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ABSTRACT

Parent and student surveys were conducted in nine primarily rural West Virginia counties to gather baseline information on incoming seventh-grade students' and parents' awareness of and aspirations for postsecondary education. The surveys are administered each year as part of Fairmont State College's GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grant. This paper summarizes findings from first-year surveys, February 2000. Surveys were completed by over 2,200 students at 29 middle and junior high schools and by 1,840 mothers and 1,464 fathers. Findings indicate that parents frequently helped their children with homework but had limited school involvement. Parents were generally satisfied with their child's education. Overall, students seemed fairly confident of their academic ability and saw themselves as good, hardworking students. Students were willing to admit that they needed academic help with some classes. Most students recognized the benefits of postsecondary education. Nearly three-fourths believed that further education is necessary to get a satisfying job, that they would attend college, and that their parents wanted them to go to college. However, students had limited awareness of postsecondary institutions. Students regarded parents as the most important source of educational information, but parents actually had limited information. Parents and students were familiar with financial aid sources but were disinclined to believe that students would receive scholarships. Parents seemed to have a realistic picture of college expenses. County-specific findings and recommendations are listed. (SV)

Academic Aspirations of Appalachian Seventh Graders and Their Parents

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AEL's mission is to link the knowledge from research with the wisdom from practice to improve teaching and learning. AEL serves as the Regional Educational Laboratory for Kentucky, Tennessee, Virginia, and West Virginia. For these same four states, it operates both a Regional Technology in Education Consortium and the Eisenhower Regional Consortium for Mathematics and Science Education. In addition, it serves as the Region IV Comprehensive Center and operates the ERIC Clearinghouse on Rural Education and Small Schools.

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INTRODUCTION

GEAR UP Program

In August 1999, President Clinton announced $120 million in GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grants to 21 states and 164 partnerships of colleges and middle schools across the country (Office of the Press Secretary, 1999). These U.S. Department of Education-funded grants were to encourage disadvantaged youth to have high expectations, to stay in school, and to take academically rigorous courses to prepare them for college. Fairmont State College (FSC) received the sixth largest grant nationwide for 1999-2000 and was the only West Virginia recipient. Grant criteria included a demonstrated need for funding as reflected by poverty levels, gross income levels, college-going rates, and academic preparedness; critical components of early intervention efforts, activities to promote college preparation, and parent involvement; and a demonstrated commitment of partners (FSC, 1999).

Fairmont State College GEAR UP Grant

The FSC partnership grant aims to promote the academic advancement of higher education among youth by increasing their interest in and academic preparation for college. Fairmont's five-year grant includes early intervention, partnership, and scholarship components for its mostly rural, north central West Virginia constituents. Collaborating agencies include nine county boards of education (Barbour, Doddridge, Harrison, Marion, Monongalia, Preston, Randolph, Taylor, and Tucker) and a number of state, business, and organizational partners. All 55 of West Virginia's counties have been classified as *Appalachia* by the Appalachian Regional Commission (2000). Of the 48 schools within the nine-county region served by the grant, 29 (60%) have a *rural* Johnson code, a system used by the National Center for Education Statistics (2000) to assign locale types. Of the remaining 19 schools, 16 (33%) are classified as *small town* and 3 (6%) as *large town* (all in Monongalia County).

The FSC GEAR UP grant initially funds academic and support services for seventh-grade students and their parents in the nine participating counties and follows those students through the following four years. In addition, a new pool of seventh graders is added each successive year. By the end of the five-year funding cycle, the majority of the high school population would have participated in GEAR UP directly or at least benefitted from the overflow effect of having a GEAR UP presence in each middle and high school. At this point, core elements of GEAR UP will have been institutionalized and systemic and environmental changes implemented in all 48 middle and high schools in the nine-county area.

Purpose and Objectives of Study

As part of its scope of work in the GEAR UP grant, Fairmont State College contracted with AEL, Inc., to administer and analyze student and parent surveys to gather baseline information on incoming seventh-grade students' and parents' awareness and perceptions of, interest in, and aspirations for students' postsecondary education. This paper summarizes findings from the first

administration of the surveys in February 2000 in 29 middle and junior high schools within the nine-county region. The main objectives are to analyze and summarize regional data and to determine if any significant differences exist at the county level by survey.

Review of Literature

Student aspirations extend far beyond individual dreams or ambitions. Instead, aspirations encompass individual and family educational goals, career choices, and self-concept. Quaglia and Perry (1993, p. 2) define aspirations as being composed of inspiration and ambitions. "*Ambitions* represents an individual's ability to look ahead and invest in the future. *Inspiration* can be described as the individual's ability to invest the time, energy, and effort presently to reach their ambitions." (For a historical perspective on the aspirations construct, see Quaglia and Cobb's "Toward a Theory of Student Aspirations," *Journal of Research in Rural Education, 12*[3], 127-132.)

Researchers at the National Center for Student Aspirations have identified eight conditions that support high levels of aspirations in youth: achievement, belonging, curiosity, empowerment, excitement, mentoring, risk taking, and self-confidence (Plucker & Quaglia, 1998). The authors state that these conditions "provide an interpretive template that frames how students can be viewed and how schools can positively support . . . the development of student aspirations" (p. 253).

Cobb, McIntire, and Pratt (as cited in Quaglia and Perry, 1993) report that rural youth believe that their parents are more supportive of them taking full-time jobs, attending vocational schools, or joining the service rather than going to college. In addition, Walberg and Greenberg (1996) note that rural youth also face economic decline, limited work opportunities, and increased isolation. Yet youth are a rural community's greatest asset. When youth migrate from their hometowns, rural communities suffer a loss of talent and vitality crucial to the development or maintenance of a desirable future for these communities (Ley, Nelson, & Beltyukova, 1996). Factors affecting out-migration include limited economic opportunities, lack of faith in a community to sustain favorable economic conditions, and a willingness of rural youth to look elsewhere. All of these, combined with overall lower aspirations for postsecondary education, make it more difficult for rural youth to achieve career and economic success within West Virginia.

Howley, Harmon, and Leopold (1996) note that educators and community leaders believe that rural youth are becoming less involved in their hometown communities—this disengagement may reinforce students' inclination to migrate elsewhere. The trick is to encourage and facilitate the development of rural students' aspirations, while at the same time transform local communities into appealing places where young adults can prosper and grow while contributing to the quality of rural life. According to Kampits (1996), rural youth have significantly higher graduation rates from high school than urban youth, yet they are less likely to pursue college degrees. In addition, rural youth are less likely than more affluent youth to enroll in more demanding college-preparatory courses and are less likely to graduate from high school with firm plans for the future.

METHODS

Instrumentation

In October 1999, FSC staff prepared draft parent and student surveys to capture information needed to help prioritize and fine-tune upcoming GEAR UP activities. In November, AEL staff critiqued the surveys, reviewed relevant research, and identified other items to include. A very limited pretest was conducted in mid-November for the student surveys, which resulted in no substantive changes. However, in late November, the federal funding agency provided draft parent and student surveys with a strong recommendation to utilize them in data collection. In an effort to meet both federal and regional needs, AEL staff worked to eliminate duplication and to keep survey response time from being too cumbersome for both parents and students.

In December, the nine-page draft federal parent survey was modified to include relevant items from the Fairmont survey and was then edited and formatted to fit on four pages (two sheets front and back). This survey was to be administered to both a student's mother and father, as applicable. The AEL/FSC and federal student surveys were judged to be different enough to require completion of both forms. Therefore, AEL staff edited and formatted the draft six-page federal student survey to fit on four pages (two sheets front and back). AEL staff also worked with FSC staff to finalize and format their two-page survey (one sheet front and back). Final versions of all three surveys were submitted to FSC staff for a final review in January 2000; all three were approved.

Final AEL/FSC student survey. This survey contains 40 items utilizing a variety of response options, both selected-response and open-ended. Students are asked demographic questions related to their families; open-ended questions about job aspirations and current classes; and yes/no questions about school participation, computer usage, and plans for taking specific courses in the future. Finally, students are asked to rate their level of agreement (*strongly disagree* to *strongly agree*) for 10 items related to current perceptions and plans for life after high school. Face validity of survey items was assumed, given FSC's staff involvement and need for data on specific topics addressed in the survey. To assess the degree to which items measure the same construct (internal consistency), Cronbach Alpha reliability estimates were computed for this set of respondent scores, both for the region and by county (using interval and ordinal items, excluding demographic items). All coefficients were deemed to be unsatisfactory, ranging only from .10 to .47 (region = .39).

Final federal student survey. This survey contains 26 items utilizing a variety of response options, mainly selected-response with only a minimal number of open-ended items. Students are asked to respond to items pertaining to school and school work, plans for the future, knowledge about college, their family, and background information. Face validity of survey items was assumed, though no further research on the survey was available. Cronbach Alpha reliability estimates were computed for this set of respondent scores, both for the region and by county (using ordinal items, excluding demographic items). All coefficients were deemed satisfactory, ranging from .63 to .74 (region = .68).

Final federal parent survey. This survey contains 34 items utilizing a variety of response options, mainly selected-response with only minimal open-ended items (for "other" descriptions). Parents are asked to respond to items pertaining to their child, knowledge about college, and background information. Face validity of survey items was assumed, though no further research on the survey was available from the federal agency. Cronbach Alpha reliability estimates were computed for both mother and father respondent scores, both for the region and by county (using interval and ordinal items, excluding demographic items). For the mother scores, all coefficients were deemed satisfactory, ranging from .68 to .81 (region = .76). The father scores resulted in similar satisfactory coefficients, ranging from .70 to .84 (region = .79).

Coding sheet. In addition to the surveys, AEL worked with FSC to develop a coding scheme for the surveys. To keep respondents' identity fully anonymous in the analysis phase, all coding was done at the school level, usually by the teachers themselves. The Student Demographic Cover Page included demographic information for the student and parents, as well as coding information. Identification codes included (1) either the student's Social Security Number or a school-specific identification number, (2) a two-digit county code, (3) a two-digit school code, and (4) a survey-specific number (to differentiate the type of survey).

Data Collection

The three surveys described above were utilized to gather baseline data from seventh-grade students and their parents from the 29 middle and junior high schools in the nine-county area. The 1999-2000 seventh-grade population for these schools was 2,620. In late January, AEL staff photocopied the final surveys and assembled packets to be distributed to school staff at a February meeting. At the meeting, each participating school received an appropriate number of student packets, as well as postage-paid mailing envelopes for returning the completed surveys to AEL.

During the February meeting, an AEL staff member instructed county and school staff on how to administer the sets of GEAR UP surveys in the schools. Teachers were to complete the demographic cover page, transfer the corresponding identification number to all four surveys, and then remove the cover page before distributing the packets to students. The cover pages were then to be stored by the GEAR UP coordinator at each school. Students were given time during a class period to complete both of their surveys and were instructed to take the parent surveys home for their parents to complete and then return them to their teacher. After all surveys for a particular school were completed and returned, a staff member packaged the materials in the envelopes provided and mailed them to AEL. Of the 29 participating schools, 13 returned their surveys in February, 10 in March, and 3 in April. However, three schools did not return their surveys until the first week of June, precluding the data from being included in the analysis. Therefore, the total student sample for this report was 2,454.

Data Analyses

Databases were created using SPSS Windows for each of the four surveys (two separate student surveys and the parent survey for both mothers and fathers). Temporary staff were hired and trained to enter the data. Data were entered by county into each of the four databases and stored both on disk and hard drive. As each set of county data was entered, spot-checks were completed by other staff to ensure accuracy. Further, preliminary analyses were run to aid in cleaning the data files.

Response rates varied by type of survey. A total of 2,284 usable AEL/FSC student surveys were received (93% return rate), while 2,271 federal student surveys were received (92% return rate). As expected, parent participation was lower: a total of 1,840 surveys were received from students' mothers (75% return rate, if one makes the assumption that all students have either a mother or some type of female guardian such as grandmother or stepmother, which is not ascertainable). A total of 1,464 surveys were received from students' fathers (60% return rate, again making the same assumption about male caregivers). Therefore, response rates for parents should be viewed only as estimates of the population. See Table 1 for a breakdown of respondents by county and survey.

Table 1: Number of Respondents by County and Survey

County	AEL/FSC Student Survey	Federal Student Survey	Federal Parent Survey (Mothers)	Federal Parent Survey (Fathers)
Barbour	202	201	183	144
Doddridge	80	79	79	63
Harrison	601	598	497	377
Marion	441	437	312	245
Monongalia	197	198	187	155
Preston	280	279	223	186
Randolph	335	332	234	193
Taylor	148	147	125	101
TOTAL	2,284	2,271	1,840	1,464

Frequencies and percentages were calculated for all survey items. Inferential analyses included both parametric and nonparametric methods for this representative sample of seventh-graders over a one-year period. Parametric analysis included One-Way Analysis of Variance (ANOVA) on interval-level data from the parent survey and the AEL/FSC student survey to determine if significant differences exist among counties, utilizing Tukey post hoc comparisons to pinpoint those differences. Nonparametric analyses included the Kruskal-Wallis *H* test (ANOVA equivalent) on ordinal-level data from all surveys to determine if significant differences exist among mean county rankings and the chi-square (x^2) test of independence on nominal-level data from all surveys to determine if items are independent of county designation. Only significant differences (alpha level of .05 or less) are reported for these statistical procedures. One caution to keep in mind is that significant differences may be due in part to the large sample size.

FINDINGS

This section presents findings from administering the surveys to seventh-grade students and their parents in the participating schools within the FSC GEAR UP area. Findings are first presented in a regional overview, followed by a discussion of significant county differences by survey.

Regional Overview

AEL/FSC Student Survey

A total of 2,284 students responded to this survey. However, due to missing data (skipped items), the number of respondents changes from item to item and is not reported.

Almost half of the student respondents reported having one brother (42%), followed by no brother (30%), and two brothers (18%). Similarly, 40% of the students reported having one sister, 34% indicated having no sister, and 17% reported two sisters. Thirty-eight percent of the students reported that four people lived in their home, followed by 25% with five members and 17% with three.

Students were asked what they wanted to be when they grew up. The most common responses were sports (12%) (either an athlete or a sports-related position), doctor (10%), teacher (7%), or undecided at this point (7%). Eighty-one percent thought that their parents wanted them to go to college, 17% were not sure, and only 2% responded negatively. Seventy-seven percent indicated that they wanted to attend college, 16% were not sure, and 7% did not want to attend. Of those 7%, 30% said that college was not important, 26% said that their grades were not good enough, 20% said that they did not have the money, and the remaining 25% provided some other explanation (such as joining the military or just not interested in college). Fewer than half of the students indicated that they planned to be living in the state (48%) or working in the state (46%) by the time that they were 30.

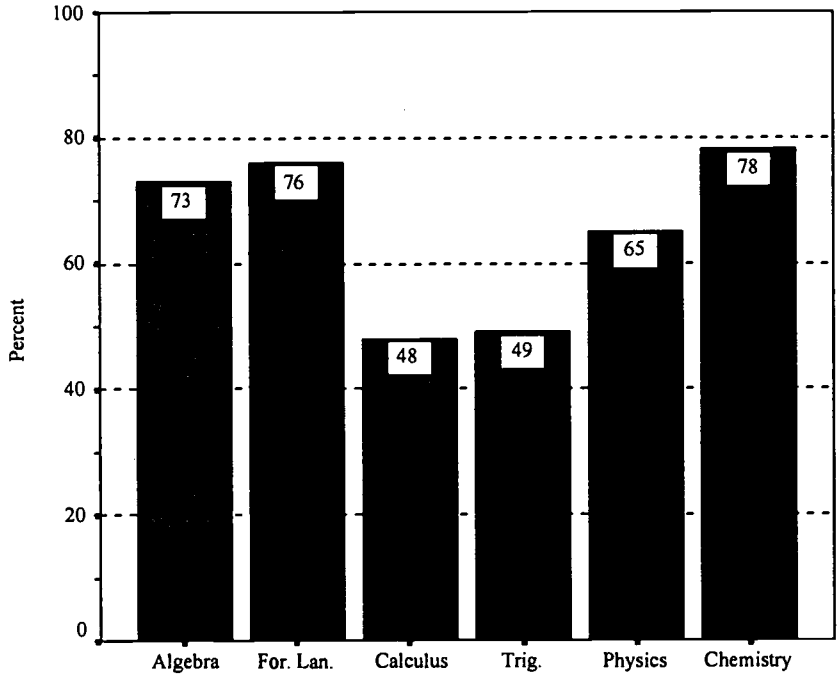
When asked how they were doing in particular subjects, students' responses were fairly similar: 60% indicated that they were doing well in math, 72% in English, 74% in science, and 73% in history. Interestingly, while 75% thought that they had good study skills and the majority indicated that they were doing well in the four subjects mentioned above, more than half (53%) indicated a need for help with some classes. The most frequently mentioned subject was math (38%), followed by English (17%), science (16%), and history (13%). Only 39% expressed an interest in attending an after-school tutoring or helping program, yet 68% were interested in a mentor/buddy. Further, students' impressions of their ability to go to college were quite high, with 90% responding affirmatively.

Participation in school activities varied widely, with 52% indicating participation in sports, 48% in clubs, and 13% in student government. Students identified their most favorite class as math (21%), science (21%), or gym/physical education (8%). When asked to explain their responses, students indicated that these classes were fun or cool (21%), that they liked the subject (12%) or the teacher (12%), or that the subject was easy (12%).

Seventy percent of the students reported having used a computer for either homework or school projects, and 75% have already taken a computer class at school. Further, 70% reported having a computer at home, 77% of whom have Internet access. Seventy-two percent reported that their parents used a computer, as well.

Students were asked if they planned on taking several advanced-level courses either before or during high school. More than three fourths of the students planned to take chemistry and a foreign language and less than half planned to take trigonometry or calculus. See Figure 1 for a graphical depiction of the percentage of students who plan to take these advanced courses.

Figure 1: Percentage of Students Planning to Take Advanced Courses



Finally, students were asked to rate their level of agreement for 10 items related to plans after high school. Item 32 (want to make money immediately after high school) received the highest level of agreement (80%). However, this seems to be contrary to the next three items receiving high levels of agreement. Item 31 (65%) states that more education or training is needed after high school to get a satisfying job, Item 33 (69%) that the student plans to continue education after high school, and Item 35 (76%) that continuing their education might help the student make career decisions.

An example of a seeming contradiction among students' views is what actions may help in making career choices. For example, Item 35 states that continuing education after high school may aid decision-making, while Item 38 states getting a job may help in this process. While 76% of the students agreed with Item 35, an additional 47% agreed with Item 38. Perhaps this overlap indicates that students were not viewing these as mutually exclusive solutions.

Students seemed to rely much more on the opinions of family members than friends when making decisions for after high school. Sixty-three percent of the respondents agreed that family advice helped them make decisions (Item 40), yet only 31% agreed that advice from friends helped in this capacity (Item 37). Finally, nearly half (49%) of the students were anxious to begin working in their career (Item 36), 17% thought that they could get a satisfying job without further education (Item 34), and 11% thought that they would not be able to afford higher education (Item 39).

Federal Student Survey

A total of 2,271 students responded to this survey. However, due to missing data (skipped items), the number of respondents changes from item to item and is not reported. The students were divided evenly by gender, with 50% being male and 50% being female. More than half were born in 1987 (53%) and 41% were born in 1986. Eighty-nine percent indicated that they were White, 4% American Indian or Alaska Native, 1% Black or African American, and 6% Other. Most frequently written-in responses for the Other category were Irish or American Indian/White.

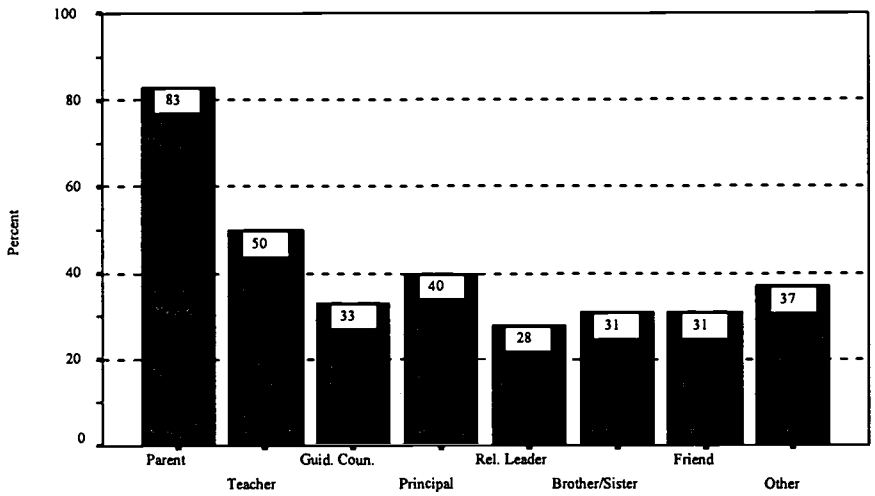
By far, students turned to a parent or guardian most frequently for help with homework, as indicated by 89% agreement. Other usual sources of help included a classmate or friend (68%), a teacher (58%), a brother or sister (43%), or another adult (32%). Less frequent sources included tutors, someone who charges a fee, grandparents, aunts, uncles, or cousins.

More than half of the students (63%) perceived themselves as either working harder than other students (51%) or much harder (12%), 32% felt that they did not work as hard as others, and 5% felt that they worked much less hard. Also, 58% classified themselves as good students, 18% as excellent, 22% as fair, and 3% as poor.

Students were asked to indicate how important others' thoughts were relative to their decisions about education. For each of the eight categories (parent, teacher, guidance counselor, principal, religious leader, brother/sister, friend, or other), fewer than half of the students indicated that these opinions were not important. Rated most frequently as very important were parent (83%)

and teacher (50%). See Figure 2 for a graphical depiction of the categories classified as very important.

Figure 2: Percentage of People Classified as
Very Important for Providing Education Information



Seventy-five percent of the students believed that they would continue their education after high school, 4% said that they would not, and 21% were not sure. Overwhelmingly, most students (92%) were getting information about choices after high school from their parents, followed by teachers (70%), friends (56%), and brothers/sisters (45%). Less frequent information sources included guidance counselors, principals, religious leaders, or others (such as grandparents or other relatives).

Students were asked what level of education they thought they would achieve and what their parents wanted them to achieve. Students most frequently indicated that they did not know what education level they would achieve (41%). Thirty-two percent believed that they would obtain a graduate degree and 13% a bachelor's degree. Fifty-eight percent believed that their mothers wanted them to get a graduate degree, while 54% believed the same for their fathers. The response patterns were similar for all degrees except the graduate degree, where parents' perceived expectations were markedly higher than the students' own expectations.

When asked why they would not continue their education after high school, 25% of the students indicated that expense was the main reason. Additionally, 15% indicated that their grades were not good enough, 12% wanted to join the military, 11% wanted or needed to work, 10% wanted to start a family or take care of existing family members, 8% were not interested, and 2% indicated that a disability prevented them from continuing their education. Seventeen percent of the respondents indicated some other reason prevented them from attending college; however, the

majority of their written responses implied that they either definitely would attend college or that they wanted to continue their education. Relatedly, when asked if they would be able to afford to attend college, only 22% definitely agreed. Forty percent said probably, 25% were not sure, 8% doubted it, and 5% said no way.

Only 9% of the students have talked with a school counselor about college entrance requirements, 21% have discussed academic requirements with an adult at school, and 45% have discussed academic requirements with an adult at home. Eighty-two percent indicated that they have heard of four-year colleges or universities and 63% indicated that they have heard of both two-year or community colleges and vocational or business schools. An additional 16% were aware of other types of schools such as technical or veterinary.

More than three fourths (76%) indicated that postsecondary education was very important, 15% said it was somewhat important, 3% said it was not important, and 6% did not know. Further, 86% agreed that college graduates earn more money than those without such a degree.

Students were asked if they were aware of a variety of financial aid sources, and if they thought that they were likely to receive them. Respondents were aware of all options to varying degrees: athletic scholarships (82%), state scholarships (77%), federal student loans (58%), institutional scholarships (46%), private/merit scholarships (40%), federal work-study (29%), and federal Pell grants (22%). Their perceived likelihood of obtaining these financial packages was very similar to their level of awareness for the federal work-study (28%) and federal Pell grants (21%). For the remaining options, students were less likely to believe that they would obtain such financing than they were aware of the various types of aid: state scholarships (58%), athletic scholarships (51%), federal student loans (47%), institutional scholarships (35%), and private/merit scholarships (27%).

About one third of the students believed that one or more of their family members had either attended or completed college—mothers (37%), fathers (31%), and grandparents (27%)—while 18% indicated that a brother or sister had attended or completed college. Interestingly, though, 55% responded that some other relative had either attended or completed college.

Federal Parent Surveys

A total of 1,840 mothers and 1,464 fathers responded to this survey. However, due to missing data (skipped items), the number of respondents changes from item to item and is not reported. For the mothers' responses, 97% indicated that they were either the mother or female guardian; other responses included grandmother, foster mother, or stepmother. For the fathers' responses, 97% indicated that they were either the father or male guardian; other responses included stepfather and grandfather. For both groups, the most frequently obtained level of education was high school (62% mothers, 67% fathers). Mothers also reported certificate (15%), associate's degree (10%), bachelor's degree (8%), and master's degree (5%). Fathers also reported certificate (11%), associate's (6%), bachelor's (10%), master's (5%), and doctorate (2%).

Eighty-seven percent of the mothers reported that another adult lived in their home, as did 92% of the fathers. For those other adults, mothers reported that 68% had achieved a high school education, 10% each had obtained a certificate or bachelor's degree, 6% an associate's degree, 4% a master's degree, and 1% a doctorate. Fathers reported that 64% had achieved a high school education, 12% a certificate, 10% a bachelor's, 9% an associate's, and 5% a master's. Twelve percent of each parent group reported that someone in their home was currently attending college.

Responses to ethnicity were almost identical between mothers and fathers. Ninety-six percent of the mothers and 94% of the fathers indicated that they were White, 2% of each group indicated American Indian or Alaska Native, and 1% each indicated Black or African American. The remainder selected Other, and wrote in such descriptions as American or American Indian/White.

Parents were asked to estimate how many hours per week their child spent on homework for specific subjects; responses between mothers and fathers were almost identical. About two thirds of both the mothers and fathers reported that their child spent from 1 to 3 hours per week on each of the following subjects: English, science, math, history, and all other subjects. About 15% of both parent groups reported that their child spent from 4 to 6 hours per week on math. Additionally, about 15% of both groups indicated that their child did not do homework for any subject. Overall, about 10% of each group noted that they did not know how much time their child spent on homework or that their child was not taking that particular subject.

Parents were then asked how often each week they helped their child with homework in various subjects. More variance was noted here between parent groups, with a higher percentage of mothers indicating that they frequently helped their child with homework and a higher percentage of fathers indicating that they never helped. Close to 60% of the mothers indicated that they occasionally helped their child with English, science, math, history, and other subjects; fathers had a slightly lower percentage of occasional help.

Parents' viewpoints were similar on how hard they believed their child works in school. Forty-eight percent of the mothers and 54% of the fathers indicated that their child worked harder than other students and 9% each indicated much harder. Respectively, 37% and 34% of the mothers and fathers felt that their child did not work as hard as others and 4% and 5% perceived that their child worked much less hard. Also, 46% and 48% of the mother and father respondents, respectively, classified their child as a good student; 32% of the mothers and 33% of the fathers said their child was excellent. Twenty percent of the mothers and 17% of the fathers felt that their child was a fair student; only 3% of mothers and 2% of fathers said that their child was a poor student.

Four percent of both the mothers and the fathers indicated that they had talked with their child's school counselor about high school graduation requirements. About one fourth (25% mothers, 24% fathers) felt that they had enough information about such requirements.

Fathers had a higher percentage of never meeting with their child's teachers, with nearly half (47%) compared to 26% of the mothers. Mothers reported higher percentages for all remaining response options: once (17% compared to 13% of fathers), few times (30% compared to 24%),

occasionally (22% compared to 14%), and frequently (4% compared to 2%). In general, more than half (52%) of the mothers indicated that they met with their child's teachers either a few times or occasionally, while only 38% of the fathers made this claim. For both groups, the major purpose of such meetings was to discuss their child's overall academic performance (69% of mothers, 66% of fathers).

Thirty percent of the mothers and 24% of the fathers indicated that they were involved in activities at their child's school. About three fourths of each group (72% and 75%, respectively) reported that they were satisfied with the education that their child was receiving, while 12% of the mothers and 9% of the fathers felt very satisfied. About equal percentages indicated that they were either dissatisfied (14% mothers, 13% fathers) or very dissatisfied (2% mothers, 3% fathers).

Only 1% of the mothers and 2% of the fathers reported that they had already discussed college entrance requirements with their child's school counselor. And, fewer than 30% of the mothers and fathers agreed that they were familiar with the entrance requirements for postsecondary institutions. Eighty-five percent of the mothers and 76% of the fathers noted that they had already talked with their child about attending college. Further, 14% of the mothers and 12% of the fathers reported having already visited college campuses with their child.

Parents were asked to provide cost estimates for their child to attend a two-year public college, a four-year public college, and a four-year private college. Median estimates were identical for both groups: $5,000 for two-year public, $10,000 for four-year public, and $20,000 for four-year private colleges (averages not reported due to several extremely out-of-range responses). These figures are very close to the national out-of-state estimates of $4,621 for two-year public, $8,018 for four-year public, and $19,970 for four-year private colleges (Snyder and Hoffman, 2000). It is not known whether parents' estimations were based on out-of-state or in-state assumptions.

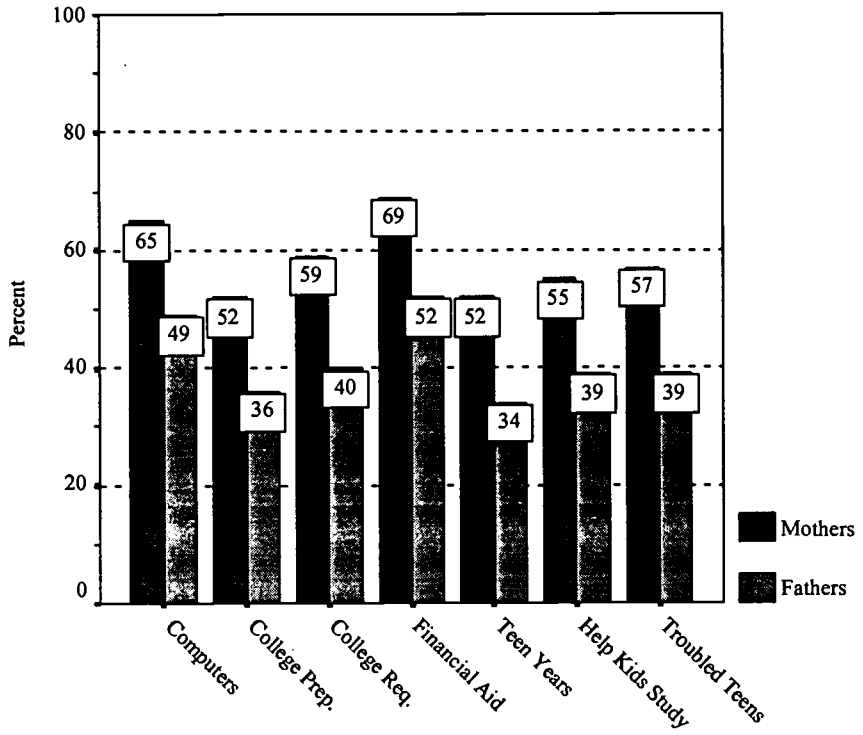
About one third of the parents reported that they were saving money for their child's college education (34% mothers, 36% fathers). Nearly half of both groups (45% mothers, 46% fathers) thought that their child probably or definitely would be able to afford to attend college. About one third (35% each group) were not sure, while about 20% of both mothers and fathers either doubted or were positive that their child would not be able to afford to go to college.

Mothers' and fathers' responses were slightly different when asked if they thought that their child would likely qualify for various types of financial aid for education beyond high school. A slightly higher percentage of mothers believed that their child would qualify for federal Pell grants, student loans, and work-study (each between 30% to 50%), while a slightly higher percentage of fathers believed that their child would qualify for state, institutional, merit, or athletic scholarships (each between 15% and 35%). Parents viewed student loans as the most likely source of financial aid for which their child would qualify (48% mothers, 46% fathers).

Finally, parents were given a listing of potential topics for free workshops and were asked to indicate which they would be interested in attending. The mothers were consistently more interested in each topic than the fathers. Both groups most frequently selected Understanding Computers and the Internet, Preparing for College - A Parent's Course, Understanding College Requirements, Under-

standing Financial Aid and Scholarships, Understanding the Teenage Years, How to Help Kids Study, and How to Know the Signs of a Troubled Teen. See Figure 3 for a graphical depiction of the seven workshop topics of most interest to parents.

Figure 3: Percentage of Seven Workshop Topics of Most Interest to Parents



County Differences by Survey

In order to determine if responses to nominal-level survey items are independent of county designation, chi-square (x^2) tests of independence were conducted. In order to determine if significant differences exist among counties by surveys, Kruskal-Wallis H tests were conducted on ordinal-level items and One-Way Analyses of Variance (ANOVAs) were conducted on interval-level items. Findings from these analyses are presented below for each type of survey.

AEL/FSC Student Survey

Chi-Square tests. Tests of independence for 27 nominal-level items with yes/no response options resulted in 26 significant x^2 values for this survey, indicating that a relationship does exist between these survey items and county designation. See Table 2 for further statistical detail. While this method does not lend itself toward pinpointing definitive differences, inspection of the cross-tabs does allow for some generalizations to be made. Table 3 is a visual depiction of overall patterns of highest and lowest percentages of affirmative responses by county for these items.

Kruskal-Wallis *H* tests. This nonparametric ANOVA equivalent was conducted on 10 ordinal-level items, resulting in 5 significant H values for this survey, indicating that significant differences do exist by county for these survey items. See Table 4 for further statistical detail. While this method does not lend itself toward pinpointing definitively which county responses differ significantly, inspection of the largest observed difference between mean county rankings does allow for some generalizations to be made (the higher the mean county ranking, the higher the level of agreement with the item).

ANOVAs. This parametric statistical method was employed for three interval-level items on the survey. These items included the number of brothers and sisters for each student, as well as how many people lived in their homes. No significant F values were evident, indicating that no significant differences exist by county for these survey items. Therefore, Tukey post hoc comparisons were unnecessary.

Table 2: Significant Chi-Square Results for the AEL/FSC Student Survey

Item	Deg. Fr.	x^2 Value	Sig. (<.05)
4. Do your parents want you to go to college?	14	39.73	.000
5. Do you want to go to college after high school?	14	30.26	.007
6. I am doing well (grade of A or B) in math.	7	66.80	.000
7. I am doing well (grade of A or B) in English.	7	63.46	.000
8. I am doing well (grade of A or B) in science.	7	107.85	.000
9. I am doing well (grade of A or B) in history.	7	42.67	.000
10. I think I have good study skills.	7	20.27	.005
11. I need help with some of my classes.	7	78.36	.000
12. I would be interested in attending an after-school tutoring program.	7	45.24	.000
13. I think I have the ability to go to college.	7	16.30	.023
14. In school, I participate in sports.	7	29.57	.000
15. In school, I participate in clubs.	7	119.78	.000
16. In school, I participate in student government.	7	45.12	.000
18. Do you use a computer for homework of school projects?	7	27.81	.000
19. Have you taken a computer class at school?	7	238.68	.000
20. Do you have a computer at home? If yes, do you have Internet access?	7 7	14.65 21.21	.041 .003
22. Do you plan to take algebra before high school?	7	72.61	.000
23. Do you plan to take a foreign language?	7	50.65	.000
24. Do you plan to take calculus in high school?	7	50.00	.000
25. Do you plan to take trigonometry in high school?	7	28.10	.000
26. Do you plan to take physics in high school?	7	27.46	.000
27. Do you plan to take chemistry in high school?	7	16.85	.018
28. Do you plan to be living in WV when you're 30?	7	20.97	.004
29. Do you plan to be working in WV when you're 30?	7	18.03	.012
30. I would be interested in having a "college-type" mentor or buddy.	7	36.29	.000

Note: All x^2 values were valid, i.e., no minimum expected counts were less than one and no more than 20% of the cells had expected counts of less than five.

Table 3: Affirmative Response Percentages by County for
Significant Chi-Square Items on the AEL/FSC Student Survey

Item Number and Shortened Stem	Barbour	Doddridge	Harrison	Marion	Monongalia	Preston	Randolph	Taylor
4: Do your parents want you to go to college?	**72**	75	82	86	90	77	79	79
5: Do you want to go to college?	**66**	71	78	78	86	77	76	72
6: I am doing well in math.	64	60	56	54	71	61	72	**40**
7: I am doing well in English.	60	78	79	69	81	**59**	75	79
8: I am doing well in science.	72	87	**64**	73	86	71	92	71
9: I am doing well in history.	78	72	68	**67**	85	82	71	72
10: I think I have good study skills.	78	80	71	73	81	75	78	**66**
11: I need help with some of my classes.	55	51	58	59	40	53	**37**	71
12: I would be interested in a tutoring program.	44	37	41	45	32	46	**26**	38
13: I think I have the ability to go to college.	86	92	91	90	93	90	92	**83**
14: In school, I participate in sports.	50	66	46	56	**44**	58	56	49
15: In school, I participate in clubs.	31	67	46	60	44	37	62	**30**
16: In school, I participate in std. government.	15	16	7	18	16	19	14	**6**
18: Do you use a computer for homework?	**65**	67	67	75	82	68	**65**	72
19: Have you taken a computer class at school?	65	90	88	**50**	84	78	80	78
20a: Do you have a computer at home?	**63**	67	68	73	77	70	70	75
20b: If yes, do you have Internet access?	**53**	54	64	65	68	55	59	67
22: Do you plan to take algebra?	62	**51**	76	75	76	81	76	54
23: Do you plan to take a foreign language?	71	**53**	77	82	86	74	72	72
24: Do you plan to take calculus?	40	**37**	53	40	61	45	54	38
25: Do you plan to take trigonometry?	44	**36**	51	44	60	47	54	48
26: Do you plan to take physics?	**54**	56	67	62	70	66	72	66
27: Do you plan to take chemistry?	**72**	**72**	80	78	75	81	84	76
28: Do you plan to be living in WV when 30?	49	52	55	46	**40**	49	42	52
29: Do you plan to be working in WV when 30?	46	50	52	43	**39**	47	42	48
30: I would be interested in a mentor or buddy.	67	72	73	69	76	62	**58**	61

Note: Counties with the highest percentage of affirmative responses per item are underlined; those with the lowest percentage of affirmative responses per item are bold.

Table 4: Significant Kruskal-Wallis *H* Test Results for the AEL/FSC Student Survey

Item	Deg. Fr.	*H* Value	Sig. (<.05)	Largest Observed Diff.
31. I need more education/training after high school to get a satisfying job.	7	18.87	.009	Monongalia > Marion
32. I want to make some money immediately after high school.	7	24.28	.001	Harrison > Monongalia
35. Continuing my education after high school might help me decide what I want to do.	7	18.22	.011	Barbour > Marion
37. The opinions and plans of my friends help me make decisions for after high school.	7	17.03	.017	Doddridge > Monongalia
39. I won't be able to afford to continue my education after high school.	7	20.86	.004	Barbour > Monongalia

Federal Student Survey

Chi-Square tests. Tests of independence for 44 nominal-level items with yes/no response options resulted in 23 significant x^2 values for this survey, indicating that a relationship does exist between these survey items and county designation. See Table 5 for further statistical detail. While this method does not lend itself toward pinpointing definitive differences, inspection of the cross-tabs does allow for some generalizations to be made. Table 6 is a visual depiction of overall patterns of highest and lowest percentages of affirmative responses by county for these items.

Kruskal-Wallis *H* tests. This nonparametric ANOVA equivalent was conducted on 15 ordinal-level items, resulting in 7 significant *H* values for this survey, indicating that significant differences do exist by county for these survey items. See Table 7 for further statistical detail. While this method does not lend itself toward pinpointing definitively which county responses differ significantly, inspection of the largest observed difference between mean county rankings does allow for some generalizations to be made (the higher the mean county ranking, the higher the response rating).

Table 5: Significant Chi-Square Results for the Federal Student Survey

Item	Deg. Fr.	x^2 Value	Sig. (<.05)
1. Who of the following usually helps you with your homework?			
(a) A teacher at your school	7	24.83	.001
(f) A classmate or friend	7	17.44	.015
(h) Some other person	7	14.19	.048
5. Do you think you will continue your education after high school (that is, go to college or a training program, etc.)?	14	37.04	.001
6. From whom do you get most of your information about your options for continuing your education after high school?			
(b) Teacher(s)	7	38.66	.000
(c) Guidance counselor(s)	7	42.58	.000
(d) Principal or assistant principal	7	24.33	.001
(e) Religious leader	7	17.97	.012
(h) Other	7	20.61	.004
9. Have you talked with your school counselor about the entrance requirements for college?	7	110.18	.000
10. Have you heard of the following types of postsecondary schools?			
(a) Two-year or community college	7	58.70	.000
(b) Four-year college or university	7	23.55	.001
(c) Vocational, trade, or business school	7	45.96	.000
14. Have you heard of the following sources of money for college?			
(e1) Institutional scholarships	7	24.97	.001
(g1) Athletic scholarships	7	20.83	.004
Do you think you are likely to get this type of aid?			
(e2) Institutional scholarships	7	18.92	.008
15. Have you discussed the academic requirements for attending a four-year college with an adult at school this year?	7	54.97	.000
16. Have you discussed the academic requirements for attending a four-year college with any adults in your household this year?	7	48.60	.000
18. Did any of your family members attend or complete college?			
(a) Mother or female guardian	14	28.59	.012
(b) Father or male guardian	14	33.11	.003
(c) Brother(s) or sister(s)	14	23.91	.047
(d) Grandparent(s)	14	34.87	.002
(e) Other relative(s)	14	27.07	.019

Note: All x^2 values were valid, i.e., no minimum expected counts were less than one and no more than 20% of the cells had expected counts of less than five.

Table 6: Affirmative Response Percentages by County for Significant Chi-Square Items on the Federal Student Survey

Item Number and Shortened Stem	Barbour	Doddridge	Harrison	Marion	Monongalia	Preston	Randolph	Taylor
1a: Who helps with homework?–teacher	64	**53**	54	55	69	54	63	**53**
1f: Who helps with homework?–friend	68	75	70	**62**	70	66	74	**62**
1h: Who helps with homework?–other	17	21	**12**	21	17	18	18	14
5: Will you continue your education?	**62**	81	76	76	81	75	77	70
6b: Who gives info. about options?–teacher	68	**50**	69	69	85	73	69	73
6c: Who gives info. about options?–counsel.	19	**17**	27	38	25	29	36	21
6d: Who gives info. about options?–principal	32	**13**	33	32	37	30	23	32
6e: Who gives info. about options?–relig. ldr.	**10**	17	22	25	18	19	20	17
6h: Who gives info. about options?–other	**22**	46	29	35	45	32	33	32
9: Talked to counselor about college req.?	**3**	5	4	18	4	6	17	6
10a: Heard of post. school?–2-year college	58	48	62	70	77	64	62	**42**
10b: Heard of post. school?–4-year college	80	87	80	86	91	82	82	**75**
10c: Heard of post. school?–voc./bus. school	57	**51**	60	64	81	57	69	61
14e1: Heard of aid?–institutional scholarship	**34**	41	44	52	53	48	45	39
14g1: Heard of aid?–athletic scholarship	80	83	80	86	92	**78**	82	83
14e2: Likely to get?–institutional scholarship	**25**	34	36	40	42	28	36	32
15: Discussed college req. with school adult?	17 **33**	**16** 47	17 44	20 56	40 56	18 40	25 44	19 38
16: Discussed college req. with home adult?	30	**28**	38	43	42	32	39	30
18a: Family member attend college?–mother	**22**	29	33	34	33	26	33	26
18b: Family member attend college?–father	19	**10**	14	17	21	19	22	16
18c: Family member attend college?–sibling	**20**	22	31	29	21	23	30	24
18d: Family member attend college?–grndprnt.	**48**	53	56	59	61	52	57	50
18e: Family member attend college?–other								

Note: Counties with the highest percentage of affirmative responses per item are underlined; those with the lowest percentage of affirmative responses per item are bold.

Table 7: Significant Kruskal-Wallis *H* Test Results for the Federal Student Survey

Item	Deg. Fr.	*H* Value	Sig. (<.05)	Largest Observed Diff.
2. Compared with other students, how hard do you work in school?	7	26.74	.000	Monongalia > Harrison
3. What type of student do you consider yourself to be?	7	32.62	.000	Monongalia > Marion
4. How important to your decisions about education is what each of the following people think?				
(c) Guidance counselor(s)	7	54.12	.000	Harrison > Doddridge
(d) Principal/asst. principal	7	26.98	.000	Harrison > Doddridge
(e) Religious leader	7	19.29	.007	Harrison > Monongalia
7. What is the highest level of education you think you will achieve?	7	17.14	.016	Monongalia > Doddridge
13. Do you think you will be able to afford to attend a four-year college or university after high school?	7	42.95	.000	Monongalia > Preston

Federal Parent Surveys

Chi-Square tests. Tests of independence for 36 nominal-level items per parent with yes/no response options resulted in 11 significant x^2 values for mothers and 2 significant x^2 values for fathers on this survey, indicating that a relationship does exist between these survey items and county designation. See Table 8 for further statistical detail. While this method does not lend itself toward pinpointing definitive differences, inspection of the crosstabs does allow for some generalizations to be made. Table 9 is a visual depiction of overall patterns of highest and lowest percentages of affirmative responses by county for these items.

Kruskal-Wallis *H* tests. This nonparametric ANOVA equivalent was conducted on 17 ordinal-level items per parent, resulting in 15 significant *H* values for mothers and 12 significant *H* values for fathers on this survey, indicating that significant differences do exist by county for these survey items. See Table 10 for further statistical detail. While this method does not lend itself toward pinpointing definitively which county responses differ significantly, inspection of the largest observed difference between mean county rankings does allow for some generalizations to be made (the higher the mean county ranking, the higher the response rating).

ANOVAs. This parametric statistical method was employed to determine if significant differences exist among counties for three interval-level items per parent on this survey. These items focused on parents' estimates of yearly expenses for a two-year community college, a four-year public college, and a four-year private college. No significant *F* values were evident, indicating that no significant differences exist by county for these survey items. Therefore, Tukey post hoc comparisons were unnecessary.

Table 8: Significant Chi-Square Results for the Federal Parent Surveys

Item	Deg. Fr.	x^2 Value	Sig. (<.05)
Fathers			
21. Which of the following free courses or parent workshops would you attend if they were offered at a convenient time for you?			
(b) A Brush-Up Course for Parents in Basic Math	7	16.35	.022
(n) Other topic	7	16.61	.020
Mothers			
10. Are you involved in any activities at your child's school?	7	27.89	.000
13. Are you familiar with the entrance requirements for each of the following schools?			
(a) Two-year college	7	14.90	.037
17. Have you saved any money for your child's college education?	7	19.24	.007
20. Do you think your child is likely to qualify for the following sources of money for education beyond high school?			
(d) State scholarships	14	31.10	.005
(e) Institutional scholarships	14	26.47	.023
(f) Private/merit scholarships	14	28.52	.012
21. Which of the following free courses or parent workshops would you attend if they were offered at a convenient time for you?			
(b) A Brush-Up Course for Parents in Basic Math	7	19.46	.007
(c) A Brush-Up Course for Parents in Basic English	7	14.70	.040
(k) Understanding the Teenage Years	7	21.72	.003
(l) How to Help Kids Study	7	15.09	.035
22. Do you have a computer at home?	7	14.66	.041

Note: All x^2 values were valid, i.e., no minimum expected counts were less than one and no more than 20% of the cells had expected counts of less than five.

Table 9: Affirmative Response Percentages by County for
Significant Chi-Square Items on the Federal Parent Surveys

Item Number and Shortened Stem	Barbour	Doddridge	Harrison	Marion	Monongalia	Preston	Randolph	Taylor
Fathers								
21b: Workshop you would attend?–math	38	26	26	34	29	**19**	26	28
21n Workshop you would attend?–other topic	11	29	9	18	**4**	8	7	15
Mothers								
10: Involved in activities at child's school?	34	32	**22**	31	34	37	32	24
13a: Familiar with entrance req.?–2-yr college	**20**	21	31	30	21	24	26	24
17: Saved any money for college education?	**23**	25	35	37	39	32	37	30
20d: Think child can get?–state scholarship	26	**17**	31	29	32	24	37	29
20e: Think child can get?–institutional schol.	19	**15**	24	24	25	18	27	25
20f: Think child can get?–merit scholarship	15	**11**	23	23	28	22	24	17
21b: Workshop you would attend?–math	48	**31**	37	47	34	33	35	45
21c: Workshop you would attend?–English	38	**22**	25	35	33	25	29	32
21k: Workshop you would attend?–teen years	57	**32**	50	54	60	48	48	59
21l: Workshop you would attend?–study skills	60	**44**	54	57	61	53	47	63
22: Do you have a computer at home?	**60**	61	68	74	70	72	70	73

Note: Counties with the highest percentage of affirmative responses per item are underlined; those with the lowest percentage of affirmative responses per item are bold.

Table 10: Significant Kruskal-Wallis *H* Test Results for the Federal Parent Surveys

Item	Deg. Fr.	*H* Value	Sig. (<.05)	Largest Observed Diff.
Fathers				
2. How many hours each week does your child spend on homework?				
(a) English	7	29.44	.000	Preston > Doddridge
(b) Science	7	34.79	.000	Preston > Doddridge
(c) Math	7	36.63	.000	Taylor > Doddridge
(d) History/Social Studies	7	27.12	.000	Marion > Doddridge
(e) All other subjects	7	25.30	.001	Marion > Doddridge
3. How often each week do you help your child with homework?				
(a) English	7	14.18	.048	Barbour > Randolph
(b) Science	7	20.57	.004	Harrison > Doddridge
(d) History/Social Studies	7	16.42	.022	Barbour > Monongalia
5. What type of student do you consider your child to be?	7	19.16	.008	Randolph > Taylor
8. How often do you meet with your child's teachers?	7	17.91	.012	Barbour > Preston
11. How satisfied are you with the education your child is receiving?	7	28.75	.000	Monongalia > Taylor
24. What is the highest level of education you have obtained?	7	23.34	.001	Randolph > Taylor
Mothers				
2. How many hours each week does your child spend on homework?				
(a) English	7	32.03	.000	Preston > Randolph
(b) Science	7	39.11	.000	Harrison > Randolph
(c) Math	7	73.39	.000	Taylor > Randolph
(d) History/Social Studies	7	22.55	.002	Harrison > Randolph
(e) All other subjects	7	36.06	.000	Marion > Randolph
3. How often each week do you help your child with homework?				
(a) English	7	18.02	.012	Barbour > Randolph
(b) Science	7	32.91	.000	Taylor > Monongalia
(c) Math	7	37.81	.000	Taylor > Doddridge
(d) History/Social Studies	7	19.17	.008	Barbour > Monongalia
(e) All other subjects	7	24.41	.001	Taylor > Randolph
4. How hard do you think your child works in school?	7	17.20	.016	Monongalia > Barbour
5. What type of student do you consider your child to be?	7	23.07	.002	Randolph > Taylor
8. How often do you meet with your child's teachers?	7	41.48	.000	Barbour > Monongalia
11. How satisfied are you with the education your child is receiving?	7	34.22	.000	Monongalia > Randolph
26. What is the highest level of education of another adult in your house?	7	20.45	.005	Randolph > Barbour

CONCLUSIONS

A number of conclusions can be drawn from both the regional GEAR UP summary and the county comparisons for the north-central West Virginia seventh-grade students and their parents. These conclusions are presented below by topical themes.

Parent Involvement

- Parents are playing an important role in their child's academic progress. Nearly all the students report that a parent (more often a mother) is the person who most frequently helps them with homework and parents themselves report occasionally helping their child with homework. However, school involvement seems to be limited, since fewer than one third of the parents report participating in school activities.

- Parent/teacher meetings seem to be viewed by parents as minimally important. Only half of the parents meet occasionally with their child's teachers, usually to discuss overall academic performance. Further, nearly half of the fathers never meet with their child's teachers.

- Overall, parents seem content with the status quo of their child's education, given that more than three fourths feel satisfied or very satisfied with the education their child is receiving.

Academics

- On average, students report spending from 1 to 3 hours per evening on homework. More than two thirds of the parents believe that their child spends 5 to 15 hours per week.

- Overall, students seem fairly confident of their academic ability and believe that they are good students. Nearly three fourths believe that they have good study skills and that they are doing well in specific subjects. Their main reasons for not doing well are not completing all the required homework or in-class assignments and not understanding the topics. Further, about two thirds of the students perceive themselves as working harder than other students, which is comparable to parents' views.

- Students are willing to admit they need academic help and are open to participating in enrichment opportunities. More than half of the students want help with some of their classes, most frequently math. More than a third are interested in attending an after-school tutoring program and more than two thirds are interested in having a mentor.

- Students' most favorite classes are math and science, due to such factors as the classes either being fun or easy and liking either the subject or the teacher.

- Students seem to be more willing to take some college-preparatory courses than others. Three fourths of the students plan to take algebra, foreign language, and chemistry in the future; two thirds plan to take physics; and only about half plan to take calculus and trigonometry.

Student Aspirations

- Most students seem to recognize the benefits of postsecondary education. Nearly all students agree that postsecondary education is important, feel that they have the ability to successfully attend college, and acknowledge that college graduates earn more money.

- Nearly three fourths of the students believe that further education is needed after high school to get a satisfying job and believe that they will continue their education. Further, they believe that their parents want them to go to college, with about half indicating that their parents want them to obtain a graduate degree. However, students seem to be unsure of their own aspirations, since more than two thirds do not know exactly what education level they will achieve.

- Nearly one third of the students indicate they want careers in the fields of medicine, sports, or education—most of which will require postsecondary education. They view poor grades and limited finances as the biggest obstacles to continuing their education.

College Awareness

- Students have limited awareness of postsecondary institutions. More than three fourths of the students are familiar with four-year colleges, but only about two thirds are familiar with either two-year colleges or vocational schools.

- Overwhelmingly, students view parents as the most important source of educational information. Nearly all of the students report getting information regarding career choices from parents. This may lead to incomplete information, though, since fewer than one third of the parents are familiar with the entrance requirements for two-year colleges, four-year colleges, and vocational or business schools. Further, the majority of parents have not talked to a school counselor about high school graduation requirements or college entrance requirements and feel that they do not have enough information about college.

Financial Aid Awareness

- Parent and student viewpoints are similar regarding students' perceived ability to afford college. About half of the students and parents believe the student either probably or definitely will be able to afford to go to college.

- Parents and students show a wide range of familiarity with financial aid sources and both groups are disinclined to believe that students will receive scholarships. Nearly all students are aware of athletic or state scholarships, about half are familiar with federal student loans and institutional and merit scholarships, and fewer than a third are familiar with federal work-study and Pell grants. Students are much less likely to believe that they will obtain athletic, state, and merit scholarships than they are to be aware of them. Fewer than one third of the parents believe that their child can receive Pell grants, work-study, or any type of scholarship.

- Parents in general seem to have a realistic picture of college expenses, with median estimates very close to 1999 national averages for attending two- or four-year colleges. About one third of the parents are already saving money for their child's education.

Miscellaneous

- Findings show that parents are more homogeneous in their survey responses than students in this nine-county region. While both groups show similarities and differences, students are more likely to differ by county.

- Mothers report being more interested in attending free educational workshops on identified topics than fathers. More than half of the mothers report interest in topics such as computers, college preparation or financing, and understanding and communicating with teenagers, compared to only one third to half of the fathers. Both groups report least interest in workshops on specific academic subjects or GED preparation.

- Students seem to think that they will find better opportunities outside the state. Fewer than half expect to be living or working in West Virginia by the time that they are 30 years old.

- Students seem to be comfortable with computers, reporting use at both home and school. About three fourths have used a computer for homework or school projects and have taken a computer class at school.

County-Specific

- Barbour County students seem to have some of the least positive attitudes about college and are least likely to think that they will attend college. Further, they note the least computer access and some of the least rigorous future academic plans. However, an encouraging note is that these students seem to be most convinced that continuing their education after high school will help them make career decisions. Barbour mothers and fathers report most frequently meeting with their child's teachers. The mothers have the lowest perception of the effort their child is putting into school.
- While Doddridge County students have some of the least rigorous future academic plans, they also are the most likely to think that they will go on to college. However, they do have the lowest perception of the education level that they will achieve. Doddridge mothers are least likely to believe that their child will qualify for various scholarships.
- Harrison County students are most likely to remain in the state after graduation or, at least, to be living or working in West Virginia by the time they are 30. They also report the lowest perception of how hard they work in school. Harrison mothers are least involved in school activities.
- Marion County students are least convinced that college can either help them secure a satisfying job or make career decisions and have the lowest perception of the type of student that they are. However, they are most likely to have discussed college requirements with an adult. Marion mothers are the most likely to have a computer at home.
- Monongalia County students seem to have the most positive attitudes toward and plans for college, the highest perception of their academic abilities, the most rigorous academic plans for the future, and the most computer access. They are most aware of the various types of postsecondary education and most likely to believe that they will qualify for various financial aid sources. Monongalia mothers too have high perceptions of their child's academic standing and ability to obtain scholarships. Both mothers and fathers are most satisfied with the quality of education that their child is receiving. It should be noted that West Virginia University is located in Monongalia County, which may help explain the more positive attitudes of students and parents toward college.
- Preston County students are most interested in participating in an after-school tutoring program and are most involved in student government activities. They are least likely to think that they can afford college or to have heard about athletic scholarships. Preston mothers report the highest level of involvement in school activities, while fathers are least likely to meet with their child's teachers.
- Randolph County students seem to be very confident in their academic abilities. They report that they are doing well in math and science and are most likely to plan on taking both physics and chemistry. Further, they are least convinced that they need help with their classes and least interested in either tutoring or mentoring. Randolph mothers and fathers have the highest perception of the type of student that their child is. Mothers are least satisfied with the quality of the education that their child is receiving.
- Taylor County students are least confident of doing well in individual subjects and of their ability to go to college, and are most convinced they need help with their classes. They are also least likely to have heard about either two- or four-year colleges. Taylor mothers and fathers report the lowest perceptions of the type of student that their child is, while fathers also are the least satisfied with the quality of their child's education.

RECOMMENDATIONS

The GEAR UP project can make a substantial difference in north central West Virginia students' lives by working to alleviate some of the educational problems within the region. Based on the findings and conclusions presented in this report, the following recommendations are made to Fairmont State College GEAR UP staff in the interest of increasing students' and parents' awareness of and interest in postsecondary education.

- Increase student willingness to complete homework and in-class assignments to help overcome poor grades.
- Establish tutoring and mentoring programs and encourage student participation.
- Encourage more students to plan on taking higher-level academic courses, especially focusing on physics, calculus, and trigonometry.
- Work with students to help improve their attitudes about college and to eliminate their perceived inability to attend. Emphasize the importance of taking more challenging college-preparatory courses to prepare for postsecondary education.
- Help all students understand that college is a viable option for them and provide information about degree requirements for various career choices.
- Provide students and parents with information about and entrance requirements for both two- and four-year colleges, as well as for vocational and business schools. It is critical that parents have correct and up-to-date information, since students most often obtain their information from them.
- Provide students and parents with information about and requirements for various financial aid sources for financing postsecondary education.
- Establish a schedule of educational workshops for parents that focus on college preparation and financing, computer use, and understanding and communicating with teenagers.
- Help students identify potential job opportunities within the state to help curb outward migration.
- Increase parent involvement in school activities.
- Increase parent interaction (especially fathers) with children's teachers.
- Include items related to the eight fundamental components of student aspirations in the next version of the AEL/FSC student survey. These components include achievement, belonging, curiosity, empowerment, excitement, mentoring, risk taking, and self-confidence.

REFERENCES

Appalachian Regional Commission. (2000). *The Appalachian region.* http://www.arc.gov/aboutarc/region/abtapreg.htm (retrieved July 2000)

Fairmont State College. (1999). *GEAR UP partnership grant overview.* Fairmont, WV: Author.

Howley, C. B., Harmon, H. L., & Leopold, G. D. (1996). Rural scholars or bright rednecks? Aspirations for a sense of place among rural youth in Appalachia. *Journal of Research in Rural Education, 12*(3), 150-160.

Kampits, E. I. (1996). Rural partnerships in New England: Learning from kids. *Journal of Research in Rural Education, 12*(3), 171-177.

Ley, J., Nelson, S., & Beltyukova, S. (1996). Congruence of aspirations of rural youth with expectations held by parents and school staff. *Journal of Research in Rural Education, 12*(3), 133-141.

National Center for Education Statistics. *1997-98 Common Core of Data: Information on public schools and school districts in the United States.* Public elementary/secondary school universe survey data. Washington, DC: Author. http://nces.ed.gov/ccd/pubschuniv.html (retrieved July 2000)

Office of the Press Secretary. (1999). *President Clinton announces $120 million in GEAR UP grants.* White House Education Press Releases and Statements. http://www.ed.gov/PressReleases/08-1999/wh-0807a.html (retrieved July 2000)

Plucker, J. A., & Quaglia, R. J. (1998). The student aspirations survey: Assessing student effort and goals. *Educational and Psychological Measurement, 58*(2), 252-257.

Quaglia, R. J., & Cobb, C. D. (1996). Toward a theory of student aspirations. *Journal of Research in Rural Education, 12*(3), 127-132.

Quaglia, R. J., & Perry, C. M. (1993). *A study of underlying variables affecting aspirations of rural youth.* Paper presented at the annual meeting of the American Educational Research Association, Atlanta, Georgia.

Snyder, T. D., & Hoffman, C. M. (2000). *Digest of education statistics 1999.* Washington, DC: National Center for Education Statistics, Office of Educational Research and Improvement, U.S. Department of Education.

Walberg, H. J., & Greenberg, R. (1996). Youth realities and aspirations. *Journal of Research in Rural Education, 12*(3), 178-180.

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