Abstract

The Interstate Distributive Education Curriculum Consortium (IDEDC) completed 500 learning activity packages (LAPs) designed to develop 983 competencies for 69 jobs in distribution in 1974. The research was to determine: the degree to which distributive education (DE) teachers were using the IDECC LAPs, the attitudes of DE students in regard to the LAPs, and why some DE teachers were using the LAPs while others were not (measured by the Russell Change Orientation Scale for vocational teachers). Of the 11 Consortium States, North Carolina was selected to be surveyed. Approximately 15% of North Carolina's DE teachers (38 subjects) were randomly selected, as well as a representative sample of their students, and asked to complete questionnaires. The teacher questionnaire resulted in a 73.68% response with 42.85% of the responding DE teachers reporting use of the LAPs and 57.15% reporting no use. There were 95 respondents to the student questionnaire. Usable return on the change orientation scale totaled 19. Findings and conclusions are reported according to three categories: the teacher questionnaire, the student questionnaire, and the change orientation scale. Four recommendations are presented and copies of the questionnaires are appended. (Author/MS)
A REPORT ON THE
NATURE OF THE USE OF
LEARNING ACTIVITY PACKAGES
IN DISTRIBUTIVE EDUCATION PROGRAMS
AND THE DETERMINATION OF CHANGE ORIENTATION
OF DISTRIBUTIVE EDUCATION TEACHERS

Stephen R. Lucas
Benton E. Miles
Larry J. Weber

A paper presented at the annual conference of the
American Educational Research Association
San Francisco, California, April 23, 1976
INTRODUCTION

This is a report of a study concerning the use of learning activity packages (LAPs) developed by the Interstate Distributive Education Curriculum Consortium (IDECC) one year after the dissemination of the product. Of concern are the change orientation of the distributive education (DE) teachers, the attitudes of the distributive education students towards LAPs and the manner in which the IDECC LAPs were used.

The Crawford Study

In the middle 1960's an extensive research effort in distributive education was undertaken by Crawford. Crawford attempted to identify the competencies needed by students who would enter into distributive occupations. The results of her study were disseminated at a national seminar held at Virginia Polytechnic Institute and State University in 1968. Enthusiasm for her work led to the establishment of an eleven-state consortium, whose purpose was to make Crawford's curricula framework operational. An increasing emphasis on educational accountability had heightened enthusiasm for individualized instruction at all educational levels. The above facet, coupled with the characteristics of distributive education curricula in which student careers are unique to each person, made the Consortium's choice to develop learning activity packages for DE students appropriate and timely.

The IDECC

In 1971, the Interstate Distributive Education Curriculum Consortium came into existence; curriculum work began and learning packages were completed by the end of the summer of 1972, at which time a meeting of representatives
from the eleven states was held to develop a strategy for testing the LAP approach and evaluating the system. A model for evaluating learning packages was developed by Weber and presented at that time. After considerable deliberation by members of the Consortium and modification of the model to better suit its needs, the model was adopted and later used to evaluate the field test of the Consortium's initial efforts in writing LAPs.

The IDECC Field-Test

Major elements of the field-test design required that the packages be tested with at least 20 students representative of populations having inner-city, rural, and suburban characteristics. The data collection methodology included instruments designed for gathering evidence about achievement of all competencies as well as attitudes toward the LAP method of instruction.

Data regarding components of the LAP program were collected and analyzed from responses of 785 classroom teachers who administered the packages and 6,875 students who used them. Information was gathered regarding the following components: effectiveness, efficiency, adequacy of learning activities, LAP format facility, congruence between objectives and test questions, availability of reading resources, education enfranchisement, a comparison of LAP instruction to traditional instruction, adequacy of objectives, time factors, direction clarity, interest level of students, and general attitudes toward LAPs by teachers and students. Analysis of the data revealed a high degree of success for the LAP method of instruction on criteria that were established for comparison of findings regarding LAP components.

Following the findings of the field-test study, the learning activity packages were revised in 1974. The IDECC LAPs were then mass-produced and distributed to the member states as well as certain selected states in 1975. The dissemination procedure varied from state to state. For example, in North Carolina the LAPs were made available to every state-approved distributive
The North Carolina In-Service Program for IDECC LAPs

It was recognized early that there was a strong need for in-service education to prepare teachers to integrate the IDECC product with the individual teacher's existing program of instruction. Consequently, state-wide, in-service programs were organized by the North Carolina Department of Public Instruction, Occupational Education Division, Distributive Education Service, in various regions of the state so that the in-service program would be accessible to all DE teachers. The instructional staff for each in-service program was comprised of high school DE teachers, state staff personnel, and distributive teacher education personnel.

RATIONALE FOR THE STUDY

Because of the extensive resources allocated to the IDECC project in North Carolina, there was extreme concern as to degree to which the IDECC product would be integrated with the current DE instructional program. Even though most DE teachers in North Carolina received in-service education regarding the IDECC LAPs, the informal feedback received by DE personnel at the state level and distributive teacher education personnel seemed to indicate that the learning activity packages were not fully integrated with the instructional system and, in some cases, were being totally disregarded. From informal observation, the DE leadership people found that many local DE teachers either enthusiastically supported the IDECC product and its use or totally ignored it. This polarization of attitudes was of great concern. The fact that many DE teachers were enthusiastic about the IDECC product and were using the product successfully was evidence that the product was usable. In an attempt to assist the "non-users," the DE state staff convened a group of IDECC "users" for the purpose of preparing a cross-reference...
scheme that identified the appropriate location for the individual LAPs in the existing state curriculum guides. Despite all efforts, there was still a sizable number of DE teachers who were not using the IDECC LAPs.

The purpose of the research described in this paper was to determine: (1) the degree to which North Carolina distributive education teachers were using the IDECC LAPs, (2) the attitudes of distributive education students in regard to the IDECC LAPs, (3) why some distributive education teachers were using the IDECC LAPs while other distributive education teachers were not using the IDECC LAPs.

PROCEDURES

In an effort to determine the degree to which North Carolina distributive education teachers were using the IDECC LAPs, the investigators developed an assessment instrument in conjunction with the North Carolina DE state staff and the North Carolina Association of Distributive Education Teachers (NCADET). Approximately fifteen percent (38 subjects) of the population were randomly selected from the North Carolina Distributive Education Personnel Directory.

In order to ascertain the attitudes of distributive education students in regard to the IDECC LAPs, a modified, shortened version of the IDECC student questionnaire, used in the 1974 IDECC field-test, was developed. This would enable the investigators to have comparative data with the 1974 study. This questionnaire was to be administered to the students of the distributive education teachers participating in this study and who were using the IDECC LAPs.

The final question to be resolved and by far the more difficult was to determine why some distributive education teachers were using the LAPs while other distributive education teachers were not using the IDECC LAPs. An instrument was identified that would measure the change orientation of vocational teachers. The investigators felt that this may be a key to the
explanation of the differences in the use of the IDECC LAPs by the various distributive education teachers. The author of the change orientation scale is Earl B. Russell, Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, who reported on the instrument and its success in a publication in December, 1972 (ED 074 211). This scale was to be administered to distributive education teachers using the IDECC LAPs as well as the distributive education teachers not using the IDECC LAPs.

The teacher and student questionnaires were to be mailed in mid-1975. The Russell change orientation scale was to be mailed in late 1975 to those teachers who had previously responded to the teacher questionnaire.

FINDINGS

The findings will be reported by the three research questions explained above: (1) the teacher questionnaire, (2) the student questionnaire, and (3) the change orientation scale. Copies of the questionnaire and scale are located in the appendix.

The Teacher Questionnaire

The teacher questionnaire resulted in a 73.68% response with 42.85% of the responding DE teachers reporting use of the IDECC LAPs and 57.15% of the responding DE teachers reporting no use of the IDECC LAPs. Highlights of an examination of the results of the teacher questionnaire are as follows:

1. Seventeen per cent of the DE teachers reported that the IDECC LAPs were being used in areas other than distributive education.
2. The amounts of money used to implement the IDECC system were reported to range from less than $25 to a maximum of $500.
3. Sixty-seven per cent of the DE teachers had classrooms that were arranged solely for large-group instruction. (It cannot be construed that these teachers were only using large-group instruction.)
4. Fifty per cent of the DE teachers reported that their students only used those IDECC LAPs which were needed according to their career objective.

5. Fifty-eight per cent of the DE teachers reported that only those IDECC LAPs that were common to the whole class were administered.

6. Sixty-eight per cent of the DE teachers reported that the learning activity used most frequently was individual.

7. Forty-two per cent of the DE teachers reported that the learning activity of the IDECC LAP should be administered to the student regardless of whether or not he/she passed the pre-test.

8. Eighty-three per cent of the DE teachers reported that the maximum number of post-test attempts was two.

9. Sixty-seven per cent of the DE teachers reported that they had not changed their grading procedures as a result of using the IDECC LAPs.

10. In regard to the question of whether the use of IDECC LAPs made grading more difficult, the DE teachers were evenly divided in their responses -- 50% indicated the affirmative and 50% checked the negative response.

The Student Questionnaire

There were 95 respondents to the student questionnaire. Highlights of an examination of the results of the student questionnaire are as follows:

1. Eighty-eight per cent of the students reported that the directions contained in the IDECC LAPs were clear.

2. Seventy-two per cent of the students reported that the learning
activities for the competencies were worthwhile.

3. Thirty-six per cent of the students felt that the LAP method of instruction was a boring way to learn distributive education material.

4. Eighty-eight per cent of the students felt the behavioral objectives contained in the IDECC LAPs were easy to understand.

5. Sixty-four per cent of the students reported a favorable attitude toward the IDECC LAPs.

6. Sixty per cent of the students reported that the most frequent use of the IDECC LAPs was the individual activity.

7. Student responses to the question of whether the competencies studied were required for their career goals resulted in 20% saying "yes," 21% saying "no," and 48% saying that they "did not know."

The Change Orientation Scale

The question asked for this section was, "Is there a difference between distributive education teachers who have adopted (used) the IDECC LAPs in their instructional program from teachers who had not used the IDECC LAPs in their instructional program?" Russell's change orientation scale was administered to both groups of distributive education teachers (those who had used the IDECC LAPs and those who had not used the IDECC LAPs) and the mean scores were computed. Results on the returns were received from 25 individuals -- 19 returns were usable. Ten of the 19 usable returns (52.63%) indicated that they were using the IDECC LAPs while nine of the 19 usable returns (47.36%) indicated that they were not using the IDECC LAPs. Scores for the means and standard deviations were computed and are shown in the table.
### TABLE

**SUMMARY OF TEST FOR DIFFERENCES BETWEEN MEAN SCORES OF DISTRIBUTIVE EDUCATION TEACHERS USING IDECC LAPS AND DISTRIBUTIVE EDUCATION TEACHERS NOT USING IDECC LAPS**

<table>
<thead>
<tr>
<th>Group</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE teachers using LAPs</td>
<td>65.60</td>
<td>6.39</td>
<td>1.56</td>
<td>&lt; .20</td>
</tr>
<tr>
<td>DE teachers not using LAPs</td>
<td>60.33</td>
<td>7.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Test for homogeneity of variance was not rejected. $F = 1.40$

Findings were not of a nature that we were able to say there was a significant difference between the group of DE teachers who had rejected the IDECC LAPs and the group of DE teachers who had adopted the IDECC LAPs. It was found that the mean of the DE teachers using the laps was not as high as Russell's norm group, however, the difference in the magnitude between the DE teacher "user" and the DE teacher "non-user" was greater than the differences reported in the Russell study.

**CONCLUSIONS AND RECOMMENDATIONS**

Conclusions will be reported in three categories: (1) teacher questionnaire, (2) student questionnaire, and (3) change orientation for vocational teachers (Russell's scale). The three questions asked of each of these categories were explained earlier.
Conclusions Pertaining to the Teacher Questionnaire

From an evaluation of the teacher questionnaire, the following conclusions are drawn:

1. Internally and externally, DE teachers are not communicating the role and use of IDECC LAPs to other audiences such as other vocational education teachers and advisory committees.

2. The IDECC LAPs are being used with a wide range of financial support. Because of the wide range of money expended for implementation, it appears that the amount of money expended is dependent on the amount of money available at the time. One of the previous criticisms of the LAPs was the high cost of reproduction of portions of the LAPs. This finding does not support that criticism.

3. LAPs can be used in traditional settings. Although it may be desirable to have individual study areas and the attendant facilities to enhance it, it is not necessary for individualized instruction to take place and for the IDECC LAPs to be used.

4. A sizable percentage (at least half) of the DE teachers are using the IDECC LAPs according to the students' career objectives. Although most DE teachers are selecting IDECC LAPs that are common to the whole class, they are administering the individual learning activities of the IDECC LAPs.

5. Many DE teachers tend to ignore the results of successful pre-test performance. Almost half of the DE teachers reported the practice of prescribing learning activities even if the student successfully passes the pre-test.

6. Although most DE teachers reported that they were using competence statements in the development of training plans for their students, they also reported that they were not using the IDECC LAPs in the
development of such plans. This may suggest that there is a lack of understanding that training plans should, indeed, indicate not only competencies but where (e.g., training station, classroom, laboratory) and how (e.g., LAPs, projects, demonstrations) one is to acquire the competencies.

7. After two attempts to pass the post-test, most DE teachers will assign the student some other activity or means of evaluation.

8. The nature of the IDECC LAPs has not been so revolutionary as to cause DE teachers to change their grading procedures. Most DE teachers follow the same grading procedure when using the LAPs as when not using the LAPs. However, there was difficulty encountered by half of the DE teachers in regard to grading when using the IDECC LAPs.

Conclusions Pertaining to the Student Questionnaire

From an evaluation of the student questionnaire, the following conclusions are drawn:

1. Most DE students felt that the objectives, directions, activities, and handouts contained in the IDECC LAPs were clear and easy to follow. The reading difficulty is evidently at an appropriate level.

2. An overwhelming majority of DE students felt that all of the learning activities for the development of the competencies were worthwhile.

3. A disappointing conclusion is that the boredom factor reported by the DE students in this study coincides with the percentage reporting boredom in the 1974 IDECC field test. It was hoped that the revision which followed the 1974 field test would have resulted in a lesser percentage of boredom being reported. (In a previous study by the investigators, it was found that the boredom factor was located...
primarily in the less efficient packages, i.e., LAPs where students did not pass the post-test(s) after one or two attempts.

4. Of the three kinds of learning activities -- individual, small group, and large group -- the individual learning activity was reported by an overwhelming number of DE students as the activity pursued most often when assigned an IDECC LAP.

5. Almost half of the DE students did not know if the specific competencies prescribed for them to study were also required according to their chosen career objective. Conversely, less than a third of the DE students felt that the competencies were required according to their chosen career objective.

The Russell Scale to Determine Change Orientation for Vocational Teachers

An evaluation of the findings reported for the Russell scale to determine the change orientation for vocational teachers resulted in the following conclusion. The evidence suggests that the sole use of the Russell change orientation scale, per se, to identify the change orientation of DE teachers is questionable in the absence of corroborative data. Since the distributions of scores of the two groups overlapped, decisions regarding DE personnel would have to be made in light of all available information.

Recommendations

In light of the findings and conclusions of the study, the following recommendations are advanced:
1. New instructional materials should not be distributed on a mass-dissemination basis even in conjunction with intensive in-service activities because many of the teachers will not use the material and, in fact, it may put a drain (limit) on the resources of teachers and the sponsoring agency.

2. In regard to the dissemination of the IDECC LAPs in the future, it would be better to distribute two sets of the LAPs to the teachers who would most likely use the LAPs. It has been observed that teachers can better administer and implement the IDECC LAP method of instruction when they have two sets of the IDECC LAPs in their possession.

3. The IDECC LAPs identified as boring should have action directed toward their improvement in an appropriate manner.

4. The argument that the IDECC LAP method of instruction cannot be used because of inappropriate physical facilities, including classroom layout, should be considered invalid.
TEACHER QUESTIONNAIRE

IF THE IDECC LAPs ARE NOT USED IN YOUR CLASSES, PLEASE CHECK THIS BOX □ AND DO NOT ANSWER THE QUESTIONS. PLEASE RETURN THE QUESTIONNAIRE.

IF YOU ARE USING IDECC LAPs IN YOUR CLASSES, PLEASE COMPLETE AND RETURN THE QUESTIONNAIRE.

1. Have you explained the IDECC LAPs system to your Advisory Committee?
   33% Yes 58% No

2. Check if any other instructional area is presently using the IDECC LAPs in your school.
   17% Yes 83% No

3. How much money have you used to implement the IDECC LAP system?
   17% Less than $25 8% $101 - $200
   25% $26 - $50 25% $201 - $500
   19% $51 - $100 0% More than $50

4. Is your classroom presently arranged solely for large group instruction?
   67% Yes 33% No

5. Under what circumstances are LAPs used in your classroom? Check all of the statements that apply.
   50% Students only use LAPs which are needed according to their career objective.
   25% All of the students use the same LAP at the same time.
   33% LAPs are used when they fit into the North Carolina State Department of Public Instruction course outlines.
   58% Students only use LAPs that are common to the whole class.

6. Indicate the following activities that were most frequently used.
   33% Large group learning activity
   0% Small group learning activity
   67% Individual learning activity

7. Should IDECC LAPs be administered to all students regardless of whether or not they pass the pre-test?
   42% Yes 58% No
8. Do you use IDECC LAPs in the development of training plans for your students? 
   25% Yes  67% No

9. Do you use competency statements in the development of training plans for your students?  
   58% Yes  33% No

10. What is the maximum number of times you have administered a post-test to a student? 
    8% One time only  0% Four times  
    83% Two times  0% Six times  
    8% Three times  0% Seven or above

11. Are you using performance "contracts" with the use of the IDECC LAPs? 
    33% Yes  67% No

12. Have you changed your grading procedure because of the use of the IDECC LAPs? 
    67% Yes  33% No

13. Does the use of the IDECC LAPs make the grading of students difficult for you? 
    50% Yes  50% No
STUDENT QUESTIONNAIRE

Instructions to the Student: Please react to these questions based on the LAPs you have completed.

1. The directions for performing the LAPs were clear and easy to follow.  
   88% Yes  11% No

2. The following reading material was difficult to understand.  
   12% Directions  28% Activities  24% Handouts

3. All of the learning activities for the competencies were worthwhile.  
   72% Yes  28% No

4. I think this is a boring way to learn distributive education material.  
   36% Yes  62% No

5. The objectives of the LAPs were easy to understand.  
   88% Yes  11% No

6. My attitude toward learning the material in the LAPs by the LAP method of instruction is favorable.  
   64% Yes  36% No

7. Indicate the following activities that were most frequently used.  
   20% Large group learning activity  
   18% Small group learning activity  
   60% Individual learning activity

8. Are the competencies you have completed required for your career goal?  
   29% Yes  21% No  48% Don't know
FOOTNOTES


ABSTRACT

The Interstate Distributive Education Curriculum Consortium completed 500 learning activity packages designed to develop 983 competencies for 69 jobs in distribution in 1974. The research study had as its prime focus to determine the extent and the manner in which the IDECC LAPs were being used during the first academic year in which the LAPs were available, 1974-75. Of the eleven Consortium states, North Carolina was selected to be surveyed. Fifteen per cent of the total DE teachers as well as a representative sample of their students were asked to complete a teacher questionnaire or a student questionnaire.