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ABSTRACT

Third-year activities of a career education project in a three-county, non-urban area of Missouri are evaluated. The report describes the use of the Career Maturity Inventory (administered to a random sample of ninth and twelfth grade participants) and the Self-Observation Scale (administered to a sample of sixth grade participants and nonparticipants) to assess the student level impacts of the project. Findings are presented as student outcome data, placement and followup data, and project expenditure data. Twelfth grade students significantly increased their scores from pretest to posttest on the CMI measure of career planning. Ninth grade participants showed a significant gain in the area of career-related self-appraisal. No evidence of impact was found at the sixth grade level. Followup survey data indicated some success for the project objective of articulating secondary education with postsecondary education and employment. (NJ)

EVALUATION OF THE STATE FAIR COMMUNITY COLLEGE CAREER EDUCATION PROJECT: 1975-76 SCHOOL YEAR

Submitted To:

STATE FAIR COMMUNITY COLLEGE
Sedalia, Missouri

Submitted By:

DEVELOPMENT ASSOCIATES, INC.
1521 New Hampshire Avenue, N.W.
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June 1976

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June 28, 1976

Mr. James L. Navara
Director of Career Education Project
State Fair Community College
Sedalia, Missouri 65301

Dear Jim:

Enclosed are fifteen (15) copies of the Evaluation of the State Fair Community College Career Education Project: 1975-76 School Year.

As the report indicates, the findings suggest that the project has made an impact on students at the ninth and twelfth grade levels, and in our judgment, the State Fair Project appears to have met most of its objectives. We were particularly impressed that the placement component was able to obtain followup information on over 90 percent of the graduating seniors for the second consecutive year. The data produced by these surveys should be of increasing value in planning and evaluation if the followup effort is maintained.

The staff of Development Associates and I have enjoyed the opportunity to work with you and your program. We wish you continued success in your future activities.

Sincerely,

Russell G. Schuh
Senior Program Officer

Enclosure: As stated
RGS:ws

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I. PROJECT OVERVIEW

In 1972, State Fair Community College in Sedalia, Missouri, organized several meetings with the school districts in the community college district to explore the concept of career education. As a result of the meetings, it was agreed that the benefits to be derived from implementing a career education program were worth pursuing. Based upon this agreement, a proposal for the development and implementation of a comprehensive career education program in ten school districts in the three county rural area served by the State Fair Community College was completed and submitted to the U. S. Office of Education. That proposal was funded in May 1973, as a "second round" project, under Part D of the Vocational Education Act, as amended. Under the terms of Part D funding, the project could be funded annually for a period not to exceed three years. The original grant was for $159,153 for the first year of operation. Since that time, the project has been funded for both a second year and a final year of operation with grants from USOE of $159,662 and $159,741 respectively.

Building on the first two successful years of operation, the focus of the third year was on expanding the project in the ten school districts and the development of linkages with post secondary training and educational opportunities. There were, however, two significant changes in project operations which distinguished it from previous years, First, at the elementary school level emphasis shifted from the lower to the upper elementary grades. This shift resulted in sixth grade teachers being designated as participants but none at the third grade level. This is the reverse of the situation during the 1974-75 school year when there were third grade participants but none at the sixth grade level.

The second major change was the identification of building coordinators in each participating school whose function was to provide support to participating teachers and staff. The coordinators were regular members of the school faculty who were provided released time to perform their career education support functions. In addition to the support received from building coordinators, the project made provision for other teachers to receive up to three days released time to attend workshops and other training. The project also continued to maintain the career education library and resource center at the Community College as well as the placement component and followup survey.

As indicated in the remainder of this report, the final federally supported year of the project may be judged quite successful in several respects. The students participating in the project demonstrated significant gains on measures of career related self-awareness at the ninth grade level and career planning and decision-making skills at the twelfth grade. There is also an indication that the job placement component has had some success in articulating post-secondary training opportunities with employment and in placing students in

jobs and/or further education. In general, Development Associates' reviews of the second and third year of the project indicate that the career education project administered by State Fair Community College has been well managed and has had a positive impact on the schools in the area.

II. EVALUATION QUESTIONS AND METHODS

In accordance with USOE policy, the State Fair Community College specified six standard evaluation questions to be addressed by this evaluation. These questions were:

1. Have students who participated in the project demonstrated an increase in self-awareness in grade levels six and nine?

2. Have students who participated in the project demonstrated an increased awareness of and knowledge about work at grade levels six, nine, and twelve?

3. Have students who participated in the project demonstrated increased competency in career decision-making skills at grade levels nine and twelve?

4. To what extent were students who participated in the project and who left the project schools placed in paid occupations, in further education, or unpaid work that was consistent with their then current career chosen, at all grade levels, by school year?

5. To what extent have job preparation opportunities been expanded for young people in grades ten through twelve?

6. What financial resources from section 142(C) of Part D were exceeded at grade levels K-3, 4-6, 7-9, 10-12 for the current school year?

In several respects the evaluation design for this school year differed from that used during 1974-75. As indicated above, during 1975-76 the project did not focus attention on the lower elementary grades. Consequently, it was determined that questions posed by USOE regarding project impact on third graders were not appropriate and would not be addressed, although they had been included in the evaluation of the second project year.

Also, because of the timing of a change in USOE policy during the 1974-75 school year, it was not possible to conduct a pretest of students. That difficulty did not exist this year and a pre-post test approach was considered practicable. Therefore, the pre-post design was planned and carried out, but not without difficulty. Due to the expanding focus of the project and the addition of part-time building coordinators, more time was devoted to start-up activities and training during the early months of the project than anticipated. As a result, the identification of participating teachers and, therefore, participating students could not occur until after the coordinators were identified,

trained, and functioning. Thus, the pretest was administered in December of 1975; the posttest was administered at the end of March 1976, only four months later.

In reviewing this year's plans with project staff, it was determined that only one student treatment group was appropriate at each of the three grade levels to be assessed (i. e. grades six, nine, and twelve). This decision was made because: (1) the project staff was interested in assessing project-wide impacts; (2) was not interested in school-by-school, or within school comparisons, and (3) the training and support provided teachers within each grade level was highly similar.

In essence, each participating teacher was provided with the equivalent of three days' release time to attend inservice training and workshops. In addition, a lead teacher for career education was designated as a building coordinator for each school with responsibility for providing general support in career education for participating teachers and for coordinating and stimulating career education in the building. General support was also available through the project staff and resources located at State Fair Community College. More specifically, the support included a career education resource center containing a library of written as well as audio visual materials established and maintained by the project. Also included were a series of curriculum and activity guides and a project supported job placement and counseling office. Because of the general availability of this support to all participating teachers within the participating schools, it was decided that there was insufficient variability in the nature and level of support provided to justify subdivisions of students based on differing project treatments.

Because project activities were pervasive at the junior and senior high school levels, it was not possible to identify comparison group students at the ninth and twelfth grades. Consequently, it was decided that a criterion-referenced approach would serve as the primary means of assessment. It was also decided to make comparisons with available norm data for the tests used.

At the sixth grade level, project activities were less inclusive, and it was possible to identify comparison group students. Thus, it was decided that assessment at this level would be based on a pre-post comparison group design.

The participating students at each level were selected following a proportionate random sampling procedure. A total of slightly over 5% of the participants at each grade level were selected and completed both the pre and posttests. At the sixth grade, a random sample of non-participating students were selected. Table 1, on the following page, indicates the total number of students and schools represented in the sample.

TABLE 1
Student Sample

	Participants		Non-Participants	
	Number Students	Number Schools	Number Students	Number Schools
Grade Six	47	6	47	4
Grade Nine	48	9	N/A	N/A
Grade Twelve	30	9	N/A	N/A

To assess the student level impacts of the project, two commercially available instruments were selected which had been reported as reviewed and judged adequate by an expert panel in the USOE publication: Evaluation and Educational Decision-Making: A Functional Guide to Evaluating Career Education (September 1975). Based on their relevance to project objectives and treatments, it was decided to administer four parts of the Career Maturity Inventory (CMI) to the sample of randomly selected ninth and twelfth grade participants and to administer the Self-Observation Scale (SOS) to the sample of sixth grade participants and non-participants.

More specifically, Parts I-IV of the Competence Test of the CMI were administered. Respectively, these separate parts of the test are titled: "Knowing Yourself," "Knowing About Jobs," "Choosing a Job", and "Looking Ahead." Each is a twenty item, multiple-choice scale designed to measure an aspect of the career maturity process. Essentially, the aspects of career maturity addressed are:

- Students' ability to appraise or assess their own vocational strengths and weaknesses;
- Students' knowledge of the world of work;
- Students' ability to match the requirements of a particular job with personal skills and training; and
- Students' ability to plan for a vocation or career.

In discussing the norms provided for the CMI, the test's Administration and Use Manual (p. 29) indicates that they "should be used with the caution that they are not meant to be nationally representative and that they are based on relatively small numbers of cases." As further indicated, however, they do provide "at least one point of reference for expressing the relative career maturity of an individual or group." Thus, the comparisons made between participant scores and test norms should be viewed in this context.

Consistent with the different project objectives at this level, the Self-Observation Scale (SOS), rather than the CMI, was administered to sixth grade students. The SOS has the following seven scales:

SCALE 1 - SELF-ACCEPTANCE

Children with high scores view themselves positively and attribute to themselves qualities of happiness, importance, and general competence. They see themselves as being valued by peers, family, and teachers. Children with low scores see themselves as unhappy, lacking in general competence, and of little importance to others.

SCALE 2 - SELF-SECURITY

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

SCALE 3 - SOCIAL MATURITY

Children with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They have learned the importance of such notions as "fair play," "sharing," "perserverance," "helpfulness," and "generosity." Children with low scores on this scale have not learned these notions and are likely to evidence behaviors that most adults would characterize as selfish, inconsiderate, or immature.

SCALE 4 - SOCIAL CONFIDENCE

Children with high scores on this scale feel confident of their ability to relate successfully in social situations. They feel confident that they can make friends easily and that they are valued and enjoyed by their friends. Children with low scores have difficulty making friends, do not feel valued by others, and see other people as being more socially adept than themselves.

SCALE 5 - SCHOOL AFFILIATION

Children with high scores view school as a positive influence in their lives. They enjoy going to school, and they enjoy the activities associated with school. Children with low scores view school as an unhappy place to be. They do not enjoy most school-related activities and are negative about the importance of school in their lives.

SCALE 6 - TEACHER AFFILIATION

Children with high scores on this scale like their teachers. They see the teacher as helpful, attentive, understanding, and generous. Children with low scores on this scale see the teacher as arbitrary, inconsiderate of children, and/or a source of emotional pain.

SCALE 7 - PEER AFFILIATION

Children with high scores on this scale consider their relationships with other children to be both of high quality and of considerable importance to them. They see themselves as approved of and valued by their peers. They like to be with other children. Children with low scores do not see their peer relationships as an asset. They see other children as unfriendly, they have few friends, and do not accept the responsibilities of friendship easily.

The instruments were administered by the project staff and school personnel in December 1975 and late March 1976. The CMI answer sheets were scored by Development Associates in Washington and the SOS was scored by the publisher. The analysis was completed by Development Associates (DA). In addition to student data, the project provided financial data and placement office followup studies to be utilized in the analysis which follows.

III. FINDINGS AND ANALYSIS

Our presentation of findings will be divided into three major sections:

- student outcome data;
- placement and followup data; and
- project expenditure data.

These three subsections will be followed by an analytic discussion of the findings.

A. Student Outcomes

As indicated in the previous section, the instruments were administered to a randomly selected sample of students at the sixth, ninth, and twelfth grades. A pretest and posttest design was employed, with students tested in December and again at the end of March 1976. Since no comparison groups were available at the ninth and twelfth grades, it was decided to assess pre-post gains to determine whether the criteria of achieving a significant increase in scores on the four parts of the CMI had been attained; also, comparisons of the test results of the project participants with the instrument norm data were made. At the sixth grade, since it was possible to identify a comparison group, the analysis compares the results of participants to those of the non-participants sampled.

The first step of the analysis involved a comparison of the pre and posttest results of twelfth and ninth grade participants on the four parts of the CMI. Table 2 presents the results of this comparison.

TABLE 2

Comparison of the Pre and Posttest Results of Ninth and Twelfth Grade Participants on Four Scales of the Career Maturity Inventory

	Career Maturity Inventory							
	PART I		PART II		PART III		PART IV	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Twelfth grade								
n	30	30	30	30	30	30	30	30
$\bar{x}$	14.67	15.13	17.77	17.40	14.57	14.70	14.87	15.83
S	2.35	2.37	1.85	1.79	2.34	2.77	2.93	2.96
t	-0.09	0.90	0.90		-0.47		-2.25	
Sig	NS		NS		NS		.05	
Ninth grade								
n	48	48	48	48	48	48	48	48
$\bar{x}$	12.60	13.52	14.40	14.81	12.25	12.90	11.73	12.21
S	3.55	3.54	3.42	3.55	2.68	3.57	4.18	4.61
t	-2.48		-1.29		-1.62		-1.23	
Sig	.05		NS		NS		NS	

n = Number of students
$\bar{X}$ = Mean
S = Standard deviation
t = Test Value
Sig. = Level of Statistical Significance

As can be seen, the students at the twelfth grade reflect slightly higher scores in the posttest on the first ("Knowing Yourself") and third ("Choosing a Job") and a slightly lower average on the second ("Knowing About Jobs"). These differences, however, were not found to be statistically significant. This indicates that the students did not really gain (or lose) from one administration to the other.

On the fourth part of the CMI ("Looking Ahead"), however, the students scored higher on the posttest than on the pretest, and the difference was found to be statistically significant at the 5% level. This suggests that during the period between the pretest and the posttest the students improved in their ability to make career or vocational plans, and this was the primary area of project focus.

At the ninth grade level the students reflected higher average scores on the posttest on all four parts of the CMI, but the differences between the pretest and posttest scores were not found to be statistically significant on the second, third, and fourth parts. On the first part ("Knowing Yourself"), however, the difference was found to be significant at the 5% level. These findings suggest that the students did make gains in their ability to assess their own competencies, desires, strengths, and weaknesses while not making any measurable gains in their overall knowledge of the world of work, their ability to match job requirements to personal characteristics, or their ability to plan their careers. At the ninth grade, this was the area with highest priority to the project.

In a second series of comparisons, the posttest results of the sampled students were compared to the results of the test norm groups for both grade levels. The results of this comparison are presented in Table 3. The data indicates that the mean scores of the project participants were higher than the norm group means on all scales for both the ninth and twelfth grade levels. However, the differences were not sufficient to be statistically significant. This would indicate that the project students at both grade levels approximated the norm group. Table 3 follows.

TABLE 3

Comparison of Project Student Posttest Results to Instrument Norm Groups

	Career Maturity Inventory							
	PART I		PART II		PART III		PART IV	
	Norm	Sample	Norm	Sample	Norm	Sample	Norm	Sample
Twelfth grade								
n	218	30	214	30	206	30	215	30
$\bar{x}$	14.15	15.13	14.43	17.40	12.90	14.70	11.89	15.53
S	3.48	2.37	4.67	1.79	5.4	2.77	5.59	2.96
t	.056		.131		.030		.141	
Sig	NS		NS		NS		NS	
Ninth grade								
n	261	48	197	48	166	48	156	48
$\bar{x}$	11.09	13.52	11.35	14.81	10.13	12.90	8.46	12.21
S	4.15	3.54	4.82	3.55	5.52	3.57	5.33	4.61
t	.094		.121		.088		.120	
Sig	NS		NS		NS		NS	

n = Number of students
$\bar{x}$ = Mean
S = Standard deviation
t = Test Value
Sig = Level of Statistical Significance

At the sixth grade level the Self-Observation Scale was administered to the randomly selected samples of participating and non-participating students. The results were analyzed by first comparing the pretest scores to posttest scores for both groups individually and then comparing the performance of the participants to non-participants. The results of the first comparisons are reported on Table 4 (see page 11).

Table 4 shows that the participants had posttest scores that were higher than the pretest scores on two of the seven scales. The non-participants recorded better posttest average scores on five of the seven scales. However, none of the gains or losses were determined to be statistically significant. In other words, neither participants nor non-participants showed a significant gain from pretest to posttest.

Next the participants were compared to the non-participants. An analysis of covariance procedure was employed using the pretest scores as the covariate. Using this statistical procedure, the change in the participants' scores (from pretest to posttest) was compared to the non-participants. The results of this analysis yielded no significant differences between participants and non-participants across any of the seven Self-Observation Scale subtests.

In summary, the student test data reveal that the twelfth grade participants made a significant gain on that part of the CMI relating to vocational or career planning. Ninth grade students made a statistically significant gain on the CMI subtest relating to understanding their career strengths, weaknesses, and desires. The sixth grade participants did not register

TABLE 4

A Comparison of the Pretest-Posttest Results of the Sixth Grade Sample on the Self-Observation Scales

Participants

	Self-Acceptance		Self-Security		Social Maturity		Social Confidence		School Affiliation		Teacher Affiliation		Peer Affiliation	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
n	47	47	47	47	47	47	47	47	47	47	47	47	47	47
$\bar{x}$	50.72	51.36	50.49	50.13	47.48	48.43	50.94	50.87	50.66	50.00	50.55	51.11	50.85	50.53
S	4.55	4.37	5.20	4.28	4.78	5.21	4.88	4.95	8.43	8.16	4.35	4.78	5.27	4.56
t	-0.89		0.48		-1.12		0.07		0.87		-0.53		0.40	
Sig	NS		NS		NS		NS		NS		NS		NS	

Non-Participants

n	47	47	47	47	47	47	47	47	47	47	47	47	47	47
$\bar{x}$	50.15	51.26	49.15	50.04	49.89	50.85	50.00	49.40	50.66	51.91	51.66	51.23	51.06	52.45
S	4.81	4.89	4.49	4.57	5.78	6.55	6.58	6.61	8.47	5.77	5.48	5.21	5.94	5.63
t	1.57		-1.08		-1.09		0.25		-1.26		0.33		-1.05	
Sig	NS		NS		NS		NS		NS		NS		NS	

significant gains in scores nor did they differ significantly in their test performance from the comparison group of non-participants. These were the areas designated by the project as being of major importance at the respective grade levels. Table 4 follows on the next page.

B. Placement and Followup

An important component of the State Fair project has been the maintenance of a central placement and career counseling office designed to provide a variety of services. These services include:

- serving as a clearinghouse of job information for all the project schools;
- providing job placement services to all students seeking employment upon completion of their study program;
- conducting job development activities with area employers;
- placing students in post-secondary career programs in their area of training or interest;
- implementing followup studies to determine placement; to measure job achievement, adequacy of skill development, and worker mobility; and to provide the participating schools with this information concerning their graduates.

As part of the last service, the project conducted followup surveys of the graduates of the classes of 1974 and 1975 in the ten participating high schools. The survey of 1974 graduates obtained 835 responses out of a total population of 860 students. The survey of 1975 graduates obtained 741 respondents from a population of 795. The unusually high response rates of both surveys, 97% and 93% respectively, are notable, and both contained a large volume of information that has proved helpful in project assessment and planning.

To obtain an indication of possible effects of the program on meeting the placement needs of graduating students, DA compared data from the two reports. The results of the comparisons are presented in Table 5. The table indicates the total number of graduating students, the number of those found to be working, the number both working and in school, the number not working but continuing their education, the number in some branch of the armed services, and the number unemployed. Table 5 follows on page 13.

TABLE 5

COMPARISON OF SELECTED DATA FROM THE SURVEYS OF 1974 AND 1975 GRADUATES

	TOTAL			Working: Not In School						Employed & In School									In School Not Employed			Armed Forces			Unemployed		
				Full Time			Part Time			Wk FT/Sch PT			Wk FT/Sch FT			Wk PT/Sch PT											
	74	75	%△	74	75	%△	74	75	%△	74	75	%△	74	75	%△	74	75	%△	74	75	%△	74	75	%△	74	75	%△
WARSAW	79	60	-24.0	29	19	-34.5	0	1		1	1	0	0			0	2		26	18	-30.8	5	2	-60	6	6	0
LINCOLN	29	39	34.5	9	12	-33.3	0	0		0	1	-	1			0	3		10	11	10.0	2	4	100	4	0	-100
COLE CAMP	52	51	-1.9	18	17	-5.6	0	0		1	0	-100	0			6	3	-50	15	14	-6.7	2	4	100	5	3	-40
GREEN RIDGE	36	32	-11.1	13	13	0	1	0	-100	0	0	-	0			3	1	-67	11	13	18.2	2	1	-50	3	3	0
LA MONTE	34	25	-26.5	12	7	-42	1	0	-100	0	1	-	0			2	2		12	10	-16.7	4	1	-75	1	1	0
SMITHTON	35	41	17.1	10	8	-20	2	0	-100	1	0	-100	0			6	6		11	15	36.4	2	3	50	1	2	100
SACRED HEART	27	28	3.7	6	5	-17	1	0	-100	1	0	-100	0			12	7	-42	3	11	266.7	1	1	0	3	3	0
NORTHWEST	28	31	10.7	7	13	86	0	2	-	1	0	-100	1	1		4	3	-25	12	5	-58.3	1	0	-100	1	1	0
SMITH-COTTON	335	339	1.2	97	78	-19.6	6	9	50	0	5	-	0	14		60	56	-7	115	83	-27.8	12	26	116.7	21	23	9.5
MARSHALL	205	149	-27.3	75	52	-30.7	-	2		-	1	-	-	1		5	4	-20	98	74	-24.5	8	9	12.5	9	0	-100
TOTAL	860	795	-7.6	276	224	-18.8	11	14	27	3	9	80	2	16	700	98	87	-11	313	254	-18.8	39	51	30.8	54	42	-22.2
% GRADUATES	100%	100%		32.1	28.2		1.3	1.8		0.6	1.1		0.2	2.0		11.4	10.9		36.4	31.9		4.5	6.4		6.3	5.3	

As the table indicates, the total number of graduates from the ten schools declined by 7.6%, between 1974 and 1975, and the number of students reported as working full time also declined. However, the proportion of graduates in full time employment declined by over twice that rate over the two years, (i.e., 32.1 % vs. 28.1%). The number of unemployed graduates, on the other hand, also decreased, both in absolute terms (i.e., 22.2%) and proportionally (i.e., 6.3% vs. 5.3%).

The major area of change from 1974 to 1975, however, was in the proportion of graduates in school full time (i.e., a decline from 36.4% to 31.9%). This was offset by increases in the proportions both working and in school (i.e. an increase from 12.8% to 14.1%) and in the armed forces (i.e., an increase from 4.5% to 6.4%).

The data indicate some variations across individual schools. Since it was considerably larger than the others, Sedalia's Smith Cotton High School tended to influence the total figures most heavily. At South Cotton the most notable changes are the smaller numbers engaged only in full-time work or school and the increase in the numbers combining work and school. This is a particularly noteworthy change if one assumes that an important motive for enlisting in the armed forces is the vocational training which may be received.

While the available data does not permit directly attributing the changes in post-secondary activities to the project, the changes reported on Table 5 are generally consistent with career education objectives. That is, it is quite consistent with project goals that there be a shift from full-time post-secondary schooling or employment to some combination of these activities. Obviously, it is also consistent that there be some decline in unemployment, although this is more likely to have been due to general economic conditions than to project related activity.

C. Project Expenditures

Throughout the year the project was requested to maintain and report expenditure data by line item as used in the USOE grant package. That data is presented in Table 6, presented on the following page. In addition, the project was asked to break out expenditures by grade level groups or activities. These data are presented in Table 7. Both tables present data on a quarterly basis. Because the program year was not completed at the time the final data were collected, the fourth quarter figures represent projections made on the basis of ten months' data. As Table 6 indicates, the project received $159,741 from USOE for its third year of operation. It also carried over $32,710 in unexpended funds from the second year program. These combined to give the project a third year budget of $192,450. The projected total third year expenditures are $188,910. Assuming that this figure holds, the project would be completed with an under-expenditure rate of less than 2%.

TABLE 6

Career Education Project

Budget Category Expenditure Report

1975-1976 School Year

BUDGET ITEM	First Quarter 6-1-75 to 8-31-75		Second Quarter 9-1-75 to 11-30-75		Third Quarter 12-1-75 to 2-29-76		Fourth Quarter 3-1-76 to 5-31-76		Projected Total
	Fed. Part D	Other	Fed. Part D	Other	Fed. Part D	Other	Fed. Part D	Other	
Personnel Costs	33,611	0	26,098	0	29,151	0	33,719	0	122,579
Benefits	2,301	0	1,920	0	2,268	0	2,549	0	9,038
Travel (total)	7,132	0	3,709	0	3,515	0	4,500	0	18,856
Services (Duplication)	897	0	4,492	0	6,029	0	5,500	0	16,918
Supplies/ Materials	6,774	0	945	0	684	0	100	0	8,503
Communications	1,724	0	992	0	1,077	0	1,378	0	5,171
Final Report Reproduction	340	0	0	0	0	0	650	0	990
Equipment	630	0	292	0	1,185	0	100	0	2,207
Other (Third Party Evaluation)	0	0	0	0	2,448	0	2,200	0	4,648
TOTAL	53,409	0	38,448	0	46,357	0	50,696	0	188,910

* Includes $159,741 for third year operation plus $32,709.55 of unexpended funds from second year's operation for a total of $192,450.55 to be expended 6-1-75 to 5-31-76.

TABLE 7

Project Quarterly-and Total Expenditures by Major Components

1975 - 1976 Year

Type of Expenditures	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
By Project Component:				(Estimated)	
Grades 5 and 6					
Personnel	4,200	3,150	3,150	3,650	14,150
Benefits	252	252	252	294	1,050
AV Materials	2,200	0	383	108	2,691
Printing (Duplication)	0	2,240	0	780	3,020
Travel	552	473	665	593	2,283
Total	7,204	6,115	4,450	5,425	23,194
Grades 7 - 9					
Personnel	8,576	2,910	2,910	2,910	17,306
Benefits	555	233	233	233	1,254
AV Materials	568	5	0	0	573
Printing (Duplication)	30	201	3,074	380	3,685
Travel	1,200	587	333	1,045	3,165
Total	10,929	3,936	6,550	4,568	25,983
Grades 10 - 12					
Personnel	4,125	3,150	3,150	3,150	13,575
Benefits	252	252	252	294	1,050
AV Materials	3,410	372	40	0	3,822
Printing (Duplication)	0	43	2,925	1,966	4,934
Travel	758	304	371	865	2,298
Total	8,545	4,121	6,738	6,275	25,679
Cluster Development 11 - 12					
Personnel	2,072	0	2,020	5,419	9,574
Benefits	105	0	161	283	549
AV Materials	25	0	0	167	192
Printing	0	0	0	2,800	2,800
Travel	41	296	0	410	748
Total	2,243	296	2,181	9,079	13,863

TABLE 7) continued...

Type of Expenditures	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
By Project Component:				(Estimated)	
Placement Followup					
Personnel	3,269	3,030	3,030	3,556	12,885
Benefits	254	242	242	298	1,036
AV Materials	176	688	17	0	881
Printing	67	6	0	150	223
Travel	1,251	356	630	1,119	3,356
Total	5,017	4,322	3,919	5,123	18,381
All School (1)					
Personnel	11,238	13,858	14,792	14,546	54,434
Benefits	800	942	1,127	970	3,839
AV Materials	672	20	147	0	839
Supplies	1,052	397	117	26	1,592
Printing	1,104	1,490	84	(137)	2,541
Communications	1,758	886	1,077	1,469	5,190
Travel	3,361	1,469	1,516	500	6,846
Equipment	1,052	292	1,186	120	2,650
Total	21,037	19,354	20,046 (2)	17,494	77,931
Grand Total					192,221 (3)

(1) Central Administration, audio-visual component, and other support services which cross all grade levels.

(2) Figure does not include $2,448 for Third Party Evaluation.

(3) Figure does include $4,879 for Third Party Evaluation.

The expenditure pattern by line item was found to be essentially the same this year as last. Personnel costs (including benefits) amounted to 70% of this year's expenditures, down 3% from last year.

The line items for supplies and services were the only others altered from last year. Supplies represented 4.5% of the expenditures this year, and last year they represented slightly over 6%. Services increased from 3.8% of the total in 1975 to 9% in 1976. This increase was used to defray printing and duplicating expenses which increased as teaching guides and curriculum materials were printed for dissemination.

Table 7 represents a breakout of project expenditures by grade levels, as the project activities at the elementary level were focused at grades five and six this year, no breakout for lower grades is necessary. This represents a change of emphasis from last year's effort which reported expenditures at grades K-4, and none for 5-6. This pattern is consistent with the project's planned phasing at these grades. Some project expenditures (i.e. audio-visual equipment available to all grade levels) do not lend themselves readily to grade level breakouts, and these were included in the category of all school expenditures.

The relative emphasis accorded the various components of the project did not change significantly from last year. Table 8 indicates the percent of total expenditures that each component represented for the 1974-75 and 1975-76 project years. As can be seen, the shift of attention to the upper elementary grades is the most significant change in grade level emphasis.

TABLE 8
Percentage of Expenditures by Component for Years
1974-75 and 1975-76

Year	Grade Level				Cluster Development	Placement	All Schools
	K-4	5-6	7-9	10-12	11-12		
1975	13%	0	15%	11%	12%	8%	42%
1976	0	12%	14.8%	13%	7%	10%	41%

In general, review of the fiscal data indicates that the project expended its federal funds at a relatively even rate throughout the school year, and that the project did not undertake any major shifts in priorities from last year.

IV. SUMMARY AND CONCLUSIONS

At the ninth and twelfth grade levels participating students significantly increased their scores on one of the four administered parts of the CMI competence test. At the twelfth grade, the significant gain was in the area of career planning (Part 4, "Looking Ahead"), and at the ninth grade the significant gain was in the area of career related self-appraisal (Part 1, "Knowing Yourself"). Although gains in all four areas were desired at both grade levels, planning was the area of primary project emphasis at the twelfth grade and self-appraisal at the ninth. Thus, it may be concluded that at these two grade levels the project succeeded in having a positive impact on students in the area of highest concern.

At the sixth grade level, however, no evidence of impact was found. There are several possible explanations for the failure to find significant differences here between participants and non-participants. One, of course, is the possibility that the treatment was not sufficient to produce measurable change. There are some considerations which tend to support this possibility. This is the first year in which the project focused upon sixth grade teachers directly, having focused at the lower elementary levels in previous years. Also, it should be remembered that the period between the pretest and the posttest was short and may not have been sufficient to produce a change measurable with the instruments used.

A second possibility relates to the nature of the outcome areas assessed and the instrument used. In general, it is difficult to assess changes in self-awareness in elementary level students, and while the self-observation scale is considered an acceptable instrument, it is possible that it is not sufficiently sensitive to detect small differences. Thus, given that the teachers at the upper elementary levels were relatively new to the project, that the time available for them to be trained and to translate that training into practice was short, and the possibility that the instrument used might not be sufficiently sensitive to subtle differences, the importance of the failure to identify significant differences between the participating and non-participating student at the sixth grade level is unclear.

With respect to the placement component, an important objective of the project was to articulate high school and post-secondary training and educational opportunities and to place students in full-time or part-time employment related to their training or interests. Comparing the data obtained from the followup survey this year to that from the previous year suggests project accomplishment in these areas.

Although the data reflected an overall decrease in the number of graduates reporting that they were enrolled in post-secondary educational programs, there was an increase in the number reporting that they were both working and enrolled in post-secondary training or education. There was also an increase in the number of students enlisting in the armed forces. It would appear from this data, that at a time when students either were not able or chose not

to enroll in full-time post-secondary training and education to the extent that they had in the past, the number that continued their training and education while working has increased. This suggests that the project had some success in articulating employment and post-secondary training. The experience at Smith Cotton, the school with the largest graduating class, is dramatic in this regard. The school reported 20% fewer students working full time but not going to school or training this year. At the same time, however, they reported an equal number of students working full-time and engaged in post-secondary education.

The probable impact of the placement component is further reflected in the data concerning students found to be unemployed at the time of the surveys. Overall, there was a slight decrease in the number of unemployed and all schools, with the exception of two, either reduced the number reported unemployed or did not exceed the number of 1974 graduates. Marshal and Lincoln high schools reported that not one 1975 graduate was unemployed.

In general, then, it may be concluded that the project was largely successful in accomplishing its objectives of improving the career related self-awareness of ninth graders, improving the career planning skills of twelfth graders, and articulating secondary education with post-secondary education and employment. It also appears that the project was well managed throughout.

Based on the foregoing, as well as general observation of and discussion with project personnel, we present below a summary of our responses to the six evaluation questions posed at the start of the study.

1. Have students who participated in the project demonstrated an increase in self-awareness in grade levels six and nine?

   At the sixth grade level, the Self-Observation Scales were administered to a sample of participating and non-participating students. The results failed to show a difference between the two groups of students. Therefore, we conclude that the project did not demonstrate that sixth grade students increased in self-awareness as measured by the SOS. It should be remembered that the sixth grade teachers were involved in project activities for the first time this year and that there was only a four-month time span between the pretest and the posttest.

   At the ninth grade level, Part I of the CMI competence test ("Knowing Yourself") was administered and the students did score significant gains. Therefore, we conclude that the ninth grade students did demonstrate an increase in self-awareness this year.

2. Have students who participated in the project demonstrated an increased awareness of and knowledge about work at grade levels six, nine, and twelve?

The ninth and twelfth grade students tested did not demonstrate an increased awareness of and knowledge about work or jobs as measured by the CMI. However, this was not a major project focus and it was not seriously expected that any significant gains would be found.

3. Have students who participated in the project demonstrated increased competency in career decision-making skills at grade levels nine and twelve?

The project's approach to career decision making is very comprehensive. At the ninth grade level, students were expected to gain in their ability to accurately assess their own strengths, weaknesses, and interests. The test results suggested that they did make significant gains in this area.

At the twelfth grade level decision making skills were considered to include planning skills. As was seen earlier, twelfth grade students did make significant gains on the CMI relating to career planning (Part IV). Therefore, we conclude that the project participants were able to demonstrate increased competency in career decision-making at grades nine and twelve.

4. To what extent were students who participated in the project and who left the project schools placed in paid occupations, in further education, or unpaid work that was consistent with their then current career chosen, at all grade levels by school year?

The followup survey data indicate that the same percent of 1975 graduates as 1974 graduates were employed full-time. It was noted that the number of students electing to combine post-secondary training or education with employment had increased and that the number of students reported as unemployed had decreased. This suggests that the project has had some success in articulating employment and post-secondary training opportunities.

5. To what extent have job preparation opportunities been expanded for young people in grades ten through twelve?

As was true during the 1974-75 school year, project personnel have advocated the expansion of opportunities and have worked in the areas of curricula development and dissemination. While it is not possible to attribute specific growth to project staff, they have supported activities intended to increase the number of courses available to students.

6. What financial resources from section 142(C) of Part D were exceeded at grade levels K-3, 4-6, 7-9, 10-12 for the current school year?

An analysis of the fiscal data indicates that the project is allocating funds much as it did last year. The major change noted was focus on upper elementary grades this year with no specific expenditures at the lower (i.e., K-3) level. Overall, the project's expenditures in excess of 98% of the year's budget indicate a well managed and well planned operation.

In conclusion, the findings suggest that the State Fair Community College Career Education Project has had a successful year. The impact on students at the ninth and twelfth grade levels is in accordance with the project's major objectives. The failure to find differences at the sixth grade level is not surprising for a variety of reasons, including the recent involvement of teachers in project activities at these levels and the short time between the pretest and the posttest. In addition, the job placement component appears to have had some success in articulating post-secondary training opportunities with employment and in placing students in either jobs or education.