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ABSTRACT

A research study investigated Kentucky middle school students' knowledge of career options available to them and the implementation of career education at the middle school level. A sample of 236 students from 11 middle schools throughout the state were interviewed for the research during the 1990-91 school year. Some of the findings of the study were the following: (1) approximately 40 percent of the sample reported they had not experienced any career education at the middle school level; (2) a majority of the sample reported they had selected a career path, but most of the students did not have current interests that complimented their career choice nor could they identify a personal ability they would need to perform well in their career of choice; (3) approximately three-fourths of the sample did not see the relevance of English, science, or social studies to successful performance in their career choice, and approximately 60 percent did not see the relevance of mathematics; (4) students in the sample were most likely to have experienced one career education activity of several hours duration at each grade level, such as a guest speaker, lecture, or career day; (5) most students reported they were most likely to approach a parent for career information, although many would approach a teacher; (6) mothers with higher education were more likely to initiate conversations about future work with their children than mothers with less education; (7) students from lower socioeconomic levels were less likely to have a career path than other students; and (8) school personnel felt that their schools lacked resources to provide effective career education. (Appendixes include the survey forms and a list of advisory committee members.) (KC)

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 KNOWLEDGE OF CAREER OPTIONS
 July 1, 1990-June 30, 1991

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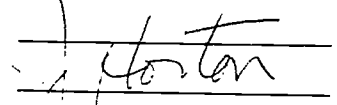
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TABLE OF CONTENTS

	Page
Executive Summary.....	6
Introduction.....	9
Project Rationale	
Study Questions	
Research Design and Methodology.....	14
Sample Description	
Procedures, Methods and Instruments	
Data Analysis	
Presentation and Discussion of Results.....	20
Demographic Characteristics	
Table 1: Frequency Distributions: urban-rural location; independent-county districts; low, average and high SES schools; geographic region of state; gender; race; grade; free or reduced lunch status; absenteeism during 1989- 1990 school year; prior retention in school	
Study Questions	
1. Have students considered or engaged in planning efforts related to their future careers?	
Table 2: Frequency Distributions: Survey Items 1, 20, 21, 12, 13, 14 and 15 pertain to whether or not students have considered or begun planning their future careers.	
2. Are middle schools students aware of how personal interests and abilities are important factors to consider when choosing a career option?	
The percentages of relevant value categories from survey items 3 thru 7 and 9 are discussed in narrative. These items pertain to students' interests and abilities as important factors to consider when choosing a career.	
3. Are middle schools students aware of how courses in school are relevant to various career options?	
Table 3: Frequency Distribution: Survey Item 10	

4. Have middle school students been exposed to basic information about career options at the middle school level?

The percentages of relevant value categories from Survey Items 25 through 28 and 33 are discussed in narrative. These items pertain to students' exposure to career education at the middle school level.

5. Have students received information about prerequisite educational and training requirements of various career options, especially for those careers which the students are currently considering?

Table 4: Frequency Distributions: Survey Items 16, 17, 30 and 31 pertain to students' knowledge about the educational requirements of the career they are currently considering.

6. Are students aware of key people who could assist them through the process of career planning?

Table 5: Frequency Distributions: Survey Items 18 and 19 pertain to students' knowledge of key people who can assist them with planning for future careers.

7. Have middle school students received information about careers which are new or "emerging"?

Table 6: Frequency Distribution: Survey Item 34

8. Have middle school students received information about careers which are "nontraditional" for individuals of their gender?

Table 7: Frequency Distribution: Survey Item 38

9. Are students who have experienced career education in middle school more likely to have considered future career options?

The results of Chi Square Analyses of a survey new item, "Students who experienced career education" by items 1 and 20 are discussed in narrative.

10. Are students with poor self esteem less likely to have engaged in career planning efforts?

The results of Chi Square Analyses of a new item created to measure Self-Esteem (which was recoded to reflect low, moderate and high self-esteem) by items 1 and 20 are discussed in narrative.

11. Are parents of various educational levels more or less likely to discuss careers in the home?

The percentages of relevant value categories from Survey Items 53, 56, 46A, 46B and 47 are discussed in narrative. The results of Chi Square Analyses of items 53 and 56 by 46A, 46B and 47 are also discussed in narrative.

12. Are students of the following groups more or less likely to have experienced career education at the middle school level or to have engaged in future career and educational planning (male-female, minority-nonminority, at risk-non-at risk, urban-rural location, low-positive academic self-esteem, and grade levels). Also, were any other meaningful differences noted among these various groupings of students in regard to the other variables examined in this study?

The results of Chi Square Analyses of demographic characteristics by survey items 1, 20, and 25 for relationships which were statistically significant (at a minimum of .10) are described in narrative. In addition, several other relationships which were theoretically significant are also discussed.

Summary of Major Findings and Recommendations.....

References.....

Acknowledgements.....

Appendix A.....
Student Confidential Information Form

Appendix B.....
Interview Survey

Appendix C.....
Self Esteem Instrument--The "What Am I Like" Scale

Study of Kentucky Middle School Students Knowledge of Career Options

EXECUTIVE SUMMARY

Authors: Randall L. Wells and Donna Gaus

The Kentucky Department of Education, Office of Vocational Education funded a research study to investigate Kentucky middle school students' knowledge of the multitude of career options available to them and whether they were being exposed to career education at the middle school level. The study explored whether students who had experienced career education at the middle school level were more likely to report having considered a career choice or demonstrated some type of planning for a future career. In addition, study examined whether students of different demographic characteristics were more or less likely to have begun thinking about a career or to have experienced career education at the middle school level.

MAJOR FINDINGS

1. A large percentage of the sample (approximately 40%) reported they had not experienced any career education at the middle school level.
2. A majority of the sample reported they had decided a career path (a large percentage claimed they had identified it at least 3 years ago), and were thinking of attending a specific school to obtain the training for that career. However, a majority of students did not have current interests which complimented their career choice, and over one-fourth of the sample could not identify one personal ability which they would need to perform well in their career of choice. Also, students were more likely to report they chose a school because of its close proximity to their home or the sports program, climate, or fun atmosphere of the school, rather than how strong the school was in a major(s) related to their career choice.
3. Approximately three-fourths of the sample did not see the relevancy of english, science or social studies to successful performance in their career choice. Approximately 60% of the sample did not see the relevancy of math.

4. A majority of those who experienced career education reported that their teachers/counselors had not discussed the importance of individual interests and abilities in choosing a career or the type and amount of training required for careers which they had studied.
5. Students in this sample were most likely to have experienced one career education activity of several hours duration at each grade level. This activity was most likely to have been in the form of a guest speaker, lecture or career day.
6. Although a large percentage of students identified teachers as a potential information source about careers, a majority of students reported they'd be most likely to approach a parent or family member for more information about a career. In fact, a majority of students reported that they'd learned about their current career choice from a parent or relative.
7. An overwhelming majority of students had not been exposed to new and emerging or nontraditional careers.
8. Students who had experienced career education did not seem more likely to have considered their future career paths or to have engaged in career planning, as these variables were measured in this study. However, it is important to take into account the type, frequency and intensity of career education experienced when investigating this question. These researchers were unable to obtain a school that offered an extensive career education program that had been tailored to the individual students in order to investigate this question in a valid manner.
9. Students of low self esteem, as measured in this study, did not appear less likely to have considered or engaged in planning for a career.
10. Level of education was related to the mothers' level of involvement in the students' consideration of their future careers. Mothers with higher education were more likely to initiate conversations about future work with their children than mothers with less education.
11. Students on free or reduced lunch appeared less likely to have considered a career path than students who were not on free or reduced lunch.
12. Students on free or reduced lunch were more likely to have low self-esteem scores than students who were not on free or reduced lunch.

13. Students who had been retained or who had high absenteeism during the previous year were more likely to have poor rather than moderate or high self-esteem scores.
14. Students with high absenteeism (7 to 52 days) were less likely to have considered a school to attend to obtain training for a career choice than students of moderate or low absenteeism.
15. School personnel who were interviewed for this study reported that schools needed adequate resources in terms of time, personnel with the necessary expertise, funding and materials to provide a comprehensive, integrated career education program of quality. They felt that their schools lacked one or more of these types of resources.

RECOMMENDATIONS

1. It will be necessary to assess whether middle schools have a sufficient amount of resources to provide a comprehensive, intensive career education program at the middle school level. These resources include adequate funding, personnel with expertise, materials and time.
2. Also, a quality program would be tailored to the specific population of each school in terms of student interests. The program would include some type of appropriate career interest testing to explore students' interests and their perceptions of their abilities. The program would help students explore the relationships between their interests and perceived abilities and various career choices.
3. The program would also help students fully explore the relevancy of their school curriculum to future career choices.
4. A comprehensive career education program at the middle school level should include information about nontraditional and new and emerging careers. Exploring careers from these perspectives broadens the types and number of career choices which are available to all students regardless of gender, race, etc.
5. Middle schools which lack one or more of the necessary resources should receive the resources they need to create and maintain a comprehensive career education program.

INTRODUCTION

Project Rationale

This study was designed to assess whether middle school students in Kentucky are knowledgeable of career options, especially careers which are considered "emerging" or "nontraditional." It also investigates whether middle school students have begun considering the various postsecondary educational options and identifying their future career paths. Most importantly, it explores whether students who have knowledge of various career options are more likely to have considered their future career path, or even begun making definite plans to pursue a career path. Also, the study includes a comparison of student responses relating to these questions by gender, minority-nonminority, urban-rural location, at-risk/non at-risk, low and positive academic self-esteem and grade level.

The need to explore these questions was revealed by the findings of a recent career workshop with middle school students from one region of Kentucky. The results of a survey which was administered to students participating in the workshop revealed that only 50% of students planned to pursue any type of postsecondary education. And of these 50%, only 25% of students had identified a definite career goal. Significantly, career workshop leaders discovered that students lacked basic information about career options, especially those which were considered "emerging" or "nontraditional."

The need for this study was also suggested by the findings of another study which was conducted by these authors and funded by

the Kentucky Department of Education, Office of Vocational Education, during the 1989-1990 school year (Wells, R., Gaus D., Esselman M., 1990). This semi-structured, qualitative interview study with 190 high school youngsters who were considered "at-risk" of dropping out of school, explored the underlying factors which were negatively influencing the students performance in high school. The study revealed that while an overwhelming majority of students had "aspirations" of a future career (79.5%), a majority of these students had not begun formulating definite career plans (61.7%). This phenomena was as true for 12th graders as it was for 9th graders!

Finally, a literature review of research related to career education at the middle school level revealed that educators and researchers are concerned about the "scarcity and fragmentation of guidance and support services for young adolescents, and believe there is inadequate funding and structure to sustain an effective base of support for middle school youngsters" (Yanis & Willner, 1988). Many educators are advocating a comprehensive career guidance program in middle and high schools, and are concerned about the lack of systematic research which has been conducted at the middle school level (Ohio State Department of Education, 1988). Some of these professionals have developed a national agenda calling for the investigation of issues such as those which are explored in this study.

Study Questions

This study has been designed to address the following questions:

1. Have students considered or engaged in planning efforts related to their future careers?
2. Are middle school students aware of how personal interests and abilities are important factors to consider when choosing a career option?
3. Are middle school students aware of how courses in school are relevant to various career options?
4. Have middle school students been exposed to basic information about career options at the middle school level?
5. Have students received information about prerequisite educational and training requirements of various career options, especially for those careers which the students are currently considering?
6. Are students aware of key people who could assist them through the process of career planning?
7. Have middle school students received information about careers which are new or "emerging"?
8. Have middle school students received information about careers which are "nontraditional" for individuals of their gender?
9. Are students who have experienced career education in middle school more likely to have considered future

career options?

10. Are students with poor self esteem less likely to have engaged in career planning efforts?
11. Are parents of various educational levels more or less likely to discuss careers in the home?
12. Are students of the following groups more or less likely to have experienced career education at the middle school level or to have engaged in future career and educational planning (male-female, minority-nonminority, at risk and non-at risk, urban-rural location, low-positive academic self-esteem, and grade levels). Also, were any other meaningful differences noted among these various groupings of students in regard to the other variables examined in this study?

RESEARCH DESIGN AND METHODOLOGY

Sample Description

Two hundred and thirty six middle school students attending eleven middle schools from the northern, eastern, western, southern and central regions of Kentucky were interviewed for this research study during the winter and spring of the 1990-91 school year. The eleven schools which participated in this study were selected to achieve a geographic representation of middle schools in Kentucky. The 236 students interviewed were selected to achieve a balanced representation of Kentucky middle school students by gender, race, urban-rural location, students "at-risk" and grade level. A school counselor or teacher from each school assisted with the selection of students and the scheduling of dates and interviews. The counselor or teacher completed a "Confidential Student Information Form" on each student to be interviewed (Appendix A). The form was designed to assist school personnel in selecting students to achieve a representation of the various groups described above.

It is important to note that students who were considered "at-risk" were identified based on their residing in families of low income (free or reduced lunch), having been retained one or more grades in school or having been absent 7 or more days during the previous school year. Of course, the authors' concede that high absenteeism, retention and poverty are only three of the multitude of characteristics which have been found to hinder a child's performance in school, and therefore may render a child "at risk" of dropping out of school.

Regarding the demographic characteristics of the students in

the sample, frequency distributions which were performed are presented in the Results Section of this report.

Procedures, Methods and Instruments

The data were obtained in structured interviews consisting of a combination of open and closed ended items. The interviews were conducted at the school sites in individual sessions with each student. Using trained interviewers to administer the interviews provided the advantage of being able to probe items when student responses were vague, and to clarify wording when students had questions. The interviewers recorded student responses on a 15-page interview form (Appendix B).

This form was developed by reviewing the literature for information about critical foundational issues within this area of knowledge, and by consulting with professional educators and researchers who were active within the areas of middle school education and/or career education at the middle school level across the state of Kentucky. The professionals were employed as teachers, principals or counselors within Kentucky middle schools, as directors and researchers at the State Department of Education, or as directors of related professional organizations.

The interview form was divided into 5 sections: Student, School, New Career, Nontraditional Career and Family. In the first section, Student: Questions 1-24, students were first asked whether they had "thought about what they wanted to do when they grew up?" They were then asked a series of questions which were designed to assess their level of knowledge about their chosen career, where

they had obtained the information, whether the career was related to their interests and abilities, and whether they perceived a connection between their academic school courses and the career to which they aspired.

As an important note, students who said they had not yet considered a future career choice were pressed to be certain, and if they still could not identify a choice were asked to "think about what you would be if you could be anything and then name the first career which comes to mind." The remaining questions in the section were linked to that career choice.

In Section Two, School: Q. 25-33, students disclosed whether or not "any of their teachers or counselors had talked to you (the student) about various types of jobs and careers while (you have been) in the 6th thru 8th grades?" They then discussed the specific types of career education activities they had experienced, how frequently they had experienced them, specific careers they had learned about and whether their career education experiences included discussion about how, ideally, their career choice should be partially decided based on their interests and abilities.

In Sections Three and Four, respectively, the students reported whether they had learned about emerging and nontraditional careers while in middle school. These sections consisted of Q. 34-37 and 38-41, respectively.

Section Five consisted of a series of questions (42-67) about the parents' educational levels, family demographic composition, parents' occupations, and whether parents discussed the relevance

of education and possible future career options with their children.

The interviewers also administered a 7 item scale which was developed to assess academic self-esteem and is one of 4 subscales of the 28 item "What Am I Like" (Harter, S., 1982) self-esteem scale (Appendix C). Answers which reflect the best self-esteem were scored a 4, those which reflect the worst were scored a 1. To obtain a student's mean self esteem score on this subscale, the scores on the 7 items were added together and divided by 7.

Harter attempted to establish the validity and reliability of the scale by performing Factor Analysis and Test-Retest Reliability. Factor Analysis was originally performed with a sample of 314 third thru sixth graders and the results were later replicated with 5 additional samples. Both orthogonal and oblique solutions were obtained, each revealing the same stable factor solution. The items for all samples had moderate to high loadings, with the loadings of academic self-esteem subscale for the original sample (.45 to .69) serving as an example. Also, as an example of the replicability of the factor pattern, the average loading for the academic self esteem items in another sample was .67.

Additionally, factor analysis of the scale using a sample of 292 seventh through ninth graders resulted in the emergence of the same factor pattern with an average loading of .57. Subscale reliability was assessed by using the coefficient "alpha" as an index of internal consistency. Reliabilities across all samples ranged from .75 to .83 for the academic subscale. Interview length

ranged from approximately 20 to 30 minutes.

Data Analysis

The data were analyzed both qualitatively and quantitatively. The open ended survey items were first analyzed qualitatively for meaningful categories, which were then coded to permit analysis via the software program SPSSX on a mainframe computer. The closed ended items were coded and also analyzed using SPSSX on the mainframe computer. Frequency distributions of specific survey items provided data pertaining to specific study questions. Chi-square analyses were performed to determine statistically significant differences among the various groupings of students examined in the study in regards to the various objectives outlined earlier in this report.

PRESENTATION AND DISCUSSION OF RESULTS

Demographics

Table 1

Characteristic	Value	Percent
Urban	yes	63.6
	no	36.4
Independent District	yes	28.0
	no	72.0
SES of District	low	53.8
	middle	8.9
	high	37.3
Geographic region	north	9.7
	south	19.5
	east	36.0
	west	8.9
	central	25.8
Gender	male	52.5
	female	47.5
Race	white	80.9
	nonwhite	19.1
Grade level	6th	23.7
	7th	34.7
	8th	41.5
Free or reduced lunch	yes	48.0
	no	52.0
Previous Absence	0 to 2	38.0
	3 to 6	21.5
	7 to 52	40.5
Retention	yes	27.6
	no	72.4

Objectives

*It is important to note that the following tables do not always add to 100% as the numbers were rounded and the students were occasionally asked to report all value categories which applied to them. Also, the statistics provided are valid percents and the reader is to assume there is no missing data unless otherwise indicated.

1. Have students considered or engaged in planning efforts related to their future careers?

Table 2

Item	Value	Percent
Q. 1: Considered career	YES	86.9
	no	13.1
Q. 20: Considered school	YES	59.3
	no	40.7
Q. 21: Why that school?	don't know	.4
	NOT APPLICABLE	40.7
	family attended	8.1
	reputation	8.5
	strong program	5.9
	heard of it	7.2
	knows people	3.4
	SPORT/CLIM/FUN	10.6
Q. 12: Student's knowledge	CLOSE TO HOME	14.6
	away from home	.8
Q. 12: Student's knowledge	accurate	16.9
	SUPERFICIAL	68.6
	inaccurate	14.4
Q. 13: How long have students' wanted to pursue career	less than 1 year	13.1
	1 to 2 years	25.8
	LONGER THAN 3 YR	61.0

Q. 14: From whom did you first learn about your career choice	PARENT	22.9
	RELATIVE	19.1
	FRIEND	5.1
	SCHOOL	16.1
	television	15.3
	other (books)	16.9

Q. 15: Do you remember when you decided to become "career choice"?	YES	69.5
	no	30.5

Items 1, 20, 21, 12, 13, 14 and 15 from the interview form were developed to assess whether middle school students had begun working through the process of deciding a career path. Item 1 investigated whether the students interviewed for this study currently had a specific career choice, and therefore were already at least thinking about their future careers. Item 20 explored whether students had reached the point of considering a school which offered the training necessary for their career choice. Item 21 investigated students' reasons for choosing a particular school.

A review of Table 2 above reveals that an overwhelming majority of students interviewed (86.9%) reported a specific career choice. The remaining 13.1% of students stated that they did not have a career choice and did not remember ever having one. These students were asked to "take a few minutes to think about what they would be if they could be anything they wanted" and then tell the interviewer "the first career comes to mind." The researchers' reasoning in approaching the dilemma in this way is that some

students might be hesitant to share their aspirations with a stranger for a variety of reasons. Making the interview a fantasy exercise might free some students of their inhibitions.

It was not remarkable that a majority of middle school students have begun considering a future career path, however, it was interesting that 61% of students stated they had wanted to pursue their career choice for 3 YEARS OR LONGER. Additionally, 69.5% of student remembered EXACTLY WHERE THEY WERE AND WHAT THEY WERE DOING when they first decided to pursue that career. For example, one student recalled, "I was at my cousin's house in her room watching her fix her friends' hair. I decided then that I wanted to do that when I grew up. You know, fixing people's hair and make-up...making people pretty...make them look their best."

Also, a majority of students first learned about their career choice from a FAMILY MEMBER or FRIEND (47.5%) rather than SCHOOL (16.1%). Interestingly, approximately 16% and 17% of the sample, respectively, learned about their career choice from watching television or from reading books obtained from the library, meeting people who function in those careers (the neighborhood pharmacist), or browsing through magazines.

However, although students appeared to have a strong loyalty to a career choice, a large percentage of students were analyzed by the interviewers as having a SUPERFICIAL understanding of the everyday activities involved in their career choice (68.6%). For example, the young girl quoted in the paragraph above described the everyday activities of a hairdresser as "fixing people's hair and

make-up...making people look pretty, making them look their best." These students had little understanding of the working conditions, earning potentials and other everyday realities of their chosen careers.

Item 20 was devised to assess whether students had begun making or thinking about making definite career plans. The frequency distribution for this item revealed that 59.3% of students stated there was a specific or several schools they wanted to attend to obtain the education/training needed for their career choice. However, although this was a clear majority, it is far less than the 86.9% who had simply chosen a tentative career. Also, the most frequently reported reasons for choosing a particular school were CLOSENESS TO HOME (14.6%) and the SPORTS/CLIMATE/FUN (10.6%) associated with the school, rather than STRONG IN MAJOR (5.9%).

2. Are middle school students aware of how personal interests and abilities are important factors to consider when choosing a career option?

Items 3 thru 7, and 9 were developed to determine whether students considered their interests and abilities when deciding their future career paths. It was important to determine whether students' engaged in this activity since matching one's interests and abilities to a career path is an elementary step in deciding a career path. Item 3 assesses students' current career choices. Item 4 describes the educational level required for each career choice. Item 5 is a listing of each student's MAJOR reason for wanting to pursue a specific career. Item 6 reveals students'

major interests in terms of pastimes and activities. Item 7 provides the student's and interviewer's assessment of whether students' current interests are related to their career choices. Item 9 provides students' descriptions of personal abilities they possess which are necessary in performing in their chosen careers.

Student responses to Item 3, CAREER CHOICE, revealed that 35.6% of students chose professional careers, 34.7% wished to pursue careers requiring a bachelor's degree in college, 1.86% chose careers requiring an associate degree from a junior college, 20.7% chose careers requiring post-high school training, 5.3% chose careers requiring a high school diploma and 1.86% chose careers which required less than a high school diploma.

In summary, the career most frequently selected by students interviewed was the professional career of LAWYER (11.4%), followed by TEACHER (9.7%), and then PROFESSIONAL ATHLETE (8.9%).

Regarding Item 5, the reason cited most frequently for pursuing a career was INTEREST (33.1%). followed by the "DESIRE TO HELP PEOPLE" (19.1%), and then MONEY (8.5%). However in Item 7, which pertains to interviewers' and students' assessments of the match between students' current interests and career choices, 48% of students did not think their current interests were related to their career choice. Qualitative analysis of students' interests in Item 6 revealed that students most frequently reported interests which were of a PHYSICAL nature (30.5%), such as sports, or interests which were purely LEISURE (21.6%), such as watching television or "hanging out with friends." Only 14.9% of students

reported having interests, in the form of hobbies, sports, a course, or simple play, which were directly related to the activities of a chosen career.

Also, in regard to the match between students' abilities and current career choices, student responses to Item 9 reveal that while 72.9% of students could identify abilities they possessed which related to their career choice, 27.1% were unable to do so.

3. Are middle school students aware of how courses in school are relevant to various career options?

Table 3

Item	Value	Percent
Q. 10	perceived academic course(s) as relevant	64.4
	did not perceive them as relevant	35.6

Item 10 from the interview form was written to assess students' perceptions of the relevancy of their academic courses to performance in their chosen career. The frequency distribution of Item 10 reveals that a majority of students felt that at least one academic course (math, english, science or social studies) was necessary to perform successfully in their chosen career. However, the breakdown for each academic area reveals that an overwhelming majority of the sample perceives each one as irrelevant to their chosen careers. The following percentages of the sample perceived each academic course as relevant: math, 38.1%; english, 25.0%; science, 29.2%; and social studies, 19.2%. Students were far more likely to see the relevance of math than any of the other areas.

4. Have middle school students been exposed to basic information about career options at the middle school level?

Items 25 thru 28 and 33 were developed to assess students' exposure to career education during the 6th through 8th grades. Item 25 provides a breakdown of those students who readily remembered experiencing career education at the middle school level. Approximately 52% of the sample readily remember experiencing at least one career education activity.

Item 26 was used to probe the students who stated they had not experienced any career education during the 6th through 8th grades. The students were asked about 8 specific activities and then given the option of reporting on an "other." Another 9.7% of the sample did remember a career education experience after probing by the interviewer. Therefore, a total of 61.4% of the sample remember experiencing at least one career education activity at the middle school level. Item 27 was used to probe those students who readily remembered experiencing career education about the specific activities they experienced.

Items 26 and 27 probed students about the same 8 activities. An analysis of student responses from items 26 and 27, consisting of responses from both those students who readily remembered and those students who recalled the experiences after probing, revealed the following: 8.9% of students recalled going on field trips during middle school; 14.4% remembered guest speakers visiting their schools; 21.2% received career education information during lectures by teachers; 11.0% of students did job shadowing; 35.2% of students had CAREER DAYS at school; 3.8% of students were enrolled

in a career education course of some type; 7.2% remembered getting career testing; 2.1% said they were involved with Project Business; and 11.4% said they had experienced a brief, but intense (a three week, every day) seminar in career education.

In item 28, students reported whether they had learned about specific careers during their career education activities. Approximately 98% of those who had experienced career education had learned about specific careers. However, only 20% of these students had learned about their specific career choice. Another 16% of students learned about careers which were directly related to their career choice.

The students were about evenly divided between those who decided their career choice after learning about it in school and those whose career choices were reinforced after studying about them in school. However, it did appear that if students learned about careers they were genuinely interested in, career education could be used to motivate them to think and begin planning for their future as adults.

Item 33 was designed to determine how often students experienced career education during the 6th through 8th grades. Again, approximately 40% of the sample reported they had not experienced any career education at the middle school level. Students were asked whether they experienced career education daily, daily for several weeks, 4 to 5 times a year, 2 to 3 times a year, once or none during the 6th, 7th and 8th grades. Students also had the option of saying they didn't remember and students who

had not experienced a grade level yet or who had not experienced any career education were accounted for.

At all three levels, the most frequently reported value category was ONCE a year. That is, for the typical student in this sample, once a year while in the 6th through 8th grades he/she experienced some type of career education activity for several hours. This activity was usually experienced in the form of a career day or guest speaker (approximately 35% and 14% respectively). However, students were more likely to experience career education in the 7th and 8th grades than in the 6th grades.

5. Have students received information about prerequisite educational and training requirements of various career options, especially for those careers which the students are currently considering?

Table 4

Item	Value	Percent
Q. 16	Student had accurate knowledge of where to receive training for career choice	42.4
	STUDENT HAD INACCURATE KNOWLEDGE	57.6
Q. 17	Student had accurate knowledge of years of schooling for career choice	33.5
	STUDENT HAD INACCURATE KNOWLEDGE	66.5

Q. 30	Student did remember school personnel describing how interests and abilities relate to careers which they discussed	26.7
	STUDENT DID NOT REMEMBER	32.6
	Student had not experienced career education in middle school or had not discussed career choices specifically	40.3
	*1 missing case	.4

Q. 31	Student did remember school personnel describing amount and type of training needed for careers which they discussed	14.8
	STUDENT DID NOT REMEMBER	44.5
	Student had not experienced career education in middle school or had not discussed career choices specifically	40.3
	*1 missing case	.4

Items 16-17 and 30-31 were designed to determine if students were knowledgeable about the type and amount of schooling/training which were prerequisites to various career choices. Items 16 and 17 assess students' knowledge of their current career choice, while 30 and 31 assess whether students' received this information from school personnel when studying various careers in school.

The frequency distributions for Items 16 and 17 revealed that a majority of students interviewed either stated that they did not have knowledge of the training requirements (57.6%) and years of

schooling (66.5%) required for their careers, or the interviewer determined that their knowledge was inaccurate.

The frequency distribution for Item 30 indicates that 32.6% did not remember a teacher or counselor discussing how an individual's interests and abilities are important factors when choosing a career. The frequency distribution for Item 31 reveals that 44.5% of students did not remember their teachers or counselors discussing the type or amount of training necessary for various careers. Another 38.6% of students had not experienced career education at the middle school level, and 1.7% of students did not discuss a career as part of their career education experience.

In these few cases, the career education activity the student experienced was of a very general nature. They essentially consisted of a teacher asking a student what he or she wanted to be when they grew up and discussing how education is important for success in any career. Therefore, only 26.7% received information from school personnel about the importance of their interests and abilities in choosing a career, and 14.8% received specific information about the type and amount of training/schooling necessary for the careers which the students studied.

6. Are students aware of key people who could assist them through the process of career planning?

Table 5

Item	Value	Percent
Q. 18: Who?	Yes: Counselor	19.5
	TEACHER	45.8
	PARENT	43.2
	RELATIVE	30.9
	Friend	11.4
	Other	21.2
Q. 19: Who would you be most likely to approach?	Yes: Counselor	5.1
	Teacher	16.9
	PARENT	30.1
	RELATIVE	20.3
	Friend	6.8
	Other	14.0
	Not rel	5.9
	None	.8

Items 18 and 19 were written to obtain students' perceptions of who in their lives were capable of providing them with information about their career choice, and which ONE of the sources they'd be most likely to approach for assistance. The frequency distributions provided above reveal that while students identified TEACHER (45.8%) as a potential key source of information, they were far more likely to approach a PARENT (30.1%) or RELATIVE (20.3%) than a TEACHER (16.9) or COUNSELOR (5.1%).

Qualitative analysis of student responses to open ended Item 19a, "Why would you be most comfortable asking that person,?" revealed two major categories of responses. Approximately half the sample stated the person they'd identified probably had more

knowledge of the career than the other potential information sources. Approximately one-third of the sample confided that they'd either felt more comfortable approaching the person they identified because of knowing them well or because they had a special rapport with this person.

7. Have middle school students received information about careers which are new or "emerging"?

Table 6

Item	Value	Percent
Q. 34: Received information?	yes	.8
	NO	99.2

Item 34 was designed to assess whether students were being exposed to new and emerging careers as a part of career education at the middle school level. As the frequency distribution above indicates, an overwhelming majority of the students in this sample (99.2%) have not been exposed to new and emerging careers at this level.

8. Have middle school students received information about careers which are "nontraditional" for individuals of their gender?

Table 7

Item	Value	Percent
Q. 38: Received information?	yes	16.9
	NO	83.1

Item 38 was designed to assess whether students were being exposed to nontraditional careers as a part of career education at

the middle school level. As the frequency distribution above indicates, an overwhelming majority of the students in this sample (83.1%) have not been exposed to nontraditional careers at this level.

9. Are students who have experienced career education in middle school more likely to have considered future career options?

Chi Square Analyses of Items 1 and 20 and "Students who had experienced career education," a new item created which includes students who reported "yes" to item 25 and the students who remembered experiencing career education after the interviewers probed the topic with them, were performed to assess whether students who had experienced career education at the middle school level were more likely to have considered a career or begun planning for a career. Neither of these relationships were statistically significant. Students who had experienced career education in middle school were no more likely to have considered a future career path or to have engaged in career planning than students who had not, at least as these variables were measured in this study.

However, please note that the type, future and duration of the career education experiences are important factors to consider when evaluating the impact of career education on student behavior.

As discussed previously in this section, the career education experiences of a majority of students in this sample were very infrequent and of short duration. Also, the experiences were not linked to the individual interests and abilities of specific students. Instead, the careers and related content which were the

focus of most experiences were dependent upon the materials and people, for example the speakers for career days and companies participating in job shadowing, which were easily available in the community.

An authentic assessment of this research question would require the investigation of schools which were offering extensive career education programs to a known grouping of students. The researchers who conducted this study attempted to design a study which included a number of schools which had an extensive career education focus. And, these particular schools did offer a variety of different types of activities. However, again, the students interviewed from the schools which were thought to have extensive programs did not experience all the activities available at the school (which would have increased the intensity for them) and each of the individual activities were of brief duration and were usually a one-time experience.

Also, the experiences were generally not tailored to the students. That is, a school often would establish agreements with a couple of companies in town that their students could visit the sites and "job shadow." Students told they could choose which site they wanted to shadow at. In reality, a student may not be interested in the jobs at any of these companies. Also, the jobs to be shadowed were typically of low status and income.

The issue of having enough resources, in terms of time, personnel with necessary expertise, funding and materials, is critically important in whether or not schools provide career

education of a high quality, or whether they provide it at all. All of the schools included in this study lacked one or more of the types of resources described above.

For example, there were several schools with a high concentration of students of low socioeconomic status. These schools had received a large amount of funding to provide an extensive career education curriculum. However, personnel at the schools who were interviewed for the study stated that they lacked the time to plan and organize the program due to their many other responsibilities. The interviewers also concluded, and many staff members who were interviewed at all the schools included in the study concurred, that additional training in the area of career education would enhance school personnels' performance in this area of their jobs. In contrast, a large number of the schools included in this study simply lacked an adequate amount of all the resources which are necessary to offer a high quality career education program.

As an interesting aside, please note that in regard to Item 1, a large percentage of the sample claimed they had decided their specific career choice at least 3 years before. This means that a majority of these students were in elementary school when they first decided their current career choice. And, for a majority of students, their specific interests and abilities were not considered when deciding their career choice. Also, remember that only 20% of students who had experienced career education during middle school had learned about their specific career choice.

Therefore, the career education that a majority of these students experienced in middle school does not appear to have either increased their certainty about their current choice or helped them in reevaluating that choice.

10. Are students with poor self-esteem less likely to have engaged in career planning efforts?

Chi Square Analyses of the item "Self Esteem" with Items 1 and 20 were performed to assess whether students with poor self esteem were less likely to have engaged in career planning.

Neither of these relationships were statistically significant. Students of low self-esteem levels were no less likely to have considered a future career path or to have engaged in career planning than students who had not, at least as these variables were measured in this study.

11. Are parents of various educational levels more or less likely to discuss careers in the home?

Chi Square Analyses of Items 53 and 56, father and mother's educational levels, respectively, and Items 46A (How often do you discuss career with your parent(s) with whom you live?), 46B (Who usually initiates these conversations?) and 47 (Have your parents discussed or recommended that you consider specific careers?) were performed to explore whether parents of various educational levels were more or less likely to discuss career in the home.

The analyses involving the students' fathers (Item 53) did not reveal any interesting relationships. However, all three analyses involving the students' mothers (Item 56) were statistically significant at the .01 level. In summary, mothers with at least a

bachelors degree were more likely to discuss their childrens' future work with them, and to initiate these discussions than mothers with less education. The other educational levels included having a junior college degree, a high school diploma/GED or less than a high school diploma/GED. Also, mothers with a junior college degree or higher were more likely suggest specific careers for their children to consider than mothers with less education.

12. Are students of the following groups more or less likely to have experienced career education at the middle school level or to have engaged in future career and educational planning (male-female, minority-nonminority, at risk-non at risk, urban-rural location, low-positive academic self-esteem, and grade levels). Also, were any other meaningful differences noted among these various groupings of students in regard to the other variables examined in this study?

Chi Square analyses of Item 1, Students who reported a career choice, with the demographic variables listed above, revealed a theoretically interesting relationship that was statistically significant at the .104 level. Students who were on free or reduced lunch, an at-risk characteristic, were less likely to report they had chosen a future career path (45.9%) than students who were not on free or reduced lunch (54.1%). Although this relationship was not statistically significant at what many researchers often regard as a minimum level, it was very close.

There were no other differences noted by gender, urban-rural location, minority-nonminority, self-esteem level or grade level.

Chi Square analyses of Item 20, Do you have a school of choice yet?, with the demographic variables listed above revealed a theoretically and statistically significant relationship between item 20 and absenteeism during the previous school year. Please

note previous absenteeism is also an at risk characteristic.

That is, students who were absent 7 or more days during the previous year, were less likely (48.2%) to have engaged in career planning, as demonstrated by considering schools or training facilities, than students who were absent 3 to 6 days (63.6%) or students who were absent 0 to 2 days (66.7%). This relationship was significant at the .01 level.

The researchers speculate that it is logical that students who are absent from school frequently are often unhappy with school, and therefore plans of additional future schooling would not be foremost on their minds.

There were no other differences noted by gender, urban-rural location, minority-nonminority, self-esteem level or grade level.

Regarding other interesting relationships among the variables examined in this study there were three which involved student self esteem.

Students of low self-esteem were more likely to have been retained in school (43.2%), than students who received a moderate (25.9%) or high (13.7%) self-esteem score. This relationship was significant at the .00 level.

And, students of low self-esteem were more likely to have been absent 7 or more days during the previous school year (47.1%) than students of moderate (41.3%) or high self-esteem (32.3%).

Also, students on free or reduced lunch were more likely to have low self-esteem (42.1%) than students who were not (24.1.4%). This relationship was significant at the .00 level.

MAJOR FINDINGS AND RECOMMENDATIONS

MAJOR FINDINGS

1. A large percentage of the sample (approximately 40%) reported they had not experienced any career education at the middle school level.
2. A majority of the sample reported they had decided a career path (a large percentage claimed they had identified it at least 3 years ago), and were thinking of attending a specific school to obtain the training for that career. However, a majority of students did not have current interests which complimented their career choice, and over one-fourth of the sample could not identify one personal ability which they would need to perform well in their career of choice. Also, students were more likely to report they chose a school because of its close proximity to their home or the sports program, climate, or fun atmosphere of the school, rather than how strong the school was in a major(s) related to their career choice.
3. Approximately three-fourths of the sample did not see the relevancy of english, science or social studies to successful performance in their career choice. Approximately 60% of the sample did not see the relevancy of math.
4. A majority of those who experienced career education reported that their teachers/counselors had not discussed the importance of individual interests and abilities in choosing a career or the type and amount of training required for careers which they had studied.

5. Students in this sample were most likely to have experienced one career education activity of several hours duration at each grade level. This activity was most likely to have been in the form of a guest speaker, lecture or career day. Seventh and eighth graders were more likely to report they had experienced career education activities than 6th graders.
6. Although a large percentage of students identified teachers as a potential information source about careers, a majority of students reported they'd be most likely to approach a parent or family member for more information about a career. In fact, a majority of students reported that they'd learned about their current career choice from a parent or relative.
7. An overwhelming majority of students had not been exposed to new and emerging or nontraditional careers.
8. Students who had experienced career education did not seem more likely to have considered their future career paths or to have engaged in career planning, as these variables were measured in this study. However, it is important to take into account the type, frequency and intensity of career education experienced when investigating this question. These researchers were unable to obtain a school that offered an extensive career education program that had been tailored to the individual students in order to investigate this question in a valid manner.
9. Students of low self-esteem, as measured in this study, did not appear less likely to have considered or engaged in planning for a career.

10. Level of education was related to the mothers level of involvement in the students consideration of their future careers. Mothers with higher education were more likely to initiate conversations about future work with their children than mothers with less education.

11. Students on free or reduced lunch appeared less likely to have considered a career path than students who were not on free or reduced lunch.

12. Students on free or reduced lunch were more likely to have low self-esteem scores than students who were not on free or reduced lunch.

13. Students who had been retained or who had high absenteeism during the previous year were more likely to have poor rather than moderate or high self esteem scores.

14. Students with high absenteeism (7 to 52 days) were less likely to have considered a school to attend to obtain training for a career choice than students of moderate or low absenteeism.

15. School personnel who were interviewed for this study reported that schools needed adequate resources in terms of time, personnel with the necessary training, funding and materials to provide a comprehensive, integrated career education program of quality. They felt that their schools lacked an adequate amount of one or more of these types of resources.

RECOMMENDATIONS

1. It will be necessary to assess whether middle schools have a sufficient amount of resources to provide a comprehensive, intensive career education program at the middle school level. These resources include adequate funding, personnel with expertise, materials and time.
2. Also, a quality program would be tailored to the specific population of each school in terms of student interests. The program would include some type of appropriate career interest testing to explore students' interests and their perceptions of their abilities. The program would help students explore the relationships between their interests and perceived abilities and various career choices.
3. The program would also help students fully explore the relevancy of their school curriculum to future career choices.
4. A comprehensive career education program at the middle school level should include information about nontraditional and new and emerging careers. Exploring careers from these perspectives broadens the types and number of career choices which are available to all students regardless of gender, race, etc.
5. Middle schools which lack one or more of the necessary resources should receive the resources they need to create and maintain a comprehensive career education program.

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APPENDIX A

Student Confidential Information Form

PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT YOUR SCHOOL:

SCHOOL: _____ DATE: _____

PERCENT OF SCHOOL ON FREE OR REDUCED LUNCH: _____

TEACHER/STUDENT RATIO: _____ COUNSELOR/STUDENT RATIO: _____

NUMBER OF STUDENTS IN SCHOOL _____

PLEASE DESCRIBE HOW CAREER AWARENESS/DEVELOPMENT IS CURRENTLY
CONDUCTED IN YOUR SCHOOL:

SCHOOL: _____ DATE FORM COMPLETED: _____

STUDENT INFORMATION FORM

INSTRUCTIONS: PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT EACH OF THE STUDENTS WHO ARE SELECTED TO BE INTERVIEWED. FILL-IN-THE BLANK, CHECK OR CIRCLE THE CORRECT RESPONSE. PLEASE TRY TO COMPLETE ALL THE ITEMS. IF YOU EXPERIENCE DIFFICULTY IN GATHERING CERTAIN INFORMATION, PLEASE TELEPHONE DONNA GAUS AT (502) 588-0642.

1. STUDENT NAME: _____ AGE: _____
2. RACE: WHITE BLACK HISPANIC OTHER: _____
3. GRADE LEVEL: 6 7 8
4. FREE OR REDUCED LUNCH: YES NO
5. FATHER'S OCCUPATION: _____
CIRCLE IF: UNEMPLOYED DISABLED RETIRED UNKNOWN
6. MOTHER'S OCCUPATION: _____
CIRCLE IF: UNEMPLOYED DISABLED RETIRED UNKNOWN

****INSTRUCTIONS: THE FOLLOWING ITEMS SHOULD BE USED IN IDENTIFYING AT-RISK AND NON AT-RISK STUDENTS. WHEN SELECTING STUDENTS WHO ARE AT-RISK, PLEASE SELECT STUDENTS WHO POSSESS MULTIPLE AT-RISK CHARACTERISTICS. ITEMS RELATING TO SCHOOL QUARTERS WERE CONSTRUCTED TO ACCOMMODATE SCHOOLS ON EITHER THE 4 QUARTER OR THE 6 PERIOD GRADING SYSTEM.

7. IS STUDENT AT-RISK? YES NO
8. CTBS TEST SCORES IN THE FOLLOWING AREAS: (PROVIDE SCORES)
LANGUAGE: LOW AVERAGE HIGH SCORE: _____
MATH: LOW AVERAGE HIGH SCORE: _____
CSI: LOW AVERAGE HIGH SCORE: _____
TOTAL BATTERY: LOW AVERAGE HIGH SCORE: _____
9. TOTAL NUMBER OF DAYS ABSENT DURING PREVIOUS YEAR: _____
NUMBER OF DAYS ABSENT DURING CURRENT YEAR:
(PROVIDE NUMBER OF DAYS PER QUARTER THROUGH CURRENT QUARTER)
1ST: _____ 2ND: _____ 3RD: _____ 4TH: _____ 5TH: _____ 6TH: _____

10. FREQUENT DISCIPLINE REFERRALS: (OVERALL) YES NO
(PER QUARTER THROUGH CURRENT QUARTER):

1ST: _____ 2ND: _____ 3RD: _____ 4TH: _____ 5TH: _____ 6TH: _____

11. HISTORY OF IN-SCHOOL OR OUT-OF-SCHOOL SUSPENSION:

YES (CONTINUE TO 12) NO (SKIP TO 13)

12. SUSPENDED WHILE IN GRADE SCHOOL? YES NO UNKNOWN
AND, NUMBER OF SUSPENSIONS IN:

6TH GRADE: _____ UNKNOWN (TRANSFER) _____
7TH GRADE: _____ NOT APPLICABLE (6TH GRADER): _____ UNKNOWN _____
8TH GRADE: _____ NOT APPL(6TH/7TH GRADER): _____ UNKNOWN _____

13. HAS BEEN RETAINED: YES NO (SKIP TO 15)

14. IF YES: (CIRCLE ALL THAT APPLY)

GRADE(S) RETAINED: 1ST 2ND 3RD 4TH 5TH 6TH 7TH 8TH

15. ARE MIDDLE SCHOOL STUDENTS ABILITY GROUPED AT YOUR SCHOOL?

YES NO (SKIP TO 17)

16. IF YES, PLEASE COMPLETE THE FOLLOWING: STUDENTS AT THIS
SCHOOL ARE GROUPED INTO THE FOLLOWING CATEGORIES:

AND THIS STUDENT HAS BEEN ASSIGNED TO THE _____ GROUP.

17. 1989-90 CUMULATIVE NUMERIC COURSE GRADE IN MATH: _____

18. TITLE OF STUDENT'S MATH CLASS: _____

19. NUMERIC GRADES IN MATH DURING CURRENT YEAR (THRU CURRENT
QUARTER):

1ST: _____ 2ND: _____ 3RD: _____ 4TH: _____ 5TH: _____ 6TH: _____

20. 1989-90 CUMULATIVE NUMERIC COURSE GRADE IN ENGLISH: _____

21. TITLE OF STUDENT'S ENGLISH CLASS: _____

22. NUMERIC GRADES IN ENGLISH DURING SCHOOL YEAR (THRU CURRENT
QUARTER):

1ST: _____ 2ND: _____ 3RD: _____ 4TH: _____ 5TH: _____ 6TH: _____

APPENDIX B
Interview Survey

Sample ID number (000-300): _____

Interview Guide for Career Awareness Project

School: 1 2 3 4 5 6 7 8 9 10 11 12

Student Name: _____

Interviewer: D1 R2 M3 S4

Date of interview: _____

Instructions: Circle the number which represents the correct answer or fill-in the blank lines unless special instructions are provided.

STUDENT: (Items 1 through 24)

1. Have you thought about what you'd like to do when you grow up? (If several, ask student to choose their first choice).
 - 1) Yes (SKIP TO Q. 3)
 - 2) No (Probe to be certain student hasn't thought about it. If still no, ask the student to take a moment now to think about the question, then select the first career that comes into his/her mind. PROCEED TO Q. 2).
2. INTERVIEWER: Was it necessary for the student to "select the first career that came into his/her mind?"
 - 1) Yes
 - 2) No
3. Student's career choice: _____
4. Interviewer: Indicate type of schooling the student's career choice requires by circling one of the six options provided below:
 - 1) college-professional
 - 2) college-4 yr.
 - 3) college-2 yr.
 - 4) post HS training
 - 5) HS training
 - 6) no training
5. Tell me why you want to be an X: (What do you like about it)
List the reason(s) provided: _____

6. What are some things you currently like to do? (Include interests both in and out of school).

7. Are any of these things related to what an X does while on the job? How? (Probe whether student has additional interests which may relate to career).

8. What are some everyday activities that an X has to do very well? (Ex: being a teacher requires teaching, making lesson plans, creating tests).

List: _____

9. Which of those things do you think you already have a natural ability or skill at doing, or could become really good at. Which of those things might be hard for you? (Probe what other abilities the student has which may relate to the career choice).

Good At: _____

Difficult: _____

10. Which of the classes (like math, english, science or social studies) that you take in school are most related to becoming an X and HOW are they related?

11. Interviewer: Complete the following by circling all that apply: The student's career choice was related to:

1) Student's Interests 2) Abilities 3) Courses

12. Interviewer: Is student's knowledge of daily activities:

1) Accurate 2) Superficial 3) Inaccurate

13. How long have you wanted to become an X?

1) less than 1 yr 2) 1 to 2 years 3) longer: _____

14. Where or from whom did you first learn about being an X?
- 1) School 2) Parents 3) Relative: _____
- 4) Friend: _____ 5) TV 6) Other(s): _____
- 7) Does not Remember
15. Do you remember exactly what you were doing, and where you were when you decided to become an X?
- 1) _____
- 2) Doesn't Remember
16. After high school, what kind of school(s) do you go to for the training you need to become an X? (Check to see if student knows about all schools which are required)
- Quote: _____
- 1) Has accurate knowledge 2) Lacks accurate knowledge
17. Well then, how many total years of schooling beyond high school do you need to have to become an X? (Exactly)
- Quote: _____
- 1) Has accurate knowledge 2) Lacks accurate knowledge
18. Who at school or at home could you ask to learn more about becoming an X? Give student the opportunity to list all which apply below before probing about each. Circle all which apply:
- School: 1) Counselor 2) Teacher(s): _____
- Home: 3) Parent(s) 4) Relatives: Who _____
- 5) Friend: Who _____ 6) Other: _____
- 7) Does Not Know
19. Of these people, who would you feel most comfortable asking for more information about becoming an X?
- 1) Counselor 2) Teacher 3) Parents 4) Relative
- 5) Friend 6) Other 7) Not Relevant: couldn't answer 18
- Why?: _____

20. Have you thought about the particular school you would like to attend to get the education you need to become an X?

1) Yes: Name: _____ (CONT. TO 21)

2) No (SKIP TO 23)

21. If yes, why that particular school?: _____

22. Interviewer: If yes, indicate whether location is:

1) Local 2) State 3) Out of state

23. What if you found out you couldn't become an X, for whatever reason. What would be your second choice?

1) _____ Probe why: _____

_____ 2) No 2nd choice

24. Interviewer: Is second choice related to career of first choice?

1) Related to first choice 2) Unrelated to first choice

3) Didn't have a second choice

SCHOOL: (Items 25 through 33)

25. Have any of your teachers or counselors talked to you about various types of jobs and careers while you were in the 6th-8th grades?

1) Yes (SKIP TO 27) 2) No (CONT. TO 26)

26. If NO ASK: So, you don't remember experiencing any of the following career awareness activities?

(CIRCLE the number if they've experienced the activity; X the number if they have not. If still no for all activities, SKIP to Q. 34).

1- Field Trips 2- Guest Speakers 3- Lecture 4- Shadowing

5- Career Day 6- Career Ed. Course 7- Career Tests

8- Proj. Bus. 9- Other(s): _____

27. IF YES ASK: Have you experienced any of the following specific career awareness activities?

(CIRCLE the number if they've experienced the activity; X the number if they have not).

- 1- Field Trips 2- Guest Speakers 3- Lecture 4- Shadowing
5- Career Day 6- Career Ed. Course 7- Career Tests
8- Proj. Bus. 9- Other(s): _____

28. Name three of the careers you learned about:

Interviewer: Should indicate level of education required for each career from the 6 options which are provided below:

- 1) college-professional 2) college-4 yr 3) college-2 yr
4) post HS training 5) HS training 6) no training

- 1) _____:level_____
2) _____:level_____
3) _____:level_____
4) Does not remember specific careers

29. Interviewer: If student reports careers which require the same level of education, probe the student's exposure to careers which require different educational levels.

- 1) An example: _____ Level: _____
2) Student was unable to provide an example.
3) It was unnecessary to ask this question.

30. Do you remember discussing how your interests, abilities, and/or school courses were related to any of these careers?

- 1) Yes 2) No

Specific Example: _____

31. Do you remember your teacher/counselor explaining the type and amount of training these careers required?

- 1) Yes 2) No

Specific Example: _____

32. Did your teacher discuss these careers in:

- 1) A special class or program
- 2) In a variety of classes
- 3) Other: _____

33. How many times have you had career awareness activities during the 6th, 7th and/or 8th grades?

6th grade:

- 1) daily
- 2) several times weekly
- 3) once a week
- 4) bi-monthly
- 5) monthly
- 6) 4-5 times yearly
- 7) 2-3 times
- 8) Once
- 9) currently in 6th grade
- 10) Doesn't Remember
- 11) None in 6th grade
- 12) Other: _____

7th grade:

- 1) daily
- 2) several times weekly
- 3) once a week
- 4) bi-monthly
- 5) monthly
- 6) 4-5 times yearly
- 7) 2-3 times
- 8) Once
- 9) Not Appl: Is in 6th grade
- 10) Doesn't Remember
- 11) None in 7th grade
- 12) Other: _____

8th grade:

- 1) daily
- 2) several times weekly
- 3) once a week
- 4) bi-monthly
- 5) monthly
- 6) 4-5 times yearly
- 7) 2-3 times
- 8) Once
- 9) Not Appl: Is in 6-7th grade
- 10) Doesn't Remember
- 11) None in 8th grade
- 12) Other: _____

NEW CAREERS: (Items 34 through 37)

34. While in school have any of your teachers/counselors talked to you about new careers which have just been created in the last twenty years or so?

1) Yes (CONTINUE TO 35)

2) No (Probe to be certain by explaining further. If still NO, SKIP TO 38).

35. Name two new careers have you learned about in school:

1) _____ 2) _____

3) Does not remember specific careers

36. Do you remember talking about the skills, abilities and/or courses you need for these careers?

1) Yes

2) No

Example: _____

37. Do you remember talking about the type and amount of training needed for these careers?

1) Yes

2) No

Example: _____

NONTRADITIONAL CAREERS: (Items 38 through 41)

38. While in middle school, have any of your teachers/counselors explained to you what nontraditional careers are? For example, it is common now for men to become nurses, and women to become doctors and welders.

1) Yes (CONT. TO 39) 2) No (If NO, probe by providing examples from List 1. (If YES, go to 40, if NO, SKIP TO 42).

39. Name two nontraditional careers have you learned about in school:

1) _____

2) _____

3) Does not remember specific careers

40 Do you remember talking about the skills, abilities and or courses you need for these careers?

- 1) Yes 2) No

Example: _____

41. Do you remember talking about the type and amount of training needed for these careers?

- 1) Yes 2) No

Example: _____

HOME: (Items 42 through 65)

42. Who do you LIVE with?

Indicate number, gender and relationship of family members:

Biological/adopted parents: Both Mom Dad

Step parents: Mom Dad

Sisters: 1 2 3 4 5 6 7 more

Brothers: 1 2 3 4 5 6 7 more

Other: Foster Legal Guardian: _____

Friends: _____ Relatives: _____

43. Interviewer: Is student living in a single parent family?

- 1) Yes 2) No

44. Interviewer: IF:

- 1) The student lives with both biological parents
SKIP TO THE *****NOTE
after Q. 45.
- 2) The student has a biological parent,
whom he/she does not live with CONT. TO
45.

45. MORE THAN 1 SET OF PARENTS: How often do you see the parents whom you do not live with?

Male parent:

- 1) Very frequently 2) Frequently 3) Occasionally
 4) Rarely 5) Never 6) Not Relevant

Female parent:

- 1) Very frequently 2) Frequently 3) Occasionally
 4) Rarely 5) Never 6) Not Relevant

**** NOTE TO Interviewer:

If the student visits with either of the parents whom she/he does not live with very frequently or frequently or occasionally, then ask the following questions for both the biological and stepparents.

HOWEVER:

If the student visits with the parents whom she/he does not live with only rarely or never, then do not consider these parents when asking the following questions.

46. How often have you and your parents discussed your working when you grow up?

Parent(s) he/she lives with:

- 1) Frequently 2) Occasionally 3) Rarely 4) Never

Who usually initiates the conversation?

Quote: _____

Parent(s) he/she does not live with:

- 1) Frequently 2) Occasionally 3) Rarely 4) Never
5) Not Relevant

Quote: _____

47. Have your parents mentioned specific jobs that you might consider?

Interviewer: Should indicate level of education or training required for each career from the 6 options which are provided below:

- 1) college-professional 2) college-4 yr 3) college-2 yr
4) post HS training 5) HS training 6) no training

1) _____ Level: _____

2) _____ Level: _____

3) Neither parents nor stepparents have discussed this with the student.

48. How important do you think it is to your parents (whom you live with) that you really try to do well in school?

1 2 3 4 5 6 7 8 9 10

Parents who you do not live with: 11 = NR

1 2 3 4 5 6 7 8 9 10

49. Have your parents said why education is or is not important? (Probe to get the parents reasoning behind their responses)

Quote: _____

50. As far as your parents (who you live with) go, what kind of grades do they generally expect you to make in school?

1) All As 2) Mostly As 3) As and Bs

4) Bs 5) Bs and Cs 6) Cs

7) Cs and Ds 8) They expect failure 9) DK

Parents who you do not live with:

1) All As 2) Mostly As 3) As and Bs

4) Bs 5) Bs and Cs 6) Cs 7) Cs and Ds

8) They expect failure 9) NR 10) DK

51. How often do your parents (who you live with) ask whether you have homework or if you've done your homework?

- 1) Very often 2) Occasionally 3) Rarely 4) Never

A: What do they say do you about it? _____

B: When do they ask about it?

- 1) Immediately after school 2) Later in the afternoon
3) Evening 4) Varies 5) Other: _____

C: Does the student have a set time for doing the work?

- 1) Yes; When: _____ 2) No

D: Does the parent follow-up to make sure the student has done the work?

- 1) Yes; When: _____ 2) No

E: Does the parent respond in any of the following ways:

- 1) Offers to help with homework 2) Checks homework
3) Threatens to punish if homework is not done
4) Threatens to punish if receive call from teacher regarding homework not being turned in

F: Interviewer: What other information has the student offered about homework?

52. What kind of work does your dad do?

Dad or guardian: A) _____

B) Does not know

Stepdad: A) _____

B) Does not know

53. How far did your dad/guardian go in school?
 1) Professional 2) college-4 3) college-2 4) post HS
 5) HS 6) GED 7) Less than HS 8) Not Rel 9) Doesn't know
54. Stepdad
 1) Professional 2) college-4 3) college-2 4) post HS
 5) HS 6) GED 7) Less than HS 8) Not Rel 9) Doesn't know
55. What kind of work does your mom do?
 Mom or guardian: A) _____
 B) Does not know
 Stepmom: A) _____
 B) Does not know
56. How far did your mom/guardian go in school?
 1) Professional 2) college-4 3) college-2 4) post HS
 5) HS 6) GED 7) Less than HS 8) Not Rel 9) Doesn't know
57. Stepmom
 1) Professional 2) college-4 3) college-2 4) post HS
 5) HS 6) GED 7) Less than HS 8) Not Rel 9) Doesn't know
58. How often have you heard your parents (whom you live with) talk about their jobs?
 1) Very often 2) Occasionally 3) Rarely 4) Never 5) NR
 Parent(s) who you do not live with:
 1) Very often 2) Occasionally 3) Rarely 4) Never 5) NR
59. Do you think your parents like their jobs?
 Dad: 1) Yes 2) No 3) Doesn't Know 4) Not Relevant
 Mom: 1) Yes 2) No 3) Doesn't Know 4) Not Relevant
 Stepdad: 1) Yes 2) No 3) Doesn't Know 4) Not Rel
 Stepmom: 1) Yes 2) No 3) Doesn't Know 4) Not Relevant

Interview: Regarding questions 60 thru 63: Probe regarding likes and dislikes related to working conditions, work tasks, work people, management practices, salary, advancement opportunities, etc., if the student does not provide a response when asked the original question.

60. What have you heard your male parent whom you live with say he likes about his job?

Quote: _____

-
- 1) Made positive comments 2) No positive comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

Male parent who you do not live with:

Quote: _____

- 1) Made positive comments 2) No positive comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

61. What have you heard your male parent whom you live with say he does not like about his job?

Quote: _____

-
- 1) Made negative comments 2) No negative comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

Male parent who you do not live with:

Quote: _____

-
- 1) Made negative comments 2) No negative comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

62. What have you heard your female parent who you live with say she likes about her job?

Quote: _____

-
- 1) Made positive comments 2) No positive comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

Female parent who you do not live with:

Quote: _____

- 1) Made positive comments 2) No positive comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

63. What have you heard your female parent who you live with say she does not like about her job?

Quote: _____

-
- 1) Made negative comments 2) No negative comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

Female parent who you do not live with:

Quote: _____

-
- 1) Made negative comments 2) No negative comments
3) Doesn't recall 4) Doesn't work 5) Not relevant

64. Based only on what you have seen regarding your parents' experiences and/or what they have said both about their jobs and working in general, does growing up and working a job sound like something to look forward to or not?

- 1) Looks like something to look forward to
- 2) Does not look like something to look forward to
- 3) Parents opinions or experiences really haven't affected my feelings about it.
- 4) Has mixed feelings about it (good and bad)

Quote explaining why: _____

65. Aside from your parents feelings and experiences, what are your own individual feelings about growing up and working a job, and what factors or circumstances do you think have influenced you to feel this way?

Quote: _____

Generally the student:

- 1) Looks forward to it 2) Does not 3) Mixed feelings
- 4) Does not know (accept this response only as last resort)

APPENDIX C

Self Esteem Instrument-The "What Am I Like" Scale

ACADEMIC SELF ESTEEM ITEMS

DIRECTIONS:

(FIRST): TELL THE STUDENT, "I AM GOING TO READ YOU TWO SENTENCES FOR EACH QUESTION I ASK YOU--I WANT YOU TO DECIDE WHICH OF THE TWO SENTENCES BEST DESCRIBES THE KIND OF PERSON YOU ARE MOST LIKE"...

(AFTER THE STUDENT CHOOSES ONE OF THE TWO OPTIONS): "NOW, I WANT YOU TO DECIDE WHETHER THE SENTENCE YOU CHOSE IS SORT OF TRUE OR REALLY TRUE FOR YOU."

FIRST WE WILL TRY A SAMPLE QUESTION TO SEE IF YOU HAVE THE HANG OF IT...

REALLY TRUE FOR ME	SORT OF TRUE FOR ME	SAMPLE QUESTION
_____	_____	1. Some kids would rather play outdoor in their spare time
		BUT....
_____	_____	2. Other kids would rather watch T.V.

NOW WE START THE REAL QUESTIONS

1A.	_____	_____	Some kids feel that they are very good at their school work.
			BUT....
1B.	_____	_____	Other kids worry about whether they can do the school work assigned to them.
2A.	_____	_____	Some kids feel like they are just as smart as other kids their age.
			BUT....
2B.	_____	_____	Other kids aren't so sure and wonder if they are as smart.

3A. _____ Some kids are pretty slow in finishing
_____ their school work.

BUT....

3B. _____ Other kids can do their school work
_____ quickly.

REALLY SORT OF
TRUE TRUE

4A. _____ Some kids often forget what they learn.

BUT....

4B. _____ Other kids can remember things easily.

5A. _____ Some kids like school because they do
_____ well in class.

BUT....

5B. _____ Other kids don't like school because
_____ they aren't doing very well.

6A. _____ Some kids wish it was easier to
_____ understand what they read.

BUT....

6B. _____ Other kids don't have any trouble
_____ understanding what they read.

7A. _____ Some kids have trouble figuring out the
_____ answers in school.

BUT....

7B. _____ Other kids almost always can figure out
_____ the answers.

APPENDIIX D

Advisory Committee Members

Ms. Gloria Farris, a high school Business teacher and parent of a middle school student

Ms. Lois Spalding, who is employed with Brown Forman Industries

Mr. D. Grant Smith, a middle school teacher

Ms. Gina Perry, a vocational educator at the Kentucky Polytechnic Institute and parent of a middle school student

Ms. Sharon Gregory, an accountant of the University of Louisville Medical School

Ms. Susan Puckett, a graduate student in Business Education at the University of Louisville