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Career Aspirations and Knowledge about Career and Technical Education of Kalamazoo County 8th and 9th Grade Students

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*Career Aspirations and Knowledge about
Career and Technical Education of
Kalamazoo County 8th and 9th Grade Students*

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By

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1. Introduction

At the end of the 1999/2000 school year, we conducted an investigation into the career aspirations and knowledge about career and technical education of county 8th and 9th grade students. This investigation comprised 54 focus groups conducted in every non-parochial middle and high school in the county; information and opinions were collected from over 300 students. Despite being an extremely busy time of the year, all of the schools and administrators were quite cooperative in making their facilities available to us and in recruiting cross-sections of students as group participants. We also felt that the students were very cooperative and serious in their answers to our questions. In short, we feel that the information that we collected and report here is quite reliable and valid.

The purpose of the study was to answer the following questions:

- To what extent have 8th/9th grade students considered jobs and careers?
- What have been their sources of information about jobs and careers?
- Do 8th/9th grade students have realistic career goals and a sound understanding of the educational and skill requirements for their chosen careers?
- Do 8th/9th grade students see the relevance of their middle school and high school classes for their chosen jobs and careers, or for other jobs and careers in general?
- Are 8th/9th grade students aware of EFE activities and classes? Are there ways that EFE could better serve the needs of these students?

The major findings of the study are as follows:

- For the most part, the students had given considerable thought to careers. Over 90 percent identified a job/career that they could see themselves in at age 30. About 20 percent identified professional sports (mostly boys) or professional entertainment (girls). About 7 percent said that they had no idea about a job or career.
- Of the approximately 70 percent of students who named an occupation other than sports or entertainment, the largest share aspired to a white collar/professional occupation—i.e., physician or other medical-related, management/business ownership, computer-related/engineering, teaching, psychologist/psychiatrist, or lawyer. Only about 10 percent of the total sample of students named a skilled trade or technician type of job.

- The students were amazingly knowledgeable about the educational requirements of their occupational choices. For example, many knew if an associate degree was available for the occupation, and how many years it took to earn professional degrees. None seem deterred by the prospect of 4 to 12 years of postsecondary education.
- Only a very small share of the students indicated that their career choices had emanated from structured career exploration. The reasons that students gave for selecting their career interest mainly fell into three categories:

altruism - they like helping people/children; they love pets
 adult role models - family members or other adults in the occupation
 general interest - enjoy sport or hobby

- A serious disconnect exists between career aspiration *now* and what it will take to succeed in college or training necessary to get into the occupation they have selected. Very few students indicated that their occupational choice related to course selection in high school. No student alluded to the grades or effort that are required to get into and succeed in college (or into sports or entertainment, for that matter).
- As reported by these students, career development in the county is rather hit or miss. Most students mentioned the career day at KVCC in 8th grade, which in many districts was preceded by the ACT-Plan test. Many students had comments about the KVCC visit. The activities that they liked were the “comedian,” the papermaking demonstration, and simulating the purchase of a car via the Internet. The main objections were that careers/fields were too limited; not enough hands-on demonstrations; and the career day needs to be more structured with research and assignments.

Students were quite positive about the Focus on Freshman class. They indicated that activities that had been undertaken in the Focus on Freshman class included research on the MOIS system and aptitude testing.

Several students mentioned that they had participated in job shadowing experiences; most of which had been with parents and none of which had been part of a course.

Finally, the students in some districts indicated that their district was focused mainly on college prep instruction, and that career development was not part of the curriculum.

- Students felt that they had very little information about EFE. One of the focus group facilitators commented that “EFE is a well kept secret.” Some students had siblings in the Radisson or Bronson programs, but in general, most students had very little understanding or knowledge about them. Even the few students with aspirations in

technical, skilled trade areas didn't know of related EFE classes. Many, perhaps as high as half of the students, said they would like to know more about EFE. Many of these students thought that it would be most effective to have high school or college students convey the information.

- A much higher than expected proportion of students personally knew an individual(s) who had not completed high school; around three-quarters. A handful of students thought that one way that schools could reduce the number of dropouts was to offer more "hands-on" instruction. In broad terms, about one-sixth of the students opined "almost nothing can/should be done - it's the kids/parents responsibility;" around one-half said that school needs to be more interesting/fun/challenging and adult educators need to take kids more seriously; and the remainder (one-third) mentioned programs like after school assistance, sports, hands-on classes, or more electives.

These findings are explained in more detail in the remainder of this report. The next section of the report documents the methods used to conduct the study. The third section presents details about the career aspirations of students. That section is followed by a discussion of career development activities in school. Section 5 presents the students' opinions about how schools can address the issue high school dropouts. Finally, the sixth and seventh sections relate how much information students reported having about EFE and career and technical education, and provide findings and recommendations, respectively.

2. Approach

The basic approach was to ask students directly for information about their experiences in school and their job/career plans. Focus groups were convened in all of the county's public middle schools and high schools. In particular, we held two groups at each school. With 13 middle schools, 11 high schools, and 3 alternative high schools in the county, a total of 54 focus groups were held. The research design called for each group to have 6 students. (In fact, we were not always able to

get 6 participants; we ended up with 303 students out of the 324 we would have had if every group had 6 members.)

Each focus group was facilitated by an adult leader, who was trained by project staff. A total of 7 leaders were employed in the project (6 leaders facilitated 8 groups, and one facilitated 6 groups.) The original intent of the project was to team up a focus group observer with each leader. The observers were to be members of the EFE Council or Workforce Development Board who had time and interest to sit in on the sessions. We were not very successful in getting observers to the sessions—only a half dozen of them were observed.

Two focus groups were conducted at each school for two reasons. First, we recognized that some focus groups would not result in useful insights because of a lack of student enthusiasm or articulation or because of the interpersonal dynamics between the students or adults. Having a second group increased the likelihood that we would end up with at least one “good” group at each school. Second, the design doubled the sample size of students, which increased the statistical significance of the findings.

After each focus group, the leader turned in their notes from the session and drafted a brief “Group Report,” which summarized the interesting comments and insights that were made by the students. After all of their focus groups had been convened, each of the leaders provided a summary report with their own observations and recommendations.

Exhibit 1 provides the questions that were asked of the students. Questions 1 through 4 ask students about the jobs or careers that they will be working in when they’re aged 30 and how they selected those careers. Question 6 asks the students for their perception about the educational requirements of their top choice, and about high school courses that they may take in preparation

for that career. Question 5 asks about career development activities in school. Questions 8 and 9 ask the students what is being done well by schools in the way of career preparation, and what might be improved. Question 7 asks students whether they know any individuals who did not complete high school, the circumstances concerning that individual, and what schools are and could be doing to reduce dropouts. Finally, question 10 asks students about their knowledge of and plans to take career and technical education classes.

Exhibit 1

Focus Group Questions

1. The first thing I would like to do is to record your name, and to ask you what job or career do you think that you'll be working in when you're 30 years old, after you finish your education? (NOTE: Try to tease out an answer, although Don't Know or No Idea is okay if the student insists on it.)

2. Why do you say that? What got you interested in that as a career? (PROBE: parents, know somebody in the occupation, teacher, relative, career unit in class, etc.)

3. Do you have a second choice/alternative careers in case the career that you just mentioned doesn't work out?

4. Why do you say that? What got you interested in that as a career? (PROBE: parents, know somebody in the occupation, teacher, relative, career unit in school, etc.)

5. Have any of you had a class or part of a class that was devoted to careers? If so, please tell me when you had that class, and tell me some of the activities that you did during the course. Have the rest of you also had that class, and do you remember other activities that you did? (PROBE: job shadowing, career interest/aptitude tests like CAPS/COPS or ACT-Plan, career research on Internet like MOIS or BRIDGES, speakers, tours, etc.)

6. How much education is needed for the career/job that you mentioned to me in the answer to the first question? Are there particular classes you need to take in high school to prepare for that career or for additional education that you need for that career?

Educational reqt.	Classes in high school
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7. Do you know anyone that has dropped out or quit school? Why do you think that person did so? Are there things that schools could be doing that would reduce the number of students who drop out? Are there things that schools are doing now that are helping to reduce the number of dropouts?
8. What do schools do that are very helpful to students in learning about and deciding on careers? Do the classes that you have taken seem relevant to the “real world”? Do you think they have helped prepare you for successful careers? (PROBE: EFE awareness; KVCC visits)
9. What could schools do better or do differently to help students learn about and decide on careers?
10. At this point, are you planning to take some technical education (also known as vocational education) classes in high school? What are (or will be) some important factors in your decisions about whether to take these classes? (PROBE: parents, siblings, friends, general attitude about voc. ed. vs. college prep, classes offered at work site, etc.)

Focus groups have advantages and disadvantages in terms of a data collection method. The main advantage of a focus group is that it allows participants to interact with each other, which stimulates responses that individuals would not have recalled or offered on their own. The disadvantages are that one or more individuals may dominate the discussion or that individuals may easily “echo” previous responses. The facilitators were trained to listen for and try to control such behavior, if possible.

3. Career Aspirations

The students were each asked to name what job or career they thought that they might be holding at the age of 30. The purpose of this question was to address whether students had considered jobs and careers and the extent to which they had realistic goals. Table 1 summarizes

the data from this question. The preponderance of students named a career. Only about 7 percent of the students responded that they had “no idea” about jobs or careers. There was no significant difference in this response between girls and boys, nor between 8th and 9th graders. About 20 percent of the students wanted to be professional athletes or entertainers (actors/actresses, singers, models,

Table 1

Career Aspirations, by Grade and Gender

Occupation	Eighth Grade		Ninth Grade	
	Males	Females	Males	Females
Professional Athlete	18	6	9	1
Professional Entertainer	2	12	2	11
Medical-related (doctor, nurse, dentist)	5	16	6	13
Psychologist/ psychiatrist	0	3	0	9
Animal health (vet, marine biologist, trainer)	3	14	0	7
Business-related (owner, acct., “business”)	9	0	6	3
Teacher	2	8	2	6
Lawyer	3	5	0	6
Architect/ Interior design	3	4	2	5
Computer-related; engineering	9	1	9	1
Artist/ photographer	2	3	2	2
Skilled trades (elec., auto mech., constr.)	5	2	11	2
Cosmetology	0	0	0	4
Law enforcement	1	1	4	1
Other (pilot, scientist, pastor, journalist)	6	2	4	5
Military	3	0	1	0
Don't know; no idea	4	7	5	5
TOTAL	75	84	63	81

comedians, etc.). Most of the students who aspired to be professional athletes were male (27 out of 34), and most of the students who want to be professional entertainers (23 out of 27) were female. Note that a smaller percentage of 9th grade males aspired to become athletes than 8th grade males (about 16 percent compared to 25 percent).

Aside from the professional athlete or entertainer occupations, the job or career aspirations of the students were quite varied, although they were highly skewed toward white collar positions. Over 13 percent of the students mentioned a medical-related occupation; mainly physicians, but also some dentists, nurses, or generic “medical field.” These responses were split evenly between 8th and 9th grades, but about two-thirds of them were from females. About eight percent of the students mentioned veterinarian or marine biologist (one 8th grade young lady said, “I really like animals...but I couldn’t be a vet) as their career/job interest—these students were preponderantly 8th grade girls (14 out of 24). Twelve students (about 4 percent of the total) listed psychologist or psychiatrist as their career aspiration. All 12 were females, and nine of the 12 were in 9th grade. All together, 64 students (about one-fifth) indicated that they were interested in a medical or related field (including animal health and psychology/psychiatry).

Other white collar careers that were named a large number of times were teaching (18 students, of whom 14 were female); computer-related careers or engineering (20, of whom 18 were males); business ownership or management (18, of whom 15 were males); attorney (14 students, of whom 11 were females); and architect/interior design (14 students).

About ten percent of the students aspired to blue collar occupations (i.e., 31 students, of whom 21 were males), defined as construction, electrician, truck driver, cosmetology, and law

enforcement. The largest share of these were in construction. Interestingly, most of the students who indicated job/career interests in the trades were 9th graders.

The responses for the two grades were quite similar. The only substantial differences across grade levels were that a smaller percentage of 9th grade males listed professional athlete as their career interest than did 8th grade males, and a larger percentage of 9th grade males listed a skilled trades occupation than did 8th grade males. A larger percentage of 9th grade females noted psychology/ psychiatry as their occupational field of interest than did 8th grade females, whereas the latter had a higher percentage of students interested in animal health.

Career choice motivation. After asking the students to name their career interest, we asked them to explain why they had selected these jobs/careers. Table 2 provides a tabulation of the major responses, by grade level.

Table 2
Reasons for Career Interest

Reason given	Eighth grade	Ninth grade	Total (percent)
Family member influenced	35	43	28.3
Adult (other than family or educator)	7	3	3.6
Career exploration in school; teacher, counselor	7	2	3.3
General interest/ inertia	50	44	34.1
Help people/ help children	12	15	9.8
Love animals	16	9	9.1
Interested in \$\$ or fame	4	12	5.8

Other	10	7	6.2
TOTAL	141	135	100.0

We have categorized the major sources of information as adult role models (family members or other adults), general interest/inertia, altruism (help people/children; love of animals), career exploration, or other. The data in the table show that the largest categories are the general interest and adult role models, which account for 34.1 and 31.7 percent, respectively. Jeff wanted to be an auto mechanic because “I’m a gearhead . . . I like cars and trucks and stuff.” An individual influenced by an adult role model and family member is Bryan, an 8th grader, who wanted to be a truck driver because “Grandpa and Dad do it. It’s fun!” A Parchment middle school student said, “I want to be an engineer because my Dad is an engineer, and I like to go to his job and watch him work.” Altruistic reasons were cited by about 19 percent of the students. Lee, a young lady in 9th grade said she wanted to become a psychologist because, “I want to work with people; help them.” Penny, a Vicksburg student, said that she wanted to be a middle school teacher so that “hopefully I can make a difference in the lives of bratty, stuck-up teens.” Another future teacher had a slightly different take, “I like to put smiles on children’s faces.” Interestingly, career exploration was given as a response only 3.3 percent of the time. Erin, a young lady in 9th grade, typified the few students who had been influenced by career exploration. She said, “I’m going into a computer-related field – there is great job availability because of the major shortage in skilled people.” Of course, some students were attracted by money. One Comstock 9th grader said, “I just want to be rich and retire early.”

Educational requirements. Question 6 asks the students for the educational requirements for the career that they had named. We had anticipated that a substantial share of students would underestimate the amount of education required. To our surprise, the students were amazingly knowledgeable about the level of education required for their careers. We categorized the responses as accurate, underestimated, or overestimated. (If a student indicated that they simply didn't know a requirement, then we categorized the response as an underestimation.) For 8th graders, 70 percent of the students were accurate, 20 percent underestimated or didn't know, and the remaining 10 percent had overestimated. For 9th graders, the percentages were almost identical – 68 percent were accurate, 21 percent had underestimated, and 11 percent had overestimated.

For the most part, the students were well aware of the years of graduate or professional education needed for the professions to which they aspired. Further, they knew if the occupation could be pursued with an associate degree or just a high school diploma.

One hypothesis that may explain the accuracy is that students have been asked by teachers or their parents about their career plans, and when they hear the responses, the adults are quick to point out how much education is required. The students have retained the information, but it is not at all clear that they have fully internalized it. The focus group facilitators indicated that students did not seem to be aware of the time, cost, or effort that would be required to complete the educational requirements.

Furthermore, the students, for the most part, do not link their career aspirations to high school courses. Less than 40 percent of the students who named a career and minimum educational requirement for that career indicated that they intended to enroll in specific classes in high school that might be related to or needed for that career. And in some of those cases where students did

indicate that they were going to enroll in a particular course, the high school class did not seem appropriate.

In short, the answers to the questions that motivated this study as far as career selection go are (1) 8th / 9th graders have seriously and sincerely considered jobs and careers, (2) the sources of information about jobs and careers are their own general interests, adult role models inside and outside of the family, and altruistic motivations, (3) 8th/9th graders know intellectually the educational requirements for their chosen careers, but (4) 8th / 9th graders do not see the relevance of their middle school or high school classes for their jobs or careers and they seem unaware of the time, cost, and effort required to meet the postsecondary requirements.

4. Career Development Activities in School

We essentially asked students three questions about career development activities—what activities have they participated in, what do schools do well in the way of preparing students for careers, and what might be done to improve career development in schools. The responses to these questions were highly varied.

All of the districts in the county apparently offer some career development activities to students up to and through 9th grade. (This study does not allow us to say much about career development beyond 9th grade.) Two conclusions struck us after reviewing the information provided by the students. First, there is extremely wide variation across the districts in terms of their attention to career development. Some districts have classes or units on careers, do aptitude and interest assessments, have job shadowing opportunities, and provide students with lots of information about career and technical education classes. Other districts apparently have very little curricular emphasis

on careers. The second conclusion is that when you add together all of the activities across all of the districts and across middle school and high school, virtually every type of career development activity or assessment is being conducted somewhere—job shadowing, internships, co-op, career fairs, speakers, field trips, career days, career classes or units, and so forth.

An activity that is centrally planned and administered by K/RESA and KVCC for the county districts is the KVCC Career Day activity. All eighth graders in the county attend the activity, which is offered several times in the Spring in order to accommodate all of the schools and students. At least one student in virtually every focus group, except for the groups that were held at the alternative high schools, mentioned the KVCC activity. When they get to the KVCC campus, students are divided into groups and each student visits three program/career areas. Roughly one-third of the students who made a comment about the career day had a positive comment; and two-thirds who made comments were negative. (It is not likely that this ratio represents the overall satisfaction with the activity by eighth graders in the county because the focus group may have tended to draw out criticisms and because students may have been hesitant to express positive comments in the group setting.) Positive comments were made about the “comedian” who entertained the students, about a papermaking demonstration, and about an Internet demonstration in which students could shop for a new car. The KVCC Career Day apparently had a significant impact on some students. A Comstock 9th grader said that he wanted to get into law enforcement because he went “to that session at KVCC and really enjoyed learning how the police worked.” Another student, from Parchment, said almost exactly the same thing, but about cosmetology. Negative comments were made about not being able to get into a desired group (“Some kids got stuck in sessions they were not interested in”), not having presentations in areas of career interest,

presentations that had too much lecturing and not enough “hands-on” demonstrations, and about not having assignments or preparation required. Students from some of the districts reported that they had taken the ACT-Plan test in preparation for the KVCC career day activity.

Besides the ACT-Plan, students from across the county reported that they had taken CAPS/COPS, the DAT, and ACT-Explore. About 10 percent of the students indicated that they had access to the Michigan Occupational Information System (MOIS). In some cases, the students had used MOIS in research about careers; and in other cases, the students indicated that MOIS was accessible in the library or career center. One student in middle school said, “I search web sites to find out more about careers.”

When discussing the relevance of the curriculum to careers and life experiences, many of the students in 8th grade reported that they had life skills courses, and many students in the 9th grade referred to their Focus on Freshman courses. While there was some uncertainty and doubt about the implementation of career pathways, almost all of the comments about Focus on Freshman were positive. One student said (about Focus on Freshman), “This is my favorite class this semester; they help you choose classes and they encourage you to get a job.” Another student indicated that when they were discussing career pathways in their Focus on Freshman class the following occurred: “In the engineering pathway, we built a bridge to hold up a penny.” Of course, not all of the students were positive. A Comstock 9th grader admitted, “We don’t *want* to sleep through Pathways; it’s just so easy to.” Interestingly, several students referred back to career awareness activities that they had participated in during elementary school. Also, several students indicated that one or two of their teachers would discuss career possibilities during class discussions. One student said, “They are teaching us about responsibility and employability skills now.” A Galesburg-Augusta 8th grader said

that her English teacher has rules for getting a job in her room and “it’s like she’s our boss and we work for her.” A number of the focus group participants said that this occurred in their science classes.

Students talked a little about job shadowing activities. The students from one district referred to a structured program conducted by the Eaton Corporation. Otherwise, the students’ experiences were reported to be rather informal—many of them as part of “take your daughter/child to work” day. A Schoolcraft 9th grader reflected on her job shadowing experience by saying, “We want more than the basics . . . should follow them around all day.”

Students from one district mentioned two special programs that they felt were particularly relevant for career development. Students from a couple of different middle schools had positive comments about the King/Chavez/Parks program at Western Michigan University. Two students from a particular middle school in this district mentioned the 21st Century After School Program. Apparently this program has some emphasis on careers, but was also seen as a way to keep students engaged so that they would not drop out of school. “It offers programs such as art, cooking, dance, and chess. I thought it was great!” said one participant.

When asked about how schools could better prepare students for careers, the students felt most strongly about offering more choices in classes; more electives. They thought that these electives could be tied to career interests. The 9th graders, in particular, felt like they had very few choices in the curriculum; most of their schedules were filled with required courses. Other suggestions offered by the students were more field trips, more hands-on instruction, more speakers, and better vocational guidance (one student said, “Have a career aptitude test; I don’t know what I’m good at.”).

5. High School Dropouts and Suggestions

An impetus for this study was to ask students for suggestions about how to engage students more effectively, and thus reduce the dropout rate. Question 7 asked whether the students knew a high school dropout, what schools do well in the way of keeping students engaged, and what schools could do better. A very high percentage of the students indicated that they knew someone who had dropped out—perhaps as high as seventy-five percent. As reported by the focus group participants, the circumstances that led to the dropouts ranged all over the map—from boredom, to expulsions for criminal behavior, to pregnancies.

One of the reasons that we included questions about dropouts in the focus groups was to see whether students would suggest that career and technical education/hands-on instruction would help to reduce the problem. A handful of students did so. But most didn't. Interestingly, about one-sixth of the students said that schools should not be held responsible for student dropouts. These students expressed the opinion that the dropout decision was the student's (and parent's) responsibility. A student at Vine Alternative said, "These students think only about today, not tomorrow!" Another student from the same school had a similar opinion, "If kids want to drop out, they will. There's nothing the school can do." The largest share of students—about one-half—said that schools need to be more fun or that adults need to be less strict. Along these lines, one Portage middle school student said, "A lot of teachers just don't care [about kids]." Another student felt that Alternative Education facilities were a problem; he said, "Schools should stop separating people into different schools (meaning alternative schools) because it makes them outcasts. They won't want to succeed then." A student from the Comstock Alternative High School said that, "Teachers could help reduce the number of dropouts if they would teach more interesting things in class and give advice to us."

Finally, the remaining third of the students suggested specific programmatic changes such as starting the school day later in the morning, having more accessible guidance counselors, or having more electives.

6. Knowledge and Opinions about Career and Technical Education

It turned out that obtaining information about students' awareness of or plans to take courses offered by Education for Employment (EFE) was difficult. Many 8th and 9th grade students are not aware of the name EFE and were confused by the term "career and technical education." Approximately one-half of the students did understand what was meant by "EFE" or "career and technical education." They named courses that they were planning to take or they gave reasons why they were not planning to take EFE courses. Perhaps two-thirds of these students (one-third of the students overall) named specific classes that they were planning to take. Among those listed were business services technology, photography, health occupations, hospitality, computers, cosmetology, veterinary science, teacher externship, and building trades. The students who were aware of EFE, but who indicated that they were not planning to take any courses suggested the following factors as influential in making their decisions:

- vocational training not for money-making jobs
- hard to schedule given the requirements of high school
- don't want to leave home high school
- peers
- counselor advised against
- classes not related to my field of interest
- doesn't fit well into block scheduling schedule.

One freshman indicated that he had been told to wait and take specialized classes like EFE offerings in college. He said, “I am going to take the more basic, broad classes in high school and wait to take more specialized classes once I get to college.”

Whereas about half the students provided relevant comments about EFE classes, the other half of the students (1) were confused about the term “career and technical education” or (2) indicated that they had no information about such classes. Maybe one-third of these students thought that the term “technical education” referred to computer-related courses or to high level science or mathematics courses. Some students indicated that they would take these classes after they had taken the prerequisite classes because “they would look good on their college applications.” The larger share of these students indicated that they had no awareness of EFE or career and technical education classes.

Many students, even those who had a good awareness of EFE, wanted more information about course availability and content. An 8th grader in Kalamazoo said, “The sheet they give us doesn’t tell what the class is!” Several students said that they thought that the most effective way to get students’ attention was by having either high school students or college students give presentations. One student said, “Have a peer tell the ‘ins’ and the ‘outs’ of EFE classes.”

Another theme that was often expressed by the focus group participants was that they would like the information about EFE in 8th and 9th grade so that they can plan their high school schedules to include classes in grades 11 or 12.

7. Recommendations

Several recommendations came out of this study for EFE administrators to consider. This section will highlight these recommendations and their rationale.

The focus group process was appreciated by students and school building staff. EFE should consider institutionalizing it.

The focus group facilitators indicated that students often commented on the fact that, for the first time, they were being asked questions about the high school curriculum. For the most part, they appreciated the opportunity to provide input. Furthermore, the facilitators received favorable comments from building staff, who thought it was a great idea to collect student opinions directly. EFE administrators should consider institutionalizing this approach, by conducting focus groups periodically. The effort may result in useful opinions or information that can help tailor EFE activities plus students feel empowered by the process. The time and effort that it takes to organize the groups may become more manageable as they are done more often.

The districts in the county are undertaking a wide variety of career development activities; some districts seem to be putting a lot of emphasis on career development whereas others are not. If it does not already exist, there should be a formal mechanism for sharing information about the effectiveness of these activities and, possibly, more collaboration. One activity that is centralized, the KVCC Career Day for 8th graders, could be more highly structured. Furthermore, job shadowing, which is done in many districts, could be more highly structured.

The students, for the most part, minimized how many career development activities that they had participated in, but when all of the responses are combined, a picture of participation in a wide variety of activities gets painted. These ranged from job shadowing to assessment tests and interest inventories to internships, career fairs, guest speakers, special projects, and tours. Virtually every activity supported by school-to-work or the state's Career Preparation System was mentioned by someone. The wide variety of activities begs the question of the extent to which local districts coordinate with each other and share information about the effectiveness of each activity.

One activity that is quite centralized is the KVCC Career Day for 8th graders. The EFE organization and KVCC plan and conduct this activity for the entire county. The description of this event that was given by students suggested that most schools structured the day loosely. If this is the case, it would seem appropriate for schools to consider using the trip to KVCC as more of a learning opportunity in which students do some research and/or writing assignment that is geared to the day's activities. Similarly, most of the students' descriptions of job shadowing made them sound very informal and lacking structure.

The low incidence of career aspiration to skilled trades suggests that 8th and 9th grade students and their parents are unaware of the good career opportunities in manufacturing and skilled trades.

As noted, the career aspirations of the youth who participated in this study were highly skewed toward white collar and professional occupations and away from blue collar, technical occupations. This is not surprising given the results of surveys of EFE students that are conducted annually that show the same results. Interestingly, the percentages of students who aspire to white collar/professional occupations and blue collar/technical occupations are quite similar in this study and in the EFE student survey. This suggests that the career aspirations that are formed in middle school or earlier grade levels are geared toward upper level jobs and that students' experiences in high school and EFE courses do not seem to greatly influence career choices. Perhaps individuals who are interested in promoting manufacturing and technician careers need to target young people in middle school grades.

The substantial interest in owning a business suggests that EFE should offer entrepreneurship as a course offering.

A sizeable share of students indicated that they were interested in owning and managing their own business. This suggests that students would be interested in a course or unit on

entrepreneurship in high school. Such a course would likely include a work-based learning placement in a small-business situation where students could see all that is involved in ownership. (I recognize that it may be the case that Marketing or BST classes already have this curricular emphasis.)

Rationalize the 8th and 9th grade curricula for life skills and careers.

Because many of the students referred to life skills courses or units when the focus groups were discussing the relevance of class work to the “real world” and to careers, it occurred to me that school districts may not have made explicit choices about the relative emphases that they place on life skills and on careers. Should these topics be separate courses or units or should they be integrated? How much of the curriculum should be devoted to each? What topics should be covered in life skills and for whom? What topics should be addressed in any formal career exploration instruction and for whom? What sequencing makes sense in each? These are questions that districts need to address, and it is likely the case that the departmentalization of staff have precluded collaboration and deliberation.