A description is given of the methodology and findings of an evaluation of learning packages (LAP's) developed for students in distributive education programs by representatives of the 11 state members of the Interstate Distributive Education Curriculum Consortium. A total of 445 packages was judged on characteristics relating to students, materials, administration, economics, and personnel. Analysis of the data revealed findings highly favorable to the LAP method of instruction when they were compared to criteria established by the consortium members. Results were important because they yielded information relevant to a major curricular endeavor in vocational education in the U.S. They represent findings about an initial attempt at using learning packages on a national basis. (Author)
THE EVALUATION OF LEARNING ACTIVITY PACKAGES DEVELOPED
BY THE INTERSTATE DISTRIBUTIVE EDUCATION CURRICULUM
CONSORTIUM

by
Larry J. Weber
Virginia Polytechnic Institute and State University

Stephen R. Lucas
and
Benton E. Miles
The University of North Carolina at Greensboro

A paper presented at the annual conference of the
American Educational Research Association
Chicago, Illinois, April, 1974.
In the mid 1960's an extensive research effort in distributive education (DE) was undertaken by Crawford. The U.S.O.E. sponsored study had as its main purpose the identification of technical and professional competencies needed by teachers of distributive education. In her methodology Crawford deemed it necessary to identify competencies needed by distributive workers as a first step. It was her contention that what was required in the marketplace should be the standard for a teacher of a subject. Accordingly, she identified 71* distributive occupations for an in-depth analysis. The occupations were selected based on those jobs which secondary school DE students most frequently entered or those to which they advanced.

*The number of jobs investigated in Crawford's study was actually reported as 76, however, through a combination of like jobs requiring the same competencies, the number that is reported by several sources will vary. We find it convenient to use the 71 jobs as they are reported later in this paper.
Thus, a base of entry-level jobs plus a two-step career continuum formed the context for Crawford's task analysis and competency identification for each of the 71 jobs. The 71 jobs represented seven major categories of business: department stores; variety stores; food stores; service stations; wholesaling; hotels/motels; and restaurants. A total of 983 competencies were identified as the result of the study of the 71 jobs. A list of the 71 jobs is presented in Illustration 1 (see page 3).

After Crawford determined the list of distributive jobs to be studied in building the competency pattern for DE teachers, task analyses were performed for each of the jobs and competency statements were written to address the tasks identified. The 983 competencies were organized according to nine competency areas: advertising, communications, display, human relations, mathematics, merchandising, operations and management, product/service technology, and selling. For each of the seven categories of business previously mentioned, the nine competency areas and their attendant competencies appropriate for the several jobs in each particular category of business were portrayed. In turn, the competencies were categorized by knowledge, skill, and attitude. See Illustration 2 for an excerpt of this overall arrangement (page 4).

The results of Crawford's study were disseminated at a national seminar held at Virginia Polytechnic Institute and State University in 1968. Enthusiasm for her work led to the eventual establishment of an eleven-state consortium, The Interstate Distributive Education Curriculum Consortium (IDDECC). The Consortium's purpose was to make Crawford's curricular framework operational with respect to the technical competencies. The focus, therefore, was to prepare curriculum materials to aid students in acquiring the necessary competencies needed to enter the several distributive occupations. The IDECC was conceived as a way to bring together a number of states for the purpose of producing a needed product that was not financially feasible for any one state to accomplish. The estimated total investment for the IDECC has been placed in excess of $500,000.
ILLUSTRATION 1

THE DISTRIBUTIVE OCCUPATIONS IN THE CONSORTIUM'S CURRICULUM

DEPARTMENT STORES

1. Advertising Manager
2. Buyer
3. Assistant Buyer
4. Credit Interviewer/Cashier, Receptionist, Credit Application Cashier, Cashier
5. Credit Manager
6. Assistant Credit Manager/Credit Authorizer
7. Department Manager/Sales Supervisor
8. Display Helper/Sign Printer
9. Display Manager
10. Assistant Display Manager/Supervisor
11. Professional Salesperson
12. Receiving Clerk/Marker
13. Receiving Manager/Supervisor
14. Assistant Receiving Manager/Checker
15. Salesperson
16. Stockperson

FOOD STORES

17. Checker
18. Head Cashier
19. Head Grocery Clerk/Head Produce Clerk
20. Grocery Clerk/Produce Clerk
21. Store Manager
22. Assistant Store Manager

HOTEL/MOTEL

23. Bell Captain
24. Bellman
25. Building Superintendent
26. Cashier
27. Catering Manager
28. Chef
29. Executive Housekeeper
30. Manager/Executive Assistant
31. Assistant Manager
32. Night Auditor (Night Manager)
33. Purchasing Agent
34. Recreation Director
35. Reservation Manager
36. Room Clerk
37. Sales Manager
38. Service Superintendent

RESTAURANTS

39. Busboy (girl) (Floor girl, cafeteria)
40. Cashier (checker, cafeteria)
41. Counter-girl
42. Head Waiter
43. Hostess
44. Manager
45. Assistant Manager
46. Waiter (Waitress)

SERVICE STATIONS

47. Attendant
48. Assistant Manager
49. Station Manager/Dealer

VARIETY STORES

50. Checkout Cashier
51. Commissioned Salesperson
52. Head Cashier/Bookkeeper/Office Manager or Head Cashier
53. Department Manager
54. Marker/Stockman
55. Office Clerk
56. Personnel Manager
57. Salesperson
58. Section Manager (Floor girl)
59. Service Desk
60. Stockroom Supervisor
61. Store Manager
62. Assistant Store Manager

WHOLESALING

63. Buyer
64. Head Buyer/Merchandise Manager
65. Merchandiser
66. Order Selector
67. Receiving/Shipping Supervisor
68. Route-Salesman and/or Vending Machine Specialist
69. Salesman
70. Sales Manager
71. Warehouse Manager

* Certain occupations require the same competencies. When this occurs, the occupations are given the same number.
ILLUSTRATION 2
EXCERPT OF DEPARTMENT STORE COMPETENCIES
COMPETENCY AREA DISPLAY

Knowledge and Understandings:
11. Knowledge of how to use backgrounds in display construction that enhance, not detract, from the merchandise.
   8 9 10
12. Knowledge of how to design and construct display fixtures.
   9 10
13. Knowledge of how to plan and schedule displays and display themes in advance.
   9 10 3 2 7
14. Knowledge of the ways to use display-lighting techniques most effectively.
   8 9 10
15. Knowledge of current fashion and merchandise information necessary for effective and timely display.
16. Knowledge of the best locations within the store or department to place displays.
   3 2 7 8 9 10
17. Knowledge of the uses which can be made of manufacturers' display-aids.
   15 3 2 7 8 9 10
18. Knowledge of the principles of mass display.
   15 3 2 16 7 11 8 9 10
19. Knowledge of the best arrangements for advertising merchandise on counters, tables or shelves.
   15 3 2 16 .7 8 9 10 11
20. Knowledge of the ways to develop displays that feature merchandise as nearly as possible to the way it will be used.
   15 .3 2 7 8 9 10 11
21. Knowledge of how to store and record the location of display fixtures or supplies so they are accessible for future use.
   8 9 10
22. Knowledge of how to dress mannequins for displays.
   15 3 2 .7 16 8 9 10 11

* Numbers below each competency indicate the identification number of the particular job(s) which requires the competency. See page 3 for numbers.
An increased emphasis on individualized instruction and the nature of distributive education curricula, in which student careers are unique to each person, made the Consortium's choice to develop learning activity packages (LAPs) for DE students an appropriate one.

A LAP is a compilation of instructional materials designed to assist distributive education students attain the competencies needed for a distributive occupation. The IDECC LAPs contain the following components:

1. LAP Cover Page. The key items appearing on the page are the LAP title, the competency numbers contained in the LAP, an illustration to convey an image of the nature of the competency area, and a statement which synthesizes the competencies contained in the LAP.

2. Pre-Test.

3. Learning Activities. This section provides the statement of the behavioral objective. The page also has a listing of at least two individual learning activities as well as a minimum of two group learning activities. At least one of the learning activities is self-contained so that it will not require the purchase of any additional material.

4. Handouts. A LAP may contain information sheets for the student to read and complete questions as part of one of the learning activities. The handouts always follow the section describing the learning activities.

5. Learning Manager's Section. This contains any information that is deemed necessary for the teacher to know in order for the particular learning activity to take place but which is not pertinent for the student to know.

6. Pre-Test Key.

7. Post-Test.

8. Post-Test Key.

A schematic arrangement of the IDECC learning activity package cycle is shown in Illustration 3, (see page 6).
ILLUSTRATION 3
THE IDECC LAP CYCLE

Select Career Objective

Common Competencies Identification

Uncommon Competencies Identification

Begin LAP
Read Objectives

Take Pre-Test

No-Pass
Select Learning Experience

Complete Learning Activity

Take Post-Test

Pass
Enter into Competency Record

Continue To Other Appropriate LAP'S and Repeat Cycle
Methodology

The 983 competencies for the nine competency areas were divided among the eleven states. The mandate for each state was to develop learning activity packages for each of their competencies. Preliminary work on packages was completed by the end of Summer 1972, at which time a meeting of representatives from the 11 states was held to devise a strategy for field testing the LAPs and evaluating the IDECC system. The parameters for the field test were as follows:

1. Sites were selected to ensure product generalizability (e.g., rural and urban settings).
2. Subjects were selected to ensure that there would be a minimum of twenty administrations of each LAP.
3. Packages developed in a given state were tested in a different state.
4. The pre-test was administered to all the students. Students who passed the pre-test were not administered that particular LAP.
5. Evaluative instruments were developed to measure the effectiveness of the LAPs. More information pertaining to the evaluative instruments is presented in a later section of the paper.

A model for evaluating learning packages developed by Weber was adapted for the purpose of evaluating the system. Major elements of the model include the program components, which are elements of an educational program that are being evaluated, and decision components, which are elements of an evaluation scheme that illustrate the format for evaluating program components (see illustration 4, page 8).

Program components that were selected for evaluation were those that related to students, LAP materials, administration, economics, and personnel. Major program goals for each component were developed which in turn were made operational by translating them into behavioral terminology. The operational goals provided clues for data collection methodology.

Three forms were devised to gather data. A brief description of each of the forms follows. Copies of the forms are contained in the Appendix.
## Illustration 4

**Excerpts of an Evaluation Guide**

<table>
<thead>
<tr>
<th>Program Components</th>
<th>Program Goals</th>
<th>Operationalized Outcomes</th>
<th>Data Collection Format</th>
<th>Criteria</th>
<th>Judgment Alternatives</th>
<th>Decision</th>
</tr>
</thead>
</table>
| Students Effectiveness | 1) Percent of students achieving mastery on post test.  
2) Comparison of LAP instruction to traditional instruction. | 1) Student/Class Analysis Chart: Ratio of total +’s on post test to total No. of students.  
2) Comparative study of the 2 methods of instruction using randomly selected classes. | 1) 80% Competency level.  
2) Statistical significance $P > .05$. | a) Revise LAPs.  
b) Use traditional instruction. | Student  
Favorable  
Non-Favorable |
| Favorable Attitude | 1) Student’s attitude toward LAPs. | 1) Student Questionnaire: Nos. 3, 4, and 6. | 1) >50% favorable on each question. | a) Eliminate undesirable features of the LAP.  
b) Use other instructional methods. | | |
| Administration Usability in Schools | 1) Educational enfranchisement. | 1) Teacher Questionnaire: No. 12. | 1) >75% No. | a) Abandon LAP format of instruction.  
b) Alter instructional methodology.  
c) Eliminate objectional procedures. | Administration:  
Favorable  
Non-Favorable  
Formative  
Summative |
| 3) Comment: | | | | | |
Student/Class Analysis Chart. This form was used for collecting information about the progress of students on LAP competencies. It is an ongoing record of the members of the class who attempted to achieve a specific competency. It was maintained for each student who did not pass the pre-test.

Teacher Questionnaire. This form was used for gathering information about individual LAPs. After students in the class had completed work on a competency, the teacher completed a copy for each LAP competency that was field-tested.

Student Questionnaire. This form was used for gathering information about individual LAPs. A student completed a copy for each LAP competency that was attempted after he/she successfully passed the post-test.

Criterion of success for each of the elements of the LAP program were established. Illustration 5 summarizes the components of the LAP program that were evaluated, lists the data collection methodology, and presents criterion information, (see page 11).

Results
A total of 445 packages (designed to develop 983 competencies) were prepared by the Consortium members. Because of the extensive nature of the project, sampling techniques were used to facilitate the analysis of data. Teachers completed a questionnaire for each different competency during the two-month period of field testing. The 785 responses represented a 50% sampling from 200 schools in the various states. Each student completed a questionnaire for each competency that he/she mastered or attempted. The 6,875 student responses represented a 20% sampling from the same schools.

Two of the major purposes of the LAP project related to student progress. The purposes were effectiveness and efficiency of the materials for teaching students in distributive education courses. Effectiveness was defined as the percent of students who attempted a given competency and passed the post-test. The question that the evaluation was attempting to answer was whether DE students could
acquire the necessary skills through the LAP mode of instruction. The criterion level set for effectiveness was 80%. Efficiency was defined as the average number of times a student needed to attempt the post-test. Specifically, it was the ratio of post-test attempts to post-test passes. It yielded information as to how many times a student had to attempt a LAP in order to master the criterion (post-test). A standard of 1.5/1 was established for all LAPs. That is, for every two students who attempted a competency, one should have passed the post-test the first time and the other should not have had to take the post-test more than two times (see Illustration 5, elements 1 and 2, page 11).

Findings relevant to effectiveness indicate that the LAP method of instruction was a successful one. Of 4,403 students who attempted competencies using the LAP materials, 4,115 passed the post-test. This constituted 93.46% of the students and surpassed the criterion of 80%. In addition to the effectiveness data for the total LAP program, comparable information about each competency was available so that revisions could be made on individual LAPs that fell below the criterion. Of data analyzed for 521 competencies, it was found that the effectiveness criterion was not attained on only 35, or approximately 7%.

Findings regarding the efficiency component were similarly favorable. On a total number of 5,763 post-test attempts, 4,115 students passed the criterion test for a ratio of attempts to passes of 1.4/1. The above figure was within the criterion established (1.5/1) by Consortium members. Data on individual packages that related to efficiency was also available. Of data analyzed on 507 competencies, the criterion was attained on 392 competencies of 78%. Packages containing competencies that did not meet the criterion level were identified so that they could be examined for revision.

Additional evaluative information regarding other elements of the LAPs is presented in Illustration 5, the Evaluation Summary. Much of the material given
### Evaluation Summary

**ILLUSTRATION 5**

<table>
<thead>
<tr>
<th>Evaluation Element</th>
<th>Data Collection Methodology</th>
<th>Criterion</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Percent of students who attempted the competency and passed the post-test</td>
<td>Data from Student/Class Analysis Chart. Ratio of total passes on post-test to total number of students who attempted the competency.</td>
<td>80%</td>
<td>93%</td>
</tr>
<tr>
<td>2. Ratio of post-test attempts to post-test passes.</td>
<td>Data from Student/Class Analysis Chart. Ratio of total post-test passes and post-test failures to total post-test passes.</td>
<td>1.5/1</td>
<td>1.4/1</td>
</tr>
<tr>
<td>3. Adequacy of Learning Activities.</td>
<td>Teacher Questionnaire: Part 1, Nos. 3, 4, 5, 6. Student Questionnaire: No. 3</td>
<td>Teacher Questionnaire: Nos. 3 &gt; 75% Yes, 4 &gt; 50% Yes, 5 &gt; 75% Yes, 6 &gt; 50% About Right</td>
<td>74%*</td>
</tr>
<tr>
<td>4. Educational Enfranchisement.</td>
<td>Teacher Questionnaire: Part 1, No. 12</td>
<td>&gt; 75% No</td>
<td>88%</td>
</tr>
<tr>
<td>5. Congruence between objectives and test items.</td>
<td>Teacher Questionnaire: Part 1, No. 7</td>
<td>&gt; 75% Yes</td>
<td>83%</td>
</tr>
<tr>
<td>6. Facility of the LAP format.</td>
<td>Teacher Questionnaire: Part 1, Nos. 5 and 10</td>
<td>5 &gt; 75% Yes, 10 &gt; 75% Yes</td>
<td>85%, 82%</td>
</tr>
<tr>
<td>7. Availability of Reading Resources.</td>
<td>Teacher Questionnaire: Part 1, No. 8</td>
<td>8 &gt; 75% Yes</td>
<td>76%</td>
</tr>
<tr>
<td>8. Comparison of LAP Instruction with Traditional Instruction.</td>
<td>Teacher Questionnaire: Part 1, Nos. 13 and 14. Student Questionnaire: Nos. 4 and 6.</td>
<td>Teacher Questionnaire: Nos. 13 &gt; 50% Yes, 14 &gt; 50% Yes</td>
<td>50%, 65%</td>
</tr>
</tbody>
</table>

* Criterion level on these items would have been attained if the numbers in the "other" categories on the questionnaires were ignored.
<table>
<thead>
<tr>
<th>Evaluation Element</th>
<th>Data Collection Methodology</th>
<th>Criterion</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Adequacy of Objectives</td>
<td>Teacher Questionnaire: Part 1, No. 2</td>
<td>Student Questionnaire: No. 5</td>
<td>2. 82%</td>
</tr>
<tr>
<td></td>
<td>Teacher Questionnaire: Part 1, No. 13</td>
<td>Student Questionnaire: No. 13</td>
<td>13. 50%</td>
</tr>
<tr>
<td></td>
<td>Student Questionnaire: No. 13</td>
<td>Student Questionnaire: No. 14</td>
<td>(Other data were analyzed, indicating 72% of competencies were completed in 30-90 minutes.)</td>
</tr>
<tr>
<td></td>
<td>Student/Class Analysis Chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Time Considerations</td>
<td>Teacher Questionnaire: Part 1, Nos. 11 and 14</td>
<td>Teacher Questionnaire: Nos. 11 and 14</td>
<td>11. 75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. &gt;50% Yes</td>
<td>14. 65%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. &gt;50% Yes</td>
<td></td>
</tr>
<tr>
<td>11. Overall Teacher</td>
<td>Student Questionnaire: No. 11</td>
<td>Student Questionnaire: No. 1</td>
<td>80%</td>
</tr>
<tr>
<td>Attitude</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Directions Clarity</td>
<td>Student Questionnaire: No. 1</td>
<td>Student Questionnaire: No. 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Interest Level</td>
<td>Student Questionnaire: No. 4</td>
<td>Student Questionnaire: No. 4</td>
<td>4. 65%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Student Attitude</td>
<td>Student Questionnaire: Nos. 3, 4, and 6</td>
<td>Student Questionnaire: Nos. 3, 4, and 6</td>
<td>3. 74%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. 65%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. 71%</td>
</tr>
</tbody>
</table>
in the illustration can be related to the criteria of evaluation elements 1 and 2, effectiveness and efficiency. The fact that such high success was obtained on these elements is supported by findings about other elements in the illustration. For example, 26 criteria were established for the evaluation elements listed in the illustration. The criteria were attained in 23 instances and in two of the remaining three instances, the criterion was deficient by only one percentage point. These findings were considered as evidence of success according to the standards established by the Consortium.

There are other data in the illustration which can be interpreted in a context apart from the first two elements. For example, evaluation element four, educational enfranchisement, refers to whether a school's policy hampered the implementation of the LAP method of instruction. Such information was considered of major importance for a curricular project which envisioned national distribution of its product. It was gratifying to note that in 88% of the 200 schools the response to this evaluation element was favorable.

Evaluation element seven refers to the availability of reading resources that were not contained within the LAP materials. Findings regarding this element were better than the established standard. However, upon subsequent discussion among Consortium members it was decided that the packages should be constructed so that at least one learning activity would be "self-contained" within each package and would not rely solely on learning resources that were external to the LAPs.

Space or time consideration does not allow for a full discussion of all elements in Illustration 5. The information contained within it is straightforward and readily interpretable. For a more complete understanding of the nature of the data, refer to the Appendix which includes a tabulation of sampling data on the Teacher Questionnaire and the Student Questionnaire.
Summary and Conclusions

This research report is a description of the methodology and findings of an evaluation of learning activity packages (LAPs) developed for students in distributive education programs by representatives of the eleven states who comprised the Interstate Distributive Education Curriculum Consortium. A total of 445 packages were judged on characteristics relating to students, materials, administration, economics, and personnel. Analysis of the data revealed findings highly favorable to the LAP method of instruction when they were compared to criteria established by the Consortium. Results are important because they yielded information relevant to a major curricular endeavor in vocational education in the United States and represent findings about an initial attempt at using learning activity packages on a national basis.
APPENDIX

Data Collection

Instruments

And

Sampling Data

Results
**INTERSTATE DISTRIBUTIVE EDUCATION CURRICULUM CONSORTIUM**

**STUDENT/CLASS ANALYSIS CHART**

**FORM 5 (cc 11) (11.72)**

<table>
<thead>
<tr>
<th>STATE NO. (1-2-3)</th>
<th>STATE NAME</th>
<th>SCHOOL NO. (cc 4-5)</th>
<th>SCHOOL NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>STREET ADDRESS, P.O. BOX (DRAWER) OR RURAL ROUTE</td>
<td>CITY</td>
<td>ZIP CODE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TEACHER NUMBER (cc 6-7)</th>
<th>TEACHER'S NAME</th>
<th>FIRST</th>
<th>MIDDLE INITIAL</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>COMPETENCY NUMBER (cc 8-10)</th>
<th>COMPETENCY NAME</th>
</tr>
</thead>
</table>

**INSTRUCTIONS:** Place a (+) in the 1st trial block if the student met standards and passed all the post tests for all the supporting objectives for this competency. Place a (-) in the 1st trial block if the student did not meet standards and pass all the post tests for all the supporting objectives for this competency. Place a (+) in the second trial block if he passed on 2nd test trial or a (-) if he did not pass. Follow the above procedure for all subsequent tests administered.

Do not record students who passed the pre-test.

<table>
<thead>
<tr>
<th>cc 11 14</th>
<th>CODES</th>
<th>1 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>16 18 17 18 19 20 21 22 24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENT NUMBER</th>
<th>STUDENT'S NAME</th>
<th>POST TESTING TRIALS</th>
<th>TIME SPENT ON LAP'S</th>
<th>D.E. STUDENT</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st 2nd 3rd 4th 5th 6th 7th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF STUDENTS THAT PASSED POST-TESTS (TOTAL +%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL NUMBER OF STUDENTS THAT DID NOT PASS POST-TESTS (TOTAL -%)</td>
</tr>
<tr>
<td>TOTAL NUMBER OF STUDENTS THAT TOOK POST-TESTS (TOTAL + % &amp; - %)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THIS LINE FOR DATA PROCESSING USE ONLY</th>
<th>TOTAL (1)</th>
<th>29-30</th>
<th>31-2</th>
<th>33-4</th>
<th>35-6</th>
<th>37-8</th>
<th>39-40</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL (+)</td>
<td>41-2</td>
<td>43-4</td>
<td>45-6</td>
<td>47-8</td>
<td>49-50</td>
<td>51-2</td>
</tr>
<tr>
<td></td>
<td>TOTAL (-)</td>
<td>63-4</td>
<td>65-6</td>
<td>67-8</td>
<td>69-72</td>
<td>73-4</td>
<td>75-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL (1)</th>
<th>37-8</th>
<th>29-30</th>
<th>31-2</th>
<th>33-4</th>
<th>35-6</th>
<th>37-8</th>
<th>39-40</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL (+)</td>
<td>41-2</td>
<td>43-4</td>
<td>45-6</td>
<td>47-8</td>
<td>49-50</td>
<td>51-2</td>
<td>53-4</td>
</tr>
<tr>
<td>TOTAL (-)</td>
<td>63-4</td>
<td>65-6</td>
<td>67-8</td>
<td>69-72</td>
<td>73-4</td>
<td>75-6</td>
<td></td>
</tr>
<tr>
<td>Part</td>
<td>Question</td>
<td>Options</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>1. THIS COMPETENCY IS A: (CHECK ONE) (cc-16)</td>
<td>1. KNOWLEDGE 2. SKILL 3. ATTITUDE 4. DON'T KNOW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>2. THE BEHAVIORAL OBJECTIVES ARE ADEQUATELY STATED. (CHECK ONE) (cc-16)</td>
<td>1. YES 2. NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>3. THE LAP MATERIALS ARE SUFFICIENT FOR STUDENTS TO MEET THE CRITERIA OF THE BEHAVIORAL OBJECTIVES. (cc-17)</td>
<td>1. YES 2. NO (cc-17) IF NO, WHAT IS THE NATURE OF THE DEFICIENCY?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td>4. THE LEARNING MATERIALS IN THE LAP FOR THIS COMPETENCY ARE SUPERIOR TO THE ONES I NORMALLY USE. (CHECK ONE) (cc-18)</td>
<td>1. YES 2. NO IF NO, WHICH ONES ARE INFERIOR?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>5. THE LEARNING MATERIALS ARE SEQUENCED IN A MANNER WHICH FACILITATES LEARNING. (cc-19)</td>
<td>1. YES 2. NO IF NO, WHAT IS THE NATURE OF THE PROBLEM? (IDENTIFY WHICH OBJECTIVE BY ITS LETTER.)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.</td>
<td>6. THE NUMBER OF LEARNING ACTIVITIES INCLUDED FOR THIS COMPETENCY ARE: (CHECK ONE) (cc-20)</td>
<td>1. TOO MANY 2. TOO FEW 3. ABOUT RIGHT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>7. THE TEST QUESTIONS ARE APPROPRIATE MEASURES OF THE OBJECTIVES. (CHECK ONE) (cc-21)</td>
<td>1. YES 2. NO IF NO, WHAT IS THE NATURE OF THE PROBLEM?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>8. WAS AT LEAST ONE OF THE READING RESOURCES SUGGESTED AVAILABLE TO YOU? (CHECK ONE) (cc-22)</td>
<td>1. YES 2. NO IF NO, WHAT RESOURCES DID YOU USE WHICH DEVELOPED THE COMPETENCY?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>9. WERE THESE READING RESOURCES PURCHASED FOR FIELD TESTING? (CHECK ONE) (cc-23)</td>
<td>1. YES 2. NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>10. THE FORMAT OF THE LAP MADE IT EASY TO USE. (CHECK ONE) (cc-24)</td>
<td>1. YES 2. NO IF NO, WHAT SUGGESTIONS DO YOU HAVE FOR IMPROVEMENT?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TEACHER QUESTIONNAIRE

**11. My general attitude toward this LAP is favorable? (Check one) (cc-26)**
- [ ] YES
- [ ] NO

**12. School policy has hampered the implementation of the LAP method of instruction in our school. (Check one) (cc-26)**
- [ ] YES
- [ ] NO

**13. The time required for students to master the material is less when I use the LAP method than when I use my own method.**
(Check one) (cc-27)
- [ ] YES
- [ ] NO

**14. I prefer the LAP method of instructions to the one I customarily use. (Check one) (cc-28)**
- [ ] YES
- [ ] NO

**COMMENTS:**

**15. The post-test keys were complete?**
(Check one) (cc-29)
- [ ] YES
- [ ] NO

**IF NO, describe deficiency.**

**PART II.**

**1. Rank in order of preference from most valuable to least valuable, the learning materials for the competency.**

<table>
<thead>
<tr>
<th>MOST-VALUABLE</th>
<th>OBJECTIVE A</th>
<th>OBJECTIVE B</th>
<th>OBJECTIVE C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
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<tr>
<td>4</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2. Can you suggest other audio-visual resources, materials, and non-reading activities which would be of value in helping students achieve the objective for the competency?**
(Check one) (cc-28)
- [ ] YES
- [ ] NO

**IF YES, list them according to objective. If A/V resources are suggested, describe their nature and purpose.**

**3. Other comments or suggestions about the LAP.**
**ILLUSTRATION 18**

**INTERSTATE DISTRIBUTIVE EDUCATION CURRICULUM CONSORTIUM**

**STUDENT QUESTIONNAIRE**

**FORM 4** (cc-1) (11:72)

<table>
<thead>
<tr>
<th>STATE NO. (cc-2-3)</th>
<th>STATE NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL NO. (cc-4-5)</td>
<td>SCHOOL NAME</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STREET ADDRESS, P.O. BOX (DRAWER) OR RURAL ROUTE</th>
<th>CITY</th>
<th>ZIP CODE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TEACHER NUMBER (cc-6-7)</th>
<th>TEACHER'S NAME</th>
<th>FIRST</th>
<th>MIDDLE INITIAL</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>COMPETENCY NUMBER (cc-8-10)</th>
<th>COMPETENCY NAME</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>STUDENT NUMBER (cc-11-14)</th>
<th>STUDENT'S NAME</th>
<th>FIRST</th>
<th>MIDDLE INITIAL</th>
</tr>
</thead>
</table>

**INSTRUCTIONS:** When you have completed work on a competency, regardless if you passed the post-tests, please answer the following questions by checking the appropriate boxes and give the paper to your teacher.

1. **THE DIRECTIONS FOR PERFORMING THE LAP WERE CLEAR AND EASY TO FOLLOW. (cc-15)**
   - [ ] YES  [ ] NO
   - IF NO, WHAT WAS OF LITTLE OR NO VALUE?

2. **THE FOLLOWING READING MATERIAL WAS HARD TO UNDERSTAND.**
   - [ ] DIRECTIONS (cc-16)
   - [ ] ACTIVITIES SECTION (cc-17)
   - [ ] HANDOUTS (cc-18)
   - [ ] BIBLIOGRAPHY (cc-19)
   - IF BIBLIOGRAPHY WAS HARD TO UNDERSTAND IDENTIFY WHICH BOOKS OR MATERIALS.

3. **ALL OF THE LEARNING ACTIVITIES FOR THE COMPETENCY WERE WORTHWHILE. (cc-20)**
   - [ ] YES  [ ] NO
   - IF NO, WHAT WAS NOT OF VALUE?

4. **I THINK THIS IS A BORING WAY TO LEARN DISTRIBUTIVE EDUCATION MATERIAL. (cc-21)**
   - [ ] YES  [ ] NO
   - IF YES, LIST SUGGESTIONS FOR IMPROVEMENT.

5. **THE OBJECTIVES OF THE LAP WERE EASY TO UNDERSTAND. (cc-22)**
   - [ ] YES  [ ] NO
   - IF NO, LIST SUGGESTIONS FOR IMPROVEMENT.

6. **MY ATTITUDE TOWARD LEARNING THE MATERIAL IN THE LAP BY THE LAP METHOD OF INSTRUCTION IS FAVORABLE. (cc-23)**
   - [ ] YES  [ ] NO
   - COMMENTS:

7. **I LEARNED THIS COMPETENCY PRIMARILY THROUGH THE ACTIVITIES OF THE FOLLOWING SECTIONS:**
   - [ ] INDIVIDUAL (cc-24)
   - [ ] SMALL GROUP (cc-25)
   - [ ] LARGE GROUP (cc-26)

8. **HOW MUCH TIME DID YOU SPEND ON THE COMPETENCY IN MINUTES? (cc-27)**
   - [ ] 30-60 MINUTES
   - [ ] 61-90 MINUTES
   - [ ] 91-120 MINUTES
   - [ ] OTHER

9. **IS THIS COMPETENCY REQUIRED FOR YOUR CAREER GOAL? (cc-28)**
   - [ ] YES  [ ] NO

10. **WHILE LEARNING THIS COMPETENCY, DID YOU LEARN OTHER IDEAS OR COMPETENCIES? (cc-29)**
    - [ ] YES  [ ] NO
    - COMMENTS:
STUDENT QUESTIONNAIRE

QUESTIONS 11 AND 12 ARE OPTIONAL.

TO CHECK THE APPROPRIATENESS OF THE COMPETENCY FOR YOUR CAREER GOAL, COPY THE COMPETENCY AND BEHAVIORAL OBJECTIVES FROM THE LAP AND SHOW IT TO A PERSON OR BUSINESSMAN CONNECTED WITH THE JOB AND ASK HIM THE FOLLOWING QUESTIONS.

11. IS THE COMPETENCY APPROPRIATE FOR THE STUDENT’S CAREER GOAL? (cc-30)

1  □ YES  2 □ NO  COMMENTS:

12. WILL THE ACHIEVEMENT OF THE BEHAVIORAL OBJECTIVE DEVELOP THE COMPETENCY (KNOWLEDGE, SKILL OR ATTITUDE) IN THE STUDENT? (cc-31)

1 □ YES  2 □ NO  COMMENTS:
INTERSTATE DISTRIBUTIVE EDUCATION CURRICULUM CONSORTIUM
TEACHER QUESTIONNAIRE
FORM 3 (cc-11) (11-72)

STATE NO. (cc-2-3) STATE NAME SCHOOL NO. (cc-4-5) SCHOOL NAME

STREET ADDRESS, P.O. BOX (DRAWER) OR RURAL ROUTE CITY ZIP CODE

TEACHER NUMBER (cc-6-7) TEACHER’S NAME FIRST LAST

COMPETENCY NUMBER (cc-8-10) COMPETENCY NAME

LAP TITLE

PART I. (IF THERE IS NOT SUFFICIENT SPACE, ENCLOSE ADDITIONAL SHEETS OR CORRECTED COPIES OF LAP MATERIALS.)

1. THIS COMPETENCY IS A: (CHECK ONE) (cc-18) Other
   1 □ KNOWLEDGE 387 49.30% 9
   2 □ SKILL .183 23.31%
   3 □ ATTITUDE 172 21.91% 1.15%
   4 □ DON’T KNOW 58 4.33%

2. THE BEHAVIORAL OBJECTIVES ARE ADEQUATELY STATED. (CHECK ONE) (cc-16) Other
   1 □ YES 2 □ NO 12 10% 49 6.2%

3. THE LAP MATERIALS ARE SUFFICIENT FOR STUDENTS TO MEET THE CRITERIA OF THE BEHAVIORAL OBJECTIVES. (CHECK ONE) (cc-17) IF NO, WHAT IS THE NATURE OF THE DEFICIENCY?
   1 □ YES 2 □ NO 583 178 Other
   74.27% 22.42% 26

7. THE TEST QUESTIONS ARE APPROPRIATE MEASURES OF THE OBJECTIVES. (CHECK ONE) (cc-21)
   1 □ YES 2 □ NO 651 111 Other
   82.93% 14.14% 3

8. WAS AT LEAST ONE OF THE READING RESOURCES SUGGESTED AVAILABLE TO YOU? (CHECK ONE) (cc-22) Other
   1 □ YES 2 □ NO 668 87 Other
   85.10% 11.08% 3

9. WERE THESE READING RESOURCES PURCHASED FOR FIELD TESTING? (CHECK ONE) (cc-23) Other
   1 □ YES 2 □ NO 640 123 Other
   81.53% 15.67% 22

10. THE FORMAT OF THE LAP MADE IT EASY TO USE. (CHECK ONE) (cc-24) Other
    1 □ YES 2 □ NO 202 25.73% 519 66.11% 8.15%
### TEACHER QUESTIONNAIRE

11. MY GENERAL ATTITUDE TOWARD THIS LAP IS:

<table>
<thead>
<tr>
<th>FAVORABLE</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ YES 2 Yes</td>
<td>□ NO 164 No</td>
</tr>
<tr>
<td>20.89%</td>
<td>4.46%</td>
</tr>
</tbody>
</table>

12. SCHOOL POLICY HAS HAMPERED THE IMPLEMENTATION OF THE LAP METHOD OF INSTRUCTION IN OUR SCHOOL.

<table>
<thead>
<tr>
<th>IF YES</th>
<th>IF NO</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ YES 1 Yes</td>
<td>□ NO 62 No</td>
<td></td>
</tr>
<tr>
<td>7.90%</td>
<td>87.90%</td>
<td></td>
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</tbody>
</table>

13. THE TIME REQUIRED FOR STUDENTS TO MASTER THE MATERIAL IS LESS WHEN I USE THE LAP METHOD THAN WHEN I USE MY OWN METHOD.

<table>
<thead>
<tr>
<th>IF YES</th>
<th>IF NO</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ YES 1 Yes</td>
<td>□ NO 391 No</td>
<td></td>
</tr>
<tr>
<td>49.81%</td>
<td>39.11%</td>
<td></td>
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</table>

### PART II.

1. RANK IN ORDER OF PREFERENCE FROM MOST VALUABLE TO LEAST VALUABLE, THE LEARNING MATERIALS FOR THE COMPETENCY.

<table>
<thead>
<tr>
<th>MOST VALUABLE</th>
<th>OBJECTIVE A.</th>
<th>OBJECTIVE B.</th>
<th>OBJECTIVE C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>5.</td>
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</tbody>
</table>

2. CAN YOU SUGGEST OTHER AUDIO-VISUAL RESOURCES, MATERIALS, AND NON-READING ACTIVITIES WHICH WOULD BE OF VALUE IN HELPING STUDENTS ACHIEVE THE OBJECTIVE FOR THE COMPETENCY.

<table>
<thead>
<tr>
<th>IF YES</th>
<th>IF NO</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ YES 1 Yes</td>
<td>□ NO 41 No</td>
<td></td>
</tr>
<tr>
<td>5.72%</td>
<td>33.10%</td>
<td></td>
</tr>
</tbody>
</table>

3. OTHER COMMENTS OR SUGGESTIONS ABOUT THE LAP.

| | |
| | |
1. Each student completed a questionnaire for each competency he or she learned or attempted.

2. Six hundred ninety-three student competency responses represent a 20% sample of responses received from a variety of the 200 schools in the 10 reporting states.

3. "Other" indicates a multiple or nothing checked in the question block.

INSTRUCTIONS: When you have completed work on a competency, regardless if you passed the post-tests, please answer the following questions by checking the appropriate boxes and give the paper to your teacher.

1. The directions for performing the LAP were clear and easy to follow. (cc 15)
   - Yes 2 No
   - If No, what was of little or no value?

2. The following reading material was hard to understand.
   - Directions
   - Activities Section
   - Handouts
   - Bibliography

3. All of the learning activities for the competency were worthwhile. (cc 20)
   - Yes 2 No
   - If No, what was not of value?

4. I think this is a boring way to learn distributive education material. (cc 21)
   - Yes 2 No
   - If Yes, list suggestions for improvement.

5. The objectives of the LAP were easy to understand. (cc 22)
   - Yes 2 No
   - If No, list suggestions for improvement.

6. My attitude toward learning the material in the LAP by the LAP method of instruction is favorable. (cc 23)
   - Yes 2 No
   - Comments:

7. I learned this competency primarily through the activities of the following sections:
   - Individual
   - Small Group
   - Large Group

8. How much time did you spend on the competency in minutes? (cc 27)
   - 30-60 minutes
   - 61-90 minutes
   - 91-120 minutes
   - Other

9. Is this competency required for your career goal? (cc 28)
   - Yes 2 No

10. While learning this competency, did you learn other ideas or competencies? (cc 29)
    - Yes 2 No
    - Comments:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes %</th>
<th>No %</th>
<th>Other %</th>
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<tbody>
<tr>
<td>1.</td>
<td>54.68</td>
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<td>79.53</td>
<td>19.42</td>
<td>1.05</td>
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<td>3.</td>
<td>47.35</td>
<td>36.61</td>
<td>15.04</td>
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<td>23.17</td>
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<td>5.</td>
<td>81.76</td>
<td>16.58</td>
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<td>6.</td>
<td>71.33</td>
<td>26.79</td>
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<td>7.</td>
<td>52.64</td>
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<td>53.25</td>
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<td>54.11</td>
<td>45.89</td>
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<td>10.</td>
<td>50.87</td>
<td>49.13</td>
<td>1.05</td>
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</table>

(CONTINUED TO PAGE 2)
11. IS THE COMPETENCY APPROPRIATE FOR THE STUDENT'S CAREER GOAL? (cc.30)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>COMMENTS</th>
<th>OTHER</th>
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<tbody>
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<td>969</td>
<td>795</td>
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<tr>
<td>14.09%</td>
<td>11.56%</td>
<td>5111</td>
<td>74.34%</td>
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12. WILL THE ACHIEVEMENT OF THE BEHAVIORAL OBJECTIVE DEVELOP THE COMPETENCY (KNOWLEDGE, SKILL OR ATTITUDE) IN THE STUDENT? (cc.31)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>COMMENTS</th>
<th>OTHER</th>
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</thead>
<tbody>
<tr>
<td>1259</td>
<td>401</td>
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<tr>
<td>18.31%</td>
<td>5.83%</td>
<td>5215</td>
<td>75.85%</td>
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</tbody>
</table>
Bibliography


2. The Interstate Distributive Education Curriculum Consortium, Wayne Harrison, Jr., Director, State Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702; an eleven-state consortium comprised of Alabama, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, North Carolina, Ohio, Washington, and Wisconsin, 1971 to present.
