This paper presents an example of the implementation of the elements of developmental career counseling within an academic setting. A ten-week seminar, attended by 49 university student subjects, was evaluated, before and after, with the Vocational Development Inventory (VDI), the Career Activities Survey (CAS, an information seeking checklist), and the Career Assessment Form (CAF, a choice-decidedness index). Seminar objectives are stated and descriptions of various seminar sessions are included. Although significant differences were found on all three instruments and results suggest significant gains for those students participating in the seminar, the author points out that the results should be interpreted with caution since a control group was not utilized. The author further suggests that the CAS may, itself, be a treatment and that movement in the direction of "less decided" on the CAF may also represent growth. References are included. (Author)
A CAREER DEVELOPMENT GENERAL EDUCATION SEMINAR

Kathleen B. Stoddard
University of Utah

Abstract
Implementation of the elements of developmental career counseling within an academic setting is described. The ten-week seminar was evaluated pre and post with the VDI, CAS (an information-seeking checklist) and CAF (a choice-decidedness index). Significant differences were found on all three instruments, but results should be interpreted with caution as a control group was not used. Further, it was suggested that the CAS may itself be a treatment and that movement in the direction of less decided on the CAF may also represent growth.

(Paper presented as part of a "Career Development Symposium" at the annual convention of the American Psychological Association, Honolulu, Hawaii, September, 1972)
A CAREER DEVELOPMENT GENERAL EDUCATION SEMINAR

Kathleen B. Stoddard
University of Utah

The traditional approach to career counseling involved individual interpretation of standardized vocational interest profiles. Recent developments have provided alternatives to this procedure as exemplified by the workshop previously discussed by Warshaw (1972). This paper describes the objective impact of career counseling via a quarter-long quasi-classroom experience. Limited to ten students, each seminar was supervised by a staff member of the University Counseling and Psychological Services and by a graduate student in counseling psychology. The forty-nine Ss who participated in the seminars consisted of thirty-eight male and eleven female University of Utah students ranging in age from eighteen to twenty-six (mean of 20.5). Thirty-seven were freshmen or sophomores while twelve were juniors or seniors. Their mean American College Test (ACT) composite score of 21.68 compared closely to the average of 22.02 for University freshmen. They were assessed before and after the seminar with the Attitude Scale of the Vocational Development Inventory (VDI), the Career Activities Survey (CAS), and the Career Assessment Form (CAF).

The seminar was designed* to provide an option to individual counseling and workshops. Objectives were similar to those of O'Hara (1968) and Cooley (1969) in that the course represented a formal presentation of

* by Edwin R. Christensen, Harrold Mallory, Kathleen B. Stoddard and Peter Warshaw, staff members of the University of Utah Counseling and Psychological Services.
elements of developmental career counseling. Seminar objectives were:

(1) for students to be aware that career development is a life-long process involving consideration of all facets of personality and environmental constraints not just interests and aptitudes (Ivey and Morrill, 1968).

(2) to assist students in exploring the elements of career development as previously discussed by Fuhriman (1972).

(3) through the life planning exercises, to help students explore a variety of ways in which they could influence their futures.

(4) to provide experiences in decision-making and goal-setting through the use of negotiated behavioral contracts (Krumboltz and Thoresen, 1969).

(5) to legitimize personal development as an educational goal through the availability of this experience as an academic course.

Description of the Seminar

Figure 1 presents the time sequencing as follows:

Insert Figure 1 here

Initial activities, during weeks 1 - 4, involved a group discussion of personal experiences, characteristics and values. Scholastic aptitude of each student as determined through American College Test (ACT) scores and grades, vocational interests obtained from interpretation of the Strong Vocational Interest Blank (SVIB) and the results of the Kuder Occupational Interest Survey (OIS) were reviewed within the group. In individual meetings with one of the instructors, additional personal
<table>
<thead>
<tr>
<th>WEEK</th>
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<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>ELEMENTS</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

**FIGURE 1**

**TIME-SEQUENCING OF THE ELEMENTS OF DEVELOPMENTAL CAREER COUNSELING AS RELATED TO THE SEMINAR**
Factors were explored through the Maudsley Personality Inventory (MPI) and the Personal Orientation Inventory (POI). The individual interview also provided an opportunity to make referrals for individual therapy when that was appropriate.

Subsequent sessions, weeks 4 - 5, focused on the integration of data generated from these instruments (SVIB, OIS, MPI and POI) with individual life plans. Within the decision-making model, students assessed their progress in career development and their readiness for further movement. Goal-setting and implementation, weeks 5 - 9, employed the format of a behavioral contract (Appendix A) negotiated primarily between each student and both group leaders with inputs from other members. Table 1 presents the frequencies of the various contracted activities.

TABLE 1

INDIVIDUAL ACTIVITIES FOR CONTRACT COMPLETION
(1971-72 academic year)

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Number of Students* (N = 49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researched occupational literature</td>
<td>45</td>
</tr>
<tr>
<td>Interviewed people working in occupations of interest</td>
<td>38</td>
</tr>
<tr>
<td>Talked with academic advisors</td>
<td>35</td>
</tr>
<tr>
<td>Talked with Placement Center Personnel</td>
<td>18</td>
</tr>
<tr>
<td>Visited prospective employers</td>
<td>15</td>
</tr>
<tr>
<td>Requested further testing for self-evaluation</td>
<td>9</td>
</tr>
<tr>
<td>Went to Utah Employment Security Office</td>
<td>8</td>
</tr>
<tr>
<td>Participated in learning skills counseling</td>
<td>5</td>
</tr>
<tr>
<td>Obtained employment in interest area</td>
<td>4</td>
</tr>
<tr>
<td>Performed volunteer services</td>
<td>3</td>
</tr>
<tr>
<td>Miscellaneous (e.g., researched military alternatives, observed people working in field of interest)</td>
<td>14</td>
</tr>
</tbody>
</table>

* Students participated in multiple activities
A group decision was made regarding the frequency and format of meetings for the following three weeks. During this period, students who met shared contract activity experiences. Some contracts were re-negotiated. The final class session involved individual disclosure to one another of their efforts to complete their contracts, evaluation of their individual progress in decision-making, and definition of their future goals. Each student turned in a report (e.g., written, tape, demonstration, chart) based on these experiences.

Course credit was based on completion of the contract and class attendance because of the activity participation format of the seminar. A credit/no-credit grade structure was chosen to minimize the evaluative aspects of the student/teacher relationship.

**Assessment Instruments**

**VDI.** The VDI was developed by Crites (1965) to show age differences in response to vocationally oriented inquiries. Response changes are presumed to relate to vocational maturity as it is increased by educational and life experiences.

**CAS.** The CAS is a behavioral checklist developed by Shepherd and Carney (1971a) based on a study of information-seeking behavior (Krumbloltz and Thoresen, 1964). The purpose of the instrument is to assess the number of career-related information-seeking activities in which students have participated.

**CAF.** The CAF is a choice decidedness index to assess progress in making decisions about college majors and occupations (Goodson, 1970; Shepherd and Carney, 1971b). It requests that a person rank himself on a scale of five from "decided" (scored one) to "undecided" (scored five).
Analysis of Data

Measures of central tendency and variability were computed for each variable. Further analysis consisted of a one-way analysis of variance with repeated measures (Ferguson, 1971) for the pre and post tests of the VDI and the CAS. The Wilcoxon matched-pairs signed-ranks test (Siegal, 1956) was used to evaluate pre and post measures of the CAF because the data was ordinal and had a continuous distribution. This test utilized information about the relative magnitude and the direction of the differences within pairs. The alpha level of .01 was selected.

FINDINGS

The null hypothesis was rejected. As indicated in Table 2, analysis of variance between pre and post measures of the VDI ($F = 23.66; p < .01$) and the CAS ($F = 120.40; p < .01$) produced significant differences. Examination of the data suggested an increase in vocational maturity as measured by the VDI and greater participation in information-seeking activities as assessed by the CAS.

TABLE 2

ANALYSES OF VARIANCE OF PRE AND POST MEASURES OF THE VDI AND THE CAS

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VDI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between-Subjects</td>
<td>1169.58</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within-Subjects</td>
<td>654.50</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>232.37</td>
<td>1</td>
<td>232.37</td>
<td>23.66*</td>
</tr>
<tr>
<td>Residual</td>
<td>422.13</td>
<td>43</td>
<td>9.82</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1824.08</td>
<td>87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **CAS**            |       |    |       |         |
| Between-Subjects   | 706.49  | 40 |       |         |
| Within-Subjects    | 758.00  | 41 |       |         |
| Treatment          | 568.98  | 1  | 568.98| 120.40* |
| Residual           | 189.02  | 40 | 4.73  |         |
| Total              | 1464.49 | 81 |       |         |

* $p < .01$
Table 3 presents the mean pre and post scores on the VDI and the CAS.

**TABLE 3**

MEANS AND STANDARD DEVIATIONS OF PRE AND POST MEASURES OF THE VDI AND THE CAS

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Deviation</td>
</tr>
<tr>
<td>VDI</td>
<td>(N = 44)</td>
<td>34.27</td>
</tr>
<tr>
<td>CAS</td>
<td>(N = 41)</td>
<td>5.85</td>
</tr>
</tbody>
</table>

Using the Wilcoxon matched-pairs signed-ranks test on CAF pre and post assessment of college major, the null hypothesis was rejected ($Z \geq 3.79$ or $Z \leq -3.79$; $p < .01$). Examination of the data suggested increased decidedness regarding choice of a college major. Based on a range from one (decided) to five (undecided), the median pre-assessment was 3.06 or "I have tentatively thought about these areas as possible majors." The post-response averaged 1.86, or "I have my major choice narrowed down to two possibilities."

Using the Wilcoxon test on CAF pre and post measurement of occupation, again the null hypothesis was rejected ($Z \geq 2.71$, or $Z \leq -2.71$; $p < .01$). Inspection of the data indicated increased decidedness about occupational choice. Also, based on a range from one to five about decidedness of occupation, the median pre-course response on the CAF was 3.81 or "I have a hazy understanding as to which general occupations I could consider." The post-class response averaged 2.62 or "I have tentatively thought about these possible occupations."
DISCUSSION

These results suggest significant gains for those students participating in the seminar. However, the results must be cautiously interpreted due to the lack of a control or placebo group.

The increase in the number of information-seeking activities as measured by the CAS was anticipated because one of the goals of the seminar was to acquaint students with methods and sources of seeking occupational information. Also, there is some indication that assessment with the CAS may itself be a treatment by suggesting the criteria activities to students (Shepherd, 1972).

The results of the CAF indicated that the majority of the students become more decided after the seminar experience, but some students became less decided. It is hypothesized that movement toward less decided is not necessarily regressive but may represent the impact of additional career information.

SUMMARY

This paper presented an example of the implementation of the elements of developmental career counseling within an academic setting. The ten-week seminar was evaluated pre and post with the VDI, CAS (an information-seeking checklist) and CAF (a choice-decidedness index). Significant differences were found on all three instruments, but results should be interpreted with caution as a control group was not used. Further, it was suggested that the CAS may itself be a treatment and that movement in the direction of less decided on the CAF may also represent growth.
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Career Life Planning Seminar  
G.E. 191

I, ______________________, do hereby agree to complete the activities listed below according to the criteria also listed below. Successful completion will result in my being awarded 2 hours credit for G.E. 191 (Career Life Planning Seminar). Failure to fulfill this contract will result in no credit.

<table>
<thead>
<tr>
<th>GOAL(s)</th>
<th>ACTIVITY(ies)</th>
<th>CRITERIA</th>
</tr>
</thead>
</table>
| Gather information about: 
   1. Requirements for medical school entrance 
      a) University of Utah 
      b) other schools 
   2. Medical school itself 
   3. Setting up practice 
   4. Physical therapy 
      a) school requirements 
      b) job activities 
   5. Medical Service Corps (medicine in the armed service) | Interviews 
   Pre-med advisor 
   Doctor (specialist) 
   Physical therapy advisor 
   Physical therapist 
   Practical, Self-help 
   Get job at a hospital 
   Check with service (Uncle Sam) 
   Set up class schedule 
   Review Occupational Literature 
   Doctor, dentist, physical therapist, osteopath, medical technologist, (see statistics about job market, salary ranges) | Written evaluation of the information in terms of my interests, aptitudes and personal characteristics. Oral report to the group of my progress in decision-making. |

Instructor

Instructor

Signed

Dated