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ABSTRACT

The Career Planning and Decision-Making (CPDM) course for college, one component in a set of career exploration materials developed by the Appalachia Educational Laboratory, was evaluated in two field tests. During 1977 the first field test was conducted to obtain formative information about the student text. Findings revealed that the CPDM course had a positive impact on student selection of a college major, knowledge of the world of work, decision-making processes, and level of career planning. In 1979, following extensive textual revisions, a second field test, using a formative-summative model, evaluated the effectiveness of the CPDM course as a whole and on selected course components. Formative evaluation results suggested a need to revise the instructor's guide in terms of time and class management and to streamline the instructional portions of the student text. Summative evaluation data indicated that instructors were highly satisfied with the course content and that students found the course activities to be personally satisfying and useful. (The appendices contain samples of form letters and data collection instruments used in the field tests.) (Author/HLM)

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CAREER PLANNING AND DECISION-MAKING COURSE
FOR COLLEGE STUDENTS

FINAL EVALUATION REPORT

December, 1979

Sandra B. Barker, Ph.D.
Principal Investigator

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	xi
INTRODUCTION	1
FIELD TEST I	5
Information Requirements	5
Target Population	5
Design	6
Treatment	7
Instruments	7
Procedures	8
Statistical Analysis	9
Results	10
Discussion and Conclusions	20
FIELD TEST II	23
Information Requirements	23
Target Population	26
Design	27
Treatment	28
Instruments	29
Procedures	29
Statistical Analysis	41
Results	41
Discussion and Conclusions	137
REFERENCES	155
APPENDICES	
A. Field Test Participation Letters Sent to Random Sample of Students at ETSU	

TABLE OF CONTENTS (Continued)

- B. Assessment of Career Decision-Making (Form B)
- C. Pre and Post Student Achievement Tests
- D. CPDM Course Goals and Objectives
- E. Assessment of Career Decision-Making (Form C)
- F. Student Survey Pretest-Experimental Group Form
- G. Student Survey Pretest Control Group Form
- H. Student Survey Posttest Experimental Group Form
- I. Student Survey Posttest Control Group Form
- J. Student Evaluation Form
- K. Instructor Survey Pretest
- L. Instructor Survey Posttest
- M. Instructor Evaluation Form
- N. College Major-Occupation Index Evaluation Form
- O. Filmstrip Evaluation Form
- P. Memorandum to Experimental Group Student Proctors
- Q. Control Group Debriefing Memorandum
- R. Student Comments: Evaluation Form Items 1-8
- S. Student Comments: Helpful and Unhelpful Aspects of the Course
- T. Student Comments: Aspects of Course Liked Best and Disliked Most
- U. Student Comments: Results of Being in the Course
- V. Meta Evaluation Summary

LIST OF TABLES

TABLE	Page
1. Analysis of Variance for TOPVAL Subtest of the Simulated Occupational Choice	11
2. Analysis of Variance for W ₂ Subtest of the Simulated Occupational Choice	12
3. Analysis of Variance for NSPEC Subtest of the Simulated Occupational Choice	12
4. Analysis of Variance for W ₃ Subtest of the Simulated Occupational Choice	13
5. Analysis of Variance for AVCH Subtest of the Simulated Occupational Choice	14
6. Analysis of Variance for the RAT-DS1 Subtest of the Simulated Occupational Choice	15
7. Analysis of Variance for the RAT-DS2 Subtest of the Simulated Occupational Choice	16
8. Analysis of Variance for the R2 Subtest of the Simulated Occupational Choice	16
9. Analysis of Variance for Self Estimated Knowledge of Career Development Concepts	17
10. Analysis of Variance for Cognitive Knowledge of Career Development	18
11. Analysis of Variance for Decision-Making Task: Major	18
12. Analysis of Variance for Decision-Making Task: Occupation	19
13. Analysis of Variance for Assessment of Career Decision-Making: Total Score	20
14. Evaluation Questions, Information Requirements, and Decision Criteria for Determining Effectiveness of the Career Planning and Decision-Making Course	24
15. Inter- and Intra-Rater Reliability for the Student Survey Based on Scoring by Three Raters	33
16. Inter-Rater Reliability for the Student Survey Based on Two Raters Knowledgeable in Course Concepts	34

LIST OF TABLES (Continued)

TABLE	Page
17. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Rational Decision-Making Styles	44
18. <u>t</u> Tests for Pre and Post Rational Decision Making Styles and Class Gains for Experimental (E) and Control (C) Groups	44
19. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Intuitive Decision-Making Styles	45
20. <u>t</u> Tests for Pre and Post Intuitive Decision-Making Styles and Class Gains for Experimental (E) and Control (C) Groups	46
21. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Dependent Decision-Making Styles	47
22. <u>t</u> Tests for Pre and Post Dependent Decision-Making Styles and Class Gains for Experimental (E) and Control (C) Groups	47
23. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision-Making Task: College	48
24. <u>t</u> Tests for Pre and Post Decision-Making Task: College and Class Gains for Experimental (E) and Control (C) Groups	49
25. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision-Making Task: Major	50
26. <u>t</u> Test for Pre and Post Decision-Making Task: Major and Class Gains for Experimental (E) and Control (C) Groups	50
27. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision-Making Task: Occupations	51
28. <u>t</u> Test for Pre and Post Decision-Making Task: Occupation and Class Gains for Experimental (E) and Control (C) Groups	52



LIST OF TABLES (Continued)

TABLE	Page
29. Percent of Experimental Students Selecting Possible Responses to the Question, "How Prepared Are You to Make Career Plans?"	53
30. Percent of Experimental Students Selecting Possible Responses to the Question, "Having Completed the Career Planning and Decision-Making Course, How Much Better Prepared are You to Make Career Decisions?"	54
31. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About College Majors	54
32. <u>t</u> Test for Pre and Post Knowledge About College Majors for Experimental (E) and Control (C) Groups	55
33. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About the Relationship Between College Majors and Occupations	56
34. <u>t</u> Test for Pre and Post Knowledge About the Relationship Between College Majors and Occupations for Experimental (E) and Control (C) Groups	56
35. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About Occupations of Interest	57
36. <u>t</u> Test for Pre and Post Knowledge About Occupations of Interest for Experimental (E) and Control (C) Groups	58
37. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Major Selection	59
38. <u>t</u> Test for Pre and Post Major Selection for Experimental (E) and Control (C) Groups	59
39. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Understanding of Self in Relation to Work	60
40. <u>t</u> Test for Pre and Post Understanding of Self in Relation to Work for Experimental (E) and Control (C) Groups	61

LIST OF TABLES (Continued)

TABLE	Page
41. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Decision-Making	62
42. t Tests for Pre and Post Decision-Making for Experimental (E) and Control (C) Groups	62
43. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Ratings of Effectiveness of One's Decision-Making Process	63
44. t Tests for Pre and Post Ratings of Effectiveness of One's Decision-Making Process for Experimental (E) and Control (C) Groups	64
45. Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Accuracy in Defining "Work" and "Career".	65
46. t Tests for Accuracy in Defining "Work" and "Career" in Experimental (E) and Control (C) Groups	65
47. Means and Standard Deviations of Pretests, Posttests, and Class Gains for Experimental (E) and Control (C) Identification of Career Information Sources	66
48. t Tests for Pre and Post Identification of Career Information Resources for Experimental (E) and Control (C) Groups	67
49. Means and Standard Deviations of Pretests, Posttests, and Class Gains for Experimental (E) and Control (C) Identification of Career Information Evaluation Criteria	68
50. t Tests for Pre and Post Identification of Career Information Evaluation Criteria for Experimental (E) and Control (C) Groups	68
51. Means and Standard Deviations of Pretests, Posttests, and Class Gains for Identification of Career Concept Definitions for Experimental (E) and Control (C) Groups	69
52. t Tests for Pre and Post Identification of Career Concept Definitions for Experimental (E) and Control (C) Groups	70
53. Means and Standard Deviations of Student Responses to Items Related to Growth Recognition Based on the Scale: 1=None, 2=Very Little, 3=A Little, 4=A Moderate Amount, 5=A Great Deal	71

LIST OF TABLES (Continued)

TABLE	Page
54. Summary (In Percentages) of Student Responses to Course Impact and Reaction Statements.	73
55. Summary (in Percentages) of Student Responses to Course Involvement Questions	79
56. Summary (in Percentages) of Student Responses to Class Involvement Questions.	80
57. Summary (in Percentages) of Student Use of Career Information Resource Materials	81
58. Percentage of Students Meeting Unit Objectives for the Career Planning and Decision-Making Course Based on Random Sample (N=58) of Student Textbooks.	82
59. Theories of Career Development with Which CPDM Field Test Instructors Stated They Most Closely Identified Themselves and the Instructors' Own Definitions of Career Development.	88
60. Career Decision-Making Steps Most Frequently Cited by Field Test Instructors	90
61. Instructional Benefits of the Course Perceived by Field Test Instructors	94
62. Career Development Theory with Which Field Test Instructors Most Closely Identified Before and After Teaching the Career Planning and Decision-Making Course	99
63. Means and Standard Deviations of Decision-Making Steps of Field Test Instructors Most Closely Identified with Before and After Teaching the Career Planning and Decision-Making Course	100
64. Instructor Ratings of Importance of Career Development Tasks Which May Occur Subsequent to the Career Planning and Decision-Making Course and Prior to Graduation	104
65. Agreement of Career Planning and Decision-Making Course Instructors with Evaluative Statements About the Course.	107
66. Instructor Opinions Regarding the Acceptability of Various Aspects of the Career Planning and Decision-Making Instructors' Guide	109

LIST OF TABLES (Continued)

TABLE	Page
67. Adequacy of the College Major-Occupation Index Evaluated by Career Planning and Decision-Making Course Instructors.	116
68. Career Planning and Decision-Making Course Instructors' Agreement with the Usefulness of Aspects of the College Major-Occupation Index	117
69. Reviewers' Agreement with the Statement, "The Purpose of the Filmstrip is Clear" for Each of the CPDM Filmstrips.	120
70. Reviewers' Agreement with the Statement, "The Title Accurately Represents the Content" for Each of the CPDM Filmstrips	121
71. Reviewers' Agreement with the Statement, "The Amount of Extraneous Material is Minimal" for Each of the CPDM Filmstrips	123
72. Reviewers' Agreement with the Statement, "Concepts are Appropriate for a College Student Audience".	124
73. Reviewers' Agreement with the Statement, "The Portrayal of Illustration of Concepts are Appropriate for a College Student Audience".	125
74. Reviewers' Agreement with the Statement, "Information Presented is Accurate"	126
75. Reviewers' Agreement with the Statement, "Information Presented is Current"	127
76. Reviewers' Agreement with the Statement, "The Filmstrip Motivated Student Discussion and/or Participation in Follow-Up Activities".	128
77. Reviewers' Agreement with the Statement, "The Filmstrip Enhances the Material Presented in the Textbook"	129
78. Reviewers' Opinions Regarding the Acceptability (Ac) - Unacceptability (Unac) of Picture Quality, Sound Quality, and Length of the Filmstrips	130
79. Biases Detected in the Career Planning and Decision-Making Course Filmstrips.	131
80. Strengths and Weaknesses of Career Planning and Decision-Making Filmstrips Identified by Reviewers.	135

LIST OF FIGURES

FIGURES	Page
1. Solomon Four Group Design	10
2. 2 x 2 Analysis of Variance	10

CAREER PLANNING AND DECISION MAKING COURSE

FINAL EVALUATION REPORT

EXECUTIVE SUMMARY

The Appalachia Educational Laboratory, Inc., (AEL) is dedicated to the improvement of education and educational opportunity for the people of its Region. It seeks to accomplish such improvement by conducting educational research, development, dissemination and evaluation; and by providing these R & D services to education agencies in its seven-state Region: Alabama, Kentucky, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

Programmatic research and development and regional educational services performed by the Laboratory are supported by funding from the National Institute of Education (NIE) and by contracts with federal agencies. In addition, the Laboratory works with regional and local education agencies to perform R & D services on a contractual basis.

AEL's Division of Career Guidance was established in 1966 in response to regional needs to address the transition of youth from school to work. In responding to this national, as well as regional need, the Division is involved in designing and developing materials and processes for assisting youth and adults in career development.

The Career Planning and Decision-Making course for college (CPDM) is part of a comprehensive plan of work committed to the design and development of materials and processes to facilitate career exploration and decision-making within a range of levels, settings, and populations. This one quarter/semester CPDM course consists of a student text,

containing six career guidance curriculum units; an Instructor's Guide; related filmstrips; and the AEL Career Information System (CIS).

The CPDM course is designed to help students develop a greater understanding of themselves and of the world of work as a basis for planning and choice. Specifically, in learning career planning and decision-making skills, students explore self and their environment; establish personally relevant goals; identify career alternatives; clarify their own work and life values in personal and culturally relevant terms; and take appropriate action.

The AEL Career Information System (CIS) used with the college course is a comprehensive organization and management system for career information resources. The CIS is linked to all of the AEL Career Decision-Making materials. Orientation and self assessment access materials are included as part of the system to assist students in exploring the world of work in relation to their personal characteristics.

Although evaluation activities took place during the entire course development process, the purpose of the Final Evaluation Report was to describe the final two field test phases. The CIS was previously evaluated and, therefore, was included as a component in this evaluation only to determine extent of use by students enrolled in the CPDM course.

Two field tests were conducted in the evaluation of the CPDM course. Field testing of the Third Edition of the course was conducted in 1976-77, primarily to obtain formative evaluation information on the student text. Following substantial revisions of the text, an extensive field test was conducted according to a formative-summative evaluation model to determine the effectiveness of selected components and of the CPDM course as a whole.

The formative evaluation phase was conducted as part of the curriculum development process to identify areas in the course needing improvement. A summative evaluation was conducted to assess the overall effectiveness of the course.

Although both field tests are included in this Executive Summary, major emphasis is placed on the second, more comprehensive field test.

Field Test I

The initial field test took place in 1976-77, at East Tennessee State University in Johnson City, Tennessee. One hundred twenty randomly selected freshmen students comprised the two experimental and two control groups involved in the Solomon Four Group design used in the study. The two experimental groups completed the CPDM course.

Experimental and control groups were pre and posttested using the Simulated Occupational Choice (SOC), Assessment of Career Decision-Making (ACDM) - Form B, and a locally developed achievement test.

Evaluation Questions

Since the primary purpose of the field test was to determine revisions needed in the student text, information required for making this determination focused upon student outcomes which addressed the following questions:

1. Does the CPDM course increase students' knowledge of the world of work?
2. Does the CPDM course increase students' awareness of personal values related to career?
3. Does the CPDM course enhance students' decision-making processes?

4. Does the CPDM course promote student selection of a College Major?
5. Does the CPDM course increase students' level of career planning?

Results and Discussion

Analysis of Variance was the inferential statistic used to analyze the field-test data. The results indicated that:

1. The CPDM course increases students' knowledge of the world of work. Findings revealed that CPDM students knew significantly more about the world of work than non-CPDM students.
2. The CPDM course may or may not increase students' awareness of personal values related to career. CPDM students were able to generate significantly more occupational values than were non-CPDM students; however, a testing effect of the SOC was found on three of the subtests and a testing-treatment interaction effect was found on another. Because it appears that learning from the pretest occurred on several subtests, it is difficult to determine the course impact based on results from the SOC.
3. The CPDM course has a positive impact on students' decision-making process. CPDM students were able to generate decision-making processes of significantly greater quality than non-CPDM students as measured by the achievement test. CPDM students were not significantly more advanced in their career decision-making as measured by the Assessment of Career Decision-Making. It appears that the CPDM course does enhance one's decision-making process to some extent. The Assessment of Career Decision-Making (ACDM) may not have been sensitive to student changes in this area or the course may not have an impact on the specific domains measured by the ACDM.
4. The CPDM course has a positive impact on student selection of a college major. CPDM students were significantly more advanced in their process of major selection than non-CPDM students as measured by the achievement test. ACDM results did not reveal significant experimental and control group differences in the decision-making task: major.

The ACDM may not be sensitive to the changes made by students relative to major selection or the course may not have an impact on the specific domains measured by the ACDM.

5. The CPDM course increases students' level of career planning. CPDM students had significantly higher levels of career planning than did non CPDM students as measured by the achievement test.

The results do support the effectiveness of the CPDM course in the areas described.

Following the field test, other components of the course were developed. Also, revisions in the student text were made in order to more fully implement the course design. Because of the extent of the student text revisions and the need to determine the effectiveness of the newly developed components, as well as the effectiveness of the whole course, a more comprehensive and extensive field test was implemented.

Field Test II

The second field test of the CPDM course was conducted during the winter school term of 1978-79. The purpose of the field test was to determine the effectiveness of the CPDM course as a whole and of the individual course component. So that this determination could be made, the evaluation of the course focused upon the following questions.

Evaluation Questions

1. To what extent were the student objectives met?
Has the desired change in client behavior occurred?
2. Has the impact of achieving student objectives (outcomes) been adequately documented and described to provide needed information to potential program users?

3. Has the usability of the program for colleges and universities similar to the field test sites been adequately documented for potential program users?

Evaluation Design

In order to respond to these questions, specific information and data collection methods were required. Table 1 presents the specific information required and the criteria to be used in determining the course effectiveness in regard to each question. In order to meet the criteria listed in Table 1, formative and summative evaluation information was obtained from students, instructors, and an independent, external evaluator.

Of 178 post-secondary institutions contacted, 14 colleges in 13 states participated in the field test. Five hundred eighty nine undergraduate students composed the 15 experimental and 15 control classes involved. Experimental students were those who volunteered, or were advised to enroll in the CPDM course. Fifty-six percent of these students were freshmen, 33 percent were sophomores, and the remainder were juniors and seniors. A control class was matched for each experimental class at the same college. Control classes were noncareer development courses similar to experimental classes in structure, organization, and student makeup.

A nonequivalent control group design was used to collect evaluation data. Experimental and control students were pre and posttested using the Assessment of Career Decision-Making (ACDM) and a student survey developed from the achievement test used in the first field test. Students also completed a Student Evaluation form. Instructors completed a survey before and after teaching the course as well as evaluation forms for the course filmstrips, College Major-Occupation Index, Instructor's Guide, and for the course as a whole.

Table 1

Evaluation Questions, Information Requirements, and Decision Criteria
for Determining Effectiveness of the Career Planning
and Decision-Making Course

Evaluation Questions	Information Requirements	Decision Criteria
1. To what extent were the student objectives met?	Pre-Post performance indicators in career decision-making. Monitoring of student performance in college text.	Achievement of each student objective by 85 percent of target population. Statistical and practical significance demonstrated.
2. Documentation of program impact?	Appropriate dependent measures over both subjective and objective variations.	Meta-evaluation by external reviewer: to include range, sensitivity, and appropriateness of measures. Perceptions of worth by users.
3. Documentation of usability?	Appropriate dependent measures over both objective and subjective variations.	Meta-evaluation by external reviewer: to include range, sensitivity, and appropriateness of measures. Perceptions of usability by users.

XVII

Descriptive statistical analyses performed included means, standard deviations, and percentages. Inferential analyses included the use of correlated and independent t tests. Although the use of analysis of covariance was originally proposed, the frequent violation of covariance assumptions by the data contraindicated its use.

Results and Discussion

The formative evaluation results provided the CPDM course developers with information on which to base revisions for course improvement. Primary revisions indicated were:

- removal of biases identified in filmstrips
- improvement of time management
- improvement of classroom management, including student evaluation.
- streamline mechanics for chart completion in the student text
- increase clarity of instructions for student activities

Both students and instructors furnished information supporting the adequacy and effectiveness of the components of the CPDM course.

The summative evaluation was conducted to assess the overall effectiveness of the program. Effectiveness was viewed in terms of both statistical and practical significance of course outcomes (impact).

Results of statistical analyses indicate that students completing the CPDM course made significantly greater gains in the following career development areas when compared with non-CPDM students.

1. Progress in selecting a college major.
2. Progress toward selecting an occupation to pursue after college completion.

3. Knowledge about college majors.
4. Knowledge about the relationship between college majors and occupations.
5. Knowledge about occupations of interest.
6. Understanding of self in relation to work.
7. Quality of decision-making process.
8. Rating the effectiveness of one's decision making process.
9. Accuracy in defining the terms "work" and "career."
10. Ability to identify criteria for evaluating career information.
11. Ability to identify correct course concept definitions.

CPDM students did not make significantly greater gains than non-CPDM students in the areas of

- Rational Style of decision-making
- Intuitive Style of decision-making
- Dependent Style of decision-making
- Making and implementing the decision to attend college

CPDM students made significant pre-post positive gains in Rational Style and predictive gains in decreased Dependent Style of decision-making during the course. These significant gains and the evidence of higher CPDM gains as compared to non-CPDM gains, although not significant at the .05 level, do suggest a positive impact of the course on students' Rational and Dependent decision-making style.

Although CPDM students decreased their Intuitive decision-making styles and non-CPDM students increased their styles, there were no significant changes during the school term in Intuitive decision-making.

This finding may partially be explained by the existence of intuitive dimensions in the CPDM course. The decision making process taught in the course consists of both Rational and Intuitive Style elements.

In addition to the statistical significance of course outcomes, practical significance of outcomes was emphasized in determining overall course effectiveness. In this study, practical significance referred to achievement of course unit objectives and student and instructor evaluations of effectiveness.

The standard originally set for objectives achievement during the field test was that 85 percent of the target population would achieve each objective. Several issues arose during the course which made this level of achievement unrealistic for basing decisions on course effectiveness:

1. Since criteria for meeting objectives were based only on textbook responses, those classes who were not able to complete Units V and VI were not able to attempt completion of objectives for those Units. The achievement level for Units V and VI are not accurate indicators of student performance based on the course experience.
2. Because of time constraints, some instructors did not assign completion of every course activity. Again, the achievement level would appear lower for the related objectives.
3. Some instructors requested that students complete some activities on photocopied sheets of the textbook so that these sheets could be collected for monitoring student performance. The achievement level for related objectives would, therefore, appear to be lower.

Since 60 percent ($N=8$) of the 14 classes on which objective achievement was determined completed all six units of the course during the term, the standard for the field test was revised to 60 percent of the target population completing each objective.

Based on the revised standard, 71 percent (N 34) of the 48 course objectives was achieved at the level indicating effectiveness. The 14 objectives not meeting the standard included all six objectives for Units V and VI as well as four objectives from Unit III, three from Unit II, and one from Unit V. Those objectives for which the standard was not attained were reviewed and recommendations made for revisions. The 71 percent of objectives met at the level defined by the standard supports the practical significance of the CPDM course.

Another indication of practical significance is student evaluation of their course experience. Ninety-eight percent of the CPDM students felt that an important function of a college is providing experiences in career planning and decision-making. This finding adds support to the appropriateness and need for a course such as CPDM as basic curriculum in college.

Students indicated the course helped them develop:

- a greater understanding of themselves
- a greater understanding of the world of work
- a career plan taking into consideration self and milieu
- increased awareness of their career goal and its appropriateness for them.

Students found the planning and deciding process taught in the course to be personally useful and indicated the course helped them gain a greater sense of control over their career. In addition to these self appraisals of course impact, students indicated they were not only pleased overall with the course, but would recommend the course to friends who wanted career guidance.

These findings indicate that the CPDM course is important, helpful, and useful to students and that they recognize the impact of the course on their lives.

Practical significance was also supported by instructor outcomes and evaluations. An unanticipated course outcome was the increase in quality in the decision-making process of instructors, criteria being the CPDM decision-making process. Apparently, teaching the CPDM course influences the instructors' decision-making processes, enhancing the quality of their process. Another unanticipated instructor outcome was the increase in the number of instructors identifying most closely with the career development theory of Tiedeman, the framework on which the course is based.

Results from the instructor evaluations indicated the course is appropriate for college students. Instructors supported the effectiveness of the course, indicating:

- students seemed interested in the course
- instructional strategies used in the course materials are effective in teaching the intended skills and knowledge
- the course prompted career planning and decision-making behavior by students
- major competencies are attainable from unit completion
- course content is comprehensive in terms of the career planning and decision-making process
- activities are appropriate for teaching the course concepts
- language and concepts presented in the course enable students to more effectively understand and discuss career concerns

Further evidence of practical significance of the course was provided by instructor identification of institutional benefits. These included:

- providing intense guidance services
- enabling students to become more goal oriented
- providing information and guidance to students not reached by counseling centers
- providing increased use of career centers
- promoting increased student satisfaction, and thus, retention at the college
- providing information and guidance for nonacademically (technical) oriented students

In summarizing their experiences with the course, instructors indicate that (1) the Instructors' Guide enables effective course instruction; (2) materials are free of bias; and (3) overall, they are pleased with the course. They rate the CPDM course as being better than other available career development courses and indicate they would recommend the course for helping students in career development.

In summary, formative evaluation results provided the developers with information on aspects of the CPDM course which are effective and aspects which may be improved by revisions. The Instructor's Guide is effective in its field test form, but can be improved by revisions in time and class management and provisions for student performance evaluation. The course filmstrips can be improved by removing biases detected and improving discussion guidelines. The College Major-Occupation Index is effective in its field test form and results failed to provide evidence of areas needing improvement. The student text is effective in its field test form but can

be improved by "streamlining" the mechanics of chart completion and clarifying some instructions.

Although the CPDM course was developed for use by college underclassmen, a small percentage of the field test students were juniors and seniors who also used the materials effectively. There was not a sufficient number of juniors and seniors participating to allow evaluation of the course for upperclassmen.

The summative evaluation results provided evidence of objectives achievement, program impact, and usability. The statistical and practical significance demonstrated in these areas indicate that the CPDM course is an effective career development curriculum for freshmen and sophomore college students.

INTRODUCTION

The Appalachia Educational Laboratory, Inc., (AEL) is dedicated to the improvement of education and educational opportunity for the people of its Region. It seeks to accomplish such improvement by conducting educational research, development, dissemination and evaluation, and by providing these R & D services to education agencies in its seven-state Region: Alabama, Kentucky, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

Programmatic research and development and regional educational services performed by the Laboratory are supported by funding from the National Institute of Education (NIE) and by contracts with federal agencies. In addition, the Laboratory works with regional and local education agencies to perform R & D services on a contractual basis.

AEL's Division of Career Guidance was established in 1966 in response to regional needs to address the transition of youth from school to work. In responding to this national, as well as regional need, the Division is involved in designing and developing materials and processes for assisting youth and adults in career development.

The Career Planning and Decision-Making course for college (CPDM) is part of a comprehensive plan of work committed to the design and development of materials and processes to facilitate career exploration and decision-making within a range of levels, settings, and populations. This one quarter/semester CPDM course consists of a student text, containing six career guidance curriculum units; an Instructor's Guide; related filmstrips; and the AEL Career Information System (CIS).

The CPDM course is designed to help students develop a greater understanding of themselves and of the world of work as a basis for planning and choice. Specifically, in learning career planning and decision-making skills, students explore self and their environment; establish personally relevant goals; identify career alternatives; clarify their own work and life values in personal and culturally relevant terms; and take appropriate action.

The AEL Career Information System used with the college course is a comprehensive organization and management system for career information resources. Orientation and self assessment materials are included as part of the system to assist students in exploring the world of work in relation to their personal characteristics.

Although evaluation activities took place during the entire development process, the purpose of this report is to describe the final two field test phases of the evaluation. The CIS was previously evaluated along with the secondary school Career Decision-Making Program and was only included as a component of the evaluation to determine extent of use by students enrolled in the CPDM course.

Two field tests were conducted in the evaluation of the CPDM course. Field testing of the Third Edition of the course was conducted in 1976-77 primarily to obtain formative evaluation information on the ~~student~~ text. Following substantial revisions of the text, an extensive field test was conducted according to a formative-summative evaluation model to determine the effectiveness of the CPDM course as a whole and on selected components of the course. The formative evaluation phase was conducted as part of the

curriculum development process to identify areas in the course needing improvement. A summative evaluation was conducted to assess the overall effectiveness of the course. Although both field tests are described in this report, the major focus is placed on the second, more comprehensive field test of all the course components.

FIELD TEST I

The initial field test of the CPDM course took place during the Spring Quarter of 1976-77, at East Tennessee State University (ETSU), Johnson City, Tennessee. The primary purpose of this field test was to obtain formative information about the student text.

Information Requirements

Since the primary purpose of this field test was to determine revisions needed on the student workbook, information required is focused on student outcomes which address the following evaluation questions:

1. Does the CPDM course increase students' knowledge of the world of work?
2. Does the CPDM course increase students' awareness of personal values related to career?
3. Does the CPDM course enhance students' decision-making processes?
4. Does the CPDM course promote student selection of a college major?
5. Does the CPDM course increase students' level of career planning?

Target Population

East Tennessee State University was selected as the field test site because of their previous developmental work with AEL and because they were willing to dedicate a half-time instructor to teach two treatment classes. The instructor for the course was a full-time faculty member with preparation and experience in counseling.

The target population consisted of the 1976-77 entering freshmen class at East Tennessee State University. A computer was used to randomly select the field test sample from the 2,000 full time students enrolled during the Fall and Winter Quarters. Students selected were representative of the total freshmen population on characteristics such as sex, race, curriculum major or undecided, and academic ability. Letters were sent by the President of ETSU to the random sample selected inviting their participation in the field test (see Appendix A). One hundred twenty students agreed to participate.

Design

A Solomon Four-Group design was used to collect evaluation data:

R O₁ X O₂

R O₃ O₄

R X O₅

R O₆ (Campbell & Stanley, 1972)

Students were randomly assigned to one of the four groups. Each group was made up of approximately 30 students.

One experimental group received the pretest and posttest and one received the posttest only. One control group received the pretest and posttest and one received the posttest only.

Threats to Internal Validity

A true experimental design, the Solomon Four-Group controls for all of the major sources of internal invalidity (Campbell & Stanley, 1972).

Threats to External Validity

The Solomon Four-Group Design controls for interaction effects of testing and treatment. Selection-treatment interaction is recognized as a threat to external validity because of the single field test site and the manner in which it was selected. However, the threat is assumed to be minimal because ETSU is considered to be generally representative of institutions which in the future would implement the course. Reactive arrangements is not considered a threat to external validity because of the educational setting in which the field test took place.

Treatment

The treatment consisted of the Third Edition of the CPDM course. This version was a partial revision of the second edition of the course, which was activity based, to form one with a stronger theoretical orientation, i.e., career development theory with tighter concepts and language and a more explicit decision-making strategy. Course materials included a student workbook and an instructor's guide.

Instruments

Three instruments were administered to collect field test data: Simulated Occupational Choice (SOC), Assessment of Career Decision-Making (ACDM), and an achievement test developed by AEL staff.

The SOC assesses a person's utilization of internal and external information in decision-making. In completing the SOC, individuals experience a decision situation. The SOC was used in the field test to determine if the CPDM course increased the level and consistency of internal information.

(values). Because of the nature of the materials required to administer the SOC, the instrument is not included in the Appendices of this report. For a complete description of the instrument and its development, readers are referred to "Simulated Occupational Choice: A Diagnostic Measure of Competencies in Career Decision-Making" (Katz, Norris, & Pears, 1978).

The Assessment of Career Decision-Making (ACDM), Form B measures a person's decision-making styles, decision-making processes, and career decision-making tasks. A copy of the ACDM, Form B, can be found in Appendix B. For a complete description of the ACDM, refer to "Assessment of Career Decision-Making: Progress Report" by Vincent Harren (1976).

An achievement test was developed locally to assess student knowledge in course content. In addition to cognitive items on the instrument, affective items were included for student estimates of self knowledge. Because students had a tendency to rate their self knowledge high in the absence of more accurate information, posttest items were provided for students to reassess their level of knowledge about occupations and self prior to the course (see Appendix C).

Procedures

Since the SOC required a one-to-one administration, four ETSU graduate students and one coordinator were hired to manage all SOC administrations and control group testing. Students were contacted and given appointments with one of the interns for SOC testing. Interns were trained by the primary developer of the SOC instrument and by AEL personnel.

The SOC was administered during the week prior to class and the first week of classes. The ACDM and achievement test were administered to

experimental students during the first and last class days. Control students also completed the tests during the first and last weeks of class. All instruments were combined and administered in one packet.

The course instructor received in-service training at AEL at which time course materials were reviewed and discussed.

Instruments were scored by AEL staff and a ten percent sample verified before data was keypunched. The SOC scale scores were calculated by the developer of SOC.

Professional keypunchers entered data onto cards for computer analysis. Statistical analysis was conducted at Princeton University's Computer Center by an educational researcher.

Statistical Analysis

The Solomon Four-Group design, shown in Figure I, involves six sets of observations. In a discussion of an appropriate statistical test for this design, Campbell and Stanley (1972) indicate that "there is no singular statistical procedure which makes use of all six sets of observations simultaneously" (p. 25). They suggest that the pretest data be set aside and that it enter the analyses as part of the treatment classification in a 2×2 analyses of variance (ANOVA). Thus, following the suggestion of Campbell and Stanley, the data was analyzed using the ANOVA shown in Figure 1 on the following page.

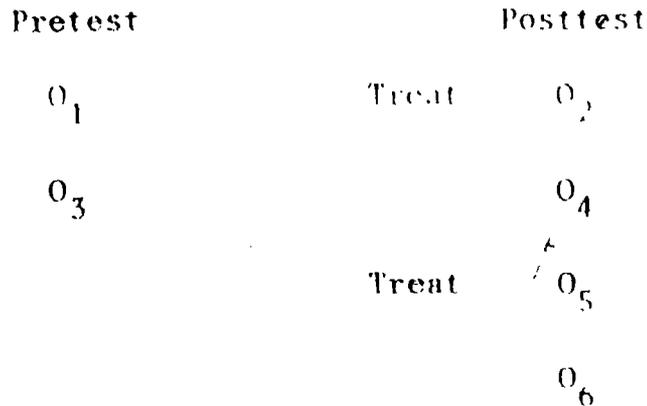


Figure 1

Solomon Four-Group Design

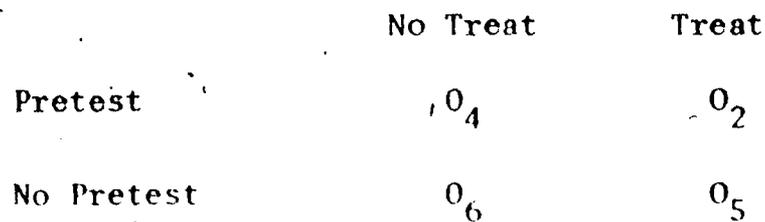


Figure 2

2 x 2 Analysis of Variance

Results

The results of Analysis of Variance performed on the field test data are presented in this section by instrument.

Simulated Occupational Choice

Analysis of Variance was performed on each of eight SOC subscores: TOPVAL, WY2, NSPEC, W3, AVCH, RAT-DS1, RAT-DS2, and Rs.

TOPVAL is a tally of the number of occupational characteristics generated in phase 1, to which the student assigns the three highest weights after phase 4 of the SOC. This subscore is an indication of the decision-makers awareness of important occupational characteristics. Table 1 shows the analysis of variance summary table on this measure.

Table 1

Analysis of Variance for TOPVAL Subtest
of the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	289.0000	101	191.2970	195.7945	0.0000
Mean	191.2970	1	0.9770		
Error	97.7030	100			
Test	0.4102	1	0.4102	0.4193	0.5188
Treat	1.1948	1	1.1948	1.2211	0.2719
Error	95.8916	98	0.9785		
Interaction	3.3214	1	3.3214	3.4803	0.0651
Error	92.5703	97	0.9543		

Results reveal no significant main or interactive effects. There was no significant difference between experimental and control students on Top Value.

W_2 is the ratio of the weights assigned to phase 1 characteristics to the weights assigned to phase 2 characteristics. This subscore is an indication of the decision-maker's awareness of occupational characteristics most important to him/her. Table 2 shows the analysis of variance summary table on this measure.

Table 2

Analysis of Variance for W_2 Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	154.5760	101			
Mean	144.1289	1	144.1289	1379.6069	0.0000
Error	10.4471	100	0.1045		
Test	0.0002	1	0.0002	0.0019	0.9654
Treat	0.0616	1	0.0616	0.5817	0.4475
Error	10.3834	98	0.1060		
Interaction	0.0365	1	0.0365	0.3421	0.5600
Error	10.3469	97	0.1067		

Results reveal no significant main or interactive effects. There was no significant difference between experimental and control groups on W_2 .

NSPEC is the number of specifications generated during phase 1. This subscore is an indication of the decision-maker's awareness of characteristics important to him/her in an occupation. Table 3 shows the analysis of variance summary table on this measure.

Table 3

Analysis of Variance for NSPEC Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	1797.0000	101			
Mean	1624.0099	1	1624.0099	938.7878	0.0000
Error	172.9901	100	1.7299		
Test	1.6474	1	1.6474	1.0055	0.3185
Treat	9.5720	1	9.5720	5.8422	0.0175
Error	160.5664	98	1.6384		
Interaction	3.6299	1	3.6299	2.2436	0.1374
Error	156.9365	97	1.6179		

Results reveal a significant ($p < .02$) treatment effect. Experimental students scored significantly greater than control students on the NSPIC after course completion.

W3 is the average weight given to residual characteristics. This subscore is an indication of the importance of occupational characteristics not generated by one's self. Table 4 shows the analysis of variance summary table for W3.

Table 4
Analysis of Variance for W3 Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	1231.0851	101			
Mean	1007.6407	1	1007.6407	450.9581	0.0000
Error	223.4444	100	2.2344		
Test	12.2767	1	12.2767	5.7062	0.0188
Treat	0.0146	1	0.0146	0.0068	0.9246
Error	210.8442	98	2.1515		
Interaction	3.4049	1	3.4049	1.5922	0.2100
Error	207.4392	97	2.1385		

Results reveal a significant ($p < .02$) test, but not treatment effect. Experimental students did not score significantly greater in the desired direction (negative) than did control students. Pretested students scored significantly lower than nonpretested students on this posttest measure.

AVCH is the ratio of mean phase 1 distance to mean phase 2 distance. This subscore is an indication of ability to interpret and use information. Table 5 shows the analysis of variance summary table for AVCH.

Table 5

Analysis of Variance for AVCH Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	186.5283	101			
Mean	157.4117	1	157.4117	540.6244	0.0000
Error	29.1166	100	0.2912		
Test	0.1435	1	0.1435	0.5038	0.4795
Treat	0.9468	1	0.9468	3.3239	0.0713
Error	27.9138	98	0.2848		
Interaction	1.4342	1	1.4342	5.2539	0.0241
Error	26.4796	97	0.2730		

No significant main effects were found. A significant ($p < .02$) test-treatment interaction was found. Experimental students did not score significantly greater than control students on this measure. Control posttest only and experimental pretest only students scored higher on this measure than the other two groups.

RAT-DS1 is the discrepancy between actual and expected positions on the attractiveness scale for phase 1. This subscore is an indication of ability to process information logically and consistently. Table 6 shows the analysis of variance summary table for RAT-DS1.

Table 6

Analysis of Variance for the RAT-DS1 Subtest of the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	15958.1473	101			
Mean	14049.1216	1	14049.1216	735.9315	0.0000
Error	1909.0257	100	19.0903		
Test	149.4740	1	149.4740	8.3407	0.0048
Treat	0.0631	1	0.0631	0.0035	0.9529
Error	1756.2637	98	17.9211		
Interaction	15.9974	1	15.9974	0.8917	0.3474
Error	1740.2663	97	17.9409		

A significant ($p < .01$) test effect, but not treatment effect was found. Experimental students did not score significantly greater in the desired (negative) direction than did control students on RAT-DS1. Students completing the pretest scored significantly lower than students not completing the pretest.

RAT-DS2 is the discrepancy between actual and expected positions on the attractiveness scale for phase 2. This subscore is another indication of ability to process information logically and consistently. Table 7 shows the analysis of variance summary table for RAT-DS2.



Table 7

Analysis of Variance for the RAT-DS2 Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	19701.3671	101			
Mean	17121.9943	1	17121.9943	663.8046	0.0000
Error	2579.3728	100	25.7937		
Test	50.2522	1	50.2522	1.9621	0.1644
Treat	11.9172	1	11.9172	0.4653	0.4968
Error	2509.8954	98	25.6112		
Interaction	0.3248	1	0.3248	0.0126	0.9110
Error	2509.5705	97	25.8719		

Results reveal no significant effects for RAT-DS2. Experimental students did not score significantly greater in the desired direction (negative) than did control students on this measure.

R2 is the consistency between the magnitude of weights assigned to characteristics and the impact of information about the respective characteristics. This subscore is an indication of consistency of use of information. Table 8 shows the analysis of variance summary table for R2.

Table 8

Analysis of Variance for the R2 Subtest of
the Simulated Occupational Choice

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	37.5945	101			
Mean	24.3730	1	24.3730	184.3452	0.0000
Error	13.2214	100	0.1322		
Test	0.5366	1	0.5366	4.1582	0.0441
Treat	0.0816	1	0.0816	0.6324	0.4284
Error	12.6470	98	0.1291		
Interaction	0.1645	1	0.1645	1.2782	0.2610
Error	12.4825	97	0.1287		

Results reveal no significant treatment effect. A significant testing effect ($p < .05$) was found. Experimental students did not score significantly greater on R2 than control students. Pretested students scored significantly greater than nonpretested students on this measure.

Achievement Test

The achievement test consisted of two parts: one affective and one cognitive. The affective part measured students' self estimated knowledge of career development concepts and the cognitive part objectively measured career development knowledge.

Analysis of Variance results for the affective component is shown in Table 9.

Table 9
Analysis of Variance for Self Estimated Knowledge
of Career Development Concepts

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	367792.2281	107			
Mean	352447.0904	1	352447.0904	2434.6078	0.0000
Error	15345.1377	106	144.7654		
Test	262.1319	1	262.1319	2.3292	0.1300
Treat	3057.9318	1	3057.9318	27.1714	0.0000
Error	11704.4032	104	112.5423		
Interaction	51.5572	1	51.5572	0.4557	
Error	11652.8460	103	113.1344		

Results reveal a significant ($p < .00$) treatment effect. Experimental students scored significantly higher than control students on self estimated knowledge of career decision-making.

Table 10 shows the analysis of variance summary table for objective estimates of career development knowledge.



Table 10

Analysis of Variance for Cognitive Knowledge
of Career Development

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	37301.0000	107			
Mean	30381.3925	1	30381.3925	465.4061	0.0000
Error	6919.6075	106	65.2793		
Test	51.4203	1	51.4203	1.1356	0.2891
Treat	2025.9168	1	2025.9168	44.7413	0.0000
Error	4709.1923	104	45.2807		
Interaction	89.9710	1	89.9710	2.0062	0.1597
Error	4619.2213	103	44.8468		

Results reveal a significant treatment effect ($p < .00$). Experimental students had significantly greater cognitive knowledge of career decision-making than did control students.

Assessment of Career Decision-Making

Analysis of Variance was run on the ACDM total score and the ACDM subscores of decision-making task: Major (DMT-M) and decision-making task: occupation (DMT-O).

Table 11 shows the analysis of variance summary table for DMT-M.

Table 11

Analysis of Variance for Decision-Making
Task: Major

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	77611.0000	107			
Mean	75220.2710	1	75220.2710	3335.1119	0.0
Error	2390.7290	106	22.5540		
Test	19.0582	1	19.0582	0.8365	0.3625
Treat	4.3655	1	4.3655	0.1916	0.6625
Error	2369.4359	104	22.7830		
Interaction	3.1392	1	3.1392	0.1366	0.7124
Error	2366.2967	103	22.9738		

Results reveal no significant main or interactive effects. Experimental students did not score significantly greater than control students on DMT-M.

Table 12 presents the analysis of variance summary table for decision-making task: occupation.

Table 12
Analysis of Variance for Decision-Making
Task: Occupation

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	72877.0000	107			
Mean	70215.7103	1	70215.7103	2796.7137	0.0000
Error	2661.2897	106	25.1065		
Treat	0.6087	1	0.6087	0.0239	0.8774
Error	16.9471	1	16.9471	0.6665	0.4161
Interaction	2644.2994	104	25.4260		
Error	4.7934	1	4.7934	0.1870	0.6663
Error	2639.5060	103	25.6263		

Results reveal no significant main or interactive effects. Experimental students did not score significantly greater on DMT-O than did control students.

Table 13 shows the analysis of variance for the ACDM total score.

Table 13

Analysis of Variance for Assessment of Career
Decision-Making: Total Score

Source	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Probability of Larger F
Total	306074.0000	107			
Mean	296443.2150	1	296443.2150	3262.7642	0.0
Error	9630.7850	106	90.8565		
Test	0.0058	1	0.0058	0.0001	0.9937
Treat	21.1453	1	21.1453	0.2289	0.6334
Error	9609.3135	104	92.3972		
Interaction	64.7848	1	64.7848	0.6991	0.4050
Error	9544.5287	103	92.6653		

Results reveal no significant main or interactive effects. The experimental group did not score significantly higher on the Assessment of Career Decision-Making than did the control group.

Discussion and Conclusions

The field test I results indicate that:

1. The CPDM course increases students' knowledge of the world of work. Findings revealed that CPDM students knew significantly more about the world of work than non-CPDM students.
2. The CPDM may or may not increase students' awareness of personal values related to career. CPDM students were able to generate significantly more occupational values than were non-CPDM students; however, a testing effect of the SOC was found on three of the subtests and a testing-treatment interaction effect was found on another. Because it appears that learning from the pretest occurred on several subtests, it is difficult to determine the course impact based on results from the SOC.
3. The CPDM course has a positive impact on students' decision-making process. CPDM students were able to generate decision-making processes of significantly greater quality than non-CPDM students as measured by

the achievement test. CPDM students were not significantly more advanced in their career decision-making as measured by the Assessment of Career Decision-Making. It appears that the CPDM course does enhance one's decision-making process to some extent. The ACDM may not have been sensitive to student changes in this area or the course may not have an impact on the specific domains measured by the ACDM.

4. The CPDM course has a positive impact on student selection of a college major. CPDM students were significantly more advanced in their process of major selection than non-CPDM students as measured by the achievement test. ACDM results did not reveal significant experimental and control group differences in the decision-making task: major. The ACDM may not be sensitive to the changes made by students relative to major selection or the CPDM course may not have an impact on the specific domains measured by the ACDM.
5. The CPDM course increases students' level of career planning. CPDM students had significantly higher levels of career planning than did control students as measured by the achievement test.

The results do support the effectiveness of the CPDM course in the areas just described.

Following the field test, other components of the course were developed. Also, revisions in the student text were made in order to more fully implement the course design. Because of the extent of the student text revisions, four external consultants reviewed course materials to critique the degree to which the design had been implemented and to make recommendations for improving procedures and activities and delivery of course concepts. Because of the need to determine the effectiveness of the revised text and the newly developed components, as well as the effectiveness of the whole course, a more comprehensive and extensive field test was implemented. This second field test is described in the remainder of this report.

FIELD TEST II

The second field test of the CPDM course was conducted during the winter school term of 1978-79. The purpose of the field test was to determine the effectiveness of the CPDM course as a whole and of the individual course components.

Information Requirements

The evaluation of the college Career Planning and Decision-Making course will focus upon the following questions:

1. To what extent were the student objectives met? Has the desired change in student behavior occurred?
2. Has the impact of achieving student objectives (outcomes) been adequately documented and described to provide needed information to potential program users?
3. Has the usability of the program for colleges and universities similar to the field test sites been adequately documented for potential program users?

In order to respond to these questions, specific information and data collection methods are required. Table 14 presents specific information required in responding to the questions listed above and the criteria to be used in determining effectiveness in regard to each question. In order to meet the criteria listed in Table 14, formative and summative evaluation information obtained from students, instructors, and an independent, external evaluator.

In addition to these participants, four schools that were involved in the development phases and pilot testing of the course continued their

Table 14

Evaluation Questions, Information Requirements, and Decision Criteria
for Determining Effectiveness of the Career Planning
and Decision-Making Course

Evaluation Questions	Information Requirements	Decision Criteria
1. To what extent were the student objectives met?	Pre-Post performance indicators in career decision-making. Monitoring of student performance in college text.	Achievement of each student objective by 85 percent of target population. Statistical and practical significance demonstrated.
2. Documentation of program impact?	Appropriate dependent measures over both subjective and objective variations.	Meta-evaluation by external reviewer: to include range, sensitivity, and appropriateness of measures. Perceptions of worth by users.
3. Documentation of usability?	Appropriate dependent measures over both objective and subjective variations.	Meta-evaluation by external reviewer: to include range, sensitivity, and appropriateness of measures. Perceptions of usability by users.

participation in the field test. They were:

East Tennessee State University, Johnson City, Tennessee
Northern Michigan University, Marquette, Michigan
Ohio State University, Columbus, Ohio
Southwest Virginia Community College, Richlands, Virginia

Five of the field test schools were two year institutions and 11 were four year. Ten institutions were on the quarter system and six were on the semester system. Three hundred twenty-three students comprised the 16 experimental classes receiving the CPDM course. Fifty-six percent of the experimental students were freshmen, 33 percent were sophomores, 5 percent were juniors, and 6 percent were seniors. Eighty-six percent of these students were enrolled in academic programs and 14 percent were enrolled in vocational programs. There were two experimental classes at East Tennessee State University with each remaining field test site having one experimental class.

In order to obtain control classes as similar to the experimental classes as possible, each instructor for an experimental class was asked to select a colleague's class which was not a career development course; but which was similar in structure, organization, and student makeup to the experimental class. Three hundred two students made up the 17 control classes.

Although this method of "matching" is not ideal, resource and field constraints limited the options available.

One field test site was dropped for evaluation purposes early in the term when the instructor decided to deviate extensively from course procedures to accommodate an adult class. This resulted in a field test target group consisting of 589 undergraduate students representing 30 college classes from 14 colleges in 13 states.

Target Population

The field test sites were voluntary participants. On June 23, 1978, letters were sent to 178 colleges and universities in the United States inviting their participation in the field test. These sites were selected on the basis of (1) inquiries received expressing interest in a course such as CPDM, and (2) recommendations received from individuals in the field. Of the 178 schools contacted, eleven participated. These eleven were:

Burlington Community College Pemberton, New Jersey	State Fair Community College Sedalia, Missouri
Chaffey Community College Alta Loma, California	Tarrant County Junior College Hurst, Texas
Fairleigh Dickinson University Madison, New Jersey	Virginia Polytechnic Institute and State University Blacksburg, Virginia
Glassboro State College Glassboro, New Jersey	West Virginia State College Institute, West Virginia
Iowa State University Ames, Iowa	Yakima Valley Community College Yakima, Washington
Keene State College Keene, New Hampshire	

The following demographic analysis characterizes the field test participants:

	<u>Experimental Group</u>	<u>Control Group</u>
Age:	\bar{x} = 20.9971	\bar{x} = 21.5464
	s = 2.9617	s = 3.0130
	age range = 18.5 to 27.6	age range = 18.3 to 26.0
Sex:	M = 35% (N=106)	M = 51% (N=135)
	F = 65% (N=198)	F = 49% (N=132)

Previous Work Experience:

	Experimental Group		Control Group	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Student and not worked	21	7	25	9
Part time work while in school	184	61	120	45
Employed full time	75	25	97	37
Other	<u>24</u>	8	<u>22</u>	8
	N=304		N=264	

Design

A nonequivalent control group design was used to collect evaluation data:

E: O_1 X O_2

C: O_1 O_2 (Campbell & Stanley, 1972)

The experimental group (E) received the CPDM course and a control group (C) received no career planning course. All students were administered a pretest at the beginning of the winter school term and a posttest at the end of the term. CPDM course instructors completed a pretest before becoming acquainted with the CPDM course materials and a posttest after completing instruction of the course. Instructors and students completed user evaluations after course completion.

Threats to Internal Validity

The nonequivalent control group design is regarded as controlling for the main effects of history, maturation, testing, and instrumentation

(Campbell & Stanley, 1972). Since the experimental group was self-selected, the willingness of control students to enroll in a course such as the treatment was assessed in order to determine the likelihood of uniformity between the experimental and control group.

Threats to External Validity

The threat of testing-treatment interaction appears minimal because of the nature of the pretest, the college classroom situation in which the tests will be given, and the Solomon Four-Group results from the previous field test.

Selection-treatment interaction is recognized as a threat to external validity because of the manner in which field test schools were selected; that is, experimental classes were selected from schools requesting involvement and most of these schools were financially able to pay for nonfield test supporting materials. Control classes were selected from these same schools in an attempt to minimize experimental and control class differences. Although this results in a greater possibility of contamination, posttest instruments were designed to detect control group exposure to any of the treatment materials or participants. Data obtained from those control students who were exposed to the treatment was dropped from the analysis.

Because of the field test site selection process, generalization of field test results should be limited to schools interested in implementing a course such as the AEL Career Planning and Decision-Making course.

Treatment

The treatment was the AEL Career Planning and Decision-Making course. The materials composing the course include the CPDM student textbook,

instructor's guide, nine filmstrips, and the College Major-Occupation Index. Although not part of the course per se, the ALJ Career Information System was used by students in completing several of the course activities. The course goals and enabling objectives are listed in Appendix D.

Instruments

Nine instruments were used to collect field test data. Students completed four instruments and instructors completed five instruments.

Student Instruments

Assessment of Career Decision-Making (ACDM). The ACDM, Form C¹, was selected as an evaluation instrument for the CPDM course because of its appropriateness for assessing course-related content (Appendix E). Similar to the CPDM course in its theoretical orientation (Tiedeman & O'hara), the ACDM measures an individual's decision-making process and decision-making styles. For a complete description of the ACDM and its development, refer to "Assessment of Career Decision-Making: Progress Report" by Vincent Harren (1976).

Student Survey - Pretest. The Career Planning and Decision-Making Course Student Survey Pretest (see Appendix F) was administered to address the following questions concerning students' precourse status related to the course goals and objectives.

¹Form C of this instrument was not available at the time of Field Test I. Therefore, Form B had been used in the previous field test.

1. Why did students enroll in the course? (item 1)
2. What type of work experience did students enrolling in the course have? (item 2)
3. How much do students know about the majors offered at their school? (item 3)
4. How much do students know about the relationship between majors and occupations? (item 4)
5. How much do students know about occupations that interest them? (items 5-9)
6. At what point are students in their major selection process? (items 10-12)
7. How well do students understand themselves in relation to work? (items 13-18)
8. What process do students use to make career decisions? (item 19)
9. How effective do students rate their career decision-making process? (item 19)
10. Do students know what the terms "work" and "career" mean? (items 20-21)
11. Do students know sources of career information? (items 22-26)
12. Can students identify criteria for evaluating career information? (item 27)
13. Can students identify correct career concept definitions? (item 28)

The control class version of the Student Survey Pretest contains identical items to the experimental version with the exception of the first item (see Appendix G). Control students were asked about their willingness to enroll in a career planning and decision-making course whereas experimental students were asked their reason for enrollment.

Student Survey - Posttest. The experimental and control group Student Survey Posttests contained identical items to the pretests to allow for pre-posttest and experimental-control group comparisons (see Appendices II and I). The instruments contained items in multiple choice, matching, and short answer formats. Scoring instructions provided criteria on which to base assignment of points to each item. Response formats for multiple choice items were in Likert Scale form ranging from "none" to "a great deal" and were assumed to be equidistant. In addition, the noncognitive items on the experimental group posttest contained two parts. Field Test I results had revealed the existence of a conventional wisdom phenomenon regarding students' appraisal of their career development knowledge. In the absence of more accurate information, students rated their career development knowledge high. Once exposed to a comprehensive career development learning experience, students apparently realized how much there is to know and lowered their pretest ratings. In order to account for this phenomenon on the posttest, each noncognitive item requiring self appraisal had a second subitem requiring students to assess the amount of knowledge they had gained; i.e.:

13A. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

13B. Having completed this course, how much understanding have you gained about your occupational interests?

- none
- very little
- little
- moderate amount
- a great deal

The student surveys were administered to obtain information to address the following evaluation questions. These questions reflect the course goals and objectives.

1. Does the course better prepare students to make career decisions? (items 1-2)
2. Does course completion increase students' knowledge about college majors? (item 3)
3. Does course completion increase students' knowledge about the relationship between college majors and occupations? (item 4)
4. Does course completion increase students' knowledge about occupations of interest to them? (items 5-9)
5. Does course completion promote the process of major selection? (items 10-12)
6. Does course completion increase students' understanding of themselves in relation to work? (items 13-18)
7. Does course completion enhance students' decision-making process? (item 19)
8. Does course completion increase students' ability to define the terms "work" and "career?" (items 20-21)
9. Does course completion increase students' ability to identify sources of career information? (items 22-26)
10. Does course completion increase students' ability to identify criteria for evaluating career information? (item 27)
11. Does course completion increase students' ability to identify correct career concept definitions? (item 28)
12. Do students recognize their own growth as a result of the course? (B items)

Instrument Development

Items for the student survey were developed based on the content and objectives of the college course. Items were pilot tested at ETSU during the field test of the CPDM student text. Based on the results of item and

data analyses, several items were dropped or revised because of either poor discrimination or testing effects.

Inter and intra-rater reliability scores were obtained on three raters. Each rater was randomly assigned three sets of ten tests to score. The 90 tests involved in the reliability study were randomly assigned to the nine groups involved. After a five week interval, tests were rescored. Each rater rescored one set of tests s/he previously scored and one set scored previously by each of the other raters:

Rater	Test Groups Scored	5	Test Groups Rescored
1	A B C	w	A D G
2	D E F	e	E B H
3	G <u>W</u> I	k	I C F
		s	

Rater reliability results based on Pearson-product moment correlations are presented in Table 15.

Table 15
Inter- and Intra-Rater Reliability for the Student
Survey Based on Scoring by Three Raters

Items(s)	Inter \bar{r} (N=58)	Intra \bar{r} (N=29)
Total Survey	.9764*	.9897*
19	.1691	.8777*
20-27	.5890	.7853*

*p < .001

Scoring items 19-27 required the use of subjective judgment. Although two of the raters were knowledgeable of the course concepts, one rater was not. Table 16 presents the results found when inter-rater correlation analyses was performed based on the data from the two raters knowledgeable in the course.

Table 16

Inter-Rater Reliability for the Student Survey Based
on Two Raters Knowledgeable in Course Concepts

Item	r Inter-Rater
19	.6489*
20-27	.8460**

* $p < .01$
** $p < .001$

Based on these findings, scoring instructions were expanded to provide explanation of the concepts assessed in items 19-27.

Validity data was obtained by correlating student survey total scores with ACDM Total Decision-Making Task Score. Based on 209 sets of scores, an r of .5383 was obtained. Such a correlation denotes a substantial or marked relationship (Garrett, 1966). Content validity was supported by material reviews by persons having expertise in career guidance and being knowledgeable of the CPDM course objectives. Construct validity is supported by the significant difference found on every item between students completing the CPDM course and students not enrolled in the course.

Student Evaluation Form. A student evaluation form was developed to obtain student reactions to the course (items 8-14), self-appraised impact (items 1-7, 15), course participation (items 16, 17, 19), and extent and type of material used (item 18). A copy of the Student Evaluation Form can be found in Appendix J.

Instructor Instruments

Instructor Survey Pretest. Items appearing on the Instructor's Survey Pretest were developed to answer the following questions:

1. Are instructors equally effective in teaching the college course, regardless of theoretical orientation, major field, degree, and previous teaching of career development courses? (items 3, 5, 9)
2. Does teaching the course have an effect on the instructor's decision-making style, concept of career, and concept of career development? (items 4, 5, 11)
3. Does the instructor have realistic expectancies of course outcome? (items 6, 7)
4. Are instructors equally effective in teaching the course and do instructors differentially evaluate the course regardless of their responsibility in course adoption, their reasons for teaching the course, and the reasons they perceive the institution as having for offering the course? (items 8, 10, 12)
5. Will the course be evaluated differently by instructors teaching the course on a quarter system and those teaching on a semester system? (item 1)

A copy of the Instructor Survey can be found in Appendix K.

Instructor Survey Posttest. Three of the pretest items were repeated on the Instructor Survey Posttest to determine if teaching the CPDM course influenced the instructor's theoretical orientation, concept of decision-making, additional career planning and decision-making activities needed,

and the importance of other career development tasks for students completing the CPDM course. A copy of the Instructor Survey Posttest can be found in Appendix L.

Instructor Evaluation Form. The Instructor Evaluation Form was developed to obtain information from instructors of the CPDM course regarding the following evaluation questions:

1. Is the course appropriate for college freshmen?
2. Are the course strategies effective?
3. Are advance preparation and planning activities appropriate and adequate for teaching course?
4. Overall, are instructors pleased with course?
5. Is the Instructor's Guide acceptable for instructors teaching the course?
6. Are there any biases present in the course materials?
7. What are the course benefits for the institution?
8. What problems do instructors encounter in teaching the course?
9. What are the strengths and weaknesses of the course?
10. What unanticipated benefits results from the course?
11. What type of students benefit most from this type of course?
12. What type of students benefit least from this type of course?
13. Would instructors familiar with the course recommend the CPDM course for helping students in their career development?
14. How does the CPDM course compare (better-worse) with other career development courses?
15. Having taught the CPDM course, are instructors interested in teaching it again?
16. How would CPDM instructors teach the course differently?

A copy of the Instructor Evaluation Form can be found in Appendix M.

College Major-Occupation Index Evaluation Form. The College Major Occupation Index is used by students to complete activities in Unit IV of the CPDM course. In order to evaluate this component of the course, instructors were asked to complete the College Major-Occupation Index Evaluation Form (see Appendix N). Items on the evaluation form were designed to obtain data to respond to the following questions:

1. Is the College Major-Occupation Index adequate in terms of?
 - representation of the relationship between college and occupations? (item 1)
 - directions for use? (item 2)
 - format? (item 3)
 - appearance? (item 4)
 - usefulness? (item 5)
2. Are students able to effectively use the Index? (items 6-10)
3. What problems do students encounter in using the Index? (item 11)
4. Are the majors listed in the Index representative of the majors offered at various institutions? (items 12 and 15)
5. Do instructors of the CPDM course support the validity of the relationships between the occupations and majors defined in the Index? (item 13)
6. Is the Index an appropriate product to help students establish the relationship between majors and occupations? (item 14)
7. What are the unanticipated uses of the Index? (items 16-17)

8. Are the prescribed uses of the Index considered feasible by CPDM instructors? (item 17)
9. What problems do CPDM instructors experience with the Index? (item 18)
10. What types of improvements for the Index do CPDM instructors recommend? (item 18)

Filmstrip Evaluation Form. Nine filmstrips were field tested as a component of the CPDM course. The Filmstrip Evaluation Form (see Appendix O) contained items adapted from the National Vocational Guidance Association (NVGA) Guidelines (NVGA, 1977) and which address the following questions for each filmstrip:

1. Is the purpose of the filmstrip clear? (item 1)
2. Does the title accurately represent the content? (item 2)
3. Is the amount of extraneous material minimal? (item 3)
4. Are the concepts which are presented appropriate for a college student audience? (item 4)
5. Is the portrayal of illustration of concepts appropriate for a college student audience? (item 5)
6. Is the information presented accurate? (item 6)
7. Is the information presented current? (item 7)
8. Does the filmstrip motivate student discussion and/or participation in follow up activities? (item 8)
9. Does the filmstrip enhance the material presented in the CPDM textbook? (item 9)
10. Is the filmstrip acceptable in terms of picture and sound quality and length? (items 10-12)
11. Are biases/stereotypes evident in the filmstrip? (sex, occupation, ethnic, social class, or age) (items 13-18)
12. What are the perceived strengths and weaknesses of the filmstrip? (item 19)

13. What improvements in the filmstrip are recommended?
(item 19)

Procedures

Instrument Administration

Instructors of the field test course were invited to the Appalachia Educational Laboratory (AEL) in November 1978, for an in-service workshop on implementation of the CPDM course. Only one instructor was unable to attend. Prior to any course orientation, instructors were administered the Instructor Survey Pretest. During the workshop, instructors were acquainted with the evaluation design, schedule, and student instruments, in addition to course materials and procedures.

On the first class day, students were administered the Student Survey Pretest followed by the ACDM. Thus, on the second to the last class period, a student proctor administered and collected the Student Evaluation Forms. To assure students that instructors would not see the completed forms, proctors were instructed to seal completed evaluation forms in an envelope provided for direct return mailing to AEL (see Appendix P). On the last day of class, instructors administered the Student Survey Posttest followed by the ACDM. Control and experimental instructors received written instructions for administering pre and posttest instruments in an attempt to maintain uniform administration procedures. Near the end of the school term, CPDM course instructors were mailed a random sample of four Social Security numbers of students from their class. Textbooks from those students whose numbers were selected were collected at the end of the course and sent to AEL for review.

After completing their posttests, control students were given a debriefing letter thanking them for their cooperation (see Appendix Q). This letter also notified them of the ~~CPIM~~ course instructor on their campus to contact if they desired information about the course.

During the quarter, instructors received an Index Evaluation Form and Filmstrip Evaluation Form to complete. Each instructor was assigned two filmstrips to review, but was encouraged to review as many as possible. After course completion, instructors were requested to complete the Instructor Evaluation Form and the Instructor Survey Posttest.

Monitoring for Fidelity of Use

A random sample of student textbooks were collected at the end of the course and reviewed to monitor completion of activities and achievement of objectives.

A wide right margin was provided on each page of the Instructor's Guide for planning notes and comments. Instructors were advised to write in this margin any deviations they made from the implementation strategy recommended for the course as well as any other comments they wanted to relay to the course developers.

Data Verification

All protocols were kept at AEL. The only identifying information on student protocols were Social Security numbers. A sample of ten percent of all protocols were rescored. The average error rate for student instrument scoring was two percent. All calculations were cross-checked and verified using similar statistical procedures.

Statistical Analyses

Since classes were the smallest independent unit of analysis, means and standard deviations were calculated for each instrument item/subtest for each class. Descriptive analyses included means, standard deviations, and percentages. Inferential analyses included the use of correlated t tests and pre-post comparisons and independent t tests for experimental-control pretest and mean gain comparisons.

Initially, analysis of covariance was used to examine experimental-control posttest means with pretests serving as the covariate. However, examination of covariance results frequently revealed low correlations and nonhomogeneous slopes. Because of the frequent violation of analysis of covariance assumptions, it was not felt that covariance results were interpretable. Therefore, t tests on gain scores were conducted. Even though this statistical analysis is less powerful than analysis of covariance, if significance is found, confidence can be placed in the findings. In addition, this simpler analysis avoids the more restrictive assumptions of analysis of covariance which were not met in this study.

The possibility of alpha inflation and Type I error using this type of analysis is recognized. Therefore, conclusions drawn from results of analyses were based on trends noted in the findings.

Results

The instruments previously described were administered to collect data to respond to formative and summative evaluation questions. The evaluation questions and the results of data analyses will be presented

in this section. Results obtained from student data will be discussed first, by instrument, followed by instructor results.

Several intervening variables were investigated to determine their possible effects on the results of this evaluation.

Since all experimental students had enrolled in the CPDM course, an attempt was made to determine the willingness of control students to enroll in such a course. Sixty-eight percent ($N=184$) of the control students indicated they would enroll in a career planning and decision-making course if one were offered. A t test performed on the total decision-making task scores of those interested and those not interested in enrolling in a career decision-making course revealed no significant difference at the .05 level. A t test performed on the total Student Survey scores revealed a significant difference ($t=-5.3416$, $p < .001$) with interested students having the higher scores.

t tests were performed for ACDM subscores and Student Survey total scores for classes whose instructors had previous experience with the CPDM course materials. No significant difference at the .05 level was found between classes of those instructors having previous experience with the CPDM course and those not having such experience.

A t test was performed on ACDM subscores and on the Student Survey total scores for classes in two year college programs and those in four year college programs. A significant difference was found ($p < .05$) between two and four year college classes in the decision-making task of progress toward selection of major with four year classes scoring higher. No significant difference at the .05 level was found for any other ACDM subscore or for the Student Survey total.

A t test was performed on ACDM subscores and the Student Survey total score for classes on the quarter system and those on the semester system. No significant difference was found between quarter and semester classes on any subscore.

Since there was no trend in the results of the statistical analyses to indicate that instructors' previous familiarity with the CPDM course, two year or four year college programs, or quarter or semester systems were confounding variables, no data was eliminated from analyses based on the above mentioned variables.

Although there was a significant difference on the Student Survey total score, for control students indicating willingness to enroll in a CPDM course and those not indicating interest in such enrollment, all control data was analyzed. This choice was made because a sizable number of experimental students indicated they enrolled in the course because of their advisor's recommendations and not because of their interest in taking such a course. Thus, the total control group seemed more parallel to the experimental group than the restricted, interested portion of the control group would have been.

ACDM Results

Data analyses performed on the ACDM pre and posttests revealed results pertaining to the following evaluation questions:

1. Does course completion increase students' Rational style (R) of decision-making as measured by the ACDM?

Table 17 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control group on this

measure. Table 18 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 17

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Rational Decision-Making Styles

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	14	6.4177	.8431	7.2067	.7185	.7890	.9183
C	9	7.0779	.8823	7.0082	2.1110	-.0696	.16452

Table 18

t Tests for Pre and Post Rational Decision-Making Styles and Class Gains for Experimental (E) and Control (C) Groups

Comparison Groups	t	df	$p <$
Pre _E - Pre _C	1.8000	21	.10 (2 tail)
Pre _E - Post _E	3.2146	13	.005 (1 tail)
Pre _C - Post _C	-.1270	8	ns (2 tail)
Gain _E - Gain _C	1.6126	21	.10 (1 tail)

No significant difference at the .05 level was found between experimental and control group pretests on Rational (R) decision-making style. Experimental posttests were significantly greater ($p < .005$) than experimental pretests. No significant difference was found between control group pre and posttests. No significant difference was found at the .05

level between experimental and control group mean gains. These results suggest that non-CPDM students and CPDM students were similar in the extent of their R style of decision-making at the beginning of the school term. Upon course completion, CPDM students had significantly increased the extent of their R style of decision-making. Non-CPDM students did not significantly change. After the course, the increase in R style of CPDM students was not significantly greater than the R style change of non-CPDM students, but the comparison of the gains of the two groups approached significance.

2. Does course completion decrease students' Intuitive Style (I) of decision-making as measured by the ACDM?

Table 19 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 20 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 19

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Intuitive Decision-Making Styles

Group	N	Pretest		Posttest		Gain	
		\bar{X}	<u>s</u>	\bar{X}	<u>s</u>	\bar{X}	<u>s</u>
E	14	4.5227	.4555	4.4565	.9761	-.0661	.9397
C	9	4.3162	.6812	4.4397	1.6429	.1235	1.4046

76

Table 20

t Tests for Pre and Post Intuitive Decision Making Styles and Class Gains for Experimental (E) and Control (C) Groups

Comparison Groups	t	df	P
Pre _E - Pre _C	.8748	21	ns
Pre _E - Post _E	-.2634	13	ns
Pre _C - Post _C	.2638	7	ns
Gain _E - Gain _C	.3896	21	ns

No significant difference was found between (1) experimental and control group pretests, (2) experimental pre and posttests, (3) control pre and posttests, or (4) experimental and control gains. These results suggest that both CPDM and non-CPDM students were similar in I style prior to the course, neither group significantly decreased their I styles during the school term, and CPDM students did not make greater gains in the desired direction than did non-CPDM students.

3. Does course completion decrease students' Dependent style (D) of decision-making as measured by the ACDM?

Table 21 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure.

Table 22 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 21

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Dependent Decision-Making Styles

Group	N	Pretest		Posttest		Gain	
		X	S	X	S	X	S
E	14	4.0257	.7585	3.3624	1.0307	-.6633	1.1498
C	9	3.1843	.5711	2.6929	.8686	-.4914	.8285

Table 22

t Tests for Pre and Post Dependent Decision-Making Styles and Class Gains for Experimental (E) and Control (C) Groups

Comparison Groups	t	df	p <
Pre _E - Pre _C	2.8409	21	.01 (2 tail)
Pre _E - Post _E	-2.1583	13	.05 (1 tail)
Pre _C - Post _C	-1.7794	8	.20 (2 tail)
Gain _E - Gain _C	.3869	21	ns

A significant difference ($p < .01$) was found between experimental and control group pretests with the experimental group exhibiting higher performance (less dependence) on this measure. Experimental posttests were significantly less ($p < .05$) than experimental pretests. No significant difference at the .05 level was found between control pre and posttests. No significant difference was found between experimental and control group mean gains. These results suggest that CPDM and non-CPDM students were not

initially similar in their D style of decision making, CPDM students being initially higher. During the term, CPDM students significantly decreased their D style whereas non-CPDM students changed in the same direction, but not significantly. After the term, CPDM and non-CPDM students did not significantly differ in the changes made in their D style.

4. Does course completion increase students progress in making and implementing the decision to attend college (DMI-C) as measured by the ACDM?

Table 23 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 24 shows the F ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 23

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision-Making Task: College

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	14	20.7395	.7573	21.4013	.7770	.6618	.6344
C	9	21.2701	.6244	21.6931	.8553	.4230	.5952

75

Table 24

t Tests for Pre and Post Decision Making Task - College and Class Gains for Experimental (E) and Control (C) Groups.

Comparison Groups	t	df	p
Pre _E - Pre _C	1.7498	21	.10 (2 tail)
Pre _E - Post _E	3.9027	13	.005 (1 tail)
Pre _C - Post _C	2.1324	8	.05 (2 tail)
Gain _E - Gain _C	.9014	21	ns

There was no significant difference at the .05 level between experimental and control group pretests. Experimental posttests were significantly greater ($p < .005$) than experimental pretests. There was a significant difference ($p < .05$) between control pre and posttests with posttest means being greater. There was no significant difference between experimental and control group mean gains. These results suggest that CPDM and non-CPDM students were initially similar in their progress in making and implementing the decision to attend college. During the term, CPDM students significantly increased in their DMT-C. Non-CPDM students significantly changed, increasing their DMT-C. Upon course completion, CPDM students had not increased in their DMT-C progress significantly more than had non-CPDM students.

5. Does course completion increase students' progress in selecting a college major (DMT-M) as measured by the ACDM?

Table 25 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on

74

this measure. Table 26 shows the t ratios, degrees of freedom, and levels of significances for each analysis performed.

Table 25

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision Making Task: Major

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	14	23.1238	2.1797	25.6510	1.0690	2.5272	1.9452
C	9	25.8068	1.2136	25.9044	1.4642	.0975	1.4775

Table 26

t Test for Pre and Post Decision-Making Task: Major and Class Gains for Experimental (E) and Control (C) Groups

Comparison Group	t	df	$p <$
Pre _E - Pre _C	3.3555	21	.01 (2 tail)
Pre _E - Post _E	4.8609	13	.0005 (1 tail)
Pre _C - Post _C	.1980	8	ns
Gain _E - Gain _C	3.1919	21	.005 (1 tail)

There was a significant pretest difference ($p < .01$) between the experimental and control groups on DMT-M. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was no significant difference between control pre and posttests. Experimental

group gains were significantly ($p < .005$) greater than control group gains. These results suggest that CPDM and non-CPDM students were significantly different on their initial DMT-M with non-CPDM students being more advanced. During the course, CPDM students significantly increased on their DMT-M while there was no significant change in the progress of non-CPDM students. Upon course completion, CPDM students had advanced in their progress of selecting a college major significantly greater than did non-CPDM students.

6. Does course completion increase students' progress toward selecting an occupation to pursue after college completion (DMT-O) as measured on the ACDM?

Table 27 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 28 shows the t ratio, degrees of freedom, and levels of significance for each analysis performed.

Table 27

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Decision-Making Task: Occupations

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	14	24.0874	2.0591	26.6427	1.0164	2.5552	1.6576
C	9	26.7704	.9250	26.7378	1.6788	-.0326	1.3047

Table 28

t Test for Pre and Post Decision Making Task. Occupation and Class Gains for Experimental (E) and Control (C) Groups

Comparison Group	t	df	p
Pre _E - Pre _C	3.6557	21	.01 (2 tail)
Pre _E - Post _E	5.7676	13	.0005 (1 tail)
Pre _C - Post _C	-.0749	8	ns
Gain _E - Gain _C	3.9515	21	.0005 (1 tail)

There was a significant difference ($p < .01$) between experimental and control pretests. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was no significant difference between control pre and posttests. Experimental gains were significantly greater ($p < .0005$) than control gains. These results suggest that CPDM and non-CPDM students were significantly different in their initial progress in selecting an occupation to pursue after college completion with non-CPDM students being further advanced. During the course, CPDM students significantly advanced in their major selection process. Non-CPDM students did not significantly change their progress. Upon course completion, CPDM students had advanced in their progress of major selection significantly more than did non-CPDM students.

Student Survey Results

The Student Survey data analyses revealed results pertaining to the following evaluation questions:

1. Does the course better prepare students to make career decisions as measured by the Student Survey?

Descriptive analyses of experimental group posttests revealed that 92 percent of the students completing the CPDM course felt adequately, well, or very well prepared to make career decisions. Table 29 shows a breakdown of student responses.

Table 29
Percent of Experimental Students Selecting Possible Responses to the Question, "How Prepared Are You to Make Career Plans?"

Response	N _p	%	
Very poorly prepared	1	0.4	
Poorly prepared	19	7.7	
Adequately prepared	100	40.3	} 91.9
Well prepared	93	37.5	
Very well prepared	35	14.1	
TOTAL		248	

Sixty five percent of the experimental students indicated that having completed the CPDM course, they were quite a bit or a great deal better prepared to make career decisions. Table 30 shows a breakdown of student responses.

Table 30

Percent of Experimental Students Selecting Possible Responses to the Question, "Having Completed the Career Planning and Decision-Making Course, How Much Better Prepared are You to Make Career Decisions?"

Response	N	%
No better prepared	6	2.4
A little better prepared	82	32.5
Quite a bit better prepared	109	43.2
A great deal better prepared	55	21.8
TOTAL	252	

2. Does course completion increase students' knowledge about college majors as measured by the Student Survey?

Table 31 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 32 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 31

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About College Majors

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	3.3844	.3480	3.9595	.3317	.5750	.3388
C	11	3.5202	.2984	3.7689	.2382	.2487	.3541

Table 32

t Test for Pre and Post Knowledge About College Majors for
Experimental (E) and Control (C) Groups

Comparison Group	t	df	P
Pre _E - Pre _C	1.0417	24	ns (2 tail)
Pre _E - Post _E	6.5718 [†]	14	.0005 (1 tail)
Pre _C - Post _C	2.3289	10	.05 (2 tail)
Gain _E - Gain _C	2.3803	24	.025 (1 tail)

There was no significant difference between experimental and control group pretests. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was a significant difference ($p < .05$) between control pre and posttests with students performing higher on the posttests. Experimental gains were significantly greater ($p < .025$) than control gains. These results suggest that CPDM and non-CPDM students were initially similar in their knowledge about college majors. During the course, CPDM students significantly increased their knowledge. Non-CPDM students changed in their knowledge, increasing their knowledge during the term. After the course, CPDM students had gained significantly more knowledge about college majors than had non-CPDM students.

3. Does course completion increase students' knowledge about the relationship between college majors and occupations as measured by the Student Survey?

Table 33 shows the means and standard deviations of the pretest, post test, and class gains for the experimental and control groups on this measure. Table 34 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 33

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About the Relationship Between College Majors and Occupations

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	3.1219	.3898	4.0083	.3107	.8864	.3948
C	11	3.2993	.2353	3.6706	.2495	.3712	.3873

Table 34

t Test for Pre and Post Knowledge About the Relationship Between College Majors and Occupations for Experimental (E) and Control (C) Groups

Comparison Groups	t	df	P <
Pre _E - Pre _C	1.3372	24	.20 (2 tail)
Pre _E - Post _E	8.6952	14	.0005 (1 tail)
Pre _C - Post _C	3.1784	10	.01 (2 tail)
Gain _E - Gain _C	3.3132	24	.005 (1 tail)

There was no significant difference between experimental and control pretests. Experimental posttests were significantly greater than experimental pretests. There was a significant difference between control pre and posttests with posttests being greater. Experimental gains were significantly greater than control gains. These results indicate that CPDM and non-CPDM students were initially similar in their knowledge about the relationship between college majors and occupations. During the course, CPDM students significantly increased their knowledge. Non CPDM students significantly changed in their knowledge exhibiting more knowledge at the end of the term. CPDM students increased their knowledge about the relationships between college majors and occupations significantly more than did non-CPDM students.

4. Does course completion increase students' knowledge about occupations of interest to them as measured by the Student Survey?

Table 35 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 36 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 35

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Knowledge About Occupations of Interest

Group	N	Pretest		Posttest		Gain	
		\bar{X}	<u>s</u>	\bar{X}	<u>s</u>	\bar{X}	<u>s</u>
E	15	15.5110	2.5137	19.7305	1.1553	4.2194	2.4039
C	11	17.7484	1.2861	17.4405	1.7763	-.3079	2.1541

Table 36

t Test for Pre and Post Knowledge About Occupations of Interest for Experimental (E) and Control (C) Groups

Comparison Group	<u>t</u>	<u>df</u>	<u>P</u>
Pre _E - Pre _C	2.6946	24	.02 (2 tail)
Pre _E - Post _E	6.7981	14	.0005 (1 tail)
Pre _C - Post _C	-.4741	10	ns
Gain _E - Gain _C	4.9520	24	.0005 (2 tail)

There was a significant pretest difference between experimental and control groups with controls having the higher means. Experimental posttests were significantly greater than experimental pretests. There was no significant difference between control pre and posttests. Experimental gains were significantly greater than control gains. These results suggest that CPDM and non-CPDM students were not initially similar: non-CPDM students initially knew more about occupations of interest to them. During the course, CPDM students significantly increased their knowledge while non-CPDM students did not significantly change in their knowledge. CPDM students increased their knowledge about occupations of interest to them significantly more than did non-CPDM students.

5. Does course completion promote the process of major selection as measured by the Student Survey?

Table 37 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on

this measure. Table 38 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 37

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Group Major Selection

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	7.0532	.9672	7.7956	.7403	.7423	.4230
C	11	7.8752	.2748	8.1548	.3247	.2796	.3265

Table 38

t Test for Pre and Post Major Selection for Experimental (E) and Control (C) Groups

Comparison Group	t	df	$p <$
Pre _E - Pre _C	2.7255	24	.02 (2 tail)
Pre _E - Post _E	6.7970	14	.0005 (1 tail)
Pre _C - Post _C	2.4629	10	.05 (2 tail)
Gain _E - Gain _C	2.8836	24	.005 (1 tail)

There was a significant difference ($p < .02$) between experimental and control pretests with the control group having the greater mean. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. Control group pre and posttests were significantly different ($p < .05$) with posttests having the greater means. Experimental gains were significantly

greater than control gains. These results suggest that non-CPDM students were initially further advanced in the process of major selection than were CPDM students. During the course, CPDM students significantly advanced in their process. Non-CPDM students significantly changed in their process progressing in the process during the term. At the end of the term, CPDM students had advanced in their process of major selection significantly more than had non-CPDM students.

Prior to the school term, experimental students indicated they had changed majors a mean of .5411 times ($s = .2889$, $N = 14$) and control students had changed majors a mean of .4578 times ($s = .1866$, $N = 11$). During the term, seven percent of the control students indicated they changed their major while 56 percent of the experimental students changed their major.

6. Does course completion increase students' understanding of themselves in relation to work as measured by the Student Survey?

Table 39 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 40 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 39

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Understanding of Self in Relation to Work

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	16.5798	2.4855	22.2651	1.3609	5.6852	1.7429
C	11	20.5725	1.0764	21.5557	2.0573	.9832	1.6939

Table 40

t Test for Pre and Post Understanding of Self in Relation to Work for Experimental (E) and Control (C) Groups

Comparison Group	t	df	p
Pre _E - Pre _C	4.9754	24	.0005 (2 tail)
Pre _E - Post _E	12.6332	14	.0005 (1 tail)
Pre _C - Post _C	1.9250	10	.10 (2 tail)
Gain _E - Gain _C	6.8759	24	.0005 (1 tail)

There was a significant pretest difference ($p < .0005$) between experimental and control groups. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was no significant difference at the .05 level between control pre and posttests. Experimental gains were significantly greater ($p < .0005$) than control gains. These results suggest that non-CPDM students initially possessed greater self-understanding in relation to work than did CPDM students. During the course, CPDM students significantly increased their self-understanding whereas non-CPDM students did not significantly change. After the course, CPDM students had increased their self-understanding in relation to work significantly more than had non-CPDM students.

7. Does course completion enhance students' decision-making process as measured by the Student Survey?

Table 41 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this

measure. Table 42 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 41

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Decision-Making

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	2.0374	.4945	2.9300	.6689	.8925	.8741
C	11	2.1893	.3750	2.1007	.3459	-.0886	.4459

Table 42

t Tests for Pre and Post Decision-Making for Experimental (E) and Control (C) Groups

Comparison Group	t	df	$p <$
Pre _E - Pre _C	.8529	24	ns
Pre _E - Post _E	3.9545	14	.005 (1 tail)
Pre _C - Post _C	-.6596	10	ns
Gain _E - Gain _C	3.3999	24	.0005 (1 tail)

There was no significant pretest difference between experimental and control groups. Experimental posttests were significantly greater ($p < .005$) than experimental pretests whereas there was no significant pre-posttest difference for the control group. Experimental gains were significantly greater ($p < .0005$) than control gains. These results suggest that CPDM

and non-CPDM students were initially similar in their processes of decision-making. During the course, CPDM students significantly enhanced their process whereas non-CPDM students did not significantly alter their process. Upon course completion, CPDM students had enhanced their process of decision-making significantly more than had non-CPDM students.

In rating the effectiveness of their decision-making process t tests revealed a significant pretest difference ($p < .05$) between experimental and control groups with the control group having the higher mean scores (see tables 43 and 44).

Table 43

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Ratings of Effectiveness of One's Decision-Making Process

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	3.3468	.3054	3.7583	.2153	.4115	.2372
C	11	3.5883	.1293	3.8173	.1569	.2290	.1896

Table 44

t Tests for Pre and Post Ratings of Effectiveness of One's Decision-Making Process for Experimental (E) and Control (C) Groups

Comparison Group	<u>t</u>	<u>df</u>	<u>p</u> <
Pre _E - Pre _C	2.4559	24	.05 (2 tail)
Pre _E - Post _E	6.7166	14	.0005 (1 tail)
Pre _C - Post _C	4.0038	10	.01 (2 tail)
Gain _E - Gain _C	2.1022	24	.025 (1 tail)

Experimental control group pretests were significantly ($p < .05$) different with control pretests having greater class means. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. Control pre and posttests were significantly different ($p < .01$) with posttests having the greater mean. Experimental gains were significantly greater ($p < .025$) than control gains. These results suggest that non-CPDM students initially rated their decision-making processes higher than did CPDM students. During the course, CPDM students significantly increased their ratings of effectiveness. Non-CPDM students did not significantly change their ratings. Upon course completion, CPDM students had raised their ratings of effectiveness of their decision-making process significantly more than had non-CPDM students.

8. Does course completion increase students' accuracy in defining the terms "work" and "career" as measured by the Student Survey?

Table 45 shows the means and standard deviations of the pretest;

posttest, and class gains for the experimental and control groups on this measure. Table 46 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 45

Means and Standard Deviations of Pretest, Posttest, and Class Gains for Experimental (E) and Control (C) Accuracy in Defining "Work" and "Career"

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	.4647	.2281	.9885	.4642	.5238	.5233
C	11	.3932	.1415	.3846	.2072	-.0086	.2043

Table 46

t Tests for Accuracy in Defining "Work" and "Career" in Experimental (E) and Control (C) Groups

Comparison Group	t	df	$p <$
Pre _E - Pre _C	.9148	24	ns
Pre _E - Post _E	3.8768	14	.005 (1 tail)
Pre _C - Post _C	.1406	10	ns
Gain _E - Gain _C	3.1871	24	.005 (1 tail)

There was no significant pretest difference between experimental and control groups. Experimental posttests were significantly greater ($p < .005$) than experimental pretests. Control pre and posttests were not significantly different. Experimental gains were significantly

greater ($p < .005$) than control gains. These results suggest that CPDM and non-CPDM students were initially similar in their accuracy defining the terms "work" and "career." During the course, CPDM students significantly increased their accuracy, whereas there was no significant change in the accuracy of non-CPDM students' definitions. After course completion, CPDM students had increased the accuracy of their definitions of "work" and "career" significantly more than had non-CPDM students.

9. Does course completion increase students' ability to identify sources of career information as measured by the Student Survey?

Table 47 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 48 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 47

Means and Standard Deviations of Pretests, Posttests, and Class Gains for Experimental (E) and Control (C) Identification of Career Information Sources

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	.0171	.0257	1.6464	.8741	1.6293	.8727
C	11	.0000	.0000	.0106	.0354	.0106	.0354

Table 48

t Tests for Pre and Post Identification of Career Information Resources for Experimental (E) and Control (C) Groups

Comparison Group	t	df	P
Pre _E - Pre _C	2.1985	24	.05 (2 tail)
Pre _E - Post _E	7.2305	14	.0005 (1 tail)
Pre _C - Post _C	1.0833	10	ns
Gain _E - Gain _C	6.1137	24	.0005 (1 tail)

There was a significant pretest difference ($p < .05$) between experimental and control groups with the experimental pretests having the higher means. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was no significant difference between control pre and posttests. Experimental gains were significantly greater ($p < .0005$) than control gains. These results suggest that CPDM students initially were able to identify more career information resources than non-CPDM students. During the course, CPDM students significantly increased their ability whereas the ability of non-CPDM students did not significantly change. Upon course completion, CPDM students had increased their ability to identify career information sources significantly more than had non-CPDM students.

10. Does course completion increase students' ability to identify criteria for evaluating career information as measured by the Student Survey?

Table 49 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental groups on this measure. Table 50 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 49

Means and Standard Deviations of Pretests, Posttests, and Class Gains for Experimental (E) and Control (C) Identification of Career Information Evaluation Criteria

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	.1448	.1030	.3536	.3119	.2088	.2510
C	11	.1538	.0966	.2012	.1708	.0474	.1837

Table 50

t Tests for Pre and Post Identification of Career Information Evaluation Criteria for Experimental (E) and Control (C) Groups

Comparison Group	t	df	$p <$
Pre _E - Post _C	.2221	24	ns
Pre _E - Post _E	3.1819	14	.005 (1 tail)
Pre _C - Post _C	.8591	10	ns
Gain _E - Gain _C	1.7855	24	.05 (1 tail)

There was no significant difference between experimental and control pretests. Experimental posttests were significantly greater ($p < .005$) than experimental pretests. Control pre and posttests were not significantly different. Experimental gains were significantly greater ($p < .05$) than control gains. These results suggest that CPDM and non-CPDM students were initially similar in their ability to identify criteria for evaluating career information. During the term, CPDM students significantly increased in this ability, whereas the ability of non-CPDM students did not significantly change. At the end of the term, CPDM students had increased their ability to identify criteria for evaluating career information significantly more than had non-CPDM students.

11. Does course completion increase students' ability to identify correct career concept definitions as measured by the Student Survey?

Table 51 shows the means and standard deviations of the pretest, posttest, and class gains for the experimental and control groups on this measure. Table 52 shows the t ratios, degrees of freedom, and levels of significance for each analysis performed.

Table 51

Means and Standard Deviations of Pretests, Posttests, and Class Gains for Identification of Career Concept Definitions for Experimental (E) and Control (C) Groups

Group	N	Pretest		Posttest		Gain	
		\bar{X}	s	\bar{X}	s	\bar{X}	s
E	15	3.3894	.6093	4.7141	.9595	1.3247	.8752
C	11	3.2870	.7092	3.8271	.8905	.5401	1.0093

Table 52

t Tests for Pre and Post Identification of Career Concept Definitions
for Experimental (E) and Control (C) Groups

Comparison Group	t	df	p
Pre _E - Pre _C	.3953	24	ns
Pre _E - Post _E	5.8619	14	.0005 (1 tail)
Pre _C - Post _C	1.7745	10	.20 (2 tail)
Gains _E - Gains _C	2.1174	24	.025 (1 tail)

There was no significant pretest difference between experimental and control groups. Experimental posttests were significantly greater ($p < .0005$) than experimental pretests. There was no significant difference at the .05 level between control pre and posttests. Experimental gains were significantly greater ($p < .025$) than control gains. These results suggest that CPDM and non-CPDM students were initially similar in their ability to identify career concept definitions. During the term, CPDM students significantly increased in this ability, whereas the ability of non-CPDM students did not significantly change. At the end of the term, CPDM students had increased their ability to identify career concept definitions significantly more than had non-CPDM students.

12. Do students recognize their own growth as a result of the course?

Field Test I results had revealed the existence of a conventional wisdom phenomenon regarding students' appraisal of their career development knowledge. In the absence of more accurate information, students rated

their career development knowledge high. Once exposed to a comprehensive career development learning experience, students apparently realized how much there is to know and lowered their pretest scores. It had been anticipated that significant posttest gains from Field Test II might not be evident because of spuriously high pretest scores due to this conventional wisdom phenomenon. Also students in Field Test II were not permitted to reassess their pretest scores. Therefore, a second subitem for each noncognitive item was added to the Student Survey to assess students' recognition of growth.

Table 53 provides a summary of student responses to items related to growth recognition.

Table 53

Means and Standard Deviations of Student Responses to Items Related to Growth Recognition Based on the Scale: 1=None, 2=Very Little, 3=A Little, 4=A Moderate Amount, 5=A Great Deal

Item	\bar{X}	S
Having completed this course, how much understanding have you gained about the college majors offered at your school?	3.6731	.4022
Having completed this course, how much understanding have you gained about the occupations and opportunities for employment that relate to college majors?	3.9710	.3362
Having completed this course, how much understanding have you gained about occupations that interest you?	3.9371	1.4400
During this class term, how much more have you thought about selection of a college major?	4.4054	.3493
Having completed this course, how much understanding have you gained about yourself in relation to work?	4.6739	1.8331

Table 53 (continued)

Item	\bar{X}	s
On the following scale rate the effectiveness of your current way of making decisions COMPARED WITH YOUR WAY PRIOR TO THE COURSE.	3.8817*	.2958*

* \bar{X} and s based on the scale: 1=much less effective, 2=less effective, 3=as effective, 4=more effective, and 5=much more effective.

The results indicate that, on the average, CPDM students felt they gained

- between a little and a moderate amount of understanding about the college majors offered at their school.
- a moderate amount of understanding about the occupations and opportunities for employment that relate to college majors.
- a moderate amount of understanding about occupations of interest to them.
- a moderate amount to a great deal more thought about selection of a college major.
- a moderate amount to a great deal of understanding about themselves in relation to work.
- more effectiveness in their way of making decisions.

Student Evaluation Form Results

The student evaluation form provided for student reactions to the course, self appraised impact, indications of course participation, and indications of the extent and type of career information resources used during the course.

Table 54 provides a summary of student responses to course impact and reaction items.

8697

Table 54

Summary (In Percentages) of Student Responses to
Course Impact and Reaction Statements

Statement	Strongly Agree	%/N Responding		Strongly Disagree
		Agree	Disagree	
Providing experiences in career planning and decision-making is an important function of a college.	56/132	43/101	02/4	0/0
The course helped me develop a greater understanding of myself.	24/57	64/152	12/29	0/0
The course helped me develop a greater understanding of the world of work.	23/52	64/145	12/27	01/2
The course helped me develop a career plan taking into consideration myself and my milieu.	22/51	62/143	15/34	02/4
I found the planning and deciding process taught in the course useful for me.	29/70	54/130	15/36	02/6
Having completed this course, I am more aware of my career goal and its appropriateness for me.	36/89	45/113	18/45	01/3
The course helped me gain a greater sense of control over my career.	24/57	55/131	20/48	01/2
Overall, I was very pleased with this course.	28/65	52/121	15/34	05/12
I would recommend this course to a friend who wanted career guidance.	42/100	41/97	11/27	05/13

Findings on this portion of the survey show that:

- 98 percent of the 237 students responding indicated that an important function of a college is providing experiences in career planning and decision-making.

- 88 percent of 238 students responding indicated the course helped them develop a greater understanding of themselves.
- 87 percent of 226 students responding indicated the course helped them develop a greater understanding of the world of work.
- 84 percent of 232 students responding indicated the course helped them develop a career plan taking into consideration self and milieu.
- 83 percent of 242 students responding found the planning and deciding process taught in the course to be personally useful.
- 81 percent of 250 students responding indicated that having completed the course, they were more aware of their career goal and its appropriateness for them.
- 79 percent of 238 students responding indicated the course helped them gain a greater sense of control over their career.
- 80 percent of 232 students responding indicated that overall they were very pleased with the course.
- 83 percent of 237 students responding indicated they would recommend the course to a friend who wanted career guidance.

A small percentage of students disagreed with statements listed in Table 54. Their stated reasons for disagreement were varied. A representative sample is listed here. A complete list of all reasons stated can be found in Appendix R.

I am still not sure what the best field for me is. My career goals are many. I would have liked to have been able to narrow it down further.

Too much paper work and library work--some of us couldn't spend much time there because of other important factors.

It really wasn't what I expected. I learned a lot but the workbook wasn't very clear.

I was not pleased because it didn't really help me reach a final conclusion.

I believe the workbook could have been set up toward college students--it (at times) seemed to edge towards high school--it may be toward freshmen more than high school. Some of the filmstrips were repetitious.

I have my own way of decision-making.

Because the textbook we had was very disagreeable with me. It is hard to understand and you couldn't do the exercises right. The class is fine, but the textbook was horrible.

To obtain user reaction regarding the appropriateness of the course for them, students were asked when the best time would be to take a course like CPDM. Fifty percent of the 272 students responding indicated high school; 41 percent indicated the freshman year of college; 7 percent, the sophomore year; 1 percent, the junior year; and 1 percent, the senior year.

To obtain information about helpful and unhelpful aspects of the course, students were asked to complete the following statements:

I think the course was helpful because _____

The course was not helpful because _____

Helpful and unhelpful aspects identified were varied. A representative sample of aspects is listed here. For a complete list of all aspects identified, see Appendix S.

Helpful aspects:

It helped me develop my values and my goals and examine careers which apply to them.

It showed me the resources open to me in the world of careers and helped me learn a decision-making option.

It allowed me to think about what I am and what I am not.

It allowed the opportunities and the means to explore career options.

I learned about many other job areas in which I thought I had no interest.

It showed me that there is not just one job I can go into but a field of jobs.

It provided me with fresh insight into the world of work and helped me to formulate a plan for reaching my desired career goal.

It taught me to make decisions with all possible information and alternatives without just falling in.

It gave me the chance to look at many occupations that I didn't really consider before.

I found out things about myself that I never knew before. I feel as though I know myself better.

Unhelpful aspects:

Not enough time and I didn't care for some portions of the workbook.

I had already decided on a career.

We didn't get to use the career center very much in class.

Too much busy work.

Some people failed to get involved.

It was a little too easy.

The textbook was difficult to understand.

Not enough student-teacher interaction. Class discussion was null.

I hate filling out charts, turning the pages back and forth was a pain.

I only get two credits.

I would have liked to have speakers for different job areas talk to class. Needed time to talk to perspective employers with specific questions.

I did not have enough time to explore all the different aspects of occupations I don't know.

0801 101

In order to obtain more specific information regarding the strengths and weaknesses of the course, students were asked what they liked most and what they disliked most about the course. A representative sample of responses is presented here. A complete list of all responses can be found in Appendix T.

Liked best:

The discussions and the interactions of the group.

The personal profile which helped me to determine certain aspects of me which I didn't know.

It made me think more about what I want and not what people want from me.

Watching myself cross off possible careers through logical thinking.

How it reinforced my goals and the use of the workbook.

The way it followed the decision-making process step by step.

CIS system.

Discussing other people's career goals and values along with mine.

The many worksheets, the variety of career information given.

That it was individual.

Planning a future in my declared major.

The decision-making process and establishing my values and abilities.

There were discussions in groups which brought out views of individuals and that enabled me to gain some ideas and to correct my understanding of the course as well as helped me know what I am and what I will be with relation to decision-making and my milieu.

Disliked most:

Not having enough time (class periods) to complete the workbook and major and career investigations.

Filling in the charts.

I did not grasp enough information on specific careers.

The films--they seemed very juvenile.

It was not organized too well for only being a 1 hour class--would prefer a 2 hour class.

Tended to be general and boring a few times.

Rushing through the book.

In order to obtain outcome information, students were asked what happened to them as a result of being in the course. A representative sample of responses appears here. A complete list of all responses can be found in Appendix U.

I did decide to go to school, if only for one year. If I had not taken the course, I would have tried to find any old job.

I am better able to understand and make decisions.

I know basically what I want. I was uncertain about what I could get from college, now I realize how important education really is for me.

I became more aware of myself, and I learned many things concerning the world of work that I did not know before.

I made the decision to pursue a career, an option I had avoided because of an inability to image what careers were available.

It helped a lot in planning courses to take to get training for that job.

I have a fuller awareness of my career goal and how to reach it now.

I have confirmed my choice of major and decided to declare my major.

I learned what is available in the world of work and that I'm not necessarily tied to any decisions I have to make. Therefore, I want to become a social worker (but I might change my mind).

I gained a great deal of knowledge and was finally capable of putting together my interests, goals, and aptitudes into a constructive career goal and outline.

In evaluating any course, it is important to know the extent of student participation: whether materials were read, activities completed, and the extent of class involvement. Eighty-nine percent of 233 students responding indicated they read at least half of the text, and 67 percent read at least three-fourths of the text. Ninety-four percent of 236 students responding indicated they completed at least half of the text activities, and 75 percent completed three-fourths or more of the activities. Table 55 provides a complete summary of the student responses on course involvement.

Table 55

Summary (in Percentages) of Student Responses to Course Involvement Questions

Questions	%/N Responding				
	0%	25%	50%	75%	100%
Approximately what percent of the test did you read?	01/2	10/24	21/50	37/86	30/71
Approximately what percent of the activities did you complete?	01/2	05/13	19/44	34/81	41/96

Regarding class involvement, 98 percent of 232 students responding indicated they usually, almost always, or always came to class. Eighty-five percent of 234 students responding indicated they usually, almost always or always, participated in class discussions. Ninety-seven percent of 235 students responding indicated they usually, almost always, or always came to

class. Table 56 provides a complete summary of the student responses on class involvement.

Table 56

Summary (in Percentages) of Student Responses to
Class Involvement Questions

Questions	%/N Responding				
	Never	Rarely	Usually	Almost Always	Always
I was generally attentive in class.	0/0	02/4	22/50	47/108	30/70
I participated in class discussions.	02/4	13/31	34/80	23/53	28/66
I completed homework assignments.	0/0	03/6	25/59	34/81	38/89
I came to class.	0/0	02/4	12/29	51/119	34/80

Completion of a number of course activities required student use of career information resources. In order to determine the extent of use of the AEL Career Information System and other career resource materials, students were asked to indicate the approximate number of times each reference was used. A number of institutions did not have all of the CIS materials.

Table 57 provides a summary of student use of career resource materials. The Worker Trait Group Guide was the material used most often; the keysort deck was used least.

Table 57

Summary (in Percentages) of Student Use of Career
Information Resource Materials

Material	Material Not Available	%/N Responding			More Than 3 Times
		None	Once	2-3 Times	
Worker Trait Group Guide	01/2	01/2	05/13	29/69	64/152
School Subject-Occupation Index	03/6	28/64	31/72	30/68	08/19
College Major-Occupation Index	02/5	19/42	30/66	35/79	14/31
Technical Major-Occupation Index*	13/28	53/118	15/33	16/35	04/8
Occupational Outlook Handbook	01/2	19/49	19/48	31/79	30/76
Encyclopedia of Careers	06/13	29/66	29/67	26/59	11/26
Dictionary of Occupational Titles	0/0	02/4	28/55	37/72	32/62
Vertical File of Career Briefs	13/27	34/79	24/54	17/39	13/30
Worker Trait Group File Content Notebook	10/21	35/73	27/57	17/35	11/24
Alphabetical Index to Occupations	08/17	36/81	21/46	24/53	12/27
Worker Trait Group Index to Occupational Information	04/10	25/55	31/70	26/59	13/30
Keysort Deck	14/31	53/120	20/44	10/23	03/7
Other (name)	0/0	24/9	24/9	30/11	22/8

*Only available at institutions having 2-year programs.

Student Objectives

In addition to the information obtained from students on the ACDM, Student Survey, and Student Evaluation Form, a random sample of 58 textbooks was collected to determine achievement of student objectives. Criteria for

objectives attainment consisted of successful completion of activities in the textbook. Table 58 provides a summary of student objectives achieved. These objectives are listed by unit under each unit goal.

Table 58

Percentage of Students Meeting Unit Objectives for the Career Planning and Decision-Making Course Based on Random Sample (N=58) of Student Textbooks*

% of Students Meeting Objective (N=58)	Unit Goals and Objectives
	<u>Unit I Goal:</u> Students will apply the concepts of "career" and decision-making dimensions in examining their own experience.
88	<u>Objective 1:</u> Students will be able to list their definitions of career.
83	<u>Objective 2:</u> Students will be able to identify their career theme.
59	<u>Objective 3:</u> Students will be able to discuss the three dimensions composing a decision situation.
80	<u>Objective 4:</u> Students will be able to apply the decision-making dimensions to a decision of their own.
	<u>Unit II Goal:</u> Students will establish occupational preference by integrating knowledge of self and work.
97	<u>Objective 5:</u> Students will be able to list their occupational, educational, civic, and home activities.
97	<u>Objective 6:</u> Students will be able to relate their interests to the 12 Career Areas.

*Criteria for meeting objectives, based only on textbook responses.

Table 58 (Continued)

% of Students Meeting Objective (N=58)	Unit Goals and Objectives
91	<u>Objective 7:</u> Students will be able to differentiate the Worker Trait Groups and Career Areas they want to explore.
93	<u>Objective 8:</u> Students will be able to recall their experiences in each of the ten types of work activities.
93	<u>Objective 9:</u> Students will be able to rate their preferences for ten types of work activities.
90	<u>Objective 10:</u> Students will be able to identify those work activities they want to include and those to exclude in their careers.
93	<u>Objective 11:</u> Students will be able to recall their experiences in each of the ten work situations.
93	<u>Objective 12:</u> Students will be able to rate their preferences for ten work situations.
86	<u>Objective 13:</u> Students will be able to identify those work situations they want to include and those to exclude in their career.
95	<u>Objective 14:</u> Students will be able to estimate their aptitudes in 11 areas.
84	<u>Objective 15:</u> Students will be able to compare their aptitude self-estimates with the key aptitudes related to each Worker Trait Group.
74	<u>Objective 16:</u> Students will be able to list the titles of aptitudes they want to include and those to exclude in their career.
78	<u>Objective 17:</u> Students will be able to recall their preferred school subjects.
76	<u>Objective 18:</u> Students will be able to distinguish the Worker Trait Groups related to their preferred school subjects.

Table 58 (Continued)

% of Students Meeting Objective (N=58)	Unit Goals and Objectives
78	<u>Objective 19:</u> Students will be able to list school subjects they want to include and those to exclude in their careers.
76	<u>Objective 20:</u> Students will be able to choose Worker Trait Groups to explore based on positive factors listed on their Personal Profile Chart.
72	<u>Objective 21:</u> Students will be able to rate their reactions to each Worker Trait Group description and qualification profile given their ability to use the <u>Worker Trait Group Guide</u> .
64	<u>Objective 22:</u> Students will be able to list those physical demands, working conditions, worker functions, general educational development, and preparation and learning they want to include and those to exclude in their careers.
64	<u>Objective 23:</u> Given their completed Personal Profile and Worker Trait Group Chart #2, students will be able to identify Worker Trait Groups they want to explore at the occupational level.
78	<u>Objective 24:</u> Students will be able to compose career value statements, given their completed values checklists.
71	<u>Objective 25:</u> Students will be able to prioritize their career values.
69	<u>Objective 26:</u> Given the <u>Worker Trait Group Guide</u> , students will be able to select for exploration, occupations from the Worker Trait Groups identified on their Worker Trait Group Chart #2, Column 10.
55	<u>Objective 27:</u> Given the Career Information System and the ability to use it, students will be able to complete one Occupational Information Summary.
41	<u>Objective 28:</u> Given the completed Occupational Information Summary and Worker Trait Group Chart #3, students will be able to differentiate those occupations which best meet their career values.

Table 58 (Continued)

% of Students Meeting Objective (N=58)	Unit Goals and Objectives
59	<p><u>Objective 29:</u> Students will be able to summarize their current occupational preferences.</p> <p><u>Unit III Goal:</u> Students will identify tentative career goals by learning to project personal values into the future.</p>
81	<p><u>Objective 30:</u> Given the completed Personal Profile and Objective 25, students will be able to evaluate their present activities.</p>
66	<p><u>Objective 31:</u> Students will be able to contrast their present activities with future preferred activities.</p>
81	<p><u>Objective 32:</u> Students will be able to formulate their career goals.</p>
66	<p><u>Objective 33:</u> Given completion of Unit II, students will be able to revise their career theme.</p>
64	<p><u>Unit IV Goal:</u> Students will develop a detailed career plan based upon their goals, knowledge of college options, and personal criteria related to their values.</p>
60	<p><u>Objective 34:</u> Given their completed Worker Trait Group Chart #3 and career goal statement, students will be able to differentiate those occupational preferences which relate to their career goal.</p>
53	<p><u>Objective 35:</u> Students will be able to locate in their milieu the general and specific competencies and credentials which are required to enter the occupations related to their career goal.</p>
22	<p><u>Objective 36:</u> Given Objective 35, students will be able to appraise those competencies and credentials they do not have.</p>
64	<p><u>Objective 37:</u> Given the Field of Study-Worker Trait Group Chart and Objective 36, students will be able to identify the fields of study related to their preferred Worker Trait Groups.</p>

Table 58 (Continued)

% of Students
Meeting Objective
(N=58)

Unit Goals and Objectives

64	<u>Objective 38:</u> Given the College Major-Occupation Index, students will be able to determine the college majors and related occupations they want to further explore.
55	<u>Objective 39:</u> Given Objective 36, students will be able to determine the means their institutions offer for acquiring needed credentials and competencies.
67	<u>Objective 40:</u> Students will be able to formulate options for reaching their career goals.
62	<u>Objective 41:</u> Students will be able to evaluate their career options to determine their most desirable option.
48	<u>Objective 42:</u> Students will be able to develop their career plan.
*	<u>Unit V Goal:</u> Students will demonstrate the ability to decide and act with respect to the steps of their career plan.
45	<u>Objective 43:</u> Students will be able to work through a decision situation.
41	<u>Objective 44:</u> Students will be able to formulate the steps (actions) necessary to implement their selected option.
**	<u>Unit VI Goal:</u> Students will comprehend planning and deciding as an ongoing process and the means of controlling and shaping career.
34	<u>Objective 45:</u> Students will be able to apply the decision-making process to their daily lives; i.e., course selection.
31	<u>Objective 46:</u> Given new information about themselves and their milieu, students will be able to state their reassessed career goal.

Table 58 (Continued)

% of Students Meeting Objective (N=58)	Unit Goals and Objectives
31	<u>Objective 47:</u> Given their reassessed career goal, students will be able to update and revise their career plan.
34	<u>Objective 48:</u> Students will be able to identify how the knowledge and skills learned in the CPDM course increases control over their lives.

* Five classes did not complete Unit V before the term ended.

** Six classes did not complete Unit VI before the term ended.

These findings provided valuable formative data on which to base revisions of the CPDM Instructor's Guide and Student Text. Specifically, those objectives which at least 60 percent of the students had not achieved (Objective 3, 27, 28, 29, 35, 36, 39, and 42) were the focus points for review and revision.

Data from instructors was collected on five instruments. The results obtained from each instrument will be discussed in this section.

Instructor Survey Pretest

Responses on the Instructor Survey Pretest revealed that:

- the majority of the field test instructors have a formal background in the counseling and guidance field. Seventy nine percent (N=11) have degrees in counseling, guidance, or psychology; two have degrees in education; one has a degree in criminology.
- eight instructors have experience teaching a career development course; five did not.

- the majority of instructors identify themselves most closely with the career development theory of Super (N=7) or Holland (N=5).

Table 59 contains a list which identifies for each instructor the theory of career development with which s/he most closely identifies and the instructor's definition of career development. In some cases, the instructors' definitions of career development do not reflect the theory identified. The list is divided into two groups: group I instructors were not previously familiar with the CPDM course, group II instructors had previous experience with the course.

Table 59

Theories of Career Development with Which CPDM Field Test Instructors Stated They Most Closely Identified Themselves and the Instructors' Own Definitions of Career Development

Theory	Definition of Career Development
	<u>Group I*</u>
Super Tiedeman	An ongoing process in which interests, values and abilities are analyzed and brought together with opportunities available in the world of work.
Parsons Super	Lifelong process of choosing, planning, etc. all of activities of one's life relative to work, jobs, occupations, etc.
Tyler	A lifelong process of identifying personal, work and leisure needs and motivation of the individual set against the ground of his experiences.
Holland	Involves one's lifelong process of growth related to paid and nonpaid work, lifestyle choices, and education/training.
Ginzberg Holland	A part of human development--the movement from awareness, exploration to preparation of the world of work.

Table 59 (Continued)

Theory	Definition of Career Development
Super	Process by which students grow through investigation of self and the world of work.
Super	A lifelong process of knowing how to assess your own unique qualities, how to gather information about your alternatives and how to implement a strategy.
Holland	Starts at birth and takes in all life events that shape a person's values and needs.
Holland	An ongoing process which allows individuals the opportunity to explore their personal development and changes and explore career opportunities consistent with them and will give opportunity for growth.
none listed	<u>Group II**.</u> A process of exploring one's interests, values, aptitudes, and general ability in deciding and planning one's career.
none listed	Process of gathering information about yourself and the world of work, so as to make positive decisions concerning your career and life goals.
Holland Super Perry	Process by which a person fits a correspondence between self and work which is compatible and satisfying.
Super	Closely allied with self development and encompasses the totality of an individual's life (work, leisure and family life, etc.)--it involves the sequence of activities related to this area.
Krumboltz	Process which includes learning about one's self in terms of abilities, aptitudes, and interest and learning about the world of work within the curriculum, which is appropriate for that particular age group. These two aspects are integrated as the student gains additional information.
Eclectic	Ongoing process in which one develops through a series of development stages and implements his or her self concept by acting upon and choosing opportunities from the milieu.

* Group I instructors were not familiar with Career Planning and Decision-Making (CPDM) course materials.

** Group II instructors had previous experience with CPDM course materials.

In describing steps which should be involved in the decision-making process, instructors were in agreement on inclusion of several steps. Table 60 shows the steps most frequently cited by the 15 instructors.

Table 60
Career Decision Making Steps Most Frequently
Cited by Field Test Instructors

Step	Instructors Citing Step	
	N	%
weigh alternatives and decide	14	93
gather and analyze information	11	73
define decision or problem	10	67
generate alternatives	9	60
explore self	6	40
develop strategy or plan	5	33
evaluate decision (after implementation)	5	33
implement plan	4	27
identify goal	3	20
explore environment	3	20
decide on decision-making criteria	2	13

When the same criteria used for scoring the decision-making process of students were used to score the processes identified by instructors, results revealed that the 15 instructors identified a mean of 2.7 decision-making steps ($s=1.1595$).

Instructors indicated a variety of learner outcomes they expected from the CPDM course. Group I expectancies were expressed by instructors

not familiar with the CPDM materials. Group II expectancies were expressed by instructors having previous experience with CPDM materials.

Group I:

- To be able to make intelligent decisions based on the decision-making process taught in the course.
- Define their unique qualities, know how to gather career information, know what kind of information is relevant to a career choice, understand a decision-making strategy.
- Have the tools to make realistic career choices.
- Make systematic decisions (personal and career).
- Help students understand the dynamic changing growing nature of themselves in relation to work--to enable students to be able to understand the process of lifework planning in order that they may reapply this during their lifetime--teach them skills.
- Develop a system for career planning and decision-making to use for their life work planning and develop a plan of action for use in the here and now.
- Make their own decisions relative to careers and life planning, based on both expressed and inventoried interests, abilities, aptitudes, environmental factors, etc.
- Better understand themselves and the options available to them as far as majors and career possibilities are concerned.
- A better understanding of themselves and the realization that their career development begins with themselves and is a continuous process.

Group II:

- Make decisions using a formalized approach, know how to use the CIS, be able to repeat the whole career decision-making process if a definite change in values occurs, or a handicap of some nature develops; and declare a major which will lead to the occupation.
- To define or refine their sense of direction in their future life.

To reflect about options and possess a means through which they can apply those reflections (decision-making).

Possess the skills to explore potential occupational areas, be able to identify traits which relate to themselves and certain occupations.

To be able to make sound career decisions based on knowledge of themselves and career information.

Increase both their self-understanding and world of work understanding, realize and appreciate that career development is ongoing, learn decision-making strategies.

Instructors were also asked what benefits for their institution they expected from the course. The following expectations were stated:

Group I:

More direction and feeling of security for students who decide not to declare a major, I would hope that their search for a major and a career would be more realistic and clearer as a result of the course.

A more informed student "body" whose members can identify career goals, make course selections or educational decisions which are appropriate to their goals.

Lessen attrition, motivate students and faculty to work for common goals of achievement relative to identified needs, have a definite impact on the economy giving future generations of employees the power to influence the work situation, allow manpower and human resources to be more productive and correctly placed in jobs (selection, performance appraisal, and compensation systems all effectively working together).

More motivated students, more realistic decision-making, more satisfied students, possibly reduction of attrition (may also increase attrition though), less frustrated faculty if they have more motivated students.

A systematic course content that can be taught by the counselors, a new approach to career counseling-- instructional in nature.

More realistic student goals, resulting in fewer major changes and higher retention.

93

Less student attrition due to uninformed course selection, better use of student services (i.e., financial aid office and advisement center as components in "strategy," career center and library as components in "information gathering," etc.

More student satisfaction and, thus, better enrollment since word of mouth information by current and past students is our biggest recruiting tool.

A logical structured experience will permit students to investigate themselves and the world of careers, the professor will have an opportunity to follow through with one complete series of materials.

Group II:

Higher level of student satisfaction; higher level of self-responsibility assumed by student; improved academic advising, greater campus-wide awareness of career development, possibly a reflection in lower attrition rate.

Helping students make career decisions, helping students reaffirm career decisions.

As a result of purchasing the CIS, I hope that the college will develop a Career Exploration Lab to be utilized by all students of the college.

Providing another way of serving students' needs, providing a "useful" educational experience, providing another way of fulfilling the research mission of the university in an applied sense.

A reduction in the number of times a person changes his/her major, increased satisfaction among students with their choice of major, could lead to greater ease in implementing placement functions, this course could lead to permanent offering of such a course; thereby meeting institutional as well as student needs.

Parents of prospective students could be encouraged to send their children even though the students are undecided, students can identify possible majors and, thus, remain in school as opposed to becoming frustrated and either dropping out or choosing a major at random, helpful to the student-athlete many of whom are not familiar with what college has to offer, general satisfaction of students served which is then shared with other students and potential students, and results in students remaining and being attracted to the institution.

Although many institutional benefits perceived by instructors were specific to their college, a number of benefits were noted by more than one instructor. These are presented in Table 61.

Table 61
Instructional Benefits of the Course Perceived
by Field Test Instructors

Benefit	Instructors Citing Benefit	
	N	%
increased student satisfaction	5	28
less attrition	5	28
increased direction in career planning	4	22
more realistic career goals	3	17
less major changes	2	11
increased student motivation	2	11

The Instructor Pretest required the names of individuals responsible for getting the CPDM course implemented at their institution. All but one instructor indicated they were instrumental in course implementation.

In responding to why their institution was offering the course, 50 percent (N=9) of the instructors stated the recognized need for a career planning and decision-making course, 39 percent (N=7) stated the number of students with undecided majors, and 22 percent (N=4) stated the high rate of attrition (responses are not exclusive). Other reasons were also offered by instructors and a complete list of responses follows:

Group I:

Because of the large number of undecided students.

Undecided students have a high attrition rate, also the mission of a community college is to give students a second chance--such students are better motivated if they understand more about themselves and their alternatives.

Obvious need--student services.

There is a greater need to reach larger numbers of students in the career planning, the course will make it possible.

To provide a large number of our students assistance in an important area prior to their making costly mistakes due to inadequate guidance.

Because it is needed by our students.

The institution is not offering this as a course, however, the counseling center is using the experience to influence institution decision-makers to offer such a course because a great number of students need the structure, information, and cognitive elements such a program provides.

Primarily to assist undeclared majors in making a choice of majors within four semesters.

To help students in their academic as well as their career planning.

To counteract the vast amount of misinformation given to students who enter Home Economics by counselors (high school and college) and thereby reduce the incidence of student attrition.

More and more students are deciding to enter college without majors--we hope to help them quickly understand the options open to them in light of their own abilities, interests and values, this should reduce changing of majors and help retention.

The college did not give a credit course, adults expressed a need, an office was created to help on a daily basis, adults needing career awareness.

Group II:

This course is being made available to prospective education majors, with the shrinking job market for teachers, the college is interested in exposing education majors to other areas so that students will be aware of other options.

To provide undecided students with the opportunity to explore themselves and various career and academic options.

We believe career guidance is fundamental to occupational education which is what the community college is all about.

Helping students make career decisions, helping students reaffirm career decisions.

High percentage of undeclared majors, high attrition rate.

To determine if course will meet the needs of undecided students.

Data was also obtained on the content topics instructors felt should be included in a career development course for college freshmen. Eighty percent (N=12) of the instructors stated they would include knowledge of self in a career development course for college freshmen, 67 percent (N=10) would include knowledge of the world of work, 40 percent (N=6) would include the decision-making process, and 20 percent (N=3) would include generation of alternatives.

Instructors were asked their reasons for teaching the course in an attempt to gain some indication of their motivation. Ninety three percent (N=14) of the instructors' responses revealed motivations to teach the course. Only one indicated teaching the course because he/she was "hired to teach..." The rationales instructors gave for teaching the course are:

Group I:

It is very important, it will help me academically (I'll learn more), it will help students at my institution. I think it will be fun to do.

Need for group experiences--students to share career related experiences, logical progression of career development process, opportunity to reach more students with information, better use of administrator's time working with group rather than individuals, learning experience for me as well as students.

Because in working in a four year college previous to my current job I saw the need, there it wasn't being addressed so I chose my current position because they were wanting to implement the course.

I teach two career related courses as part of my counseling contract, I have chosen to teach your course because I am always looking for better ways of doing things and I am impressed with your materials.

I believe career development is a problem in human development that needs more systematic procedures for dealing with this problem.

Because I enjoy the challenge of finding new ways to help people deal with their life situation.

I have a personal and professional commitment to better job satisfaction and placement if we are to preserve the free enterprise system.

Staff development of counseling staff and to assist undeclared majors in making a choice of majors within four semesters.

Because I enjoy working with students who learn through the element of self discovery which is so much a part of this course. It is both exciting and rewarding, I feel I have both the background and skills and am delighted with this "new" approach.

To counteract the vast amount of misinformation given to students who enter Home Economics by counselor (high school and college) and thereby reduce the incidence of student attrition.

Because I firmly believe that few students come to college prepared to decide on a major. I find it exciting and rewarding to assist them in their career planning.

Group II:

Primarily because of my connection with AEL, without such a connection, someone else (hopefully) would have taught the course. My interest is strong as I know college students need and desire the type of experience that this course affords.

I'm interested in human development and career education, the commitment to some guided efforts along these lines, part of my assistantship as a doctoral student.

I was hired to teach, develop, and evaluate all career planning classes at this institution.

To assist students in exploring their interests, values, and aptitudes in relationship to career choices.

I enjoy working with students who have these concerns, I believe strongly in its importance, keeps me growing and attuned to needs of youth.

I enjoy the course because of my graduate training, my own rather wide work experience, my people orientation, my interest in problem solving, and my interest in being involved in something new that works.

Instructor Survey Posttest

After course completion, ten instructors completed and returned the posttest. To permit pre-post comparisons, several posttest items were identical to items on the Instructor Survey Pretest completed prior to the course. Because of the small number of posttests returned (N=10), only descriptive analyses could meaningfully be performed.

Whereas, prior to the course, the majority of instructors identified themselves most closely with the career development theories of Super and Holland, instructors identified themselves most closely with Super

and Tiedeman after teaching the course. Table 62 shows the pre and post theory preferences of field test instructors.

Table 62

Career Development Theory with Which Field Test Instructors Most Closely Identified Before and After Teaching the Career Planning and Decision-Making Course

Theory	Identified with Most Closely	
	Pre-Instructor (N=18)	Post-Instructor (N=14)*
Ginzberg	1	1
Holland	5	2
Krumboltz	1	1
Parsons	1	0
Roe	0	0
Super	6	5
Tiedeman	1	3
Tyler	1	0
Other	2	2

* Some respondents indicated more than one theory.

Posttest results revealed a mean score of 3.900 ($s=1.1005$) on instructor processes of decision-making. Table 63 shows the comparison scores for decision-making pre and post instruction.

Table 63

Means and Standard Deviations of Decision-Making Steps of Field Test Instructors Most Closely Identified with Before and After Teaching the Career Planning and Decision-Making Course

	\bar{X}	S	N
Pre Instruction	2.700	1.1595	15
Post Instruction	3.900	1.1005	10
Gain	1.200		10

Prior to teaching the CPDM course, instructors expressed a mean of 2.700 decision-making steps based on criteria derived from the course.

After teaching the course, instructors expressed a mean of 3.900 decision-making steps. This represents a mean gain of 1.200 steps during the instruction of the course.

The post survey also obtained instructors' definitions of career development. These definitions are listed below:

It is an ongoing process that integrates knowledge about the world of work, knowledge about one's self, knowledge about philosophy of the good life and knowledge about decision-making.

Career development is a lifetime process whereby persons engage in certain activities and assume various roles in order to achieve their goals. This demands that persons continuously evaluate both what they want to do and what actions will enable them to obtain their goals.

Knowledge of self in relation to the world of work.

Ongoing continuous process, continuing throughout life which includes formation, translation, and implementation based on self concept--begins early in life and continues until death.

The process of making life choices as they relate to education, work, and leisure throughout a person's life span.

A lifelong process of developing work values, crystallizing a vocational identity, learning about opportunities, and trying out plans in part-time, recreational, and full-time work situations.

Definition of one's self through continuous decision-making and choice of work experiences related to one's values.

The lifelong process of setting goals related to one's career and constantly reevaluating and setting new goals, while moving towards these goals.

Using what you know to get what you want.

↓ ↓ ↓

strategy information values

Implementation of self-concept through life roles, competencies in occupational role, family role, citizenship role, and leisure role.

Post survey questions also focused upon instructors' recommendations regarding (1) instructor qualifications needed for teaching the CPDM course, (2) the type (required, elective, preferred) of offering for the course, and (3) the optimal student level for offering the course.

All respondents mentioned CPDM instructor's qualifications should include some counseling background. Their complete responses are listed here:

Some counseling and group leadership, expertise, knowledge of a systematic approach (such as AEL) of the world of work.

Preferably a counselor but with appropriate in-service, could be taught by an interested teacher. (In-service should be available for counselors as well.)

Counseling and teaching training background and experience.

Credentials--course graduate degree in counselor education, vocational counseling, guidance and counseling, occupational/vocational career planning, career education

Work experience

Familiarity/Training with DOT, OOH, EOC, etc. also decision-making, sincere interest and great deal of objectivity in working with people.

Thorough knowledge of career development theory and practice; comprehensive awareness of world of work; group facilitation skills; previous experience with teaching career planning course would be helpful; although not required; counseling skills.

The instructor should be a counselor or a person with counseling experience. The instructor should have at least one-two successful years of teaching on the post-secondary level. An understanding of structural and process approaches to career counseling is necessary.

The following are other necessary background knowledge:

1. Background in vocational student identification and analysis
2. Understanding of development task--tasks that are common to various age groups (developmental psychology)
3. Group procedures in counseling and guidance,
4. Program evaluation skills (process and product evaluation)
5. Vocational guidance curriculum development skills

A masters or higher in guidance and counseling. Also, the person should be well acquainted with all its institution's educational options as well as the employment needs of the surrounding community.

A commitment to the area of career guidance. A willingness to be open to new ideas. Being able to function more as a facilitator than as a teacher.

Familiar with student backgrounds and needs, strong counseling and facilitating skills, background in career planning approaches.

Counseling background, vocational/career information knowledge, genuine liking and appreciation of the students, genuine respect for importance of material.

Three instructors felt the CPDM course should be offered as a required course, one instructor felt the course should be required for undeclared

students. Six instructors felt the course should be offered as an elective and two felt it should be taught to referred students.

Eight of nine respondents supported teaching the course at the freshman level: two recommended freshman year, first quarter; four recommended freshman year, second quarter; and one recommended freshman year, fourth quarter. Two instructors indicated the optimal time should be during the first quarter of the sophomore year and one felt the criteria should be student readiness rather than class level.

The remainder of the information obtained from the post survey pertained to additional career planning and decision-making activities needed, and the importance of other career development tasks for students completing the CPDM course.

In responding to what else, in addition to the course, their institutions need to facilitate continued career planning and decision-making behavior, instructors presented a variety of needs. These needs are listed below:

Familiarize advisors with what the system can do for the student.

Provide training in job finding and job keeping skills;
provide printed information (pamphlets, catalog, etc.)
relating majors to job (both vocational and academic);
provide meaningful work experiences for students.

Having career planning and placement office--CIS resource center in progress.

Comprehensive career development program to include:
career planning center; individual and group counseling;
cooperative education program; job placement service;
noncredit workshop or pertinent topics, i.e., sheets
identifying assertiveness training, etc.

None

Better communication between myself, the academic advisors and placement people.

At the present time I am in the process of identifying the requirements of a truly comprehensive career guidance approach. To implement such an approach would require: intake diagnosis, the availability of various types of career resources, follow-up. I plan to purchase a computerized guidance system.

Up-to-date career information which is easily accessible.
Good student services referral system. Individual counseling.

Better academic advising.

In rating the importance of career development tasks which may occur subsequent to the course and prior to graduation, most instructors rated planning for employment and developing employability skills as the most important. Table 64 presents a summary of the instructor ratings.

Table 64

Instructor Ratings of Importance of Career Development Tasks Which May Occur Subsequent to the Career Planning and Decision-Making Course and Prior to Graduation

Career Development Task	Ratings of Individual Instructors			
	Very Important	Of Some Importance	Of Little Importance	Of No Importance
Adjusting to college environment	4	5	1	0
Planning for employment (family considerations, income, location)	8	1	1	0
Developing employability skills (resume writing, interviewing)	6	3	1	0

Table 64 (Continued)

Career Development Task	Ratings of Individual Instructors			
	Very Important	Of Some Importance	Of Little Importance	Of No Importance
Becoming employed-- negotiating work agree- ments (salary, work schedule, benefits)	3	5	2	0
Adjusting to employment (skills for keeping a job)	5	4	1	0

All instructors responding (N=9) indicated it would be very helpful to their institution to have a handbook coordinating the Career Information System and Career Planning and Decision Making course with services provided by Recruitment, Academic Advisement, and Placement Staff.

Eight of ten instructors responding indicated it is of great importance for student personnel workers, placement personnel, academic advisors, and college counselors to be aware of the course concepts and the career planning and decision-making process in which students have been involved. Two instructors indicated it was of some importance.

Instructors were also asked on the post survey if the Career Information System was set up at their institution. Seven responded yes and three responded no.

Instructor Evaluation Form Results

The Instructor Evaluation Form provided for instructor reactions based on their experience teaching the CPDM course. The information obtained from this form and the evaluation questions addressed will be discussed in this section.

1. Is the course appropriate for college students?

Table 65 shows the responses of instructors regarding the appropriateness of the course for college students (items 1 and 2). All instructors responding agreed that the course was appropriate for college students in both two and four year institutions.

2. Are the course strategies effective?

Table 65 shows the responses of instructors regarding the effectiveness of course strategies (items 3-9). All instructors agreed that

- students seemed interested in the course
- instructional strategies used in course materials are effective in teaching the intended skills and knowledge to students
- the course prompted career planning and decision-making behavior by students
- major competencies are attainable from unit completion
- course content is comprehensive in terms of the career planning and decision-making process
- activities are appropriate for teaching the course concepts

All but one instructor agreed that the language and concepts presented in the course enabled students to more effectively understand and discuss career concerns. Disagreement was based on instructor's rationale that some students were not able to grasp the concepts enough to apply them.

3. Are advance preparation and planning activities appropriate and adequate for teaching the course?

Table 65 shows the responses of instructors regarding the appropriateness and adequacy of advance preparation and planning activities (items 10 and 11). All instructors responding agreed

that the equipment and materials needed for activities were appropriate and available. All but one instructor agreed the planning and preparation activities were adequate for teaching the material. Disagreement was based on the instructor's rationale that the instructor's guide would be more effective if it were coordinated more clearly with the student textbook.

4. Overall, are instructors pleased with the course?

Table 65 (item 12) reveals that all instructors agreed that they were pleased with the CPDM course.

Table 65

Agreement of Career Planning and Decision-Making Course Instructors with Evaluative Statements About the Course

Statement	- Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
The course is appropriate for college freshmen in four year institutions.	5	2	0	0
The course is appropriate for college freshmen in two year institutions.	3	4	0	0
Students seemed interested in the course.	3	4	0	0
Instructional strategies used in the course materials are effective in teaching the intended skills and knowledge to students.	3	4	0	0
The course promoted career planning and decision-making behavior by students.	3	4	0	0



Table 65 (Continued)

Statement	Strongly Agree	Number Responding		Strongly Disagree
		Disagree	Disagree	
Major competencies for each unit were attainable from unit completion.	0	7	0	0
Course content was comprehensive in terms of the career planning and decision-making process.	6	1	0	0
Language and concepts presented in the course enabled students to more effectively understand and discuss career concerns.	2	4	1	0
Activities were appropriate for teaching the course concepts.	3	4	0	0
Equipment and materials needed for activities were appropriate and available.	4	3	0	0
Planning and preparation activities were adequate for teaching material.	3	2	1	0
Overall, I am pleased with the CPDM course.	5	2	0	0

5. Is the Instructor's Guide acceptable for instructors teaching the CPDM course?

Table 66 shows instructors' opinions regarding the acceptability of various aspects of the Instructor's Guide.

Table 66

Instructor Opinions Regarding the Acceptability of Various Aspects
of the Career Planning and Decision-Making Instructor's Guide

Areas	Number Responding	
	Acceptable	Unacceptable
Format	6	3
Appearance	7	1
Filmstrip discussion questions	6	2
Suggested activities	7	1
Class management techniques	6	2
Major competencies for each unit	8	0
Orientation to course materials	7	0
Length of activities	7	1

These findings indicate the majority of CPDM instructors found the Instructor's Guide acceptable in terms of format, appearance, filmstrip discussion questions, suggested activities, class management techniques, major unit competencies, orientation, and length. Reasons given by instructors for finding some aspects of the Guide unacceptable were:

Since I taught the class once a week in three hour blocks, I found it hard to hold some activities to the prescribed time allotments and we ran out of time at the end of the semester causing us to have time only to glance over Units 5 and 6.

My major concern about the course is that in a two hour semester course we did not have enough time to complete all the activities. Thus, we did not have time for any of the suggested activities.

Organization! Time frame, lengthy, drawn out
 Technical editing errors
 Cumbersome--had to read and read to find out needs better
 organization.

I would suggest a listing approach such as:

In Class	Prepare
Unit 1, Activity D	Prepare decision-making handout for next class period
Unit 1, Activity E	
Handout decision-making sheets	

In other words, a brief listing of the day by day activities and preparation needed to be made ahead of time such as when to put books on reserve in library, when to prepare handouts for class, etc. The narrative format is good, but does not provide at a glance a list of things to do.

Filmstrip guide to evaluate answers to all questions should be included. For the sake of time, questions should be kept to a minimum.

6. Are there any biases present in the course materials?

No instructor responding indicated any biases in the course materials.

7. What are the course benefits for the institution?

Instructors listed various institutional benefits that the CPDM course provides. These benefits include:

Intense-directed guidance services.

The course somewhat provides "legitimacy" to our requirements that all students in two year programs take career planning.

Course appears to give students a greater sense of direction--this institution can benefit from more goal oriented students.

Informs students about university programs (majors). Services as a source of information for students who would not go to counseling center, serve as a resource for advisor.

Student satisfaction/retention, more use of career center, more realistic decisions.

Offered a course which everyone felt was needed.

I feel I get better results than I usually got from the formats used previously in these classes.

As a community college we seem to attract many students that were not academically oriented in high school. We also get a lot of housewives coming back to school. These students have a lot of questions that a course like this is able to answer.

8. What problems do instructors encounter in teaching the course?

Instructor-identified problems were varied, but the most common problem appeared to be time limitations. The problems identified by instructors were:

Time limitations--adjusting some of the activities for two year students. Student evaluation was very difficult.

Time for presentation at end of quarter. I had to really push in some areas, but the students did not appear to suffer.

Getting students to come to class prepared and staying current in their workbook.

Too much material; some students felt it was "high schoolish," others that it was too mechanistic at times, and a few that it was "pushy" or rigid towards end.

Time it took to coordinate Teacher's Guide with student text.

I was unable to complete the course (workbook) within the academic time frame; I am using the material again this quarter and have been able to better allocate the time activities.

As mentioned previously, we ran short of time at the end of the semester. Also, as in previous times when I've taught career planning courses several students dropped after the first session. Under Holland's theory; most of these people probably would be identified as conventional or realistic. I've attached an article I received recently that supports this theory as to why conventional or realistic types may feel uncomfortable in a class like this.

9. What are the strengths and weaknesses of the course?

The various strengths identified by CPDM instructors responding were:

Systematic three phase approach to career counseling incorporated.

Students' responses were very positive to the course, this is a strength.

Decision-making activities, tying all occupations into one system, self evaluation activities in Unit 2, group discussions.

Well designed, model is functional, recognize results when obtained.

Students comfortable with structured format.

Truly comprehensive, Unit 2 is such an excellent exploration tool that it makes the textbook worth purchasing.

WTG charts and support documents were among strengths. Also small group exercises.

Weaknesses identified were:

Referring from chart to chart--if there is a simpler way to bring the charts together, it should be used.

Filmstrips generally below level for this group of students.

Filmstrips least successful, some felt too much was asked for at times.

Repetition at end-course preregistration took place before Chapter VI. Format of student text too many charts spread out--have to flip back and forth.

More help on classroom management, listing of day by day activities.

Students felt it got repetitious at time, length of course.

No clear coordination between student workbook and teacher's guide.

Student evaluation is very difficult. AEL should offer suggestions to teachers in this area.

10. What unanticipated benefits resulted from the course?

Unanticipated benefits identified by CPDM instructors were:

Having already taught courses similar to this, I pretty well knew what to expect. I thought the students would enjoy it and they did.

Action is being taken to get approval from the curriculum committee to include this course as a permanent offering.

Widespread word of-mouth advertisement, of course.

Some spreading of the word about our center; students with career goals liking and benefitting as much as some did. Confirmation process.

Many students changing majors, transferring, etc.
I see as benefit--institution may not.

A number of the students changed part-time jobs that related more closely to their goal.

11. What type of students benefit most from this type of course?

Although some instructors felt freshmen and sophomores would benefit most from this type of course, other instructors felt all types of students would benefit if they were willing to invest the time and energy necessary. Also, several instructors felt undecided students would benefit most.

12. What type of students benefit least from this type of course?

Most instructors indicated students who were not open and motivated to examine themselves and their plans would benefit least from a course like CPDM.

13. Would instructors familiar with the CPDM course recommend it for helping students in their career development?

All CPDM instructors responding (N=8) indicated they would recommend the course for helping students in their career development.

14. How does the CPDM course compare with other career development courses?

Compared with other available career development courses, six instructors rated the Career Planning and Decision-Making course a great deal better, and the remaining two instructors rated the course somewhat better.

15. Having taught the CPDM course, are instructors interested in teaching it again?

All eight instructors responding indicated they were interested in teaching the CPDM course again.

16. How would CPDM instructors teach the course differently?

A number of instructors indicated that they would improve class management techniques in teaching the course again. The various ways instructors indicated they would revise the course to reflect their own priorities and desires are:

Adjust some of the activities such that they pertain to the concerns of vocational and two year students. For example, Activity B, Unit V, page 111 I would change the decision situation. None of my students were concerned with declaring a major. Most two year students have already pretty well decided on a major when they enter the program. Also, I deleted Activity B, page 90--Educational Directions. I think there are shorter ways to obtain such information. Attempt to come up with a student evaluation scale that was more objective. I would probably have students write a paper on the occupation of their choice after completing Unit II, and have them present this paper orally to the class.

I would place greater emphasis on definitions of interest, values, and aptitude. During a post-course interview, I discovered that students were able to identify their personal values, interests, and aptitudes but could not, in most cases, tell me what these terms meant. NOTE: Charts in students' workbooks related to activities in Unit II were cumbersome for students to use. They should be located closer to the activity the students are required to perform.

I am improving my class management in the area of grading and keeping students up-to-date on their work.

Limit enrollment, more time in career center.

Basic theoretical framework is excellent--Unit II is heart, of course, for cognitive input--some of rest is flowery or filler type. (1) Take more time for Unit II, (2) Put Unit II where it coincides with preregistration--end of course is too late for most college calendars, (3) Give Strong-Campbells, DATs, Otis Lennon's etc. at beginning. Each student should have WTG Guide when needed. While not used all the time, when needed hard to share. Keysort decks more useful for secondary than post-secondary. Some activities are received as busy work--students don't like "workbook activities in class," prefer to do outside--have guest speakers. Prefer decision-making approach in secondary program--hard to follow for some.

I would spend less class time on activities, i.e., students doing exercises in class. I would eliminate some of the filmstrips, again to save class time for discussion. I would substitute an aptitude test (probably GATB) for the aptitude self-assessment in the workbook. Students have not been realistic in assessing their own aptitudes.

I gave the GATB to the class this quarter after the students had completed the self assessment--we came up with some large differences. (I then converted standard scores to percentiles and assigned level 1-5 and followed through the activity.)

I'm going to teach 1 section in one hour class segments to see if this class enables me to budget class time better. Also, I think I have a better feel for which activities are likely to bog down. I'm going to try and be more selective in screening students into the program and possibly add a midterm and final test to insure that all students that take the course work a little harder to complete the prescribed activities.

College Major-Occupation Index Evaluation Form

In order to evaluate the College Major-Occupation Index component of the CPDM course, instructors were asked to complete the College Major-Occupation Index Evaluation form. The information received on these forms and the evaluation questions the information addresses will be presented in this section. Instructor estimates indicate that over 90 students used the Index. This estimate is based on the classes of the five instructors who completed and returned the evaluation form.

1. Is the College-Major Occupation Index adequate in terms of representation of the relationship between college and occupations, directions for use, format, appearance, and usefulness?

Table 67 shows the individual instructor responses regarding the adequacy of the Index in these areas. Results indicate that all instructors responding found the Index adequate in terms of representation, directions, format, appearance, and usefulness.

Table 67

Adequacy of the College Major-Occupation Index Evaluated by Career Planning and Decision-Making Course Instructors

Area Evaluated	Number Responding	
	Adequate	Inadequate
Representation of the relationship between college education and occupations	5	0
Directions for using the Index	5	0
Format of the Index	5	0
Overall appearance of Index	5	0
Potential usefulness of content of the Index	5	0

2. Are students able to effectively use the Index?

In determining effective use of the Index, instructors responded to students' understanding of the Index, ability to follow directions, subsequent career planning, ability to locate desired information based on Index content, and subsequent movement toward more specific career goals or plans. Table 68 shows a breakdown of instructors' agreement with these facets of use.

Table 68

Career Planning and Decision-Making Course Instructors' Agreement with the Usefulness of Aspects of the College Major-Occupation Index

Aspect	Number Responding	
	Agree	Disagree
Students understood the Index	5	0
Students were able to follow directions in the textbook for using the index	5	0
Exposure to the Index prompted further career planning behavior; i.e., use of additional resources.	4	1
Students were able to locate desired information in their college catalog from majors and occupations listed in the <u>College Major-Occupation Index</u>	5	0
The Index helped students move toward more specific career goals/plans	4	1

All instructors responding indicated the usefulness of the Index in terms of students (1) understanding the Index, (2) being able to follow directions in the student text for using the Index, and (3) being able to

locate desired information in their college catalog from majors and occupations listed in the Index. One instructor did not agree that exposure to the Index prompted further career planning behavior. The rationale for disagreement was based on the instructor's observation that although the majority of students did use the Index as an exploration tool, several used the Index for making a college major choice. The same instructor also disagreed that the Index helped students move toward more specific career goals/plans indicating that although one or two students "moved toward a more specific career goal/plan, the majority were still moving toward the tentative exploration period."

3. What problems do students encounter in using the Index?

The only problem observed by instructors was not having a sufficient number of Indexes for student use.

4. Are the majors listed in the Index representative of the majors offered at various institutions?

All but one of the instructors responding indicated the majors listed in the Index were comparable to majors listed in their institution's catalog. The one instructor not indicating comparability stated, "since we're a community college, we are concerned primarily in tailor-making a transfer student's program for the school he will transfer to, but majors here as defined by the Index really don't exist." For the same reason, this instructor indicated inability to relate his/her institution's specific academic majors to the majors listed in the Index. All other instructors responding indicated they could relate the majors.

5. Do instructors of the CPDM course support the validity of the relationships between the occupations and majors defined in the Index?

All instructors responding (N=5) indicated the occupations listed in the Index did relate to the academic majors as defined in the Index.

6. Is the Index an appropriate product to help students establish the relationship between majors and occupations?

All instructors responding (N=5) stated the Index was an appropriate product to help students establish the relationship between majors and occupations.

7. What are the unanticipated uses of the Index?

Instructors were asked in what ways other than directed by the text did their students use the Index? Instructors stated the Index was used by students in general career resource center use during individual counseling sessions and supplemented the institution's own guide for college majors. Potential uses instructors generated, in addition to the prescribed uses listed in the Index, included using the Index (1) as the basis for developing in-house bibliographies on particular career fields, (2) in the development of curriculum guides listing appropriate career options for particular college majors, and (3) in workshops for academic advisors.

8. Are the prescribed uses of the Index considered feasible by CPDM instructors?

All of the prescribed uses of the Index were considered feasible by the instructors responding (N=5).

9. What problems do CPDM instructors experience with the Index?

The only problem cited by an instructor was differentiating between all of the numbers: Dictionary of Occupational Titles numbers, Worker Trait Group numbers, and Higher Education General Information Survey numbers.

10. What types of improvements for the Index do CPDM instructors recommend?

No improvements were recommended by the instructors responding.

Filmstrip Evaluation Form

Evaluative information on each of nine CPDM course filmstrips was collected from instructors, counselors, and students on the Filmstrip Evaluation form. The information obtained on each filmstrip and the evaluation questions addressed will be presented in this section.

1. Is the purpose of the filmstrip clear?

Table 69 presents reviewers' opinions regarding the clarity of purpose of each of the nine CPDM filmstrips.

Table 69

Reviewers' Agreement with the Statement, "The Purpose of the Filmstrip is Clear" for Each of the CPDM Filmstrips

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	6	2	0	0
Work Activities	6	4	0	0
Work Situations	4	4	0	0
What are Aptitudes	7	0	0	0

Table 69 (Continued)

Filmstrip Title	Strongly Agree	Number Responding		Strongly Disagree
		Agree	Disagree	
Career Decision-Making	7	1	0	0
Career Planning & Decision-Making: Part I	4	2	0	0
Career Planning & Decision-Making: Part II	5	0	1	0
Career Goals	5	2	0	0
Career Progress	5	1	0	0

These findings indicate the purpose of each filmstrip is clear. One reviewer disagreed with the clarity of the purpose of the Career Planning and Decision-Making, Part II filmstrip stating the filmstrip seemed to supercede Part I.

2. Does the title of the filmstrip accurately represent the content?

Table 70 presents reviewers' opinions regarding the representativeness of the filmstrip titles.

Table 70

Reviewers' Agreement with the Statement, "The Title Accurately Represents the Content" for Each of the CPDM Filmstrips

Filmstrip Title	Strongly Agree	Number Responding		Strongly Disagree
		Agree	Disagree	
Career Interests	6	1	0	0
Work Activities	6	4	0	0

Table 70 (Continued)

Filmstrip Title	Strongly Agree	Number Responding		Strongly Disagree
		Agree	Disagree	
Work Situations	6	0	1	0
What are Aptitudes	7	0	0	0
Career Decision-Making	5	2	1	0
Career Planning and Decision-Making: Part I	3	3	0	0
Career Planning and Decision-Making: Part II	4	1	0	0
Career Goals	5	2	0	0
Career Progress	2	4	0	0

These findings support the representativeness of the filmstrip titles. One reviewer felt the title, "Career Decision-Making" was too broad and one reviewer recommended changing the title, "Work Situations" to "Can You Adapt to These Work Situations?"

3. Is the amount of extraneous materials in the filmstrip minimal?

Table 71 presents reviewers' opinions regarding the amount of extraneous material evident in the filmstrips.

Table 71

Reviewers' Agreement with the Statement, "The Amount of Extraneous Material is Minimal" for each of the CPDM Filmstrips

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	5	3	0	0
Work Activities	6	3	1	0
Work Situations	3	3	1	0
What are Aptitudes	3	4	0	0
Career Decision-Making	5	2	1	0
Career Planning and Decision-Making: Part I	4	2	0	0
Career Planning and Decision-Making: Part II	5	1	0	0
Career Goals	5	2	0	0
Career Progress	4	2	0	0

The data in Table 71 indicate there is a minimal amount of extraneous material in the filmstrips. Of those disagreeing, one reviewer responded that students grew restless during the "Work Activities" filmstrip and some students felt it was too general. One reviewer thought the "Work Situations" filmstrip should not be set up around the card game. One reviewer indicated that in "Career Decision-Making," one character's situation takes away from another.

4. Are the concepts which are presented appropriate for a college student audience?

Table 72 presents reviewers' opinions regarding the appropriateness of filmstrip content for a college student audience.

Table 72

Reviewers' Agreement with the Statement, "Concepts are Appropriate for a College Student Audience"

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	4	3	1	0
Work Activities	6	3 ^J	1	0
Work Situations	4	3	1	0
What are Aptitudes	3	3	0	0
Career Decision-Making	5	2	0	0
Career Planning and Decision-Making: Part I	5	1	0	0
Career Planning and Decision-Making: Part II	5	1	0	0
Career Goals	6	1	0	0
Career Progress	4	2	0	0

These findings support the appropriateness of the filmstrips for the college student target population. Of those disagreeing, one reviewer stated some students found "Career Interests" too high schoolish; one reviewer stated some students found "Work Activities" too high schoolish, and one reviewer failed to provide a specific rationale for rating "Work Situations" inappropriate for college students.

5. Is the portrayal of illustration of concepts appropriate for a college student audience?

Table 73 presents reviewers' opinions regarding the appropriateness of concept portrayal in the filmstrips.

Table 73

Reviewers' Agreement with the Statement, "The Portrayal of Illustration of Concepts are Appropriate for a College Student Audience"

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	4	3	1	0
Work Activities	6	3	1	0
Work Situations	3	3	1	1
What are Aptitudes	3	3	1	0
Career Decision-Making	5	3	0	0
Career Planning and Decision-Making: Part I	4	2	0	0
Career Planning and Decision-Making: Part II	4	2	0	0
Career Goals	5	1	1	0
Career Progress	4	2	0	0

Findings suggest that the portrayals of illustration of concepts are appropriate for a college student audience. Reasons given for disagreement were the same as disagreement with the appropriateness of content for college students. In addition, one reviewer disagreed with the statement regarding appropriate concept portrayal because s/he thought women were depicted in stereotyped roles and one stated the role models in "Career Goals" were unreal and students would have difficulty identifying with them.

6. Is the information presented accurate?

Table 74 presents reviewers' opinions regarding accuracy of information presented in the filmstrips.

Table 74

Reviewers' Agreement with the Statement, "Information Presented is Accurate"

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	5	3	0	0
Work Activities	6	4	0	0
Work Situations	4	4	0	0
What are Aptitudes	2	4	1	0
Career Decision-Making	8	0	0	0
Career Planning and Decision-Making: Part I	6	0	0	0
Career Planning and Decision-Making: Part II	5	1	0	0
Career Goals	6	1	0	0
Career Progress	3	3	0	0

Findings suggest that the information presented in the filmstrips are accurate. One reviewer disagreed with the accuracy of information presented in "What are Aptitudes" because of a conflicting instruction in the filmstrip compared with the textbook.

7. Is the information presented current?

Table 75 presents reviewers' opinions regarding currentness of information presented in the filmstrips.

Table 75

Reviewers' Agreement with the Statement, "Information Presented is Current"

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	5	3	0	0
Work Activities	5	5	0	0
Work Situations	4	4	0	0
What are Aptitudes	3	4	0	0
Career Decision-Making	8	0	0	0
Career Planning and Decision-Making: Part I	4	2	0	0
Career Planning and Decision-Making: Part II	4	1	0	0
Career Goals	5	2	0	0
Career Progress	0	4	0	0

Findings suggest that information presented is current. All reviewers agreed on the currentness of all nine filmstrips.

8. Does the filmstrip motivate student discussion and/or participation in follow-up activities?

Table 76 presents reviewers' opinions regarding the filmstrips' ability to motivate student discussion and/or participation in follow-up activities.

Table 76

Reviewers' Agreement with the Statement, "The Filmstrip Motivated Student Discussion and/or Participation in Follow-Up Activities"

Filmstrip Title	Number Responding			
	Strongly Agree	Agree	Disagree	Strongly Disagree
Career Interests	2	2	1	0
Work Activities	2	3	2	0
Work Situations	1	2	1	0
What are Aptitudes	2	1	0	0
Career Decision-Making	3	4	0	0
Career Planning and Decision-Making: Part I	2	1	0	0
Career Planning and Decision-Making: Part II	2	1	0	0
Career Goals	3	1	1	0
Career Progress	0	4	0	0

Findings suggest that the filmstrips motivate student discussion and/or participation in follow-up activities. No specific reasons were given by the reviewers who represent the five disagreements with the motivational ability of the filmstrips.

9. Does the filmstrip enhance the material presented in the CPDM textbook?

Table 77 presents reviewers' opinions regarding the filmstrips' enhancement of the material presented in the CPDM textbook.

Table 77

Reviewers' Agreement with the Statement, "The Filmstrip Enhances the Material Presented in the Textbook"

Filmstrip Title	Strongly Agree	Number Responding		Strongly Disagree
		Agree	Disagree	
Career Interests	3	3	1	0
Work Activities	5	3	0	0
Work Situations	5	2	0	0
What are Aptitudes	5	1	0	0
Career Decision-Making	5	1	0	0
Career Planning and Decision-Making: Part I	2	3	0	0
Career Planning and Decision-Making: Part II	4	1	0	0
Career Goals	4	1	0	0
Career Progress	2	2	0	0

Findings suggest the filmstrips enhance the material presented in the textbook. One reviewer did not agree that "Career Interests" enhanced the textbook material, but no specific reason was given.

10. Is the filmstrip acceptable in terms of picture and sound quality and length?

Table 78 presents reviewers' opinions regarding the picture quality, sound quality, and length of the filmstrips.

Table 78

Reviewers' Opinions Regarding the Acceptability (Ac) - Unacceptability (Unac) of Picture Quality, Sound Quality, and Length of the Filmstrips

Filmstrip Title	Number Responding					
	Picture Quality		Sound Quality		Length	
	Ac	Unac	Ac	Unac	Ac	Unac
Career Interests	8	0	8	0	7	1
Work Activities	8	0	7	1	7	1
Work Situations	8	0	8	0	8	0
What are Aptitudes	7	0	7	0	7	0
Career Decision-Making	7	0	7	0	7	0
Career Planning and Decision-Making: Part I	6	0	6	0	6	0
Career Planning and Decision-Making: Part II	4	0	4	0	4	0
Career Goals	7	0	7	0	6	0
Career Progress	6	0	5	1	6	0

Findings suggest the picture quality of the filmstrips is acceptable.

All reviewers rated the picture quality acceptable.

The findings also suggest the sound quality of the "Work Activities" as unacceptable because the tape was garbled and the frame advance was impaired. One reviewer rated "Career Progress" unacceptable in sound quality, but no rationale was provided.

The findings support the acceptability of filmstrip length. One reviewer found the length of "Career Interests" unacceptable, but the reason stated was "no minorities and no handicapped." A reviewer found "Work Activities" unacceptable in length, but provided no rationale.

11. Are biases/stereotypes evident in the filmstrip?

Table 79 presents the biases/stereotypes that reviewers detected in the filmstrips.

Table 79

Biases Detected in the Career Planning and Decision-Making Course Filmstrips

Filmstrip Title	No. Responding	Type of Bias/Stereotype Detected					
		Sex	Occ.	Ethnic	Social Class	Age	Other
Career Interests	8	0	1	2	1	3	1
Work Activities	10	3	0	1	0	0	1
Work Situations	8	1	1	1	0	1	0
What are Aptitudes	7	3	1	4	0	0	1
Career Decision-Making	8	0	0	0	0	0	1
Career Planning and Decision-Making: Part I	6	0	0	0	1	1	0
Career Planning and Decision-Making: Part II	6	0	0	0	1	1	0
Career Goals	7	1	0	4	1	3	0
Career Progress	6	0	0	1	1	0	0

Table 79 shows that of the eight individuals reviewing "Career Interests," one detected occupational biases, two detected ethnic stereotypes, one detected social class bias, three detected age bias, and one detected bias toward urban populations. In explaining the biases detected, instructors commented that:

- no Blacks were depicted
- college students were portrayed as being ages 18-22 in range
- nontraditional students need to be depicted
- bias is evident toward middle class
- some sex stereotyping is present in occupations portrayed

Of the ten individuals reviewing "Work Activities," three detected sex bias, one detected ethnic bias, and one detected handicap bias. In explaining the biases detected, instructors commented that:

- females were depicted in traditional roles
- mostly white males were depicted in executive positions
- the majority of occupations pictured males
- handicapped were not shown

Of the eight individuals reviewing "Work Situations," one detected sex bias, one detected occupational stereotypes, one detected ethnic bias, and one detected age bias. In explaining the biases detected instructors commented that:

- traditional male and female occupations were portrayed
- only one nonwhite worker was portrayed
- no elderly were depicted
- few women were talking about jobs

Of the seven individuals reviewing "What are Aptitudes?," three detected sex bias, one detected occupational stereotyping, four detected ethnic bias, and one detected bias toward urban populations. In explaining the biases detected, instructors commented that:

- only one Black was depicted
- persons from rural and small towns would not relate to the urban settings portrayed
- many examples of aptitudes were male
- women for the most part, were portrayed in stereotypical occupations

Of the eight individuals reviewing "Career Decision-Making," one detected bias against the handicapped explaining that no handicapped were present in the filmstrip.

Of the six individuals reviewing "Career Planning and Decision-Making: Part I," one detected social class bias and one detected age bias. Instructors provided no explanation of the biases they thought were present in the filmstrip.

Of the six individuals reviewing "Career Planning and Decision-Making: Part II," one detected social class bias and one detected age bias. In explaining the biases detected, instructors commented that:

- two year courses should also be covered
- possibilities of changing from technical school to university and vice versa should be covered
- middle class bias exists
- the filmstrip assumes students have not worked and are just out of high school

Of the seven individuals reviewing "Career Goals," one detected sex bias, four detected ethnic bias, one detected social class bias, and three detected age bias. In explaining the biases detected, instructors commented that:

- there were no Blacks in the filmstrip

- no older students depicted
- biases toward whites, middle class, and youth were evident

Of the six individuals reviewing "Career Progress," one detected ethnic bias and one detected social class bias. In explaining the biases detected, instructors commented that:

- no Blacks or other minorities were depicted
- middle class bias was evident

Table 79 findings indicate some sex, ethnic, and age biases were detected in several filmstrips. Little, if any, occupational, social class, or other types of biases were detected in any of the filmstrips.

12. What are the perceived strengths and weaknesses of the filmstrip?

Reviewers identified a number of strengths and weaknesses for each filmstrip. Their comments are summarized in Table 80 on the following page for each filmstrip reviewed.

13. What improvements in the filmstrips are recommended?

The most common recommendations by reviewers was to include more minorities, handicapped, elderly, and women in the filmstrips and to portray the sexes in nontraditional occupations.

Table 80

Strengths and Weaknesses of Career Planning and Decision-Making
Filmstrips Identified by Reviewers

Filmstrip Title	Strengths	Weaknesses
Career Interests	<ul style="list-style-type: none"> • combining interests to relate to career and use of leisure activities as means of confirming interests • suggestions to seek out new experiences as means of confirming interests • interests shown since childhood 	<ul style="list-style-type: none"> • male narrator and actors • title not appropriate • age stereotyping
Work Activities	<ul style="list-style-type: none"> • social orientation • total content • presentation of concepts and information • not biased to occupations requiring advanced education and training • elderly depicted • both sexes depicted as actors and narrators • variety of occupations shown • graphics of each type of activity 	<ul style="list-style-type: none"> • difficult to discriminate between activities and situations • repetitions and obvious at times • hesitancy by narrator in speaking at the beginning
Work Situations	<ul style="list-style-type: none"> • Blacks and females well represented • plot • related well to life experiences • social orientation • picture and sound quality • total content • reality of need to adapt student desires to demands of world of work • variety of work situations • portrayal of purpose 	<ul style="list-style-type: none"> • distinction between activities and situations • deals more with adaptive skills and behaviors, not work situations • hard to follow all types of work situations
What Are Aptitudes?	<ul style="list-style-type: none"> • age groups varied • examples of school activities and every day life • specificity • took mystique out of aptitude testing and showed relationship to Worker Trait Groups • stage production as example of different aptitudes 	<ul style="list-style-type: none"> • excerpt from text too small to read • narration a little too fast • character playing tennis pro held racquet incorrectly • Elizabeth (main character) never spoke • male narrator only
Career Decision-Making	<ul style="list-style-type: none"> • minorities well represented • introduction to program • prompted lively discussion • picture quality and sound • social orientation • realistic information and content • reality of need for flexibility in careers and possibility of having to sell self after graduation • nontraditional occupations shown 	<ul style="list-style-type: none"> • voice of elderly man not appropriate • narrator and music boring

Table B0 (continued)

Filmstrip Title	Strengths	Weaknesses
Career Planning and Decision-Making: Part I	<ul style="list-style-type: none"> • content complements and summarizes text • clear purpose • absence of sex and ethnic bias • students could identify with subject and decision making process • technical quality • minority depicted • good overview of steps to be taken 	<ul style="list-style-type: none"> • emphasis on competencies and credentials • title confusing with filmstrip which follows • no older students • middle class bias • male narrator • some of vocabulary might not be understood • might be difficult for some to follow
Career Planning and Decision-Making: Part II	<ul style="list-style-type: none"> • picture quality • length • to the point 	<ul style="list-style-type: none"> • small writing on slips of paper • title confusing with previous filmstrip • male narrator • assumption that women must value a husband and family • no minorities • all 18-19 year old students
Career Goals	<ul style="list-style-type: none"> • motivates one to think of long range goals • motivates student to complete textbook assignments • presentation of concepts and information • social orientation • picture and sound quality • total content • absence of sex and role stereotyping • help for women in seeing possibility of career and home • use of spare and part time work for confirming career goals • minorities and handicapped depicted • introductory music 	<ul style="list-style-type: none"> • male narrator and actors
Career Progress	<ul style="list-style-type: none"> • emphasis on early planning • use of class assignments to develop strengths and abilities • importance of making choices • career development as area of growth giving opportunity to change and develop on day-to-day basis • content • format • frame of minority and white student at beginning 	<ul style="list-style-type: none"> • dress of student actor reporting for interview • balance of minorities-whites • male narrator and actors • several frames slightly out of focus

Discussion and Conclusions

This section will provide a discussion of the results described in the previous section and the conclusions based on these results. Discussion and conclusions are organized according to the formative and summative phases of the evaluation.

Formative Evaluation

Formative evaluation results provided the CPDM course developers with information on which to base revisions for course improvement. Formative information was provided by both students and instructors of the CPDM course.

Before field test results could be interpreted, it was necessary to determine if the course was taught as intended and to what extent students participated. Process monitoring in the Instructor's Guide revealed that, for the most part, instructors taught the course according to the prescribed methods. Several instructors supplemented course activities with exercises such as guest speakers, reports, and interest and aptitude surveys. However, only one instructor gave evidence of markedly deviating from course procedures and the class involved was dropped from the evaluation study.

Monitoring of the student text revealed five of the fifteen field test classes did not complete Unit V prior to the end of the school term and six classes did not complete Unit VI. This information, plus student and instructor evaluation comments relating to time limitations experienced during the course, suggests a need for review and revision of time management.

Although the course was designed for college freshmen in academic programs, 56 percent of the students enrolling in the course were freshmen, 33 percent were sophomores, and the remaining 11 percent were juniors or seniors. Most of the field tests students (86 percent) were enrolled in academic programs.

Eighty-nine percent of the students read at least half of the text and 67 percent read at least three-fourths. Ninety-four percent of the students completed at least half of the text activities and 75 percent completed three-fourths or more. In light of the fact that a number of classes were unable to finish the course during the school term, it is felt that these percentages reflect an acceptable level of student participation.

Regarding class involvement, 98 percent of the students indicated they usually came to class, 85 percent usually participated in class discussions, and 97 percent usually completed homework assignments. These percentages indicate a high level of student involvement in the course.

It was concluded from the process monitoring that the course was implemented as intended.

In interpreting instructor comments and responses, it was helpful for developers to know the background and expectations of the field test instructors. The majority of instructors had formal backgrounds in counseling and guidance fields and previous experience teaching a career development course. Most instructors identified themselves most closely with the career development theories of Super and Holland (prior to the course) and defined career development as an ongoing, lifetime process.

Although one instructor's description of course expectations seemed too global to be realistic: "to define and refine their sense of direction in their future life," the other expectancies expressed by instructors seemed realistic and appropriate for the course.

Anticipated institutional benefits most often expressed were increased student satisfaction, less attrition, and increased direction in career planning.

All but one instructor indicated they were instrumental in getting the course implemented at their institution and all but one indicated motivation to teach the course.

It was concluded from these findings that field test instructors were qualified and motivated to teach the course and held realistic expectations for course outcomes.

As an indication of course content validity, instructors were asked on the pretest, what content they thought should be included in a freshman career development course. Eighty percent indicated knowledge of self, 67 percent indicated knowledge of the world of work, 40 percent indicated a decision-making process, and 20 percent indicated generation of alternatives. All of these domains are included in the CPDM course. These findings provide support for the content validity of the course.

Formative evaluations were conducted on each of the course components to identify areas needing revision. These components are the CPDM Instructor's Guide, College Major-Occupation Index, CPDM filmstrips, CPDM student text, and the AEL Career Information System.

Instructor's Guide. In evaluating the CPDM Instructor's Guide, the majority of the field test instructors indicated:

- equipment and materials needed for activities are appropriate and available
- planning and preparation activities are adequate for teaching material
- format and appearance of the Guide are acceptable
- filmstrip discussion questions are acceptable
- suggested activities and class management techniques are acceptable
- major competencies for each unit are acceptable
- orientation to course materials is acceptable
- length of activities is acceptable

Although the majority of instructors indicated the Guide is effective in its field test form, some instructors identified areas which could be improved. Suggested improvements included better organization, more effective time management, and guidelines for filmstrip discussions.

It is concluded from the field test results that the CPDM Instructor's Guide is effective in its present form; however, revisions in organization, time management, and filmstrip discussion guidelines would increase the effectiveness of the Guide.

College Major-Occupation Index. Instructors reviewing the Index indicated that approximately 90 students used the College Major-Occupation Index. All field test instructors reviewing the Index found it adequate in:

- representation of the relationship between college education and occupations
- directions for use
- format
- overall appearance

- potential usefulness of content

Instructors also found the following aspects of student use of the Index effective:

- student understanding of content
- student ability to follow directions presented in the student text for using the Index
- exposure to the Index promoting further student career planning behavior
- student ability to locate desired information in their college catalog from majors and occupations listed in the Index
- helping students move toward more-specific career goals/plans

One instructor disagreed with the effectiveness of the Index in the third and fifth area listed. However, the rationales provided supported, rather than contraindicated, effectiveness in these areas.

Instructors indicated students encountered no problems in using the Index. The only recommendation given was to have more Indexes available for student use.

With the exception of one community college instructor, all instructors indicated the majors listed in the Index are representative of the majors offered in their institutions. This finding adds support to the content validity of the Index. In addition, all instructors give support to the validity of the relationships between the occupations and majors defined in the Index. Instructors also indicated the Index is an appropriate product to help students establish the relationship between majors and occupations.

Instructors considered all of the prescribed uses of the Index feasible and identified a number of unanticipated uses. These include:

- 142
- use in general career resource center
 - use during individual counseling sessions
 - use as a supplement with an institution's own guide for college majors

Potential uses instructors generated in addition to the prescribed uses include:

- use as the basis for developing in-house bibliographies on particular career fields
- use in the development of curriculum guides listing appropriate career options for particular majors
- use in workshops for academic advisors

Instructors provided no recommendations for improving the Index.

It is concluded that the College Major-Occupation Index is effective in its field test form based on the evaluation questions asked and the field test results obtained.

Filmstrips. Formative evaluation was collected on nine CPDM course filmstrips during the field test. The results indicate that:

- all filmstrips have a clear purpose
- all filmstrips have titles which accurately represent content
- all filmstrips have a minimal amount of extraneous material
- all filmstrips contain concepts which are appropriate for a college student audience
- all filmstrips portray concepts appropriate for a college student audience
- all filmstrips present accurate information
- all filmstrips present current information

- all filmstrips motivate student discussion and/or participation in follow-up activities
- all filmstrips enhance the material presented in the textbook
- all filmstrips are acceptable in picture quality, sound quality, and length
- some types of bias/stereotyping are evident in the filmstrips

The biases detected most often in filmstrips were:

- age bias in "Career Interests" detected by three of eight reviewers
- sex bias in "Work Activities" detected by three of ten reviewers
- sex and ethnic bias in "What are Aptitudes," the former detected by three, and the latter, by four of seven reviewers
- ethnic and age bias in "Career Goals," the former detected by four, and the latter, by three of the seven reviewers

The incidence of bias in these four filmstrips suggests review and revisions should be considered.

Field test results also revealed strengths and weaknesses of each filmstrip. This information (refer to Table 80) will be helpful for developers in making final filmstrip revisions. In recommending improvements, reviewers focused on the biases detected.

The field test results on the CPDM filmstrips indicate that the nine filmstrips are effective for use with the course with the exception of biases present in "Career Interests," "Work Activities," "What are Aptitudes?," and "Career Goals." These four filmstrips should be reviewed for revisions.

Student textbook. Monitoring activity completion in the student text provided formative information regarding difficulties encountered in completing text exercises and summative information regarding objectives achievement.

In reviewing the random sample of student textbooks collected from each field test class, it was evident that some exercises were not assigned by instructors and some which were assigned were completed on photocopied forms rather than written into the textbooks. Therefore, the percent of students completing some of the exercises designated as criteria for objective achievement may be lower than actual performance. For the purpose of revisions, those objectives which less than 60 percent of the target population were able to achieve were examined. In several instances, it was determined that more explanation in the Instructor's Guide was needed to assist instructors in explaining directions or emphasizing concepts. In other cases, better organization of material in the student text and clarification of content and procedures were deemed as appropriate revisions. The comments which field test instructors provided in their Guides were helpful in determining revision alternatives.

Career Information System. To complete a number of the course activities, students had to use career information resources. In order to determine what types of resources were used most often, particularly AEL Career Information System materials, students were asked how often they used specific resources. Results reveal that the Worker Trait Group Guide, Dictionary of Occupational Titles, and Occupational Outlook Handbook were used most often. The Keysort Deck, Worker Trait Group File Content Notebook, and Alphabetical Index to Occupations were used least. The percentage of

students using the Technical Major-Occupation Index is small because this Index was only available at institutions which have two year programs.

The high percentage of students not using the key-sort deck is surprising in light of the popularity of the deck at workshops and training sessions. One possible explanation for 53 percent never using the deck is students not being instructed in the mechanics of using the deck.

In addition to the component evaluations just discussed, formative information was collected on the course as a whole. Helpful and unhelpful aspects and strengths and weaknesses of the course perceived by students and instructors provided valuable information to consider in making revision decisions.

In listing helpful aspects of the course, students provided evidence of recognition of their own growth during the course (see Appendix S). Most indicated helpful aspects in terms of some personal impact; i.e., it helped me..., showed me..., allowed me..., provided me.... It appears that students recognize the course impact on themselves.

The unhelpful aspects of the course which were identified revealed not only the common problems of time constraints and mechanics of chart completion, but also the varied characteristics of the target group in terms of motivation and ability: some students thought the course was too hard and some thought it was too easy; some thought the text was difficult to understand and some thought it was too juvenile; some indicated they had already decided on a career and some indicated they still hadn't been able to decide on one.

In describing what they liked best about the course, most students again spoke in terms of personal impact. However, in describing what

was disliked most, the majority of students expressed specific components; i.e., filling out the chart, or they expressed nonpersonal generalities; i.e., course tended to be general and boring.

Students described what happened to them as a result of being in the course and again provided evidence of growth recognition:

I did decide to go to school, if only for one year. If I had not taken the course, I would have tried to find any old job.

I am better able to understand and make decisions.

I know basically what I want. I was uncertain about what I could get from college, now I realize how important education really is for me.

I became more aware of myself, and I learned many things concerning the world of work that I did not know before.

I made the decision to pursue a career, an option I had avoided because of an inability to imagine what careers were available.

I have a fuller awareness of my career goal and how to reach it now.

I have confirmed my choice of major and decided to declare my major.

I learned what is available in the world of work and that I'm not necessarily tied to any decisions I have to make. Therefore, I want to become a social worker (but I might change my mind).

I gained a great deal of knowledge and was finally capable of putting together my interests, goals, and aptitudes into a constructive career goal and outline.

Student evaluative comments indicated three primary areas which could be improved through revisions: time management, mechanics of chart completion in the workbook, and clarity of instructions for completing exercises. Also, since students seem to get bogged down in completing

all the self exploration activities in Unit II, revisions which would help students see how the activities fit into the total course framework would be helpful.

Instructors also provided formative information on the course as a whole. The most common problems instructors encountered teaching the CPDM course were completing material in the time available and monitoring student performance.

Instructors perceived the strengths of the course in the design and model of a systematic and comprehensive approach to career development curriculum. They felt that sophomores as well as freshmen would benefit most from the course and particularly students who were open and willing to invest the time and energy necessary.

Other than in some of the filmstrips, instructors did not detect any biases in course materials.

How would instructors teach the course differently? The most common responses were improving time and class management and tailoring the course in minor ways to accommodate instructor preferences.

In summary, the formative evaluation produced information on which developers could base revisions of the CPDM course. The primary revisions indicated are:

- removal of biases in filmstrips
- improvement of time management
- improvement of classroom management, including student evaluation
- streamlining of mechanics for chart completion in the student text
- increase clarity of instructions for student activities

Both students and instructors furnished information supporting the adequacy and effectiveness of the components of the CPDM course. The summative evaluation section will present a discussion of the overall effectiveness of the course.

Summative Evaluation

The summative evaluation was conducted to assess the overall effectiveness of the program. Effectiveness was viewed in terms of both statistical and practical significance of course outcomes (impact).

Prior to discussing differences between CPDM and non-CPDM students, it is necessary to look at the comparability of these two groups. Experimental and control student classes were similar in age, sex, previous work experience, and willingness to enroll in a career planning and decision-making course.

Results of statistical analyses indicate that students completing the CPDM course made significantly greater gains in the following career development areas when compared with non-CPDM students.

- Progress in selecting a college major.
- Progress toward selecting an occupation to pursue after college completion.
- Knowledge about college majors.
- Knowledge about the relationship between college majors and occupations.
- Knowledge about occupations of interest.
- Understanding of self in relation to work.
- Quality of decision-making process.
- Rating the effectiveness of one's decision-making process.

- Accuracy in defining the terms "work" and "career."
- Ability to identify criteria for evaluating career information.

CPDM students did not make significantly greater gains than non-CPDM students in the areas of:

- Rational Style of decision-making
- Intuitive style of decision-making
- Dependent style of decision-making
- Making and implementing the decision to attend college

CPDM students made significant pre-post positive gains in Rational Style and predictive gains in decreased Dependent Style of decision-making during the course. These significant gains and the evidence of higher CPDM gains as compared to non-CPDM gains, although not significant at the 05 level, do suggest a positive impact of the course on students' Rational and Dependent decision-making style.

Although CPDM students decreased their intuitive decision-making styles and non-CPDM students increased their styles, there were no significant changes during the term in Intuitive decision-making. This finding may partially be explained by the existence of intuitive dimensions in the CPDM course. The decision-making process taught in the course consists of both Rational and Intuitive Style elements.

Regarding the area of making and implementing the decision to attend college, both CPDM and non-CPDM students made significant gains during the term. It appears that experiencing college may increase student progress in this area. The findings did not support a significant impact by the CPDM course in student progress in adjusting to college.

In addition to the statistical significance of course outcomes, practical significance of outcomes was emphasized in determining overall course effectiveness.

In this study, practical significance refer to achievement of course unit objectives and student and instructor evaluations of effectiveness.

The standard originally set for objectives achievement during the field test was that 85 percent of the target population would achieve each objective. Several issues arose during the course which make this level of achievement unrealistic for basing decisions on course effectiveness:

1. Since criteria for meeting objectives were based only on textbook responses, those classes who were not able to complete Units V and VI were not able to attempt completion of objectives for those units. The achievement level for Units V and VI are not accurate indicators of student performance based on the course experience.
2. Because of time constraints, some instructors did not assign completion of every course activity. Again, the achievement level would appear lower for the related objectives.
3. Some instructors requested that students complete some activities on photocopied sheets of the textbook so that these sheets could be collected for monitoring student performance. The achievement level for related objectives would therefore appear to be lower.

Since 60 percent (N=8) of the 14 classes on which objective achievement was determined completed all six units of the course during the term, the standard for the field test was revised to 60 percent of the target population completing each objective.

Based on the revised standard, 71 percent (N=34) of the 48 objectives were achieved at the level indicating effectiveness. The 14 objectives not meeting the standard included all six objectives for Units V and VI as

as well as four objectives from Unit III, three from Unit II, and one from Unit V. As discussed in the formative evaluation section, those objectives for which the standard was not attained were reviewed and recommendations made for revisions. Table 58 on page 82 gives the percent of students meeting each objective. The 71 percent of objectives met at the level defined by the standard supports the practical significance of the CPDM course.

Another indication of practical significance is student evaluation of their course experience. Ninety-eight percent of the CPDM students felt that an important function of a college is providing experiences in career planning and decision-making. This finding adds support to the appropriateness and need for a course such as CPDM as basic curriculum in college.

Students indicated the course helped them develop:

- a greater understanding of themselves
- a greater understanding of the world of work
- a career plan taking into consideration self and milieu
- increased awareness of their career goal and its appropriateness for them

Students found the planning and deciding process taught in the course to be personally useful and indicated the course helped them gain a greater sense of control over their career. In addition to these self appraisals of course impact, students indicated they were not only pleased overall with the course, but would recommend the course to friends who wanted career guidance.

These findings indicate that students find the CPDM course important, helpful, and useful, and that they recognize the impact of the course on their lives.

Practical significance is also supported by instructor outcomes and evaluations. An unanticipated course outcome was the increase in quality in instructor decision-making processes, criteria being the CPDM decision-making process. Apparently, teaching the CPDM course influences the instructors' decision-making processes, enhancing the quality of the process. Another unanticipated instructor outcome was the increase in the number of instructors identifying most closely with the career development theory of Tiedeman, the framework on which the course is based.

Results from the instructor evaluations indicated the course is appropriate for college students. Instructors supported the effectiveness of the course indicating:

- students seemed interested in the course
- instructional strategies used in the course materials are effective in teaching the intended skills and knowledge
- the course prompted career planning and decision-making behavior by students
- major competencies are attainable from unit completion
- course content is comprehensive in terms of the career planning and decision-making process
- activities are appropriate for teaching the course concepts
- language and concepts presented in the course enable students to more effectively understand and discuss career concerns

Further evidence of practical significance of the course was provided by instructor identification of institutional benefits. These included:

- providing intense guidance services
- enabling students to become more goal oriented

- providing information and guidance to students not reached by counseling centers
- providing increased use of career centers
- promoting increased student satisfaction, and thus retention at the college
- providing information and guidance for nonacademically (technical) oriented students

In summarizing their experiences with the course, instructors indicate that (1) the Instructor's Guide enables effective course instruction; (2) materials are free of bias; and (3) overall, they are pleased with the course. They rate the CPDM course as being better than other available career development courses and indicate they would recommend the course for helping students in their career development.

Summary

Formative evaluation results provided the developers with information on aspects of the CPDM course which are effective and areas which may be improved by revisions. The Instructor's Guide is effective in its field test form, but can be improved by revisions in time and class management and provisions for student performance evaluation. The course filmstrips can be improved by removing biases detected and improving discussion guidelines. The College-Major Occupation Index is effective in its field test form and results failed to provide evidence of areas needing improvement. The student text is effective in its field test form but can be improved by "streamlining" the mechanics of chart completion and clarifying some instructions.

The decision criteria identified in Table 14, page 21 for determining effectiveness of the Career Planning and Decision-Making course included a meta evaluation by an external reviewer in addition to statistical and practical significance demonstrated. The meta evaluation summary can be found in Appendix V.

Although the CPDM course was developed for use by college undergraduates, a small percentage of the field test students were juniors and seniors who also used the materials effectively. There was not a sufficient number of juniors and seniors participating to allow evaluation of the course for upperclassmen.

The summative evaluation results provided evidence of objectives achievement, program impact, and usability. The statistical and practical significance demonstrated in these areas indicate that the CPDM course is an effective career development curriculum for freshmen and sophomore college students.

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APPENDIX A

Field Test Participation Letters Sent to Random Sample
of Students at ETSU

Control Sample Draft Letter
Post-Test
ETSU/AEL field test
ETSU stationery to be used

Dear

I would like to request your help in carrying out a research study to examine the need to offer ETSU freshmen a course on career planning and decision making. The University is cooperating with the Appalachia Educational Laboratory in the field testing of a course of this nature. The experimental design being used requires that a randomly selected sample of students be identified to serve as members of the control group. This group is not to take the course but is to serve as the basis for determining the effectiveness of the course. Data will be collected from students in the control group during the Spring Quarter in the same manner as those students in the course. Information is to be gathered on the experimental and control groups at the beginning and the end of the Quarter. Members of the control group you have been identified for are being asked to contribute about two hours of time at the end of the Quarter for the collection of this data.

I would like to invite you to serve as a member of the control group. Please indicate your willingness to participate by filling out and returning the form below. If your response is positive, you will be contacted regarding the data collection schedule well in advance of the proposed time.

If you have any questions, please contact _____ (name) at _____ (phone number). Thank you for your cooperation.

Sincerely,

(Signature, President of University)

-
- I am willing to participate in data collection at the end of Spring Quarter.
- I am not willing to participate.

Return this form to:

name
address
phone number

Control Sample Draft Letter
Pretest/Posttest
ETSU/AEL field test of PS/CDM
ETSU stationery to be used

Dear

I would like to request your help in carrying out a research study to examine the need to offer ETSU freshmen a course on career planning and decision making. The University is cooperating with the Appalachia Educational Laboratory in the field testing of a course of this nature. The experimental design being used requires that a randomly selected sample of students be identified to serve as members of the control group. This group is not to take the course but is to serve as the basis for determining the effectiveness of the course. Data will be collected from students in the control group during the Spring Quarter in the same manner as those students in the course. Information is to be gathered on the experimental and control groups at the beginning and the end of the Quarter. Members of the control group you have been identified for are being asked to contribute about two hours of time at the beginning and at the end of the Quarter for the collection of this data.

I would like to invite you to serve as a member of the control group. Please indicate your willingness to participate by filling out and returning the form below. If your response is positive, you will be contacted regarding the data collection schedule well in advance of the proposed time.

If you have any questions, please contact _____ (name)
at _____ (phone number). Thank you for your cooperation.

Sincerely,

(Signature, President of University)

-
- I am willing to participate in both testing sessions.
(beginning and end of Spring Quarter)
- I am not willing to participate.

Return this form to:

name
address
phone number

183

APPENDIX B

Assessment of Career Decision-Making
(Form B)

ASSESSMENT OF CAREER DECISION-MAKING (FORM B)

Vincent A. Barron, Ph.D.

This questionnaire is designed to help college students assess their degree of progress toward making and carrying out decisions affecting their career. It is a way of finding out where a person is in his or her career planning, and what a person's present attitudes, feelings, needs, or concerns are. This information will help you determine what kinds of help you may need in your career exploration and career planning activities.

Since this is the purpose, there are no right or wrong answers to the statements. Circle A (Agree), or D (Disagree) for each statement, depending on whether or not it applies to you; that is, something you could or would say about yourself.

There are three separate parts to this questionnaire: Part I has to do with your decision to go to college and how you feel about being in college; Part II deals with your decision or plans about your major field of study in college; and Part III assesses your decision or plans about your occupation. Treat each part separately; that is, don't worry about being consistent from one part to another, since each part assesses a different decision-making task: college, major, and occupation.

PART I DECISION-MAKING TASK: COLLEGE

This part has two sections. For Section A, My Decision to Go to College, think back to before you came to college and how you made your decision, as you remember it or think about it now.

A = Agree
D = Disagree

Section A My Decision to Go to College

- A D 1. I came to college because my parents expected me to.
- A D 2. I decided to go to college when I realized that the careers I was interested in required college degrees.
- A D 3. I made my decision to go to college pretty much on the spur of the moment, without thinking much about it.
- A D 4. My high school teachers kept encouraging me to go to college.
- A D 5. Before coming to college, I studied the college catalogues carefully.
- A D 6. My reasons for going to college weren't very clear.
- A D 7. I really didn't have much choice; going to college was just the thing to do in my high school.
- A D 8. My friends who were going to college had a lot to do with my decision to go.

- A D 9. I talked with my guidance counselor (or teachers) in high school about going to college.
- A D 10. When I decided to go to college, I just listened to my feeling; it was what I wanted to do.
- A D 11. I came to college because I felt that having a college degree was important in order to be accepted.
- A D 12. Getting good grades in high school was important to me because it would increase my chances of getting to go to college.
- A D 13. Before deciding to go to college, I carefully considered other alternatives.
- A D 14. When I made up my mind to go to college, it just felt right inside.
- A D 15. Before deciding to go to college, I visited the campus to find out more about it.
- A D 16. When I was in high school, I can remember daydreaming about how great it would be to be a college student.
- A D 17. My decision to go to college was pretty much an intuitive one, not carefully planned out.
- A D 18. I came to college to please other people, not because I really wanted to.
- A D 19. I chose my electives in high school on the basis of what would help me most in college.
- A D 20. Everybody in my family went to college; I just never questioned it.
- A D 21. I don't think I had a reason for going to college; I just did it.

Section B How I Feel About Being in College

For the rest of the questionnaire, all of the statements are in the present tense. Mark the statement Agree only if you feel this way right now. You may have felt this way in the past, or you could conceivably feel this way in the future, but if you aren't concerned about this right now, or if this is not relevant to you right now, mark it Disagree.

- A D 22. I don't know what the instructors in my courses expect.
- A D 23. I believe I've been pretty successful in adjusting to college.
- A D 24. People are starting to listen to some of my ideas around here.
- A D 25. I've been talking some of my friends back home into going to college.
- A D 26. I'm trying to find out what the people I live with want of me.
- A D 27. People here seem to respect me and value my ideas.
- A D 28. I'm just beginning to feel a part of things around here.
- A D 29. I feel like we are all helping each other to accomplish our goals.

- A D 30. This college seems to be meeting my expectations and needs pretty well.
- A D 31. It's hard to know how to act at this school.
- A D 32. I don't feel that I really belong here yet.
- A D 33. I've been trying to get some of my instructors to change their course requirements around to fit my individual needs better.
- A D 34. I'm trying to get other students involved in things, instead of just sitting around.
- A D 35. My parents are giving me more rope to be on my own.
- A D 36. The encouragement and support I've gotten has helped me to try harder to do well.
- A D 37. I've been getting a lot of positive feedback from my instructors.
- A D 38. I'm less afraid to speak up in class when I don't agree with the instructor.
- A D 39. Most of the students here seem to have attitudes and values like mine.
- A D 40. My parents are treating me more like an adult.
- A D 41. Some of my instructors have helped me to get a more objective picture of myself.
- A D 42. I've had to change in some ways in order to get along with people here.
- A D 43. I'm learning to be more assertive to get what I want.
- A D 44. I wonder if further education is worthwhile for me.
- A D 45. I'm pretty satisfied with the way things are working out for me here.

PART II DECISION-MAKING TASK: MAJOR

What I Want to Study

- A D 46. I have a wide range of course interests.
- A D 47. I need to take a lot of different courses to see what I like.
- A D 48. I like most of the teachers and students in my major.
- A D 49. I'm pretty certain about my choice of major.
- A D 50. It would take a lot to make me change my mind about my major.

- 5
- A D 51. If I choose the wrong major, it could slow me down in getting through college.
- A D 52. I need to consider my interests in choosing a major.
- A D 53. I don't know how to go about choosing a major.
- A D 54. There just isn't anything else that I'd rather major in.
- A D 55. My past experiences in school should help me decide on a major.
- A D 56. The more I think about a major, the more confused I get.
- A D 57. It's a relief to have decided on my major.
- A D 58. I realize my major limits the kinds of future goals I can set for myself.
- A D 59. Some of the advanced courses in my major look pretty hard.
- A D 60. I enjoy telling people what I'm majoring in.
- A D 61. I need to decide on a major.
- A D 62. I've changed my mind about my major because of some of the courses I've taken.
- A D 63. I haven't definitely decided against any major.
- A D 64. I've decided what I will major in.
- A D 65. I wonder how I will fit in with other students in my major.
- A D 66. My major gives me a sense of identity so that I'm beginning to know myself better.
- A D 67. My major gives me a sense of purpose and direction.
- A D 68. I can't decide which of two or three possible majors to choose.
- A D 69. I know what major I want, but I don't know what I could do with it after I graduate.
- A D 70. I want to know what major I would be best at.
- A D 71. I get pretty wrapped up in discussions about things in my major.
- A D 72. I wish I knew what I wanted to study.
- A D 73. I don't know if I'm capable enough for the majors I'm considering.
- A D 74. I don't know what courses to take next semester.
- A D 75. Most of my friends are either in my major or a closely related one.

- A D 76. My interests and attitudes are like most of the students in my major.
- A D 77. Courses in my major are easy for me.
- A D 78. I don't know what majors or programs are available here.
- A D 79. I was wrong about my major, but it has helped me to see what I don't want.
- A D 80. I'm looking forward to getting into the advanced courses in my major.
- A D 81. I need to choose my courses more wisely than I have in the past.
- A ~~B~~ 82. When people know what your major is, they expect you to act in a certain way.
- A D 83. I need several electives that can't be in my major.
- A D 84. I'm looking forward to getting to know other students in my major.
- A D 85. I don't know what minor to take with my major.
- A D 86. I see some disadvantages to the major I am considering.
- A D 87. I need to see an advisor in my major to plan the rest of my program.
- A D 88. There are just so many different kinds of courses I would like to take.
- A D 89. There are a number of majors which I have decided against.
- A D 90. I've looked into several programs, but I don't know what I'm really looking for.
- A D 91. I need a program that is broad and flexible.
- A D 92. Since choosing a major, my personality seems to be changing.
- A D 93. I really get involved in courses in my major.

PART III DECISION-MAKING TASK: OCCUPATIONS

Where I am Heading After College

- A D 94. What I used to think I wanted to become doesn't seem practical anymore.
- A D 95. Almost any career seems appealing to me.
- A D 96. I think I'll be happy with the career I have chosen.
- A D 97. I wonder what kind of job I'll be able to get in my field.

- A D 98. My attitudes and outlook are becoming more like the people I know in my field.
- A D 99. I need to plan ahead for the future.
- A D 100. I want a career that will give me the kinds of rewards I need.
- A D 101. I'm trying to decide between two or three possible careers.
- A D 102. My plans for the future are too indefinite.
- A D 103. I'm pretty certain about the occupation I will enter.
- A D 104. The occupation I have chosen will affect the kinds of friends I will have in the future.
- A D 105. I'm tired of waiting to begin work in my field.
- A D 106. I want to know what field of work I'm best suited for.
- A D 107. There are several careers which I have already decided against.
- A D 108. I don't know what I really want out of life.
- A D 109. I hope I can find a job in my field after I graduate.
- A D 110. I'm a lot happier now that my future career is clear to me.
- A D 111. I won't let anything get in the way to my reaching my goal.
- A D 112. I don't have enough experience for a job in my field.
- A D 113. I need information about occupations.
- A D 114. The more I learn about things in my field, the more involved I become.
- A D 115. I need to find out what jobs are available in my field.
- A D 116. I've decided on the field I am going into.
- A D 117. I'm interested in too many fields.
- A D 118. I've become more realistic in my thinking about possible careers.
- A D 119. I've changed my mind about what I wanted to become, now that I've learned more about the field.
- A D 120. I hope the people in my field will accept me.
- A D 121. I'm more certain of the fields I don't want than what I do want.
- A D 122. I need to decide on an occupation.
- A D 123. I know what's important to me, but I don't know what kind of career would meet most of my needs.

- A D 124. It's hard to know what to look for in a career.
- A D 125. I need to start thinking about job interviews.
- A D 126. The career I have chosen fits in with my personality.
- A D 127. I wonder if I will be successful in life.
- A D 128. I need to know more about the training required for some of the occupations I am considering.
- A D 129. I will probably have to move away from here to get a job in my field.
- A D 130. I expect to go a long way in my field.
- A D 131. I don't know if I have the right kind of personality for the work I'm considering.
- A D 132. I don't know how to look for a job in my field.
- A D 133. I feel I can overcome any obstacles in the way of my goal.
- A D 134. I can't decide on a career because my interests keep changing.
- A D 135. The people in my field have certain expectations of me.
- A D 136. I want to be trained for a specific job.
- A D 137. It's unlikely that I will change my mind about my career plans.
- A D 138. I don't know how to go about deciding on a career.
- A D 139. There are not many job opportunities in the field that I really like.
- A D 140. I'm looking forward to getting out of school and getting started in my career.
- A D 141. I think I'm ready to choose a specialty within my chosen field.

ASSESSMENT OF CAREER DECISION-MAKING

Basic Information

When you have completed the Assessment of Career Decision-Making questionnaire, please fill out this form. The information provided here, as well as your responses to the questionnaire will be regarded as confidential.

1. How satisfied are you at this college? (Circle a number on the scale below.)

1 2 3 4 5 6 7 8 9
Dissatisfied Satisfied

2. Have you made a choice of major? Yes No (If yes, continue; if no, leave rest blank.)

3. What is your tentative choice of major? _____

4. How certain are you of this choice? (Circle a number on the scale below.)

1 2 3 4 5 6 7 8 9
Uncertain Certain

5. How satisfied are you with this choice?

1 2 3 4 5 6 7 8 9
Dissatisfied Satisfied

6. What is your tentative choice of occupation? _____

7. How certain are you of your choice?

1 2 3 4 5 6 7 8 9
Uncertain Certain

8. How satisfied are you with this choice? (Circle a number on the scale below.)

1 2 3 4 5 6 7 8 9
Dissatisfied Satisfied



APPENDIX C

Pre and Post Student Achievement Tests

4. How much do you feel you know about the occupations and opportunities for employment that relate to various college majors? Do you know what occupations you could enter and what the employment opportunities are? Indicate how much you feel you know about this on the scale.

1	2	3	4	5
very little				a lot

5. How seriously have you thought about your career and occupations up to now? Read the following statements and the corresponding scale. The mark should indicate how concerned you were at different times.

I thought about my career during high school.	1	2	3	4	5
	very little				a lot

I thought about my career during my first year of college.	1	2	3	4	5
	very little				a lot

I plan to consider my career during the next three years.	1	2	3	4	5
	very little				a lot

I plan to consider my career after college.	1	2	3	4	5
	very little				a lot

6. What is your reason for going to college? You may have more than one reason. Can you describe briefly what being in college means to you?

7. Do you have an occupational goal? Can you identify an occupation or area of work that you are interested in? If you can, write the title of the occupation here: _____
 If you can't think of a specific occupation, you can identify a general area of work you are interested in? Write the area name here: _____
 How serious are you about your occupational goal? Mark the following scale to describe the importance of this goal to you.

1	2	3	4	5
not important				very important

8. How well do you feel you understand yourself with respect to your career? In the left column below are terms that relate to self and work. Read each one, think about how well you understand yourself in relationship to work in each of the categories. Then mark the scale to indicate how much you feel you know..

Occupational Interests	1 very little	2	3	4	5 a lot
Work Values	1 very little	2	3	4	5 a lot
Career Goals	1 very little	2	3	4	5 a lot
Aptitudes	1 very little	2	3	4	5 a lot
Abilities	1 very little	2	3	4	5 a lot
Working with People	1 very little	2	3	4	5 a lot
Work Skills	1 very little	2	3	4	5 a lot

9. How much do you feel you know about the world of work and opportunities for employment in the future? For each statement in the left column mark the scale to indicate how much you feel you know about:

occupations that interest you	1	2	3	4	5
	very little				a lot

qualifications for employment	1	2	3	4	5
	very little				a lot

salary and benefits	1	2	3	4	5
	very little				a lot

future job openings	1	2	3	4	5
	very little				a lot

opportunities for advance- ment	1	2	3	4	5
	very little				a lot

college prep- aration for employment	1	2	3	4	5
	very little				a lot

10. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making a decision? What steps do you follow? Describe briefly what you would do to reach a decision.

How well do you make your decisions? Indicate on the following scale how you rate your decision-making skills.

1	2	3	4	5
I just struggle along			I use a clear method for deciding	

Part II

Directions:

The following section deals with knowledge and concepts about the world of work. Read the following questions and respond appropriately.

11. What does the term work mean to you? Can you define the meaning this term has for you? What does it include? Write a definition.

12. The term career is becoming more popular. What does the term career mean to you? How does the term relate to what you are doing now; to an occupation; to a job? Describe its meaning to you.

13. There is a great deal of information about occupations and work in our culture. Are you aware of the basic ways in which it can be organized? What factors do you feel are used to classify and organize this information? List any you know or can think of.

14. For job openings, employers normally develop a list of the qualifications to be met by applicants. Can you identify the types of qualifications generally used in hiring and describe the kind of evidence an employer would be looking for? List them here.

15. Aptitudes are sometimes important in studying occupations. What is an aptitude? Write your definition of aptitude.

Give some examples of common aptitudes.

16. Assume you need to have information about occupations. Where would you go to get information about the following? In the left column are items about which information is available. On the line beside it write in the name of the source you would go to for the information. It should be a primary source and use the correct title for it. If you do not know, place a mark (X) in the column "I need help."

Information	Source	"I need help"
Information about a specific occupation	<hr/>	<hr/>
Information about a specific job	<hr/>	<hr/>
Information about salary and income	<hr/>	<hr/>
Information about working conditions	<hr/>	<hr/>
Information about employment outlook	<hr/>	<hr/>
Information about aptitude requirements	<hr/>	<hr/>
Information about groups of occupations	<hr/>	<hr/>
Information about educational requirements	<hr/>	<hr/>
Information about training and methods of entering occupations	<hr/>	<hr/>
Information defining a specific occupation	<hr/>	<hr/>

17. Occupational information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. It is therefore, necessary for you to have some way to evaluate this information. Have you had this problem? Answer: yes ___ no ___. When this problem occurs, what criteria would you use to evaluate this information. Explain how you would go about evaluating occupational information:

Student Achievement Posttest

EAST TENNESSEE STATE UNIVERSITY

Student's Name: _____

Social Security Number: _____

These are posttest materials. You are being asked to respond on this questionnaire as part of a study at ETSU on the relationship of college experience and career development.

Follow the directions for each Part. Similar questions may be asked in the different sections. Do not let this concern you. You should be able to move fairly rapidly through the materials. Be sure to consider each question before answering. Select the answer that best describes your feeling about the question.

Special Instructions for Part I

Some of your earlier responses have been recorded in this questionnaire for Part I. This involves only questions 1, 2, 4, 8, and 9. Each of these questions has been highlighted by a marginal note. The diagonal orange line (/) on the scale represents your first response. For these questions do the following: (1) read the statement and decide upon your response--disregarding your initial response. Mark your present response on the scale using an "X," (2) then reassess your earlier response and mark the scale with a vertical line (|) to show how you rate your knowledge of the subject at the start of the Spring Quarter.

Part I

Directions:

The following section deals with general questions about your status in college. There are no right or wrong answers. Respond to each question in the best way you can.

1. How much do you feel you know about the college majors offered at your school? This includes the area of study, course requirements, and eventual employment opportunities. On a scale from 1 to 5 with 1 as VERY LITTLE and 5, A LOT, indicate how much you feel you know about college majors.

Follow
Special
Instructions

1	2	3	4	5
very little				a lot

2. How much do you feel you know about the procedures for declaring your college major? This includes people to contact, steps to follow, and any paper work involved. Use the following scale to indicate how much you feel you know about this process.

Follow
Special
Instructions

1	2	3	4	5
very little				a lot

3. Where are you now in the process of selecting a college major? Read the following statements and check the appropriate responses--provide additional information if appropriate.

_____ I have not thought a great deal about the selection of my college major yet.

_____ I have thought about college majors but am still undecided.
I am considering the following areas: _____

_____ I have decided upon my college major. It is _____

_____ I have already changed my college major. My original selection was _____, but now I have changed to _____

allow special instructions

- 4. How much do you feel you know about the occupations and opportunities for employment that relate to various college majors? Do you know what occupations you could enter and what the employment opportunities are? Indicate how much you feel you know about this on the scale.

1	2	3	4	5
very little				a lot

- 5. How seriously have you thought about your career and occupations up to now? Read the following statements and the corresponding scale. The mark should indicate how concerned you were at different times.

I thought about my career during high school.

1	2	3	4	5
very little				a lot

I thought about my career during my first year of college.

1	2	3	4	5
very little				a lot

I plan to consider my career during the next three years.

1	2	3	4	5
very little				a lot

I plan to consider my career after college.

1	2	3	4	5
very little				a lot

- 6. What is your reason for going to college? You may have more than one reason. Can you describe briefly what being in college means to you?



7. Do you have an occupational goal? Can you identify an occupation or area of work that you are interested in? If you can, write the title of the occupation here: _____
 If you can't think of a specific occupation, you can identify a general area of work you are interested in? Write the area name here: _____
 How serious are you about your occupational goal? Mark the following scale to describe the importance of this goal to you.

1	2	3	4	5
not important				very important

Follow
Special
Instructions

8. How well do you feel you understand yourself with respect to your career? In the left column below are terms that relate to self and work. Read each one, think about how well you understand yourself in relationship to work in each of the categories. Then mark the scale to indicate how much you feel you know.

Occupational Interests	1	2	3	4	5
	very little				a lot
Work Values	1	2	3	4	5
	very little				a lot
Career Goals	1	2	3	4	5
	very little				a lot
Aptitudes	1	2	3	4	5
	very little				a lot
Abilities	1	2	3	4	5
	very little				a lot
Working with People	1	2	3	4	5
	very little				a lot
Work Skills	1	2	3	4	5
	very little				a lot

9. How much do you feel you know about the world of work and opportunities for employment in the future? For each statement in the left column mark the scale to indicate how much you feel you know about:

Follow
Special
Instructions

occupations that interest you	1 very little	2	3	4	5 a lot
qualifications for employment	1 very little	2	3	4	5 a lot
salary and benefits	1 very little	2	3	4	5 a lot
future job openings	1 very little	2	3	4	5 a lot
opportunities for advancement	1 very little	2	3	4	5 a lot
college preparation for employment	1 very little	2	3	4	5 a lot

10. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making a decision? What steps do you follow? Describe briefly what you would do to reach a decision.

How well do you make your decisions? Indicate on the following scale how you rate your decision-making skills.

1 I just struggle along	2	3	4	5 I use a clear method for deciding
----------------------------	---	---	---	--



Part II

Directions:

The following section deals with knowledge and concepts about the world of work. Read the following questions and respond appropriately.

11. What does the term work mean to you? Can you define the meaning this term has for you? What does it include? Write a definition.

12. The term career is becoming more popular. What does the term career mean to you? How does the term relate to what you are doing now; to an occupation; to a job? Describe its meaning to you.

13. There is a great deal of information about occupations and work in our culture. Are you aware of the basic ways in which it can be organized? What factors do you feel are used to classify and organize this information? List any you know or can think of.

14. For job openings, employers normally develop a list of the qualifications to be met by applicants. Can you identify the types of qualifications generally used in hiring and describe the kind of evidence an employer would be looking for? List them here.

15. Aptitudes are sometimes important in studying occupations. What is an aptitude? Write your definition of aptitude.

Give some examples of common aptitudes.

16. Assume you need to have information about occupations. Where would you go to get information about the following? In the left column are items about which information is available. On the line beside it write in the name of the source you would go to for the information. It should be a primary source and use the correct title for it. If you do not know, place a mark (✓) in the column "I need help."

Information	Source	"I need help" ✓
Information about a specific occupation	_____	_____
Information about a specific job	_____	_____
Information about salary and income	_____	_____
Information about working conditions	_____	_____
Information about employment outlook	_____	_____
Information about aptitude requirements	_____	_____
Information about groups of occupations	_____	_____
Information about educational requirements	_____	_____
Information about training and methods of entering occupations	_____	_____
Information defining a specific occupation	_____	_____

17. Occupational information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. It is therefore, necessary for you to have some way to evaluate this information. Have you had this problem? Answer yes _____ no _____. When this problem occurs, what criteria would you use to evaluate this information. Explain how you would go about evaluating occupational information:

APPENDIX D

CPDM Course Goals and Objectives

MISSION STATEMENT

The program will help students develop a greater understanding of a career as a continuous growth process, and learn to manage their own career development.

Learner Goals and Objectives

UNIT I GOAL: Students will apply the concepts of "career" and decision-making dimensions in examining their own experience.

Objective 1: Students will be able to list their definitions of career.

Objective 2: Students will be able to identify their career theme.

Objective 3: Students will be able to discuss the three dimensions composing a decision situation.

Objective 4: Students will be able to apply the decision-making dimensions to a decision of their own.

UNIT II GOAL: Students will establish occupational preference by integrating knowledge of self and work.

Objective 5: Students will be able to list their occupational, educational, civic, and home activities.

Objective 6: Students will be able to relate their interests to the 12 Career Areas.

Objective 7: Students will be able to differentiate the Worker Trait Groups and Career Areas they want to explore.

Objective 8: Students will be able to recall their experiences in each of the ten types of work activities.

Objective 9: Students will be able to rate their preferences for ten types of work activities.

Objective 10: Students will be able to identify those work activities they want to include and those to exclude in their careers.

Objective 11: Students will be able to recall their experiences in each of the ten work situations.

Objective 12: Students will be able to rate their preferences for ten work situations.

Objective 13: Students will be able to identify those work situations they want to include and those to exclude in their career.

Objective 14: Students will be able to estimate their aptitudes in 11 areas.

Objective 15: Students will be able to compare their aptitude self-estimates with the key aptitudes related to each Worker Trait Group.

Objective 16: Students will be able to list the titles of aptitudes they want to include and those to exclude in their career.

Objective 17: Students will be able to recall their preferred school subjects.

Objective 18: Students will be able to distinguish the Worker Trait Groups related to their preferred school subjects.

Objective 19: Students will be able to list school subjects they want to include and those to exclude in their careers.

Objective 20: Students will be able to choose Worker Trait Groups to explore based on positive factors listed on their Personal Profile Chart.

Objective 21: Students will be able to rate their reactions to each Worker Trait Group description and qualification profile given their ability to use the Worker Trait Group Guide.

Objective 22: Students will be able to list those physical demands, working conditions, worker functions, General Educational Development, and preparation and learning they want to include and those to exclude in their careers.

Objective 23: Given their completed Personal Profile and WTG Chart #2, students will be able to identify Worker Trait Groups they want to explore at the occupational level.

Objective 24: Students will be able to compose career value statements, given their completed values checklists.

Objective 25: Students will be able to prioritize their career values.

Objective 26: Given the WTG Guide, students will be able to select for exploration, occupations from the Worker Trait Groups identified on their WTG Chart #2, Column 10.

Objective 27: Given the CIS and the ability to use it, students will be able to complete one Occupational Information Summary.

Objective 28: Given the completed Occupational Information Summary and Worker Trait Group Chart #5, students will be able to differentiate those occupations which best meet their career values.

Objective 29: Students will be able to summarize their current occupational preferences.

UNIT III GOAL: Students will identify tentative career goals by learning to project personal values into the future.

Objective 30: Given the completed Personal Profile and Objective 25, students will be able to evaluate their present activities.

Objective 31: Students will be able to contrast their present activities with future preferred activities.

Objective 32: Students will be able to formulate their career goals.

Objective 33: Given the completion of Unit II, students will be able to revise their career theme.

UNIT IV GOAL: Students will develop a detailed career plan based upon their goals, knowledge of college options, and personal criteria related to their values.

Objective 34: Given their completed WTG Chart #3 and career goal statement, students will be able to differentiate those occupational preferences which relate to their career goal.

Objective 35: Students will be able to locate in their milieu the general and specific competencies and credentials which are required to enter the occupations related to their career goal.

Objective 36: Given Objective 35, students will be able to appraise those competencies and credentials they do not have.

Objective 37: Given the Field of Study-WTG Chart and Objective 36, students will be able to identify the fields of study related to their preferred Worker Trait Groups.

Objective 38: Given the College Major-Occupation Index, students will be able to determine the college majors and related occupations they want to further explore.

Objective 39: Given Objective 36, students will be able to determine the means their institutions offer for acquiring needed credentials and competencies.

Objective 40: Students will be able to formulate options for reaching their career goals.

Objective 41: Students will be able to evaluate their career options to determine their most desirable option.

Objective 42: Students will be able to develop their career plan.

UNIT V GOAL: Students will demonstrate the ability to decide and act with respect to the steps of their career plan.

Objective 43: Students will be able to work through a decision situation.

Objective 44: Students will be able to formulate the steps (actions) necessary to implement their selected option.

UNIT VI GOAL: Students will comprehend planning and deciding as an ongoing process and the means of controlling and shaping career.

Objective 45: Students will be able to apply the decision-making process to their daily lives; i.e., course selection.

Objective 46: Given new information about themselves and their milieu, students will be able to state their reassessed career goal.

Objective 47: Given their reassessed career goal, students will be able to update and revise their career plan.

Objective 48: Students will be able to identify how the knowledge and skills learned in the CPDM course increases control over their lives.

APPENDIX E

Assessment of Career Decision-Making
(Form C)

Social Security Number: _____

ACDM ANSWER SHEET (Side 1)

Instructions: Circle "A" for "Agree" and "D" for "Disagree"

PART I.

- | (A) | | (B) | | (C) | |
|-----|-----|-----|-----|-----|-----|
| 1. | A D | 2. | A D | 3. | A D |
| 4. | A D | 5. | A D | 6. | A D |
| 7. | A D | 8. | A D | 9. | A D |
| 10. | A D | 11. | A D | 12. | A D |
| 13. | A D | 14. | A D | 15. | A D |
| 16. | A D | 17. | A D | 18. | A D |
| 19. | A D | 20. | A D | 21. | A D |
| 22. | A D | 23. | A D | 24. | A D |
| 25. | A D | 26. | A D | 27. | A D |
| 28. | A D | 29. | A D | 30. | A D |

(A) = _____

(B) = _____

(C) = _____

PART II.

- | (D) | | (E) | | (F) | |
|-----|-----|-----|-----|-----|-----|
| 31. | A D | 32. | A D | 33. | A D |
| 34. | A D | 35. | A D | 36. | A D |
| 37. | A D | 38. | A D | 39. | A D |
| 40. | A D | 41. | A D | 42. | A D |
| 43. | A D | 44. | A D | 45. | A D |
| 46. | A D | 47. | A D | 48. | A D |
| 49. | A D | 50. | A D | 51. | A D |
| 52. | A D | 53. | A D | 54. | A D |
| 55. | A D | 56. | A D | 57. | A D |
| 58. | A D | 59. | A D | 60. | A D |

(D) = _____

(E) = _____

(F) = _____

ACDM ANSWER SHEET (Side 2)

Instructions: Circle "A" for "Agree" and "D" for "Disagree"

PART III.

	(G)		(H)		(I)		(J)
61.	A D	62.	A D	63.	A D	64.	A D
65.	A D	66.	A D	67.	A D	68.	A D (G) = _____
69.	A D	70.	A D	71.	A D	72.	A D
73.	A D	74.	A D	75.	A D	76.	A D (H) = _____
77.	A D	78.	A D	79.	A D	80.	A D
81.	A D	82.	A D	83.	A D	84.	A D (I) = _____
85.	A D	86.	A D	87.	A D	88.	A D
89.	A D	90.	A D	91.	A D	92.	A D (J) = _____
93.	A D	94.	A D	95.	A D	96.	A D
97.	A D	98.	A D	99.	A D	100.	A D

PART IV.

	(K)		(L)		(M)		(N)
101.	A D	102.	A D	103.	A D	104.	A D
105.	A D	106.	A D	107.	A D	108.	A D (K) = _____
109.	A D	110.	A D	111.	A D	112.	A D
113.	A D	114.	A D	115.	A D	116.	A D (L) = _____
117.	A D	118.	A D	119.	A D	120.	A D
121.	A D	122.	A D	123.	A D	124.	A D (M) = _____
125.	A D	126.	A D	127.	A D	128.	A D
129.	A D	130.	A D	131.	A D	132.	A D (N) = _____
133.	A D	134.	A D	135.	A D	136.	A D
137.	A D	138.	A D	139.	A D	140.	A D

ASSESSMENT OF CAREER DECISION MAKING

by

Vincent A. Harren, Ph.D.

PART I: HOW I MAKE DECISIONS

The first section of this questionnaire is designed to find out how you go about making important decisions in your life. Some of these decisions, for example, might be: to go to college or not; to decide on a career; or to take job X vs. Y. We believe that regardless of what the decision is about, each person has his or her own unique way of going about making decisions. We also believe that there is no one best way for everybody, and that you have probably learned to rely on a way which works best for you, based on your past experiences.

Before filling out this section, think about how you have made these important decisions in the past, or about how you are handling decisions with which you are currently confronted. Try to get a picture of how you typically or characteristically make decisions. Then go ahead and respond to the statements below in terms of how you feel. Remember, we don't think there is a single best way for everybody, so there are no "right" or "wrong" answers.

On your answer sheet, circle "A" if you Agree with the statement, or "D" if you Disagree with it. For a statement to be true of you, it doesn't always have to be the case, but more often than not. If you really can't make up your mind, then leave the item blank, but try not to leave more than a few of them blank, or the scores from the questionnaire will not be valid.

1. I am very systematic when I go about making an important decision.
2. I often make a decision which is right for me without knowing why I made the decision.
3. When I make a decision it is important to me what my friends think about it.
4. I rarely make an important decision without gathering all the information I can find.
5. Even on important decisions I make up my mind pretty quickly.
6. I like to have someone to steer me in the right direction when I am faced with an important decision.
7. When I make a decision I consider its consequences in relation to decisions I will have to make later on.

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USED WITH PERMISSION AEL FIELD TEST

8. When I make a decision I just trust my inner feelings and reactions.
9. I really have a hard time making important decisions without help.
10. When I need to make a decision I take my time and think it through carefully.
11. I often decide on something without checking it out and getting the facts.
12. I often make decisions based on what other people think, rather than on what I would really like to do.
13. When an important decision is coming up, I look far enough ahead so I'll have enough time to plan and think it through before I have to act.
14. I don't really think about the decision; it's in the back of my mind for a while, then suddenly it will hit me and I know what I will do.
15. I rarely make a decision without talking to a close friend first.
16. I double-check my information sources to be sure I have the right facts before deciding.
17. In coming to a decision about something I usually use my imagination or fantasies to see how I would feel if I did it.
18. I put off making many decisions because thinking about them makes me uneasy.
19. Before I do anything important, I have a carefully worked out plan.
20. I don't have to have a rational reason for most decisions I make.
21. I seem to need a lot of encouragement and support from others when I make a decision.
22. I don't make decisions hastily because I want to be sure I make the right decisions.
23. I make decisions pretty creatively, following my own inner instincts.
24. There's not much sense in making a decision that is going to make me unpopular.
25. Often I see each of my decisions as stages in my progress toward a definite goal.
26. I usually make my decisions based on how things are for me right now rather than how they'll be in the future.
27. I don't have much confidence in my ability to make good decisions, so I usually rely on other's opinions.

28. I like to learn as much as I can about the possible consequences of a decision before I make it.
29. A decision is right for me if it is emotionally satisfying.
30. I usually don't have a lot of confidence in my decisions unless my friends give me support on them.

PART II: HOW I FEEL ABOUT BEING IN COLLEGE

For the rest of this questionnaire, all of the statements refer to your present feelings. Mark the statement "Agree" only if you feel this way right now. You may have felt this way in the past, or you could conceivably feel this way in the future, but if you aren't concerned about this right now, or if this is not relevant to you right now, mark it "Disagree".

31. I don't know what the instructors in my courses expect.
32. People are starting to listen to some of my ideas around here.
33. I believe I've been pretty successful in adjusting to college.
34. I'm trying to find out what the people I live with want of me.
35. I've been talking some of my friends back home into going to college.
36. People here seem to respect me and value my ideas.
37. I'm just beginning to feel a part of things around here.
38. Some of my instructors seem open to suggestions for improving their course.
39. I feel like we are all helping each other to accomplish our goals.
40. It's hard to know how to act at this school.
41. I'm trying to get other students involved in things, instead of just sitting around.
42. This college seems to be meeting my expectations and needs pretty well.
43. I don't feel that I really belong here yet.
44. I often talk to my instructors outside of class.
45. The encouragement and support I've gotten has helped me to try harder to do well.
46. Most of the students here seem to have attitudes and values like mine.
47. I'm not afraid to speak up in class when I don't agree with the instructor.

48. I've been getting a lot of positive feedback from my instructors.
49. I've had to change in some ways in order to get along with people here.
50. I like to hang around on campus during my free hours.
51. Some of my instructors have helped me to get a more objective picture of myself.
52. I wonder if further education is worthwhile for me.
53. I'm learning to be more assertive to get what I want.
54. I'm pretty satisfied with the way things are working out for me here.
55. Some of the instructors here are pretty hard to satisfy.
56. I really enjoy getting involved in group projects with other students.
57. I feel a sense of working together or team effort here.
58. I've been asking other students how they like it here.
59. I've been telling my friends at other colleges what a great place this is.
60. Some of the advanced students have helped me become more realistic.

PART III: WHAT I WANT TO STUDY

61. I have a wide range of course interests.
62. If I choose the wrong major, it could slow me down in getting through college.
63. I'm pretty certain about my choice of major.
64. I like most of the teachers and students in my major.
65. I need to take a lot of different courses to see what I like.
66. I need to consider my interests in choosing a major.
67. It would take a lot to make me change my mind about my major.
68. I realize my major limits the kinds of future goals I can set for myself.
69. I don't know how to go about choosing a major.
70. My past experiences in school should help me decide on a major.

71. There just isn't anything else that I'd rather major in.
72. Some of the advanced courses in my major look pretty hard.
73. The more I think about a major, the more confused I get.
74. I've changed my mind about my major because of some of the courses I've taken.
75. It's a relief to have decided on my major.
76. I wonder how I will fit in with other students in my major.
77. I need to decide on a major.
78. I know what major I want, but I don't know what I could do with it after I graduate.
79. I enjoy telling people what I'm majoring in.
80. Most of my friends are either in my major or a closely related one.
81. I haven't definitely decided against any major.
82. I don't know if I'm capable enough for the majors I'm considering.
83. I've decided what I will major in.
84. My interests and attitudes are like most of the students in my major.
85. I wish I knew what I wanted to study.
86. I need to choose my courses more wisely than I have in the past.
87. My major gives me a sense of purpose and direction.
88. When people know what you major is, they expect you to act in a certain way.
89. I don't know what courses to take next semester.
90. I see some disadvantages to the major I am considering.
91. I get pretty wrapped up in discussions about things in my major.
92. I need several electives that can't be in my major.
93. There are just so many different kinds of courses I would like to take.
94. There are a number of majors which I have decided against.
95. I'm looking forward to getting into the advanced courses in my major.
96. I need to see an advisor in my major to plan the rest of my program.

- 97. I've looked into several programs, but I don't know what I'm really looking for.
- 98. I need a program that is broad and flexible.
- 99. I really get involved in courses in my major.
- 100. Since choosing a major, my personality seems to be changing.

PART IV: WHERE I AM HEADING AFTER COLLEGE

- 101. Almost any career seems appealing to me.
- 102. What I used to think I wanted to become doesn't seem practical anymore.
- 103. I think I'll be happy with the career I have chosen.
- 104. I wonder what kind of job I'll be able to get in my field.
- 105. My plans for the future are too indefinite.
- 106. I'm trying to decide between two or three possible careers.
- 107. I'm pretty certain about the occupation I will enter.
- 108. My attitudes and outlook are becoming more like the people I know in my field.
- 109. I want to know what field of work I'm best suited for.
- 110. There are several careers which I have already decided against.
- 111. I'm a lot happier now that my future career is clear to me.
- 112. The occupation I have chosen will affect the kinds of friends I will have in the future.
- 113. I don't know what I really want out of life.
- 114. I've become more realistic in my thinking about possible careers.
- 115. I won't let anything get in the way to my reaching my goal.
- 116. I don't have enough experience for a job in my field.
- 117. I need information about occupations.
- 118. I've changed my mind about what I wanted to become, now that I've learned more about the field.
- 119. The more I learn about things in my field, the more involved I become.
- 120. I need to find out what jobs are available in my field.
- 121. I'm interested in too many fields.

122. I'm more certain of the fields I don't want than what I do want.
123. I've decided on the field I am going into.
124. I hope the people in my field will accept me.
125. I need to decide on an occupation.
126. I know what's important to me, but I don't know what kind of career would meet most of my needs.
127. The career I have chosen fits in with my personality.
128. I need to start thinking about job interviews.
129. It's hard to know what to look for in a career.
130. I need to know more about the training required for some of the occupations I am considering.
131. I feel I can overcome any obstacles in the way of my goal.
132. I will probably have to move away from here to get a job in my field.
133. I can't decide on a career because my interests keep changing.
134. I don't know if I have the right kind of personality for the work I'm considering.
135. It's unlikely that I will change my mind about my career plans.
136. The people in my field have certain expectations of me.
137. I don't know how to go about deciding on a career.
138. There are not many job opportunities in the field that I really like.
139. I'm looking forward to getting out of school and getting started in my career.
140. I think I'm ready to choose a specialty within my chosen field.

APPENDIX F

Student Survey Pretest - Experimental Group Form

CAREER PLANNING AND DECISION MAKING STUDENT SURVEY

Social Security Number: _____

Age: _____ Sex: _____

1. Why did you enroll in this course?

2. What has been your work experience to this point?

I have been a student and not worked.
 I have held part-time or summer jobs while attending school.
 I have been employed full time (name occupation) _____
 Other (describe) _____

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge of career. There are no right or wrong answers. Respond to each question in the best way you can.

3. Knowledge About College Majors

How much do you know about the college majors offered at your school? This includes the area of study, course requirements, and eventual employment opportunities. Check the statement below that shows how much you know.

I know nothing about the college majors offered at my school.
 I know very little about the college majors offered at my school.
 I know little about the college majors offered at my school.
 I know some about the college majors offered at my school.
 I know a great deal about the college majors offered at my school.

4. Knowledge About Occupations

How much do you know about the occupations and opportunities for employment that relate to college majors? Do you know what occupations you could enter? Check the statement below that shows how much you know.

- I know nothing about the occupations and opportunities for employment that relate to college majors.
- I know very little about the occupations and opportunities for employment that relate to college majors.
- I know a little about the occupations and opportunities for employment that relate to college majors.
- I know some about the occupations and opportunities for employment that relate to college majors.
- I know a great deal about the occupations and opportunities for employment that relate to college majors.

For items 5 through 9, check the response that shows how much you know about occupations that interest you.

5. How much do you know about the qualifications for employment in occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

6. How much do you know about the salary and benefits of occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

7. How much do you know about future job openings in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

8. How much do you know about occupational advancement in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

9. How much do you know about college preparation for employment in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

10. How much have you thought about selection of a college major? (check one)

- I have not yet thought about selection of a college major.
- I have thought very little about selection of a college major.
- I have thought a little about selection of a college major.
- I have thought some about the selection of a college major.
- I have thought a great deal about selection of a college major.

11. At what point are you in deciding upon a college major? (check one)

- I have no idea about what my college major will be?
- I have very little idea about what my college major will be.
- I have some idea about what my college major will be, but have not completely decided. I am currently considering

I have decided upon a college major. It is _____

12. How many times have you already changed your major? _____
What were your previous selections? _____

For items 13 through 18, check the response that shows how well you understand yourself in relation to work.

13. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

14. How well do you understand your work values?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

15. How well do you understand your career goals?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

16. How well do you understand your aptitudes?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

17. How well do you understand your work competencies?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means



18. How well do you understand your work skills?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

19. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

On the following scale rate the effectiveness of your way of making decisions.

1	2	3	4	5
very poor	poor	adequate	good	excellent

20. What does the term work mean to you? What does it include? Write a definition.

21. What does the term career mean to you? Write a definition.

PART II

Assume you need information about an occupation. Read the following situations. In the space to the right of each situation, write the source you would go to for the information. If you do not know a source, place a (✓) mark in the right column.

Situation	Source	Don't Know a Source
22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's.	<hr/>	<hr/>
23. I want to know what college majors I can pursue to become an oceanographer.	<hr/>	<hr/>
24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology.	<hr/>	<hr/>
25. I want to know what occupations would involve creative thinking.	<hr/>	<hr/>
26. Where can I go to find occupations which do not require high mathematical abilities?	<hr/>	<hr/>
27. Occupational information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. When this problem occurs, what criteria would you use to evaluate information?	<hr/> <hr/> <hr/> <hr/>	

28. Read the definitions listed in the left column. Match each definition with the term it defines in the right column. In the space to the left of each definition, write the letter of the term it best defines.

- | | |
|---|-----------------------------------|
| ___ activity intended to produce something of benefit to the individual or the society | a. career development |
| ___ all of the tasks performed by a worker | b. career theme |
| ___ continuous integration of values in relation to the milieu through work | c. deciding |
| ___ use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self | d. occupational group arrangement |
| ___ quickness or ease with which people can learn or develop understanding and skills | e. job |
| ___ occupations which involve similar worker characteristics | f. worker trait group |
| ___ things people learn and the skills they develop | g. occupation |
| ___ achievement of self-integration in relation to the milieu through knowledge of self and milieu | h. occupational exploration |
| ___ activity undertaken for personal pleasure | i. aptitudes |
| ___ overriding principle that gives structure and meaning to the sequence of one's work, education and training experiences | j. leisure |
| | k. work |
| | l. career exploration |
| | m. competencies |
| | n. career goals |
| | o. abilities |

APPENDIX G

Student Survey Pretest - Control Group Form

CAREER PLANNING AND DECISION-MAKING STUDENT SURVEY

Social Security Number: _____

Age: _____

Sex: _____

1. Would you enroll in a career planning and decision-making course if one were offered? (Check one) Yes _____ No _____

2. What has been your work experience to this point?

____ I have been a student and not worked.

____ I have held part-time or summer jobs while attending school.

____ I have been employed full time (name occupation) _____

____ Other (describe) _____

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge of career. There are no right or wrong answers. Respond to each question in the best way you can.

3. Knowledge About College Majors

How much do you know about the college majors offered at your school? This includes the area of study, course requirements, and eventual employment opportunities. Check the statement below that shows how much you know.

____ I know nothing about the college majors offered at my school.

____ I know very little about the college majors offered at my school.

____ I know little about the college majors offered at my school.

____ I know some about the college majors offered at my school.

____ I know a great deal about the college majors offered at my school.

4. Knowledge About Occupations

How much do you know about the occupations and opportunities for employment that relate to college majors? Do you know what occupations you could enter? Check the statement below that shows how much you know.

- I know nothing about the occupations and opportunities for employment that relate to college majors.
- I know very little about the occupations and opportunities for employment that relate to college majors.
- I know a little about the occupations and opportunities for employment that relate to college majors.
- I know some about the occupations and opportunities for employment that relate to college majors.
- I know a great deal about the occupations and opportunities for employment that relate to college majors.

For items 5 through 9, check the response that shows how much you know about occupations that interest you.

5. How much do you know about the qualifications for employment in occupations that interest you?
- nothing
- very little
- little
- some
- a great deal
6. How much do you know about the salary and benefits of occupations that interest you?
- nothing
- very little
- little
- some
- a great deal
7. How much do you know about future job openings in the occupations that interest you?
- nothing
- very little
- little
- some
- a great deal

8. How much do you know about occupational advancement in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

9. How much do you know about college preparation for employment in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

10. How much have you thought about selection of a college major? (check one)

- I have not yet thought about selection of a college major.
- I have thought very little about selection of a college major.
- I have thought a little about selection of a college major.
- I have thought some about the selection of a college major.
- I have thought a great deal about selection of a college major.

11. At what point are you in deciding upon a college major? (check one)

- I have no idea about what my college major will be?
- I have very little idea about what my college major will be.
- I have some idea about what my college major will be, but have not completely decided. I am currently considering

I have decided upon a college major. It is _____



12. How many times have you already changed your major? _____
What were your previous selections? _____

For items 13 through 18, check the response that shows how well you understand yourself in relation to work.

13. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

14. How well do you understand your work values?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

15. How well do you understand your career goals?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

16. How well do you understand your aptitudes?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

17. How well do you understand your work competencies?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

18. How well do you understand your work skills?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

19. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

On the following scale rate the effectiveness of your way of making decisions.

1	2	3	4	5
very poor	poor	adequate	good	excellent

20. What does the term work mean to you? What does it include? Write a definition.

21. What does the term career mean to you? Write a definition:

PART II

Assume you need information about an occupation. Read the following situations. In the space to the right of each situation, write the source you would go to for the information. If you do not know a source, place a (✓) mark in the right column.

Situation	Source	Don't Know a Source
22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's.	_____	_____
23. I want to know what college majors I can pursue to become an oceanographer.	_____	_____
24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology.	_____	_____
25. I want to know what occupations would involve creative thinking.	_____	_____
26. Where can I go to find occupations which do not require high mathematical abilities?	_____	_____
27. Occupational information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. When this problem occurs, what criteria would you use to evaluate information?	_____	_____
	_____	_____
	_____	_____
	_____	_____

28. Read the definitions listed in the left column. Match each definition with the term it defines in the right column. In the space to the left of each definition, write the letter of the term it best defines.

___ activity intended to produce something of benefit to the individual or the society

___ all of the tasks performed by a worker

___ continuous integration of values in relation to the milieu through work

___ use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self

___ quickness or ease with which people can learn or develop understanding and skills

___ occupations which involve similar worker characteristics

___ things people learn and the skills they develop

___ achievement of self-integration in relation to the milieu through knowledge of self and milieu

___ activity undertaken for personal pleasure

___ overriding principle that gives structure and meaning to the sequence of one's work, education and training experiences

a. career development

b. career theme

c. deciding

d. occupational group arrangement

e. job

f. worker trait group

g. occupation

h. occupational exploration

i. aptitudes

j. leisure

k. work

l. career exploration

m. competencies

n. career goals

o. abilities

APPENDIX H

Student Survey Posttest - Experimental Group Form

CAREER PLANNING AND DECISION-MAKING COURSE
STUDENT SURVEY

Social Security Number: _____

Age: _____

Sex: _____

1. How prepared are you to make career plans?

- very poorly prepared
- poorly prepared
- adequately prepared
- well prepared
- very well prepared

2. Having completed the AEL Career Planning and Decision-Making course, how much better prepared are you to make career decisions?

- no better
- a little better
- quite a bit better
- a great deal better

This survey is being administered to obtain information for evaluating the Career Planning and Decision-Making course you have just completed.

PART I

The following section deals with your current status in college, your knowledge of careers, and how much understanding you think you have gained from completing this course. There are no right or wrong answers. Respond to each question in the best way you can.

3. Knowledge About College Majors

A. HOW MUCH DO YOU KNOW ABOUT THE COLLEGE MAJORS OFFERED AT YOUR SCHOOL? This includes the area of study, course requirements, and eventual employment opportunities. Check the statement below that shows how much you know.

- nothing
- very little
- a little
- some
- a great deal

B. Having completed this course, how much understanding have you gained about the college majors offered at your school?

- none
- very little
- a little
- a moderate amount
- a great deal

4. Knowledge About Occupations

A. HOW MUCH DO YOU KNOW ABOUT THE OCCUPATIONS AND OPPORTUNITIES FOR EMPLOYMENT THAT RELATE TO COLLEGE MAJORS? Do you know what occupations you could enter? Check the statement below that shows how much you know.

- nothing
- very little
- a little
- some
- a great deal

B. Having completed this course, how much understanding have you gained about the occupations and opportunities for employment that relate to college majors?

- none
- very little
- a little
- a moderate amount
- a great deal

Items 5 through 9 have two parts, A and B. Check the response in Part A that shows how much you know about occupations that interest you. Then check the response in Part B that shows how much understanding you have gained from completing this course.

5. A. How much do you know about the qualifications for employment in occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

B. Having completed this course, how much understanding have you gained about the qualifications for employment in occupations that interest you?

- none
- very little
- a little
- moderate amount
- a great deal

6. A. How much do you know about the salary and benefits of occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

B. Having completing this course, how much understanding have you gained about the salary and benefits of occupations that interest you?

- none
- very little
- a little
- moderate amount
- a great deal

7. A. How much do you know about future job openings in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

B. Having completed this course, how much understanding have you gained about future job openings in the occupations that interest you?

- none
- very little
- a little
- moderate amount
- a great deal

8. A. How much do you know about occupational advancement in the occupations that interest you?

- nothing
- very little
- little
- moderate amount
- a great deal

B. Having completed this course, how much understanding have you gained about occupational advancement in the occupations that interest you?

- none
- very little
- a little
- moderate amount
- a great deal

9
A. How much do you know about college preparation for employment in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal.

B. Having completed this course, how much understanding have you gained about college preparation for employment in the occupations that interest you?

- none
- very little
- a little
- moderate amount
- a great deal

10. A. How much have you thought about selection of a college major?

- I have not yet thought about selection of a college major.
- I have thought very little about selection of a college major.
- I have thought a little about selection of a college major.
- I have thought some about the selection of a college major.
- I have thought a great deal about selection of a college major.

B. During this class term, how much more have you thought about selection of a college major?

- no more
- very little
- little
- a moderate amount
- a great deal

11. At what point are you in deciding upon a college major? (check one)

- I have no idea about what my college major will be.
- I have very little idea about what my college major will be.
- I have some idea about what my college major will be, but have not completely decided. I am currently considering

I have decided upon a college major. It is _____

12. Have you changed your choice of major during this term?

Yes No

If yes, state your reason for changing.

Items 13 through 18 also have two parts. Check the response that shows how well you understand yourself in relation to work (Part A). Then check the response that shows how much understanding you have gained from completing this course (Part B).

13. A. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your occupational interests?

- none
- very little
- a little
- moderate amount
- a great deal

14. A. How well do you understand your work values?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work values?

- none
- very little
- a little
- moderate amount
- a great deal

15. A. How well do you understand your career goals?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your career goals?

- none
- very little
- a little
- moderate amount
- a great deal

16. A. How well do you understand your aptitudes?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your aptitudes?

- none
- very little
- a little
- moderate amount
- a great deal

17. A. How well do you understand your work competencies?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work competencies?

- none
- very little
- a little
- moderate amount
- a great deal

18. A. How well do you understand your work skills?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

B. Having completed this course, how much understanding have you gained about your work skills?

- none
- very little
- a little
- moderate amount
- a great deal

19. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

On the following scale rate the effectiveness of your way of making decisions.

1 2 3 4 5
 very poor poor adequate good excellent

On the following scale rate the effectiveness of your current way of making decisions COMPARED WITH YOUR WAY PRIOR TO THE COURSE.

1 2 3 4 5
 much less effective as effective more effective much more effective

20. What does the term work mean to you? What does it include? Write a definition.

21. What does the term career mean to you? Write a definition.

PART II

Assume you need information about an occupation. Read the following situations. In the space to the right of each situation, write the source you would go to for the information. If you do not know a source, place a (✓) mark in the right column.

Situation	Source	Don't Know a Source
22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's.	_____	_____
23. I want to know what college majors I can pursue to become an oceanographer.	_____	_____
24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology.	_____	_____
25. I want to know what occupations would involve creative thinking.	_____	_____
26. Where can I go to find occupations which do not require high mathematical abilities?	_____	_____

27. Occupational Information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. When this problem occurs, what criteria would you use to evaluate information?

28. Read the definitions listed in the left column. Match each definition with the term it defines in the right column. In the space to the left of each definition, write the letter of the term it best defines.

- | | |
|--|-----------------------------------|
| _____ activity intended to produce something of benefit to the individual or the society | a. career development |
| _____ all of the tasks performed by a worker | b. career theme |
| _____ continuous integration of values in relation to the milieu through work | c. deciding |
| _____ use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self. | d. occupational group arrangement |
| _____ quickness or ease with which people can learn or develop understanding and skills | e. job |
| _____ occupations which involve similar worker characteristics | f. worker trait group |
| _____ things people learn and the skills they develop | g. occupation |
| _____ achievement of self-integration in relation to the milieu through knowledge of self and milieu | h. occupational exploration |
| _____ activity undertaken for personal pleasure | i. aptitudes |
| _____ overriding principle that gives structure and meaning to the sequence of one's work, education, and training experiences | j. leisure |
| | k. work |
| | l. career exploration |
| | m. competencies |
| | n. career goals |
| | o. abilities |



APPENDIX I

Student Survey Posttest - Control Group Form

CAREER PLANNING AND DECISION-MAKING COURSE
STUDENT SURVEY

Social Security Number: _____

Age: _____ Sex: _____

1. During this term, have you talked with anyone enrolled in a career planning/decision-making course? Yes _____ No _____

If yes, did you discuss the course? Yes _____ No _____

2. During this term, have you been exposed to any career planning and decision-making materials? If yes, which materials?

This survey is being administered to obtain information about "where you are now" in your career planning and decision-making process.

PART I

The following section deals with general questions about your status in college and your knowledge of career. There are no right or wrong answers. Respond to each question in the best way you can.

3. Knowledge About College Majors

HOW MUCH DO YOU KNOW ABOUT THE COLLEGE MAJORS OFFERED AT YOUR SCHOOL? This includes the area of study, course requirements, and eventual employment opportunities. Check the statement below that shows how much you know.

- _____ nothing
- _____ very little
- _____ a little
- _____ some
- _____ a great deal

4. Knowledge About Occupations

HOW MUCH DO YOU KNOW ABOUT THE OCCUPATIONS AND OPPORTUNITIES FOR EMPLOYMENT THAT RELATE TO COLLEGE MAJORS? Do you know what occupations you could enter? Check the statement below that shows how much you know.

- nothing
- very little
- a little
- some
- a great deal

For items 5 through 9, check the response that shows how much you know about occupations that interest you.

5. How much do you know about the qualifications for employment in occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

6. How much do you know about the salary and benefits of occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

7. How much do you know about future job openings in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

8. How much do you know about occupational advancement in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

9. How much do you know about college preparation for employment in the occupations that interest you?

- nothing
- very little
- little
- some
- a great deal

10. How much have you thought about selection of a college major? (check one)

- I have not yet thought about selection of a college major.
- I have thought very little about selection of a college major.
- I have thought a little about selection of a college major.
- I have thought some about the selection of a college major.
- I have thought a great deal about selection of a college major.

11. At what point are you in deciding upon a college major? (check one)

- I have no idea about what my college major will be?
- I have very little idea about what my college major will be.
- I have some idea about what my college major will be, but have not completely decided. I am currently considering

I have decided upon a college major. It is _____

12. Have you changed your choice of major during this term? Yes _____ No _____
If yes, state your reason for changing.

For items 13 through 18, check the response that shows how well you understand yourself in relation to work.

13. How well do you understand your occupational interests?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

14. How well do you understand your work values?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

15. How well do you understand your career goals?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

16. How well do you understand your aptitudes?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

17. How well do you understand your work competencies?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means



18. How well do you understand your work skills?

- not at all
- a little
- fairly well
- well
- extremely well
- I'm not sure what this means

19. Frequently you must make career decisions. These decisions may relate to your college work or part-time or summer employment. How do you go about making an important decision? What steps do you follow? Describe briefly what you would do to reach an important decision.

On the following scale rate the effectiveness of your way of making decisions.

1	2	3	4	5
very poor	poor	adequate	good	excellent

20. What does the term work mean to you? What does it include? Write a definition.

21. What does the term career mean to you? Write a definition.

PART II

Assume you need information about an occupation. Read the following situations. In the space to the right of each situation, write the source you would go to for the information. If you do not know a source, place a (✓) mark in the right column.

Situation	Source	Don't Know a Source
22. I want to get an idea of what the job market will be like for oceanographers by the mid-1980's.	_____	_____
23. I want to know what college majors I can pursue to become an oceanographer.	_____	_____
24. My favorite high school subject was biology. I want to know what groups of occupations are directly related to biology.	_____	_____
25. I want to know what occupations would involve creative thinking.	_____	_____
26. Where can I go to find occupations which do not require high mathematical abilities?	_____	_____
27. Occupational information can sometimes appear to be confusing and contradictory. In fact the more information you have, the more apparent this condition may be. When this problem occurs, what criteria would you use to evaluate information?	_____	_____
	_____	_____
	_____	_____
	_____	_____

28. Read the definitions listed in the left column. Match each definition with the term it defines in the right column. In the space to the left of each definition, write the letter of the term it best defines.

___ activity intended to produce something of benefit to the individual or the society	a. career development
___ all of the tasks performed by a worker	b. career theme
___ continuous integration of values in relation to the milieu through work	c. deciding
___ use of knowledge of self to learn more about the world of work and use of knowledge of the world of work to learn more about self	d. occupational group arrangement
___ quickness or ease with which people can learn or develop understanding and skills	e. job
___ occupations which involve similar worker characteristics	f. worker trait group
___ things people learn and the skills they develop	g. occupation
___ achievement of self-integration in relation to the milieu through knowledge of self and milieu	h. occupational exploration
___ activity undertaken for personal pleasure	i. aptitudes
___ overriding principle that gives structure and meaning to the sequence of one's work, education and training experiences	j. leisure
	k. work
	l. career exploration
	m. competencies
	n. career goals
	o. abilities

APPENDIX J

Student Evaluation Form

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
6. Having completed this course, I am more aware of my career goal and its appropriateness for me.				
7. The course helped me gain a greater sense of control over my career.				
8. Overall, I was very pleased with this course.				
9. I would recommend this course to a friend who wanted career guidance.				

In the space below, please comment on any statements with which you disagreed.

10. When would be the best time to take a course like this?

- in high school
- freshman year of college
- sophomore year of college
- junior year of college
- senior year of college

Please complete the following statements.

11. I think the course was helpful because _____

12. The course was not helpful because _____

13. The thing I liked best about the course was _____

14. The thing I disliked most about the course was _____

15. What happened to you as a result of being in this course?

PART II

In order to evaluate the Career Planning and Decision-Making course you just completed, it is also important to have information about your involvement in the course. Please respond to the following questions.

16. Approximately what percent of the text did you read?

17. Approximately what percent of the text activities did you complete?

0%	25%	50%	75%	100%

18. Listed below are reference materials available in the Career Information System. In the boxes to the right of each reference, indicate approximately how many times you used that reference by placing a check mark (✓) in the appropriate box.

- a. Worker Trait Group Guide
- b. School Subject-Occupation Index
- c. College Major-Occupation Index
- d. Technical Major-Occupation Index
- e. Occupational Outlook Handbook
- f. Encyclopedia of Careers
- g. Dictionary of Occupational Titles
- h. Vertical File of Career Briefs
- i. Worker Trait Group File Content Notebook
- j. Alphabetical Index to Occupations

Material Not Available	None	Once	2-3 Times	More Than 3 Times

k. Worker Trait Group Index to Occupational Information

l. Keysoft Deck

m. Other (name)

Material Not Available	None	Once	2-3 Times	More Than 3 Times

19. In the boxes to the right of each statement below, indicate the degree of your class involvement by placing a check mark (✓) in the appropriate box.

a. I was generally attentive in class.

b. I participated in class discussions.

c. I completed homework assignments.

d. I came to class.

never	rarely	usually	almost always	always

APPENDIX K

Instructor Survey - Pretest

CAREER PLANNING AND DECISION-MAKING COURSE

Instructor Survey

For our evaluation of the Career Planning and Decision Making course, it would be helpful to have information from those who will be teaching the course. The information requested below will help acquaint us with your orientation toward career planning and decision-making. Please take a few minutes to complete this survey.

Social Security Number: _____

Institution: _____

Your Degree: _____ Major: _____

1. Will this course be taught on a semester or quarter system at your institution? (Check one)

Semester _____ Quarter _____

2. Have you read or are you familiar with the Instructor's Guide for the Career Planning and Decision-Making Course? (Check one)

Yes _____ No _____

3. With which theory of career development do you most closely identify yourself? (Check one)

- Ginzberg _____
- Holland _____
- Krumboltz _____
- Parsons _____
- Roe _____
- Super _____
- Tiedeman _____
- Tyler _____

Other (name) _____

4. In the space below, describe your concept of decision-making. What steps should be followed in making a decision?

5. In the space below write your definition of career development.

6. What would you like students to be able to do as a result of this type of course?

7. What benefits for your institution might you expect from this course?

8. What individuals were responsible for getting the Career Planning and Decision-Making course implemented at your institution?

Name: _____ Position: _____

Name: _____ Position: _____

Name: _____ Position: _____

9. Have you ever taught a career development course? If yes, briefly describe each one below.

10. Why do you think your institution is offering this course?

11. List below the content topics (be specific) you would include in a course on career development for college freshmen. Then rank the importance of each topic by numbering from 1 to N, one being the most important topic.

12. Why are you teaching this course?

APPENDIX L

Instructor Survey - Posttest

CAREER PLANNING AND DECISION-MAKING COURSE

POST- INSTRUCTOR SURVEY

Since you have taught the Career Planning and Decision-Making course, we are interested in your responses to the following questions. This information will help us evaluate the course and determine the need for other products.

Social Security Number _____

Institution _____

1. With which theory of career development do you most closely identify yourself? (check one)

- Ginzberg
- Holland
- Krumboltz
- Parsons
- Roe
- Super
- Tiedeman
- Tyler
- Other (name) _____

2. In the space below, describe your concept of decision-making. What steps should be followed in making a decision?

3. In the space below, write your definition of career development.

4. What qualifications should an instructor have to teach the AEL Career Planning and Decision-Making course?

5. Should the Career Planning and Decision-Making course be offered as:

- a required course for students
- a required course for undeclared students
- an elective course
- a referral course

6. At what level do you think this course should be offered for maximum student benefit? _____

- freshman
- sophomore
- junior
- senior
- 1st quarter
- 2nd quarter
- 3rd quarter
- 4th quarter

7. In addition to the course, what else does your institution need to facilitate continued career planning and decision-making behavior?

8. Listed below are five career development tasks which may occur subsequent to the course and prior to graduation. By checking (✓) the appropriate box, indicate how important each task is for students completing the Career Planning and Decision-Making course.

Statement	very important	of some importance	of little importance	of no importance
a. adjusting to college environment				
b. planning for employment (family considerations, income, location)				
c. developing employability skills (resume writing, interviewing)				
d. becoming employed--negotiating work agreements (salary, work schedule, benefits)				
e. adjusting to employment (skills for keeping a job)				

9. How helpful to your institution would it be to have a handbook coordinating the Career Information System and Career Planning and Decision-Making course with services provided by Recruitment, Academic Advisement, and Placement Staff.

- very helpful
- helpful
- not very helpful
- not helpful at all

10. How important is it for student personnel workers, placement personnel, academic advisors, and college counselors to be aware of the course concepts and the career planning and decision-making process in which students have been involved?

- of great importance
- of some importance
- of little importance
- of no importance

11. Was the Career Information System set up at your institution?

- Yes
- No

APPENDIX M

Instructor Evaluation Form

CAREER PLANNING AND DECISION-MAKING COURSE

INSTRUCTOR EVALUATION FORM

To determine the effectiveness of the Career Planning and Decision-Making course, we need your evaluation comments. Please take a few minutes to complete this evaluation.

Institution _____

The following statements address important aspects of the Career Planning and Decision-Making course. By checking (✓) the appropriate box, indicate which response corresponds closest to your feelings and/or experiences.

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Overall I am pleased with the CPDM course.				
2. The course is appropriate for college freshmen in four year institutions.				
3. The course is appropriate for college freshmen in two year institutions.				
4. Students seemed interested in the course.				
5. Instructional strategies used in course materials are effective in teaching the intended skills and knowledge to students.				
6. The course prompted career planning and decision-making behavior by students.				
7. Major competencies for each unit were attainable from unit completion.				
8. Equipment and materials needed for activities were appropriate and available.				
9. Planning and preparation activities were adequate for teaching material.				
10. Course content was comprehensive in terms of the career planning and decision-making process.				
11. Activities were appropriate for teaching the course concepts.				
12. Language and concepts presented in the course enabled students to more effectively understand and discuss career concerns.				

274

In the space below, describe your reasons for disagreeing with any of the above statements.

Questions 13-20 concern the Instructor's Guide. By checking (✓) the appropriate box indicate the acceptability of the Instructor's Guide in each of the following areas.

Areas	Acceptable	Unacceptable
13. Format		
14. Appearance		
15. Filmstrip discussion questions		
16. Suggested activities		
17. Class management techniques		
18. Major competencies for each unit		
19. Orientation to course materials		
20. Length of activities		

In the space below, comment on any areas you thought were unacceptable.

21. List below any stereotyping you detected in the course materials. Be specific.

22. List below the benefits of this course for your institution.
23. What problems did you have in teaching this course?
24. List below the strengths and weaknesses of the course.
25. What benefits of the course resulted which you had not anticipated?
26. What type of students benefit most from this type of course?
27. What type of students benefit least from this type of course?
28. Would you recommend this course for helping students in their career development?

Yes
 No

APPENDIX N

College Major-Occupation Index Evaluation Form.

COLLEGE MAJOR-OCCUPATION INDEX EVALUATION FORM

This form was developed to assist in evaluating the College Major-Occupation Index. As instructors of the AEL Career Planning and Decision-Making course, you can provide us with valuable information for revising this product. After your students have completed Unit IV, please take a few minutes to complete this evaluation form and return it in the envelope provided. Keep in mind that the college Major-Occupation Index was developed for students attending or transferring to four year institutions. Please evaluate this Index as a product for that population.

NAME: _____ DATE: _____

INSTITUTION: _____

NUMBER OF STUDENTS USING THE INDEX: _____

By checking the appropriate box, indicate your opinion of the adequacy of the Index in each of the following areas:

Areas	Adequate	Inadequate
1. Representation of the relationship between college education and occupations.		
2. Directions for using the Index.		
3. Format of the Index.		
4. Overall appearance of Index.		
5. Potential usefulness of content of the Index.		

For any area you marked inadequate, please provide suggestions for improvement in the space below.

Based on your observations of students using the College Major-Occupation Index, indicate your agreement with the following items by checking (✓) the appropriate box below.

Item	Agree	Disagree
6. Students understood the Index.		
7. Students were able to follow directions in the textbook for using the Index.		
8. Exposure to the Index prompted further career planning behavior; i.e., use of additional resources.		
9. Students were able to locate desired information in your college catalog from majors and occupations listed in the AEL College Major-Occupation Index.		
10. The Index helped students move toward more specific career goals/plans.		

Please comment in the space below on any items with which you disagreed.

Please respond to the following questions:

11. What problems did your students encounter in using the Index?

12. Are the majors listed in the Index comparable to majors listed in your institution's catalog? Yes ___ No ___

If no, in what ways are they not comparable?

13. Do the occupations listed in the Index relate to the academic majors as defined in the Index? Yes No

If no, which occupations do not relate?

What occupations relating to majors are not listed in the Index?

14. Is the Index an appropriate product to help students establish the relationship between majors and occupations? Yes No

If no, why?

15. Can you relate your institution's specific academic majors to the majors listed in the Index? Yes No

If no, what problems did you encounter?

What majors did you have difficulty relating to the Index?

16. In what ways other than directed by the text did the students use the Index?

17. Pages 6 and 7 of the College Major-Occupation Index list the potential uses. Take a few minutes to read these two pages. List below any potential uses identified which you do not think are feasible and why?

List below any potential uses which are not listed.

-
18. In the space below, please comment on any problems you experienced with the Index or any suggestions you have for its improvement.

APPENDIX O
Filmstrip Evaluation Form

CAREER PLANNING AND DECISION-MAKING PROGRAM
 FILMSTRIP EVALUATION FORM

Your feedback would be very helpful in evaluating the filmstrips for the Career Planning and Decision-Making program and in making filmstrip revisions. After reviewing the particular filmstrip designated below, complete this evaluation and return it in the envelope provided.

TITLE OF FILMSTRIP TO BE REVIEWED: _____

NAME OF REVIEWER: _____

DATE OF REVIEW: _____

Based on your review and use of the filmstrip, indicate your agreement with the following items by checking (✓) the appropriate box below.

Item	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The purpose of the filmstrip is clear.				
2. The title accurately represents the content.				
3. The amount of extraneous material is minimal.				
4. Concepts are appropriate for a college student audience.				
5. The portrayal of illustration of concepts are appropriate for a college student audience.				
6. Information presented is accurate.				
7. Information presented is current.				
8. The filmstrip motivated student discussion and/or participation in follow up activities.				
9. The filmstrip enhances the material presented in the textbook.				

In the space below, please comment on any items with which you disagree.

By checking (X) the appropriate box below, indicate the acceptability of the filmstrip in the following areas:

Area	Acceptable	Unacceptable
10. Quality of pictures		
11. Quality of sound (cassette tape)		
12. Length of filmstrip		

In the space below, please comment on any areas you found to be unacceptable. Be as specific as possible.

Place a check mark () to the right of any biases you detected in the filmstrip.

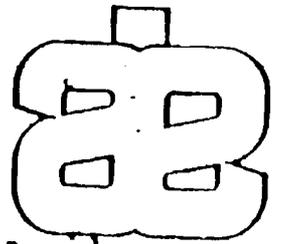
13. Sex stereotyping _____ 16. Social class bias _____
 14. Occupation stereotyping _____ 17. Age stereotyping _____
 15. Ethnic stereotyping _____ 18. Other (specify _____)

Please explain the basis for each bias you checked, including specific examples from the filmstrip.

19 In the space below, please list the strengths and weaknesses of the filmstrip and your suggestions for improvement.

APPENDIX P

Memorandum to Experimental Group Student Proctors



Appalachia
Educational
Laboratory

Post Office Box 1348
Charleston
West Virginia 25325

M E M O R A N D U M

TO: Proctors for Student Evaluation Forms
FROM: Sandra Barker, Ph.D. *B*
SUBJECT: Administration of Student Evaluation Forms

Thank you for agreeing to serve as proctor for the administration of the Student Evaluation Forms. You have been asked to administer, collect, and seal in an envelope these forms to assure students that their responses will not be seen by the course instructor.

Please hand out the forms, collect them when completed, and seal them in the enclosed envelope. Return the sealed envelope to your instructor for mailing.

Thank you for your assistance in the evaluation of the Career Planning and Decision-Making course.

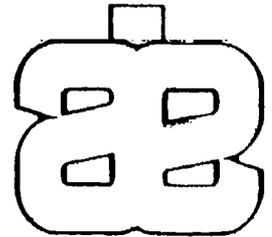
ms

Enclosures

286

APPENDIX Q

Control Group Debriefing Memorandum



**Appalachia
Educational
Laboratory**

Post Office Box 1348
Charleston
West Virginia 25325

M E M O R A N D U M

TO: Students Participating as Controls for Career
Planning and Decision-Making Course

FROM: Sandra Barker, Ph.D. (3)

SUBJECT: Career Planning and Decision-Making Course

Thank you for your participation as a control student for the evaluation of the Career Planning and Decision-Making course being taught at your institution. The information you provided will assist us in determining if this course is an effective program for helping college students with their career planning and decision-making.

Many of you indicated on the pretest that you are interested in enrolling in such a course. The instructor named below is teaching the course at your institution this term. Please contact him/her for information regarding future offerings of this course.

* Again, thank you for your participation.

ms

Instructor

288

APPENDIX R

Student Comments: Evaluation Form Items 1-8

In the space below, please comment on any statements with which you disagreed.

I am still a little vague over what my exact career will be and I would recommend a friend to talk to a career counselor before taking this course.

The course seemed to be very general--there was not enough work on values and goals.

3) We never went out in the world of work to see what goes on. It was discussed briefly. It should have been discussed in more detail.

6) I am still not sure what the best field for me is. My career goals are many. I would have liked to have been able to narrow it down further.

I feel I did not get into specific careers in depth enough. Likes and dislikes in courses, hobbies, etc. seemed to be stressed more. I have not yet decided on a career, but my choices are being narrowed down.

The book was good in that you went step by step in order to reach your career goals and objectives, but, upon completion of the book I was still unable to identify my career goal.

This course actually confused me more. There was not enough time spent on particular things. My career plan is still up in the air.

I feel the course needs some changes because it seems to me that the book is set up for someone who already knows what he wants to do. Maybe, if more interest tests were given or more value tests, it would help an individual find himself.

The course helped me but I still don't have a definite career chosen. I've narrowed it down but cannot set up a specific one.

I didn't think this course made me understand the world of work the way it should have. It should have emphasized worker-employer relationships more and made the student more aware of the competitiveness of the work world.

I already had an understanding on all the things I disagreed on, all the course did was organize my thoughts.

This course has opened my eyes; I was thinking of majoring in business, but after completing this course my views have changes. Although I am not definitely sure what I want to go into, I am still investigating other career goals and opportunities.

I don't disagree with any of the statements. The course was good. However, it might have been better if the course was a semester instead of a quarter.

No matter what you decide on as a career, you never really have control, no matter how hard you want a certain career or how well trained you are for it. There are a lot of intangibles involved and you boys ought to know that by now!

#3, the course did not give you an understanding of work, it really only guided and showed you the careers in which you could go into. You did not actually experience any of the careers.

The course helped me to find out what areas I was interested in but beyond that I don't feel it has helped me develop a career plan or gain control over my career. I still feel that I haven't narrowed my choices down enough to a specific area I can deal with.

This course did not help me develop a greater understanding of myself. The records of values and what we like was very tedious work.

I felt it was hard and confusing to follow the workbook at times.

I am still not sure about what career I want to go into.

I still am not sure what I want to do but the course did give me some ideas.

Actually, I'm more confused. I do understand some of the areas I should avoid though.

Too much paper work and library work--some of us couldn't spend much time there because of other important factors.

I still don't know what I want as my career.

I have not acted directly upon any of my decisions made in the class yet.

I was just as confused. I guess I didn't put enough time in it. It is a lot of busy work.

I am very stubborn and had already made up my mind.

The course was unrealistic, it lead you to believe that the W.T.G. was the answer to every question. The course was very boring, but I didn't really devote my time to it.

As a senior, this course could not change my mind on what I've already planned to do. As a result, the course could not determine any of the goals that have already been set.

I would not recommend to a friend because there is entirely too much work.

I felt the course was too much outside busy work.

This course was very confusing and was nothing more than a lot of busy work.

There is too much busy work in this class. Also there is too much work required. I've put more work in this class than any others.

I didn't enjoy the course. (busy work)

I didn't disagree with any--but I feel as if each student that takes the course should be better informed just exactly what is included in the course.

4-6-7. I am not exactly sure what I want to do for a career, but I have decided on a field of study.

There's not much to be planned or decided that hasn't already been.

The course was pretty basic, should be titled "Values Clarification."

The teacher didn't go into detail on the decision process enough.

The career in decision-making workbook I would not recommend. Everything is repetitious.

Because the textbook we had was very disagreeable with me. It is hard to understand and you couldn't do the exercise right. The class is fine but the textbook was horrible.

The class was not what I expected. If the workbook were made clearer and not so repetitious the course would have been more enjoyable. The instructors were good. I would recommend the class if the materials were changed.

It wasn't really what I expected. I learned a lot but the workbook wasn't very clear.

I wasn't pleased because I already had an understanding of my career goal and occupation. To me this class was very discouraging.

I don't think the course is worth recommending to a friend.

I don't have a greater sense of control over my career. I was not pleased with this course because it was taught too simply.

I expected more field research (going to business) and talking with the employees to find more direct information of the career I had in mind.

Before I entered this course I pretty well understood myself and what I wanted out of a career.

Did not go into actual work--tended to get boring.

The course didn't help me understand myself better.

The Career Planning and Decision-Making workbook should really be reviewed by AEL. This was very inappropriate and insulting for the college student. I would discourage anyone I know from taking this course as is.

I thought this course was a TOTAL waste of time and I was highly insulted by the Career Planning and Decision-Making workbook. I felt like I was in 2nd grade. I feel that the workbook was totally inappropriate for college students.

I am very pleased with this course; however, the last few chapters of the book were just a rehashing of what had already been covered. The last few chapters should have covered topics such as resume writing, how to properly seek a job, how to dress and act for a job interview--hence job skills.

I found that the course material was geared more for people in a two year program or high school. Also, in regard to statements 1-9, if I got the least bit benefit from any issue stated I put "agreed." There were not any occupations talked about that I wanted. I wanted to explore and have the book discuss professional occupations like psychologist (dr.) or any thing else that would require graduate level of education and/or doctorates level.

I have not reached a career goal at this time. At points I became confused and discouraged. I have learned some valuable information but have not reached the decision I had hoped for when I entered the course.

The world of work was not expressed enough; there wasn't enough time spent on work traits. Most of the exercises in the workbook were useless.

I thought that the workbook was very little help to me.

This course would have been more beneficial if we did not have to go through so many pages of filling out. It was frustrating and I began to lose interest. I felt like a kindergartener that had to be fed step by step, but it took a genius to keep up with the round about way to approach it. Giving us the information would have been best then doing it in our own style would have been more understandable by the person doing it. You had too much control. It stifled my aim and bogged me down.

It seemed superficial and inadequate.

2. The course didn't help me with much that I didn't already know.
4. I was already working on a career plan.
7. It simply did not.
8. It was very boring for the most part.
9. I really didn't like this course much at all.

I was not pleased because it didn't really help me reach a final conclusion.

I didn't feel like this course made any major changes in the control of my career goal. However, it did make me set goals that I can look forward to.

Although I did learn much from this course, I did not develop a full career plan.

I was already aware of the world of work, but I did not feel that this course presented work situations; it was more geared toward education/planning.

Don't know if I have any more control over my career but I feel like I have more direction and plans.

There were some I could have gone either way on. I think it was a little redundant. I could have learned the same with less time spent in class and on "busywork."

I did not find out enough to make the course profitable. I think the fact that I was taking 20 hours this quarter had a lot to do with it. I just didn't have time.

None--except I believe the workbook could have been set up toward college students--it (at times) seemed to edge towards high school--it may be toward freshmen more than high school. Some of the filmstrips were repetitious.

I have held jobs before and I didn't learn anything about working that I didn't already know.

I still have not completely decided upon a certain career I would like to go into.

6. I'm not sure it

The course is too slack, it dragged from the beginning, it was not specific enough. Need better correlation between workbook and Worker Trait Group Guide.

Too much screwing around, didn't get to do much research until last week.

I don't like working in the book.

The books made the class seem mechanical. I felt it could have been more interesting--speakers, field trips, movies, etc.

1. We never had the chance for outside class to have the chance to talk to the working, managing people.
2. I have my own way of decision-making.

The teacher didn't organize class discussions well and there weren't enough speakers, we should have learned how to handle an interview, to get the job we are after.

APPENDIX S

Student Comments: Helpful and Unhelpful Aspects of the Course

STATEMENT:

I think the course was helpful because...

RESPONSE:

it helped me clarify my goals.

it helped me to develop my values and my goals and examine careers which apply to them.

it helped me to decide on at least two careers I want to go into.
Helped me to make decisions.

it made me really think about what I like.

it made me realize how I make my decisions.

I now know what I want to do with my life and what I want to contribute to society.

it taught me to put things in the right order.

I learned some about making decisions and about careers I was interested in.

it helped me understand myself better and make decisions. It gave me greater insight into my career possibilities.

it familiarized me with the materials available to aid me in making my career decisions.

did help in decision-making.

it did have good realistic concepts and it does open things up.

it showed me how I should go about making decisions.

it showed me the resources open to me in the world of careers and helped me learn a decision-making option.

it forced me to think of different options in life to do.

it gave me an idea of what I want out of a job or occupation.

it gave me a better understanding of myself.

it allowed me to think about what I am and what I am not.

I learned a few more of my own values that I didn't know were relevant.
it reinforced my choice of a career and proved to me what my dislikes and likes were.

I had never received much guidance in high school and this broadened my knowledge about careers.

it made me look at my values and things which I like doing and focused them on different careers which were related to them.

I became more aware of my values and goals in my career planning.

I organized my thoughts.

it helped me put my interests, values, and goals into perspective.
I could look at them objectively.

it made me aware of my values, interests, and other things that I took for granted.

it gave me tips on how to plan my career.

I knew the field I wanted to go into--it just helped me narrow down my choices in the field.

it allowed the opportunity and the means to explore career options.

it reinforced my ideas and goals I had for my career and pointed to some other directions I could follow.

it made me more aware of the choices available to me and the requirements that must be met to enter the various career fields.

I learned about many other job areas in which I thought I had no interest.

it really let me know how to go about my career goals.

it showed me jobs and occupations related to my interests.

it made me think about my life and goals.

I found out what I thought I would like as a career and how I could go about it.

it made me aware of my personality type and helped me to rule out some areas that would not be tolerable.

it gave me different relate job in one sort of occupation.

it shows you about the different kinds of jobs and courses that you would want.

it helped me to know what kind of person I am. It also gave me a method to make decisions.

it got me to think more in-depth about a career.

it showed to me that there is not just one job I can go into but a field of jobs.

it taught me a lot about myself and what I could do to better myself in order to get the job I want.

it cleared up and answered a lot of unanswered questions I had.

it provided me with fresh insight into the world of work and helped me to formulate a plan for reaching my desired career goal.

it gave you a better knowledge of how to go about selecting a career.

I know what career fits me.

it helped me to narrow down my career options and how to develop the one I chose.

it made me think in concrete terms about my major, choice, etc. in some units helped you to find out about chosen careers.

helped me decide things I wasn't sure of.

because it helped me understand my career better.

it helped me to realize all the alternatives I have open to me.

it gave guidance in how to go about in deciding on a career.

gave info on where to find outlook on careers.

now I know more about my career.

I gained an understanding of my occupation.

it takes an in-depth look at careers.

helped me decide exactly what I wanted.

it made me more aware of different alternatives concerning my career goal.

it made me understand work.

it helped me see more alternatives in choosing a career.

it taught me to make decisions with all possible information and alternatives without just falling in.

it helped me decide on a career.

I found where I can get information.

being able to use the materials in the library is very important and helpful.

it gives you a system in which you can organize your thoughts.

it helps you to see what alternatives you could take in whatever career you are going into or plan a career.

it gave you a better understanding in your career values.

it helped me realize some of my values and pick a career that I'm suitable for and interested in.

it helped me to realize what my values and goals are, and what type of field I could excel in.

it made me more aware of the world of work.

it helped me to understand my values and goals and apply them to deciding on a career.

I learned a lot about myself.

of the outcome. I now have a career goal and I learned much about myself.

it taught me a lot about myself and about the job world.

it helped me take a better look at myself and what I would be interested in for a career.

it pointed out where my values lie.

it gave you an idea of where the job were and how much money is to be made in that certain job.

it pointed out a lot of my strong points.

it helped open doors to occupations we might not think had existed.

I learned more about job market.

it helped to match careers to personal goals--greater understanding of relationship between what I think and what I do want.

I learned a lot about my career I didn't know.

it helped me define my values.

it developed my interests.

it helped me to clarify my values and point me in the direction of some possible career paths.

it introduced me to areas of strength that I thought never existed. It gave me a few choices in picking a new college major.

The lectures were very useful and answered a lot of questions.

I now understand a lot what I want to become, I now understand what jobs are available. I never knew what a social worker did before now I know, I want to become one!

it opens up information available to student.

I found out what I really liked and disliked.

it brought out things one would not think of otherwise.

helped you to look for the kind of work you want.

it enabled me to state my values and interest and relate them to my career.

it helped me find all of the information I need to know about my career.

I learned about different kinds of occupations from the Worker Trait Group book.

it helped me to clarify some of my goals and decide on an occupation.

I learned a little more about myself.

it did help me understand myself a little bit more but as far as decision making and career direction, I now realize that only I can bring this about.

it made me see what my major actually required.

it taught you more about your interests and ideals in relation to a career of the future, the you thought you knew.

it helps a person to open their eyes and face reality.

helped you learn more about yourself.

it clarified my goals.

it helped you identify the career process and careers good for you.

it gave me the chance to look at many occupations that I didn't really consider before.

I learned more about majors and their related occupations.

it aided me in the decision-making processes that I had to undergo as a freshman in college (major, courses, trivial decisions as well).

I was forced to think about what I am and what my needs are and how I can obtain them.

it allows you to explore different occupations within your interest and values.

gave me more information about the career I had in mind.

I learned so much about myself and career decision-making.

it helped set me on the right track as far as a career goes.

it helped me to specify my goals (career) better.

it gave us info about how to find answers to our questions.

it really gave me an understanding and direction to go with my interests being narrowed down--made many decisions about myself.

it showed me more than one possibility for my career.

I found out things about myself that I never knew before. I feel as though I know myself better.

it showed me the many fields in the world of work. But more important, it showed me how to find out more about specific fields.

I can look up occupations and know how to find them better.

it made you look at your career.

it opened my eyes on exactly what is going to be waiting for me when I finish college and get out on my own.

it made you really think about your career goals and your outlook of life.

it assured me of my career goal and strengthened my knowledge about it.

it helped me decide my major.

it helped me to decide on the right major and to help plan things.

it provided me with a better understanding of my values, interests, and in helping me make decisions.

it helped me clarify my goals and interests. It also reinforced my interest toward my major.

it seriously made me think about the present and the future. The course showed me how to plan my career, and how to look at myself and my career objectively.

I decided on a major that suits me.

it helps you to understand how to make decisions.

I have a better understanding of my future.

it has guided me toward making decisions in a better aspect. Planning a future and understanding my values.

it made one think of the steps needed for a satisfying career.

I became a better decision-maker.

it helped me in making decisions better.

it helped me see things as they really are including my own feelings. And it helps you evaluate for a logical, pleasing decision.

it made me more aware of what I wanted to do in my career field.

it helped me make up a career plan, which I have not thought of really until I got in this class.

the instruments used helped me gain a more organized and detailed understanding of myself and the work world.

it helped me to clarify my interests and gave me some alternative ways of getting gainful employment.

it gives direction to a life.

it helped me not only in my present career but also taught me how to go about changing it.

it first showed all my personal values and then related it to the field of work.

it gave me a positive sense of action.

it encouraged me to examine my interests, abilities and apply these to career decisions.

you get as much out of (it) as you put into it.

it had a wealth of information and taught me how to look up job descriptions.

it helped me set my goals.

it showed me how to make decisions and helped me narrow down and even change my career ideas.

I needed to learn more about decision-making and the world of work.

it made sources available for research.

it helped me learn a few more things about different jobs.

the teacher is a good one on one counselor.

gave me a few ideas of which way to go.

it has shown me the difference in the many career and it has

it did start my thinking in the right direction toward a goal.

it was more self-acceptance toward work. And emphasized the need to set goal and mainly decisions.

I became more aware of different career opportunities open to me.

it exposed me to several different occupations.

it helped me to understand why I came to college. I know it may sound dumb, but I've really changed my mind about what I want to do.

it broke major occupations down into minor fields and gave details of each.

it defined a career plan for me to follow.

thought I knew my career goal in advance, the course provided me with a firm commitment.

found out more about my perspective career.

it taught me to plan my work and make better decisions, and let me see what I had to do to better plan my career.

it helped me to take steps in a definite direction.

it helped me understand what my goals were and how I could best achieve them.

it helped me in understanding which career goal was best for me. Helped me in understanding job openings too.

it gave me a chance to sit down and think about my career and research the opportunities I have.

I learned how to make decisions in a more organized manner and where I can go for career info.

I saw new sides to my career.

it gave me an opportunity to examine my values and my decision-making process.

it gave me information about the world of work and what careers are available.

it let me investigate many career goals.

it made me make decisions--as much as I hate to do it.

I was undecided about a definite major but now I know where I am going.

it made me more aware of my interests and abilities.

it gave me time to work on my job interest.

it made me aware that I need to plan something about my life work right now and then get it accomplished today!

it has helped me to make decisions on what I will take as a career and it has also given me the view of my future.

it helped me set a short term goal.

it did tell me what I had to do for my major.

it helped me understand what I can and can't do for a career.

it made me make decisions.

improved knowledge about special interest areas.

it directed me to a career by taking into consideration my abilities, aptitudes, and past experience.

I got an easy three credits.

it taught me that a career is not necessarily just one job.

this at least has given me an idea of my aptitudes, interests, and qualifications.

I found out about more career and what they were about.

it shows what one has to do in order to get the job he wants.

it helped me look into the occupations I wanted to know about.

it gives a broader look of the occupations you might like that you didn't know of.

STATEMENT:

The course was not helpful because...

RESPONSE:

some material was too involving.

by the end I had come full circle in my thinking--but then that could be helpful.

not enough time and I didn't care for some portions of the workbook.

I was not really interested in careers.

it lasted longer than the original time allotted.

it was too long, repeated things over and over, got boring.

I was the only man in there besides the instructor, all students were women.

I felt it wasn't helpful when I got confused on the exercises in the workbook.

when we did childish things in class like drawing our crest, recording our values and recording what we are not.

it did not help me to decide specifically what field of work I'd like to go into or specifically how to go about getting there.

I had already decided on a career.

it was only one quarter and the second half was cut from the schedule; therefore, it didn't go as far as I would have liked.

it went through too much bull--oney. I think it could have gotten the job done with less and more interesting work.

it covered too broad an area.

I still don't know what my major is.

it didn't give me any specific knowledge of the world of work. I'm still not sure where I'm going career wise.

I think it was written for high school level and should be taught there.

the book seems to be set up for someone who already knows what interests he has or values.

I feel it should be given at a younger grade level.

I am a college senior and I am in my last semester, so it is too late to change my major.

I have not yet found my direction.

it didn't give me an idea of what jobs I liked were all about.

it seemed it was mostly geared to people who already know what career they want.

I did not get a chance to clarify my career goals or values.

much of the work seemed repetitious and so it got boring.

only spent two class sessions in the Career Center.

we didn't get to use the career center very much in class.

we were not given enough time, everything was too hurried.

it went too fast.

I was not able to make decisions but that was my problem not the course.

it didn't get too much about the important facts.

we didn't spend more time looking in different work ~~trait~~ jobs.

it was designed for students out of high school. Was hard to relate to some situations.

I don't have no comment because I liked the class and it was very helpful.

we were short of time. I think the class should be two hours.

the homework was not clearly understood by me until the next class when we would look at it very quickly.

there was way too much busy paper work--needless!

it was busy work.

too much busy work.

it had too much busy work.

I didn't really care about it, from the start.

too much busy work, not enough help.

I was boxed sometimes because I had already made a decision of career before this class.

too much filling out time consuming forms.

I had already decided, however, if I had taken this course when I was a freshman I could have saved a lot of time.

it was unorganized--needed more explanation.

I didn't learn anything new about my career.

too much busy work, would confuse a freshman.

it was a lot of busy work that could have been skipped.

it was a little too easy.

the material covered was too great for one quarter, and was too hard for a freshman level course, thus defeating its purpose.

some of the areas noted on our worker trait group chart proved to be weak, when all along they were strong areas I've succeeded in.

I think it should be taught, in early high school years instead of college.

well, I'm no closer to picking a major. That was not your goal, but it was mine.

became very bored with text--did not go into detail of chapters at all in class--should have more class discussion.

no direct results.

I already had a career plan in mind and felt as though I was pressured to consider something else.

some people failed to get involved.

it didn't give a way to put all the material together.

I am still not set on a major.

too much busy work--high school stuff.

the material wasn't very clear; I tended to get very confused as I progressed.

material was not clear.

the textbook was difficult to understand.

the materials were not very clear and the book was too repetitious.

hard to understand instructions.

the workbook wasn't very clear.

I already knew about what I want to major in.

I feel I should have had it sooner in my life.

I thought that many of the exercises were a waste of time.

I still have no idea what I want to get into.

we really didn't learn that much and we seemed to waste an awful lot of time with numbers.

was a little too general.

I hate filling out charts, turning the pages back and forth was a pain.

I'm still somewhat undecided if I can do in the future what I really want to do.

not enough student teacher interaction class discussion was null.

of the way the workbook was set up.

sections II and III were too confusing.

it really didn't allow much field experience.

too much needless instruction could have been completed in less time.

it should of dealt more with trips.

of that stupid workbook. The whole format was ridiculous and I think it was a waste of my time to fill in any of it.

it avoided the topic of job seeking and job skills. (resumes, interviews, etc.)

I only got two credits.

I think it consisted of too much writing and some of the questions were not explained well.

it kept repeating the same exercises and kept asking for the same information in each exercise. It didn't give a clear view of jobs available later or salaries for the jobs.

we were somewhat rushed--only two hours a week to complete this course.

the book instructions were not fully understandable.

only the student didn't use it.

at times rather boring tests and group discussions that didn't help.

because a lot of the occupations that were in the workbook were of a low standard 3 for those only wanting a low salary or nonprofessional occupation. For example the occupation on pages 67, 69 were too vague and not any much of the "high paid professional" occupations.

me being an older student, my needs seemed to be different and less concrete to the younger students.

it didn't stress work situations, functions, and just work detail. Dealed with primarily background activity.

I'm in the same boat as I was when I started.

I didn't understand a lot of it and I couldn't concentrate in class.

it bogged me down on that crazy workbook. I never did have enough time to investigate all possible job careers. The instructions were not clear and too strung out. I'm disappointed. I still did not choose a career. I put down something just to get through it.

the quarter was too short for all the work in the book.

not enough time involved--too much repetitive material.

no information on military or government positions.

there seemed to be too much to it in a short time and the books are very disorganized.

it didn't help me make a final decision.

we really didn't have sufficient time to complete everything.

I did not have time enough to explore all the different aspects of occupations I don't know.

the instructions in the workbook were not clear sometimes and made it hard to get everything out of the activity.

it was done too quickly. We needed more time and a little more individual help.

the only area with which I experienced trouble was with the out of class work. This probably could be associated with the fact that I'm taking 18 hours.

it is more appropriate for high school students.

not really sure about aptitudes.

at times it made me feel I was unsuccessful because I couldn't come to decisions in a matter of a day or two.

the text is long in some places where it is not necessary and short where it should be long, and the directions were difficult to understand.

it got boring.

I didn't find out anything new I didn't make any great new decisions.

(it was).

it didn't say much about working conditions jobs.

there was too much paper work filling out the same kinds of answer questions each day.

I would of liked to have speakers for different job areas talk to class. Needed time to talk to prospective employers with specific questions.

of the way the workbooks were set up. I wanted more guidance through the instructor.

it did not really give me a secure feeling about what I want to do.

there wasn't enough time to do it all.

too much workbook not enough research.

it was a little weak in places, not enough specific information could be used.

it wasn't of college caliber, should have been taken in 9th grade.

it did not point me in any specific direction.

it didn't really tell me anything that I didn't already know.

went to slow.

it did not spend enough time on looking into careers.

it didn't have any speakers in.

it didn't really help me pinpoint a certain career.

APPENDIX T

Student Comments: Aspects of Course Liked Best and Disliked Most

STATEMENT:

The thing I liked best about the course was...

RESPONSE:

getting to know others have the same indecision I have.

the "jam" sessions where we each discussed our values -what we wanted from life. Very useful even for other purposes than career and college decisions.

it didn't make any real demand on us. We could sit and discuss problems that didn't concern any other class.

the people in my class. We were very compatible and I enjoyed their company and our teacher.

get to know myself and my future better and getting to know some great friends.

the way our instructor handled the class and the way the material was presented. The teacher and the other people in the class were Great!

it taught me how to make decisions, which I couldn't do before.

the people and teacher.

the discussions and the interactions of the group.

discussion time.

the teacher, Ms. Stubbs. She was a very good teacher.

decision-making process, using DOT and Career encyclopedia.

meeting the people in class.

the self image evaluation. I liked discovering what I really like and dislike.

learning things about myself that I was not aware of.

it was basically contained in one book.

in-class discussions.

researching different careers.

the personal profile which helped me to determine certain aspects of me which I didn't know.

I now can see I have many different careers I can enter which would meet my values and career goals.

it was only half a semester and it made me think more about what I want and not what people want from me.

meeting some new people in the class.

the instructor. Ms. Stubbs is understanding and eager to help students explore new ideas.

(1) the exercise on what type of decision-maker you are, and (2) the code of arms in-class exercise.

the way in which it helped me discover new things about myself.

watching myself cross off possible careers through logical thinking.

the specificity of the WTG text and the knowledge of the instructor.

how it reinforced my goals and the use of the workbook.

that it forced me to think about possible careers.

learning of many other job areas. The Worker Trait Group book.

that so many of the jobs are interrelated that I never knew before.

the new things I learn about myself.

that it helped me understand more clearly my goal.

the career center and what it had to offer you as information on the job I would like.

that it gave me information into a number of jobs.

that now I have some new ideas.

the insights I got about myself.

the Worker Trait Group book, filmstrips.

looking at different related work traits in one certain field.

the interest, aptitude, and personality testing were very interesting.

talking about the different goals, going to the career center, and talking out loud.

the different personality tests, and the introduction to some of the services at the career center.

being able to chart out my plans for a future career.

the way it followed the decision making process step by step.

a lot about myself and career.

learning about the different occupations.

it's over.

it reinforced that I am in the right major.

relaxing--although busy.

the group discussions.

the discussions.

CIS system.

other students.

the group discussions.

films.

discussing other people's career goals and values along with mine.

no pressure.

its instruction to the CIS and career plan.

it was fun.

the instructor.

the interviews of people in careers of our interest.

the discussion type atmosphere.

it makes you stop and think about your career. Will you be happy, are the activities and situations what you would want of the job you like.

panel discussions, value system.

the instructor's concern and patience.

the many worksheets, the variety of career information given.

discussions.

you could work at your own pace more or less.

the different activities, guest panel, lab day, small group discussion, self searching activities

the things we did outside of class.

some of the work sheets and extra assignments we were given in class.

the emphasis on values and prior happenings.

video tapes and most lectures, also group discussion.

having guest speakers come and talk to us.

new information.

actually realizing what careers are available and understanding the function of each.

learning about different fields.

Career Lab Day.

the lab day, along with the taped interviews and the aptitude tests. All were valuable and helpful.

reading material in the lab.

the way the course was set up was very helpful, but the instructor should have tied in the decision-making process with the work fields.

finding out more about the occupation I was interested in.

the discussions in class.

finding out which way you could look for a job.

the chance to interview someone in the field I was interested in.

going to the library and looking at the DQT and finding information.

Worker Trait Group book.

discovering what, in terms of a career, what is right and what is wrong for me.

it was an easy three credits, and it didn't tax my brain.

the relaxed and open atmosphere. I wish more classes were structured this way because I believe it is much more beneficial for the student.

the easiness of it.

getting to work with the Worker Trait Group Guide, the DOT, etc. all the career decision-making materials.

that it was individual.

using the Worker Trait Group Guide.

personal profile.

taking the aptitude test and getting results.

the use of the DOT--that info is very valuable.

(all the new things I learned about myself.

the instructors and the clarification of my interests, values and goals.

the fact that I finally learned to set down some basic and alternate goals.

learning how to use DOT, OOH, Keysort deck. Also, learning about myself and how I would relate to different jobs to plan my career.

the unit on how to make a decision.

Ms. Blecharczyk's attitude, tests, and personal interest. I am grateful for her and the opportunity I had to gain so much useful information.

its open style and the subjects we covered.

the exercises we did to see what jobs we'd enjoy--seeing how it all came out.

finding sources for information and learning more about myself.

it led me towards my goal--it made me think and develop a greater understanding of myself.

that I finally decided upon three or four career choices that suited me.

looking and researching the different types of occupations that interested me.

when it was finally narrowed down to a specific field, I really felt like I was headed somewhere.

the teacher.

the exercises were fun to work on and got me really involved in my career plan.

the teacher, some of the book and the students.

the teacher and her approach and guidance she administered.

it helped me make a change in my major and feel good about it.

studying the different fields of occupations.

finding out about my goals and my educational alternatives.

the teacher, because she really made interesting and challenging.

that sharing of ideas among classmates, and hear others' career plans.

decision worksheet, career exploration.

it made me feel good about the career I have chosen.

exploring the different careers I was interested in.

planning a future in my declared major.

the way the instructor taught the class and the career planning.

the teacher. She was very helpful and explained everything well.

the honest open relationship with the teacher.

the breakdown of job listings in all the different fields to go into.

Mrs. Smith. I like her teaching methods, her as a teacher, and a very good friend.

the feedback from the instructors especially on the personal inventory and personal profile.

the tests and comparing notes and experiences.

it encouraged my motivation.

the second half where we actually went out in the field and interviewed.

getting results from tests and finding out lots of information about myself.

I found out things about myself that I did not know.

the learning atmosphere provided by the instructors, and the discussions of the entire class!

motivation to get up and go after what I found my interests were in

learning how to find the information and also the atmosphere of our class was very enjoyable.

the way the course was set up (i.e., the workbook).

the decision-making process, and establishing my values and abilities.

getting to use all the information in the career center.

being able to explore and research careers that I'm not really interested in but was just curious.

looking through the DOT and OOH.

the charts.

my instructor.

the way the textbook was set up and the test that we took in class.

the film and lectures.

the instructor, Brenda, Jay, Malisa, etc.

the type test given. Such as GATB, Scacedale and aptitude.

learn more about where to find complete information about different careers.

because I realized that a lot of people don't want a lot out of a job and life.

the possibilities that are in front of me for a career were brought out, with help (a lot) from this course.

finally discovering a direction for my career to take.

the group encounters.

decision-making section.

the loose style with which we taught, it helped me to gain more knowledge more easily.

the group discussions.

being in groups to discuss how we each had decided on our goals and the filmstrips.

the writing and learning of my values! It helped me to better understand myself!

all the information I learned about careers and how to plan ahead of time for them.

I learned about where to go for career information.

the instructor.

it taught me about the different occupations available for a career.

all of the information available about various careers.

looking into other careers.

the discussions within the groups.

all of the activities involved.

that it helped me define my interests.

showing how many careers and how they were related to the things I liked best.

learning about different occupations and qualifications needed.

you get to see what all a person has to do in order to get a job.

it gave me a greater understanding of courses in college and careers.

the activities that pertained to aptitudes.

the end, seriously the course did not inform that much. Although the time we had to spend on looking into the occupations of interest was good.

I got to study a wide variety of fields.

the general awareness of myself in relation to suitable careers.

it helped me to isolate some career possibilities.

looking at all the careers I could possibly go into.

the fact that I could get information on jobs I am interested in.

slides.

there were discussions in groups which brought out views of individual and that enabled me to gain some ideas and to correct my understanding of the course as well as helped me know what I am and what I will be with relation to decision-making and my milieu.

the self-awareness it teaches.

I had the chance to look at the material on jobs.

STATEMENT: The thing I disliked most about the course was...

RESPONSE:

not having enough time (class periods) to complete the workbook and major and career investigations.

we didn't have enough time to complete the book.

the directions in the career planning and decision-making book were hard to understand and there was too much to do in the time allotted.

it seemed to take a great deal of time with all of my other classes, I didn't feel we did it justice.

there was not enough time allowed to complete the book.

it repeated itself over so many times.

it wasn't what I really expected, it would be good for high school seniors and middle-aged people.

that it ran over the allotted time in the catalog.

the course was too long, repeated itself too often, got boring!

not getting the opinions and values of any males.

I wish we had enough time in the course to finish the exercises in the workbook.

that the information was all a rush job wasn't too much time to think about it.

recording of ourselves and what we don't want.

that it was too general. Perhaps though, a second semester dealing with specific jobs would be helpful.

the films. I thought they were very poor and not really needed as they served as no means of motivation.

1) the workbook, especially the pictures and sometimes the copy was difficult to understand; 2) the filmstrips were dull, condescending in time, and overall they were boring and too unsophisticated for my taste, perhaps junior high or high school students was for whom they were produced.

there were too many boring and unnecessary assignments in the book; and the reading was dull.

the workbook. The material was good, but the spaces for answers were too small.

the book, in certain parts, some of the activities were extremely elementary.

filling in the charts.

the research material was hard to get to since I live 15 miles from campus and there wasn't enough books for everyone in the class.

the films. I thought they were unrealistic. For example: in one a white woman came home to a black husband and an all white family. This was suppose to be a typical family!

the set up of the book.

too much outside work.

I did not grasp enough information on specific careers.

there was too much to cover in a short length of time. Topics were discussed briefly.

it repeated itself in the book a great deal.

the films. They seemed very juvenile.

it didn't get into specifics enough, it only got into generalities.

some of the things I disliked showed some jobs that I was not even interested in.

sometimes it seemed the information was too general, not well defined.

not enough time.

I don't know.

they didn't have enough time to do everything.

nobody coming in to speak to the class about different careers. (a speaker)

that it was not organized too well for only being a 1 hour class--
would prefer a two hour class.

the course was not long enough I think it should be a two hour class

all of the busy paper work.

out-of-class work.

busy work.

the busy work.

its daily work that had to be kept up to date without falling into
confusion, even though other classes prevented this sometimes.

boring.

a little more complicated than I thought.

the extra work.

that there was a great deal of paper work.

all the paper work.

the picky work you had to do. I would have rather taken applied
psychology this quarter.

the homework.

filling out little blanks.

the busy work.

homework.

too much work involved and the tests were too long.

too much busy work.

it was boring and seemed elementary.

the busy work.

the requirements for grades.

all the busy work.

the paper work.

nothing.

frequent meetings, difficult and excessive amount of materials to turn in.

nothing, although I found myself not reading the book.

the first few beginning assignments on values.

textbook got too rigid towards end. I wasn't ready to declare a major--it was.

not enough in-depth class discussion.

boring repetitions.

working out of the book--I considered the book to be elementary.

tended to be general and boring a few times.

the two-hour block (too long to be interesting).

some of the filmstrips that accompanied the book.

long class period.

watching video tapes.

video tapes and long class hours.

it was kind of boring.

aptitudes testing.

we were too rushed for time.

over 50 percent of the material was repetitious.

workbook.

the only thing I disliked was the book.

the book.

the time the class was set.

the difficulty understanding the instructions.

the workbook. It was too repetitious.

the time wasted with charts and diagrams and other stupid stuff.

that it did take a long time to narrow down, by then the class was over.

the exam on Chapter (Unit) 2.

the workbooks tend to be very complicated sometimes.

the course.

the time we spent filling out charts that had to be decided for use.

the way the teachers taught--too simple.

it wasn't really geared for the whole class at the same time.

I hate filling out charts, turning the pages back and forth was a pain.

the class time seemed too long and I sometimes lost interest in what was being said.

the confusion of turning pages back and forth to get information.
(could be overlooked)

the teacher lecturing was more of a high school level and it tended to be more instruction of how to do the exercises than a synthesis of ourselves--I believe in this type of learning process you tend to learn through student interaction, how everyone feels and you feel.

the way the workbook was set up--flip here, flip back, and back again.

the filmstrips were kind of boring.

plowing through needless work!

all the paperwork!

sometimes things went rather slowly.

that there was not enough widespread activities.

at times the lectures were boring.

taking the tests in Ellior (?).

the fact that it had to center around the workbook. I think if we did a lot more exploration on our own.

the workbook was highly insulting and also the attitude of one of the teachers. She talked to us as if we were two year olds.

so much writing.

the last few weeks which repeated already covered material.

some parts of the book seemed confusing and irrelevant.

the constant writing in the book.

the films. It seems that after the first two or three slides the rest were just repeating the main ideas in different words.

rushing through the book.

filling out the workbook and all its technicalities.

we were rushed through the semester.

the time of the class (morning).

some of the longer exercises that required a lot of writing but had little space for writing.

the feedback from the younger students was limited.

all the paperwork. The workbook got very confusing on directions.

I liked everything.

the workbook and other repetitious exercises.

some assignments seemed repetitious and boring.

too much work.

the amount of homework--but I realize this was necessary.

group discussions that lasted all night.

covered a lot of material I already knew that's why I stated "high school" level for being taught. Also, the text repeated itself too much. I got tired of rating my values and stating them, etc. The text, in my opinion, was of low caliber. Also, the instructions were not always clear. Another thing that was discouraging about the course was that ridiculous story on page 4 about "Booker Page, Cabdriver." I can't imagine anyone going to school and taking a course like this to hear about a cab driver. Perhaps a story of a person in a "better" college related occupation would have been a better job.

in many cases the workbook seemed unnecessary and a waste of time.

the material covered was below level. More work traits needed to be expressed.

the workbook.

the noisy class.

some exercises in workbook.

the writing.

that for the most part it was boring, the book is not very well planned too much skipping around.

having to go through the workbook.

the workbook. It was rather difficult to complete.

we spent more time on ourselves instead of the occupations themselves.

the fact that all the work was required at the very last and not spread throughout the semester evenly.

not having enough time to do much of the work as correctly as possible.

there's not much I disliked about the course, except for the time of the class.

the decision-making process.

time it was offered.

having it at night.

the time taken away from other studies.

the long amount of time needed to compute the homework and complete.

it got boring and repetitive.

the time 6:30 to 7:45 was particularly bad. The homework I just didn't have time for.

the time--it was in the evening.

having it in the evening.

the time it was given.

it being at night.

the time required for out of class work in Unit II.

unorganized.

some exercises led me the wrong way in my career goal.

lack of enthusiasm from students and instructor. Although it wasn't his fault--it was the new program presented.

doing some of the work in the booklet and lack of participation by fellow students.

we went through everything too fast.

not enough time.

book work.

it was too general and a bit low level in places.

it didn't let me narrow a field down to three or four choices.

too many exercises that did not amount to anything.

it didn't really get down and tell what each certain job field was like.

went too slow in the book.

boring.

no speakers.

not really being able to decide on a certain career and not having enough time to completely finish the course.

APPENDIX U

Student Comments: Results of Being in the Course

QUESTION:

What happened to you as a result of being in this course?

RESPONSE:

Not much.

I did decide to go to school, if only for one year. If I had not taken the course, I would have tried to find any old job.

I am better able to understand and make decisions.

I learned to make better decisions.

I chose a major.

I found my career.

I have stated and reached several goals. I have made several career decisions that are very important in my life.

More sure of myself and my future.

Possibly I understand myself better or finally spoke some of my deeper feelings.

It made me aware of decisions that had to be made. Decisions that I kept putting off.

I know basically what I want. I was uncertain about what I could get from college, now I realize how important education really is for me.

I have a clearer understanding of what I don't want.

I decided upon a college major, although I am unsure what I am going to do with it.

I learned ways to make decisions and I'm amazed at the amount of career open to me.

Made me realize it's getting late and I better get into a field.

I learned what I want in a job. I also learned I was interested in occupations I had never thought of before this class.

I found a new career to research.

I feel better about myself.

I know a bit more about how I view things.

I strengthened my dislikes and likes and narrowed down my choices of a major towards a career.

I was made aware that my decision making process wasn't very thought out. Also, I received a better understanding of myself.

I was able to evaluate myself and see what type of careers I might be interested in.

The course made me more aware of the direction I'm going. I made up my mind on a major yet I'm still not sure what kind of job I'd like to have when I graduate.

Nothing.

As I stated before, I am looking into other careers related to math and tangent to business.

I became more aware of myself and I learned many things concerning the world of work that I did not know before.

I'm ready to explore further those careers which interest me.

I just grew a tad more secure in my career selection. The course may be a factor in my slightly altering my major.

I made the decision to pursue a career, an option I had avoided because of an inability to imagine what careers were available.

I became more consistent toward my career.

I learned there are many possible careers to try and that it is not a one-step process. I found out where my main interests lie.

I became more aware of the variety of occupations in the world of work today.

I really found out in which direction I am going.

I found some new things about myself, but most of the things I already knew.

I've broadened my knowledge of careers and the career world.

It helped a lot in planning courses to take to get training for that job.

I have an idea that I would like to go into a technical field of work something I was not aware of.

I got more confused about my career.

I know where to go and how to go about it. When I decide what area I want to go in.

I looked up different job careers, what skills were required for that certain job.

It gave me more information on where I might be in my studies here in college. (courses)

It opened my eyes to many different areas of possible career ideas. Helped me to have a little more confidence.

I am not shy and I really found out what kind of a person I am. I could speak up without being shy or feeling dumb.

I found I like being back in school and would like to further my education in some direction.

I have a fuller awareness of my career goal and how to reach it now.

Probably will help me make better decisions in the future.

I found out what career I really wanted.

I decided on a definite major.

Became frustrated.

I put in more work than I wanted to but my career was reinforced.

Able to bring up Q.P.A., wasted a lot of time filling out papers.

I learned more about my career.

I now realize I have picked the right major for me.

Nothing, it was too late for me.

Didn't have much time.

Nothing will change I had my career already.

Hurt my Q.P.A. with a freshman course.

Decided on a major and minor.

I am much more aware of where I am headed with my career. I had a basic idea of what I wanted, but the course made my decision more concrete.

I had a nervous breakdown.

Started thinking seriously about future--career choice, college, etc.

Nothing.

I gained a greater understanding of careers and world of work and greater understanding of decision-making process.

I learned more about myself.

Always trying to keep up.

I have confirmed my choice of major and decided to declare my major.

I thought a lot about my career.

I took a closer look at my career goals, values, and interests.

I was bored.

I've learned a great deal more about the career I've chosen.

I've decided to attend a modeling school, and afterwards finish my college program in textiles.

I have decided on a career plan, partially because of this course.

No much.

I learned more about myself and also I was able to decide on a college major.

I got reinforced self-confidence and one college credit.

I have narrowed my career choices.

Learned much valuable information about myself and my career goals which were nonexistent before.

I became more aware of myself.

I am able to look at my future with a more realistic vantage point.

I have a better awareness of my values, needs, wants, and goals. It is an informative class.

I more or less confirmed my area of interest and occupation. I'm still not positive on my future goals though.

Not much--I gained a little better understanding of myself and realized that everyone has good points--they may be significant even if we don't consider them so.

Expanded my knowledge of careers.

I have clearer idea of my career values and goals.

I understand myself somewhat better.

I have learned more about myself and my goals.

I was able to clarify some career goals and find ways to fulfill them.

I was able to pick a major area of study that I think I'll be successful in.

I have selected a major and am more aware of what I want and how to get it.

Gained greater understanding of my aptitudes and information that will be useful in the future.

I learned what is available in the world of work and that I'm not necessarily tied to any decisions I have to make. Therefore, I want to become a social worker (but I might change my mind).

I have set some goals that I will accomplish.

I was able to state a career goal.

This course helped me to find my goals and information about my career.

I was able to state a career goal.

I gained a further understanding of my goals (or one specific goal), and the career options available to me.

Nothing.

I got very discouraged and exasperated at times--but still continued with my work.

I found out what competencies and credentials were needed for my field of work.

I learned more about myself in relation to my interests.

I have become more aware of my desires, values.

I now have a better understanding of my career choice.

Wrote down goals.

Learned more about what I can do with my interests.

It made me question myself in a number of ways.

I picked a major and two related occupations. I also make decisions faster.

I more clearly identified my values, interests, and goals.

I have decided my major and have the motivation to know I can handle it.

Career plan is now established which enables me to choose courses better in the years to follow in schooling.

I did make some final decision about the summer--I reevaluated myself and goals.

I gained a great deal of knowledge and was finally capable of putting together my interests, goals, and aptitudes into a constructive career goal and outline.

I picked upon a career goal.

I have a better understanding of what I want to do and I know that I have to prepare for this goal in other ways than attending college.

I learned a little more about myself in relation to careers and occupations.

I'm working towards my decided goals in life.

I became more sure of myself about making decisions and I'm not likely to put off making decisions.

I found out where my interests are and what my abilities and competencies are.

I've looked into my field of interest. I know what's offered. I know what background I need. I now have a foundation to build on.

I have a better understanding about DOT's and OOH's to help other people decide on careers.

I'm more aware of my career goals.

I have a broader outlook on my career and am looking forward to getting out into the world and starting work.

I learned my career goals and my alternatives in the secretarial field.

It supplied knowledge about my occupational preference. It made me prepared for life.

Changed major.

This course has helped me to learn how to make decisions and understand myself better.

I have gained a better understanding of myself and the different alternatives I have.

I feel like I know what I want in the future, my goals.

I looked at my career objectively and changed my major to my real love, sociology.

I have a schedule that carries through school up to starting work.

I have more insight into making decisions about my career and personal life.

I finally got my career straightened out and going in the right direction.

I now know what I want. Before this course I was guessing.

I can better have the understanding of job situations in my chosen major.

I know what my goals are, and I know how to make a good decision.

I decided my career goal.

I gained a greater understanding of myself and the world of careers, enough to formulate a precise career plan.

I'm more aware of my future goal and short term goal.

I have a career plan to go by now and that's more than many other people have.

I was allowed a job interview for two specific occupations due to the field survey. I developed a greater sense of self-confidence and have decided to pursue a graduate degree, most likely an MBA.

Built some confidence, narrowed my interests, and gave me some other career alternatives.

I became aware.

I've gained more control over why I'm doing what I'm doing and how to do it.

I found out about myself and what I am prepared to do. It helped me choose a career.

A new major.

I became clearer on a career change--got some very specific job preferences.

Decided to go to school, picked a major, and made some friends.

I found some new avenues career wise to explore plus learned how to find any information I do not know.

Gained knowledge of knowing occupations that I was certain not to go into and found some I would like to strive for.

I now have a stronger outlook towards what I want to do and how to go about doing it.

I've pretty well narrowed down my career goal and I am headed in the right direction.

I am more familiar with a few different occupations but got frustrated because it didn't help me more.

It reinforced my career desire a little more.

I met some interesting people.

Not much.

It gave me an idea of what some careers are and what I would be like in working in a career.

I wasted my time.

I was beat up, my car had a flat, my dog died, and I can't drink as much.

I have narrowed my choices down somewhat as to my major.

I found out what I didn't want to do.

I'm currently enrolled in a business class, to see how I like it so I may decide if I should change my major.

I changed majors and took courses related to my career goal.

Felt more definite about career goal.

I was more aware of what I had to do to prepare myself for a career and it made me more decisive in making decisions.

I can make up my mind easier about things I'm involved in.

I have decided on my major and have a clearer idea of what I want out of my career and how to obtain it.

I decided to look into transferring to another school because this course helped me in my decision-making and also to find out that to teach Special Ed was what I really wanted to do!

I have decided to transfer to a school that offers the curriculum I want.

Not much.

I decided to stick with my major.

I decided to presently stay in my major.

I now have a more definite plan for my future.

Met many new people--just kidding--It made me sure of my major.

I decided to take course in another major without officially changing my major until taking some classes.

I found the career that best suits me and interests me.

I became more aware of my interests and am now sure of my major.

I found a number of occupations that I might further be interested in and may continue to pursue or look into.

know more about/certain jobs.

I really found out what career I'm going into.

This course has made me more aware of what I can do as compared to my skills.

I gained three credits.

I'm more confused now than before I took it.

I am directing myself towards a career goal.

I have made decisions about my career and I am making steps toward it.

I think I have decided what I will do for a career.

I found out what I needed to know about my major and job interests.

I decided my short term goal.

It changed my mind from the career I planned to take to a better career which is based on facts and examples.

Gave me an awareness that everyone wants a fulfilling job career and it takes work to find one.

Not much, I have had more help from outside people. The class stayed on each point too long.

APPENDIX V

Meta Evaluation Summary



University of Pittsburgh

SCHOOL OF EDUCATION
Division of Educational Studies
Program in Educational Research Methodology

November 1, 1979

Dr. Sandy Barker
Appalachia Educational
Laboratory
P. O. Box 1348
Charleston, WV 25325

Dear Sandy:

This is to certify that I have reviewed your assessment package and evaluation plan for the Career Planning and Decision Making Course. I believe the measures used cover a broad range of outcomes and have sufficient validity and sensitivity for the evaluation effort. The evaluation plan likewise seems appropriate. Further, I have reviewed the interpretations and conclusions included in the final report and believe they accurately reflect the data and are justified by it.

I enjoyed working with you on the project.

Best regards,

Nancy S. Cole
Associate Professor and Director
Program in Educational Research
Methodology

NSC/dap

Enclosure

341