions contained in this protocol were, “What classes can you recall in which the teacher talked about how the subject relates to employment or careers?” and, "What are some of the ways the knowledge, skills, and attitudes you are learning in your favorite
subject might be used in the future?" Analysis for this study was done by content analysis, a
coding system according to behavioral research, and was also analyzed using statistical software.
Johnson (2000) identified four findings: Student awareness of the skills, knowledge, and
attitudes needed for success; Student perceptions regarding the education and training needed for
career success; Student perceptions about the relevance of school; and, Student expectations
about future employment.

**Student awareness of the skills, knowledge, and attitudes needed for success.** The first few
questions researchers asked the participants in this study, were meant to assess the students’
overall awareness of what was needed to be successful in the world of work. Only 52% of the
students were able to name one skill that would lead to success in a career (Johnson, 2000).
These responses were then broken down into computer or technical skills, job specific skills,
communication skills, problem-solving capabilities, and interpersonal skills. Again, when
answering the second part of this issue, the majority of students could identify a form of
knowledge that would needed for future career success. Getting an appropriate education was
named most by participating students as knowledge they would need. Having job-specific
knowledge or coursework in a specific area and possessing general intelligence were the other
forms of knowledge these students named as important. As noted by the authors, none of the
students mentioned what they were currently learning as important knowledge to have for their
future careers.

The students then were asked how students can develop necessary skills and asked what
steps had they already taken to develop their own skills, knowledge, and attitudes needed for
career success (Johnson, 2000). These students responded that doing well in school and
participating in extra-curricular activities were ways of acquiring career skills. Very few
students had a response for how they themselves were developing career success skills. “Planning for post-secondary education or training” was named by only 3% of the students as helpful for future career success (Johnson, 2000). Other responses given were: gathering career-related information, seeking out special help or tutoring, and developing computer proficiency. Again, as noted by the authors, these students did not refer to the subject matter and skills they were currently learning as preparation for career success.

*Student perceptions regarding the education and training needed for career success.* After assessing students awareness as to what is needed for future career success, the interview protocol then addressed how these students regarded their education and its relevance to career development. When asked to identify any form of education or training needed to have career success as an adult, 58% of the students’ responded that a college degree would be most helpful (Johnson, 2000). Within their personal goals, 75% of the participating students said they intended on earning a Bachelors, Masters, or Professional degree in their future. This result is interesting because when previously questioned, none of these students named their current educational experience as preparing them for career success perhaps meaning that the knowledge they believe necessary would only come from college or vocational experience.

*Student perceptions about the relevance of school.* In assessing how students felt school was relevant, the authors of this study employed a close-ended item (Johnson, 2000). The question posed was “How useful is school?” The results of this item showed no difference in gender, but a large difference between the two grade levels examined. The 6th grade students saw school as very useful to their future success, whereas the 9th grade students did not share in this belief. The authors of this study draw the unsubstantiated conclusions that this discrepancy is perhaps because of their increased sense of frustration and dissatisfaction.
Again, when speaking to relevance, the students were asked to name their favorite subject and how what they had learned in that class could be used in their careers. Eighty-eight percent of these students were not aware of any connection between their favorite subject and how that would help them to be successful (Johnson, 2000). When asked to name all the classes that discussions took place concerning how that subject related to careers, 20% of the students were not able to answer. Over half of the participating students said that studying career-specific subjects would make school more relevant. Conclusions from this finding seem to mean students do not see the “utility” of their general studies (Johnson, 2000).

*Student expectations about future employment.* Two questions were asked of the students in order to assess their expectations about future employment. First, students were asked what their expectations were for their future work. The majority of students responded that they were optimistic about their future work with 86% responding that their future employment would “…make good use of their abilities.” (Johnson, 2000, p. 270) However, only 37% agreed that their current studies would relate to their future employment.

The second question asked the students what kind of career they pictured for themselves. For this study, the actual careers these students were aspiring to were not as important as how they made those choices and what their career aspiration involved (Johnson, 2000). Four factors were found to be most important when choosing their career aspirations. Students’ personal interests received 75% of responses, followed by abilities, values, and parental influence with only 6% of responses. When asked to elaborate on what was involved in their career aspirations, 87% of the students had little or no awareness as to what was actually involved in their career choices. The 9th grade students only had a slight advantage in awareness. The researchers’ assumption is that this sense of awareness should increase as students progressed, but the very
small difference between the 6th and 9th grades demonstrates that, without intervention, age and grade by themselves does not increase career awareness.

Conclusions of this study seem to be that students do not see the relevance or connection in what they have to do at school every day to what their future careers may be. These students see schoolwork that is relevant only if it is career-specific. According to the authors of this study, there is a need for schools to do more to build “learning pathways” (Johnson, 2000). Educators must understand that making connections between their content-area and the outside world does not diminish what they are teaching, but enhances it and makes learning more useful to the student. Learning geometry because knowing the supplementary angles theorem will change their futures is not necessarily true; a link exists between learning so that we know and learning so that we can do (Johnson, 2000). The actual solution to a proof in geometry is not as important as the problem-solving skills used to get that solution.

This linked concept of “learning to know and learning to do,” lends itself to the plight of students with learning disabilities as well. In a study conducted by Johnson (2000), students chose careers based on their interests and abilities, but did not know what that career entailed. From my experience with freshman students with learning disabilities, careers were chosen by the students because it was something they liked to do. For instance, one freshman girl with whom I worked reasoned that because she liked animals, she was going to be a veterinarian. However, this student was not planning to take a high school biology class. When asked by facilitators of the study done by Johnson about one essential attitude for success, the majority of participating students agreed that having a positive attitude was most important (Johnson, 2000). Students with learning disabilities, however, often have a negative attitude toward school because of a history of failure. College-bound students tend to see the relevance in the work they
do at school. Those who may not be headed in the same direction, do not perceive this same relevance. As these students go on in their high school careers, they may lose any direction for the work world that they may have had due to the lack of perceived connection between what they are currently learning and their future careers. It seems as though students with learning disabilities derive no real meaning from school; school is just something to endure for four years until they get their diplomas and enter the world of work.

_Efficacy and Vocational Interests of Seventh graders_

To most people, seventh graders are still just kids, but more attention regarding career development is being focused on this grade level (Lapan, 2000). Middle school students are making more decisions that will affect their career and educational goals (Arrington, 2000). The practice of middle school students making more career decisions is not modern, but has been occurring for several years. A survey conducted in Oklahoma in 1998, asked parents several questions about career exploration including when they felt schools begin to provide information about different careers. Over 50% of the parents surveyed wanted their schools to begin career exploration at the middle school level (Arrington, 2000). According to the National Education Longitudinal Sample of 1988, it was found that middle schools students are more likely to seek advice from their peers than from qualified adults in their schools like the guidance staff. This is unfortunate in that guidance counselors can reach more students and can focus more attention on career exploration.

A study conducted by Lapan (2000), explored the “efficacy patterns” and “vocational interest” of 7th grade students. 68 Sixty-eight girls and 44 boys participated in the study (Lapan, 2000). Most of the students came from a diverse middle school in a predominantly lower middle class, Midwestern city (Lapan, 2000). Collaboration between guidance and social studies
teachers helped to create a four-week career exploration class which was led by the first and second author of this study.

For the purpose of this study, 45 careers were selected for exploration (Lapan, 2000). These careers represented Holland’s six themes and were further broken down into: twelve Realistic careers, nine Investigative, nine Artistic, five Social, five Enterprising, and five Conventional careers. Data for this study was then collected by using the *Mapping Vocational Challenges* workbook, or MVC. Contained within the MVC workbook are activities for classes, “maps” to track interests and efficacy, and occupational materials to discuss.

To begin this study, the authors first presented information on all 45 careers in order to make sure that each student had -background knowledge before answering questions. After the presentation of materials, the students were asked to select the 15 careers they liked best and least as listed in the MVC workbook. Of these 30 careers chosen, the students were then asked to rate them numerically assigning a one if there was low interest; a two is medium interest; and, a three if there was high interest. These numbers would be later used during the study.

The next task these students had to complete was to create a grid to compare interest levels, gender domination, and self-efficacy judgments concerning the careers students chose in the first step. In making self-efficacy judgments about themselves, the students had to decide whether they believed they would able to perform what was necessary for a particular career. At the completion of this portion, the students ended up with a color-coded grid showing 15 careers in which they were interested. This visual then provided the students a chance to compare their interests to their self-efficacy. Cluster analysis was utilized in order to assign statistics to the interest and efficacy patterns tested throughout this study (Lapan, 2000).
Results from this study demonstrate that both boys and girls in the 7th grade, understood “employment pattern difference” between genders and across Holland’s six themes (Lapan, 2000). Through this understanding, the 7th graders also recognized a large gender difference across the six themes. The 7th graders rated men more likely to be employed in Realistic careers as opposed to Investigative and Enterprising career. Women, as rated by the students, were more likely to be employed in Social careers. Efficacy ratings seemed to be directed by the perceived gender differences as well. Realistic careers earned more interest from boys, while girls expressed their interest and efficacy with Artistic, Conventional, and Social careers (Lapan, 2000).

The study demonstrated that these 7th grade students wanted to have a career discussion. According to the author, these students were eager to talk about all aspects of career exploration from salaries to required coursework to necessary training (Lapan, 2000). The participating students were able to create a visual representation to help guide their career development and exploration. Observations of the study and its results are concerned with gender differences. This is concerning because of how the boys and girls fell into perceived traditional roles. Of course, the purpose of this study is not to reverse gender bias, but it would be useful to take this study for the promotion of a non-traditional career discussion. Lapan notes that for future replication of this study, more diverse samples of middle school students should be utilized. Lapan also noted that some data could be different depending on whether it was gathered in a classroom or individually.

The role of efficacy is an important factor for students with learning disabilities and creating a visual map like the one generated in this study, would be truly beneficial. Helping to foster self-efficacy in students with learning disabilities might lead to better career exploration
practices. According to Kerka, (2002) three basic necessities exist for students with learning disabilities to achieve in order for them to be successful: a) self-knowledge about their personal abilities, skills and interests; b) an understanding of what is expected in the work world, in general, as well as for particular jobs; c) chances to match personal abilities to a fitting career.

Although these three studies do not address students with learning disabilities directly, the results and conclusions drawn from the research contain concepts that need to be mastered by these students. Having career awareness can help middle school students begin to make appropriate choices towards their future. Developing their self-efficacy can help students with learning disabilities build on what their strengths are. Making school relevant can add meaning to these students school day. Combining all these concepts can lead to greater school engagement for middle school students with learning disabilities.
Chapter III:
Results and Analysis Relative to the Problem

What are the characteristics of effective career development programs for students with learning disabilities in middle school? There are studies on career development and exploration, and studies on what students need for future success, but very few, if any, that include career development for students with learning disabilities. However, there is an abundance of literature concerning the outcomes for students with learning disabilities after their formal education ends. This literature connected to the research done on career development, should create a better picture as to what educators and schools can do for our students with learning disabilities.

No one person can dispute that without interventions and support, the adult outcomes for students with learning disabilities can be bleak. Morrison (1997) stated that some of those negative outcomes include emotional distress or problems, social problems, lack of personal independence, prolonged dependence on parents, lack of living skills, and obtaining employment especially satisfying employment.

Students with learning disabilities are more likely to experience lower job status, lower wages, having few or no benefits, and the nonexistent possibility of promotion (Lindstrom, 2002). Female students with learning disabilities see an even more desperate career situation than male students with learning disabilities or female students without disabilities.

Students with learning disabilities tend to be less career mature, meaning they are not ready or able to make decisions concerning their education or career path (Rojewski, 1996). The lack of career maturity facing students with learning disabilities has several parts: a) greater reliance on others; b) difficulty targeting strengths and weaknesses; c) less involvement in decision making; d) less willingness to accept the difference between what they want and what
they need; e) less knowledge of the workplace; and, f) lack of ability to select appropriate goals (Rojewski, 1996).

Adults with learning disabilities, for the most part, come out of their public school education with a "history of frustration and failure." (Morrison, 1997, p. 45). Because of weak verbal skills and a denial of disability, these adults often have not developed adequate coping possibilities or general strategies. The dropout rate for students with learning disabilities is depressing. According to Morrison (1997), students with learning disabilities experience a dropout rate of between 33% and 47%. Students with learning disabilities who dropout are not only individually impacted, but society is affected as a whole. Dropping out of high school leads to extended economic and social disadvantages to the students that choose that path.

The presence of a learning disability is not a risk factor for economic and social disadvantage, but in combination with other stressors and a lack of family or school support, secondary problems can develop (Morrison, 1997). The presence of a learning disability can put students at risk for depression and anxiety because of the feeling of frustration, lower achievement, and due to the part of the brain that may be affected by a learning disability.

Though research may depict a gray future for students with learning disabilities, we know how and what these students need to circumnavigate perceived barriers on the road to success. We all want to be the best people we can be and to find how we fit into the world. This idea of "Goodness of fit," offered by Morrison (1997), refers to how a child fits into a family. This is an important factor; how a student fits into their family could be a predictor of success or stress. This same theory could apply to the "goodness of fit" within a classroom. When students feel comfortable, they often will at least try their best and will try to succeed.
Experts agree that students with learning disabilities need "hands-on" opportunities to ignite interest in careers and to clarify their personal career goals (Lindstrom, 2002). Lindstrom (2002) offers four factors to aid in the success of students with learning disabilities by offering the following: self-directed planning, goal-setting, self-advocacy, and self-determination. Part of achieving in the above four areas, is also making sure that students with learning disabilities are knowledgeable about their disability. A local special education teacher shared a story about her seventh grade students with learning disabilities in her resource room. She mentioned to them that she would be absent because she and other special education teachers would be attending a conference. Her students asked, "You're a special education teacher?" These students had no idea that they were in fact special education students modeling a complete lack of self-awareness. Knowledge of their disability equals suffering less vulnerability to the disability (Morrison, 1997). Students who have knowledge of their disability also have self-awareness, are able to ask for assistance, and can build on strengths. The disability itself cannot be controlled. Students with learning disabilities need to concentrate on what they can control like building on their strengths and developing strategies for success.

Family adaptation is another component of helping a student with learning disability have knowledge and control over their disability by providing acceptance and less stress. There is an understanding of the disability; that the disability is not the whole child (Morrison, 1997). This past marking period, while participating in an IEP meeting, this concept of family acceptance was very evident. The mother discussed that the family works together to ensure the success of every member and was quick to point out the strengths that her daughter had developed. This family had mastered the idea that there were things they could control, and things they could not. The fact that their daughter has trouble reading is not something they spend energy on; their
energy is spent on finding alternative ways to help their daughter. Within this family, there is no child left behind.

Schools need to be a safe place for its students. Schools act to protect their students from the impact of the risks in the world (Morrison, 1997). By teaching or promoting self-efficacy, self-concept, and new opportunities, this preparation and protection can take place. The New Freedom Initiative in 2001 promotes career exploration in all areas, improves opportunities; and creates meaningful, competitive, and integrative careers (Hart, 2004). The IDEA reauthorization Act of 1997 was also very important for students with learning disabilities in that more general education classes became available and that assessments applied to students with learning disabilities as well (Shin, 2000). The IDEA 1994 Work Opportunities Act was written in to order to increase the opportunity of students with learning disabilities to obtain high skill and high wage careers (Lindstrom, 2002). It is with these pieces of legislation that a path has been created for students with learning disabilities in the workforce. Now is the time to go further with the implementation of new ideas and changes in thought concerning students with learning disabilities in the world of work. Students need to identify what they are preparing for. Ideally, the educational system would fit to each student but until this occurs, educators can help students make their experience more relevant for their individual futures.

With what is known about students with learning disabilities and their post-secondary outcomes, how does the research on career development connect to our students with learning disabilities? Five main concepts have emerged from the research: self-efficacy, vocational interests, relevance, self-awareness, and school engagement. These concepts directly apply to students with learning disabilities in the middle school and their career development plans.
According to Arrington (2000), students at the middle school level are making more choices that will affect their futures. This is especially evident in Michigan with the goal that every child who earns a diploma be college-ready. Although many students with learning disabilities will not attend college, the ideals behind being college-ready apply to those students as well. Either way, having children be college-ready means that their education building up to graduation has more relevance.

The concept of relevance could be better expressed within our schools especially for those that struggle with certain areas. For instance, the reason for learning math, as should be expressed to all students, is to foster problem solving skills. To a 7th grader, it may not seem that dividing with decimals is pertinent for their future, but the process and thinking skills required to solve a problem in math, are what all students need for success.

In the state of Michigan, all students earning a diploma must have 4 years of Math and English. This is a fact that our students cannot change. These students, especially those with learning disabilities, must take this requirement, mold it to fit what their needs are, and then find relevance for their future. For instance, if a student knows that their future career will require them to know how to do technical writing, that student should make sure to enroll in the English class that best fits what they will need for this career. In an International study completed in 1994, results demonstrated that American students still finished behind all other industrialized countries in being able to connect what they learned in the classroom to real-life applications, even though the standards for American students had increased (Johnson, 2000). Either what we are requiring our students to know is not applicable, or the delivery method of this material is not effective.
In research by Johnson (2000), almost 100% of the participating students did not refer to what they were currently learning as important or relevant to their future career success. This could be a case of both lack of relevance and low self-awareness. Being self-aware means that our students with learning disabilities know what is expected of them, what their disability is, what kind of help they can get, and other issues that are crucial for their educational success. As stated previously, students who have knowledge and awareness of their disability, suffer less vulnerability to the disability (Morrison, 1997). These students then have a higher level of self-awareness and can then build on the strengths they possess. Being self-aware, making school relevant for themselves, and building on the strengths they already have are things that out students with learning disabilities can control and work out.

Developing vocational interests is an involved process and one that cannot be completed in a short time frame. Arrington (2000) suggested that career exploration should be integrated into the general curriculum and needs to be an “on-going” process. Lapan (2000), found that 7th grade students want to have a career discussion and are excited to discuss all aspects of career exploration. These students are looking ahead to the future. This holds true for students with learning disabilities at the middle school level. These students with learning disabilities need to explore vocational interests and apply their strengths, weaknesses, and interests to the pathways they are interested in. Having a high level of self-awareness, in this case, is key to helping students with learning disabilities explore vocational options.

There exists for students with learning disabilities necessities that they must achieve for their future success (Kerka, 2002). These three necessities are: self-knowledge about a student’s own abilities, skill, and interests; an understanding of what is expected in the world of work and for specific careers; and, the chance to explore and match their personal abilities to future
careers. Self-efficacy seems to be the base for these three concepts to develop in a middle school student as well as the starting point for any one of these concepts to bloom.
Chapter IV:
Recommendations

The term career education was initially introduced in a speech delivered to the National Association of Secondary School Principals in 1971 (Evans, 1992). Since then, this concept of career education has changed the way schools prepare their students for the future. Currently, in the state of Michigan, guidance counselors introduce a program to their 8th grade students called the Education Development Plan, or EDP. As 8th graders, a computer file is created containing their current classes, as well as the chance to complete several aptitude/interest inventories. The students' EDP is updated every year thereafter. Students add their classes, and classes they may take in the following years, as well as to update their interests and possible career interests. Within the EDP program, students can search thousands of careers, which university is best suited for that career, what courses a student should take to prepare, and among many other options, the program can deliver all financial aid information for each university. From personal experience, however, the students often do not see the validity or relevance of the EDP to their future. For most, the career information is really the only aspect of the process they are interested about. The time they have to browse this information is short, though, and then not another thought is given to it until the following year when they are forced to open up their EDP and update their class information. For the plan to be effective, these 8th grade students should be immersed in the information the EDP can provide.

What schools and especially educators need to do is figure out a way to educate students for their academic life as well as for their non-academic lives. As Arrington (2000) noted, just like any other skill, career development skills need to be practiced. This is possible, if the opportunity is used, because in designating it a skill, career development can be taught and
fostered. There are students in our classrooms and schools that need more from their education than Shakespeare, Trigonometry, and Physics. Our students need life skills and our students need to know life's rules. This is where the processes of what is taught in schools are so important. Today's students with learning disabilities need their teachers to think "outside the box" and need more than a traditional education can offer.

In a report submitted by Queen’s University (1998), the idea of cooperative education was introduced as a successful, non-traditional education practice in Canada. Cooperative education is defined by a cooperative relationship between schools and potential employers (Munby, 1998). Through cooperative education, students spend a majority of their time in the workplace, while still enrolled in school full-time, being orientated about the workplace. Reflection time, meant to build on strengths and self-efficacy are also part of the process making students become more self-aware of their situation.

In promoting the idea of cooperative education, its proponents refer back to the ideal of providing a liberal education and insist that by offering cooperative education, school can properly supply a liberal education to its students. The reason that cooperative education helps to fulfill a liberal education is because "...understanding work is a part of cultural literacy." (Munby, 1998, p. 4) This means, as part of our culture, our citizens must know what is expected in the world of work. According to officials in Newfoundland and Labrador, cooperative education has the potential to "...enhance their in-school learning...provide greater awareness and understanding of the world of work."(Munby, 1998, p. 4) In the province of Alberta, cooperative education is believed to "...enable students to acquire knowledge, skills, and attitudes related to work and other life goals."(Munby, 1998, p. 4)

In some countries, students choose a career path in middle school that they follow
through with for the duration of their formal schooling and into their post-secondary education. Choosing a particular career pathway can help to focus a student with learning disabilities on what they specifically need. Building on their strengths in a chosen pathway leads these students to learn strategies to be successful. This process can also create relevance for students with learning disabilities within the new graduation requirements. Perhaps this idea of career tracking is a real possibility for our students with learning disabilities. Career development would begin at the 6th grade by introducing the students to many different careers through career pathways. In the following year, 7th graders would continue with this process but would begin taking interest inventories and other protocols to assess their state of self-awareness and self-efficacy. It would be important in this year to explore deeply the students’ needs as they pertain to career exploration and then begin a discussion about how their current school work and future schoolwork will be intimately connected to their career goals. The eighth-grade year could be spent on narrowing the field of careers and focusing their energy on only one or two. This would allow the student to design their education around their career path. This “designer” education would connect more relevance to what is needed for school and a future career. Upon entering high school, these students would already have three years of vocational background and meaning for their continued success. When students with learning disabilities are able to build on their strengths and focus their attention and energy on what they can control, more students might not think of themselves as helpless and stupid.

When 61% of students with learning disabilities view attitude as the number one barrier to their post-secondary success, more career development plans need to be implemented (Hart, 2004). This practice and implementation should not just be left to the guidance staff, but incorporated into general education classrooms throughout entire districts. Career development
and exploration need to be much more in-depth. Instead of middle school being something to endure before high school, and high school being something to endure for four years before being set free, these crucial periods in a student’s existence should be a catalyst for a better life.

Most drastically, further research can be done by studying intense career interventions on students with learning disabilities starting in the 6th grade. These students could follow a program, like the one outlined in this paper, and be evaluated while in progress. The ideal study would include students with learning disabilities from 6th, 9th, and 12th grade. The reason these students would be chosen is because they all have a different outlook on the concept of career development and are in different, very important crossroads of their lives. The study would use open-ended questionnaires that gauge these students' self-awareness, career awareness, and self-efficacy. After these questionnaires are complete, intense career exploration interventions would occur. Through these interventions, the students would become knowledgeable about careers, the role of work, the needs they have concerning career development, and where they fit into both. At the end of this aspect of the study, the students would be offered questionnaires to be completed again. These questionnaires would evaluate the intervention. Most importantly, after the career exploration process, these questionnaires would evaluate the effects of the interventions. Questions like, “What was most helpful?” and “How has the career exploration activity changed your viewpoint of your future career?” Overall, the study would provide feedback on how students see themselves and how they view career development.

The goal for education is to create lifelong learners. Adults who had positive school experiences, promote positive school attitudes with the next generation. By choosing education as our careers, educators need to create more positive school experiences. Middle school students seem to be in limbo; they still have a connection to their elementary life, but can also
see high school looming in the future. Students with learning disabilities in middle school also feel torn between their past and future and if not supported in the appropriate manner, their connection to school can suffer. By providing effective career development programs to middle school students with learning disabilities, their lives can be enhanced and they will become lifelong learners.
References


