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DESCRIPTORS           *Educational Accountability; Educational Assessment;
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ABSTRACT              The development and documentation of procedures to
                    conduct a comprehensive follow-up survey in addition to the
                    compilation of the perceptions of recent graduates regarding the
                    quality of their preparation for teaching were the goals of this
                    investigation. The sample consisted of 196 1973-74 graduates of
                    teacher preparation programs under the aegis of the College of
                    Education at a Land Grant University accredited by the Southern
                    Association of Colleges and Universities and the National Council
                    for Accreditation of Teacher Education. The instrument designed for
                    this investigation contained thirty items with two response scales
                    (importance and effectiveness) associated with each item. In
                    addition, demographic items and four open-ended questions were
                    included on the instrument in such fashion to permit the respondent
                    to fold a single sheet, affix the edges, and remit by mail. Two
                    mailouts and a telephone contact resulted in a total return of 62.8
                    percent of the graduates surveyed. Procedures determined to
                    facilitate a follow-up study of this nature include (1) a systematic
                    plan for compiling addresses of graduates, (2) the utilization of a
                    durable single sheet mailout instrument, and (3) telephoning
                    non-respondents. The perceptonal ratings obtained on the value of
                    the instructional units and the quality of instruction experienced
                    have provided meaningful information to program developers for
                    revising and replacing various instructional components. (Author/DST)
One Approach to Accountability:
Program Assessment by Recent Graduates Using a Two Scaled Instrument

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Running Head: One Approach to
In recent years, education has experienced numerous alterations in the methods espoused in teacher preparation programs because of increased attention to individualized instruction and competency based teacher education. These changes have in part, been influenced by the emphasis placed on teacher accountability in public schools. Improving the quality of teaching and teachers rest primarily with the college designed instructional programs and personnel who have been vested with the responsibility of producing competent and effective teachers. An outgrowth of the emphasis on accountable teaching, has been the development of techniques which attempt to assess the skills and capabilities of the teacher. Research in teacher education has increased dramatically, but to date no single method has been determined to be the most effective technique to foster learning (Sandefer, & Bressler, 1972). This research has demonstrated, however, that assessment of the teacher is the most direct measure of the educational program's outcome; since the teacher is a manifestation of the goals and objectives established for the program. Therefore, results obtained from evaluations of teachers (self-reports and supervisor reports) should be included in programmatic decisions related to the training they experienced in becoming certified. Such information may be gained through a follow-up study of recent graduates. Implementing this strategy after a semester of teaching provides the recent graduate an opportunity to apply the skills and content stressed in their preservice preparation. With "real world" experience, the graduate is in a more tenable position to critically assess the value of the program objectives and the effectiveness of his recent pedagogical preparation.

This feedback provides program staff with qualitative ratings of the program, actual classroom needs of the teacher, and insights of skills
required in the classroom which may not have been stressed by the existing coursework. Corresponding information can be requested from the immediate supervisor of the graduate based on his performance. Numerous educational programs have been evaluated with follow-up studies, e.g., status of high school graduates (Welch, Lindbloom and Flahaven, 1971), graduates of a secretarial school (Gell, & Bleil, 1973), location of community college graduates (Behrendt, 1974), and graduates of a nursing program (Padillo, 1974). The utility of the follow-up survey has also been exemplified with evaluations of teacher education graduates (Hopkins, 1970; Adams, 1974).

McKinney and Oglesby (1971) have defined a follow-up study as "a procedure for accumulating pertinent data from or about individuals after they have had similar or comparable experiences." Follow-up studies customarily are conducted utilizing one of three formats. One of these approaches, the personal interview, is used to gather information vis-a-vis. This technique usually provides very accurate information, however, it is time consuming, expensive, and in most cases reduces the number of individuals who can be surveyed. A second method is the telephone interview. Disadvantages of this approach may outweigh the advantages because of the substantial time investment necessary to locate and actually contact individuals by phone. Certainly an advantage of the telephone is direct communication and the opportunity to clarify any misunderstandings concerning the questions raised by the interviewer. The most conventional approach of conducting a follow-up study involves the use of a mailout opinionaire. Paper and pencil instruments allow for the canvassing of a much larger sample at a fraction of the cost in dollars and hours, but this approach often suffers from misinterpretation of items by subjects and a low response ratio.
Purpose

A common limitation encountered in reviewing follow-up investigations is the lack of attention addressed to methodological techniques. Often, reports contain only results of a survey with no description of how the data were collected. Procedural documentation is critical if follow-up investigations are to provide significant data for program evaluation. For this reason, the goals of this investigation included the development and documentation of procedures to conduct a comprehensive follow-up survey as well as compilation of observations of recent graduates concerning the quality of their preparation.

Method

Subjects

The sample consisted of 1973-74 graduates of teacher preparation programs under the aegis of the College of Education at a Land Grant University accredited by the Southern Association of Colleges and Universities and the National Council for Accreditation of Teacher Education. For the purpose of this investigation, all graduates from the elementary area and secondary area were combined to form a total of 212 individuals of whom 68% were female. Six months after spring graduation, (1974), more than 90% of the graduates resided within the state where the degree was conferred.

Instrumentation

The follow-up instrument used in this investigation contained two Likert-type scales referenced to a single stem. Thirty phrases or terms (table 2) related logically to instructional units in the preparatory programs constituted a substantial portion of the instrument. Information was sought on the worth of different instructional components on one scale (importance scale) and a rating of the quality of instruction provided for that
unit on the second scale (effectiveness scale). In addition, demographic items about the graduate's current position and future plans were posed, as well as four open ended questions that permitted discussion of issues not specified in the thirty items. This information was organized on a single sheet to encourage individuals to respond. The instrument contained the return address and prepaid postage label; individuals completing the questionnaire merely folded the instrument and stapled or taped the ends and remitted it by mail.

A parallel questionnaire was developed to obtain responses from the supervisor, i.e., principal or department head, of the teaching graduate. This corresponding information from supervisors was sought to provide potential criterion variables for regression models used to determine empirically the quality of the instructional components.

Interesting reliability and validity questions arise with two scaled instruments of this nature. For example, a legitimate question is whether a mental set for that item occurs and a similar rating results on both scales. To answer this question a series of comparisons were made. It was determined that fourteen of 30 correlated t-tests conducted with data obtained from the 1973-74 graduates on ratings of effectiveness and importance were statistically different at the .01 level. These results suggest that response set is not a measurement concern for these two scaled items.

The reliability of the instrument was confirmed by comparing importance scale responses between first year graduates of 1972-73 and 1973-74. These comparisons were thought to be feasible since the instructional program components and staff remained virtually unchanged. Comparisons of uncorrelated samples were conducted to determine the stability of the instrument with different groups over time. Not one of the thirty comparisons were signif-
icantly different. Additional comparisons were made between these groups with respect to the effectiveness scales. One t-test in 30 comparisons was different, statistically. Because 59 of 60 comparisons were determined to be statistically equivalent, it appears safe to state that both scales produce stable responses over time. Face validity of the instrument was obtained by submitting the original versions of the instrument to a panel of ten judges. The resulting scales and items on the instrument were agreed on after refining three drafts.

Procedure

Members of the sample were identified from the rosters of the student teaching course. The most recent addresses of the individuals were then obtained by one of four methods. First, names and permanent addresses of graduating seniors were obtained from certification applications submitted at the conclusion of all coursework. Addresses obtained in this manner were usually accurate since receipt of certificates from the state department of education usually required three months; therefore, temporary university addresses were not supplied on the applications. This technique provided addresses on nearly 85% of the total sample.

A contingency plan was employed where certification seeking graduates were provided a postcard (figure 1) and requested to remit it once their employment plans were established. Thirty percent of the graduates returned completed cards from the total sample.

Insert Figure 1

The task of obtaining an accurate address on those graduates electing not to complete certification papers was more difficult. University records maintained by the alumni office were consulted and a permanent address,
often that of the parents, was obtained. If this search failed to produce an address, a final survey was made by referring to the university phone directories for the preceding and current academic years. Addresses were obtained by one of these methods on 196 of the 212 graduates, i.e., 92.4%.

A solicitation prepared to accompany each questionnaire provided a rationale for the follow-up study and requested assistance from each graduate. The cover letter and questionnaire were mailed to 196 graduates in early December, 1974, with six weeks allotted for return of the completed instrument. After this period had elapsed a second mailout was conducted. If the second mailout failed to elicit a response, phone numbers of the reticent graduates were obtained from phone company directory assistance or postcards (figure 1), alumni records, and university directories. Phone numbers gleaned from these sources often were those of the graduates' parents. For those subjects whose phone numbers were determined, contact was attempted during three weeknights from 7:00 p.m. to 10:00 p.m. Individuals phoned were reminded to send in the questionnaire or requested to provide a current address for a third mailout.

A parallel questionnaire was sent to the immediate supervisor of all respondents who were teaching. Responses were recorded and processed for analysis on receipt of completed instruments from the supervisor.

After the response period allotted for the second mailout had transpired, responses were compiled and displayed on a copy of the instrument and shared with those who had participated in the investigation. A brief explanation of the data, how the data were being used, and a statement of gratitude for their interest and commitment to the program were included with the data summary.
Results

Procedural Findings

Mailouts to 196 graduates constituted the initial survey sample in this investigation. The yield from the first mailout was 60 responses or 30.6% of the graduates surveyed. The second mailing contained 136 questionnaires of which 52 (26.5%) were dutifully completed and returned.

Phone listings were sought on the 84 graduates who failed to respond to either request. Current listings of 38 individuals (19.4%) were gleaned from the records and various directories used. Procurement of a more complete list of phone numbers was hampered by insufficient addresses and surname changes. Thirty-four of these graduates were contacted by phone and agreed to remit the questionnaire, one person refused to complete the questionnaire, and contact was not made with three others despite the fact their phone listing was known. Although verbal commitments were obtained from 34 individuals, only 11 additional instruments were returned. A total of 123 questionnaires, 62.8% of the graduates surveyed, was ultimately received as a result of this investigation. Table 1 provides a summary of the ideographic characteristics of the respondents.

Insert Table 1

The proportion of males and females responding to the instrument corresponds closely to the sex distribution of the total sample, i.e., 62 males, 134 females. It is interesting to note that over one half of the male graduates and 25% of the female graduates in this survey were employed in occupational fields other than education. Parallel questionnaires were mailed to supervisors of the 61 graduates who were teaching. Of these, 38 remitted completed instruments for a cumulative percentage of 62.4%. 
Instrument Findings

Utilizing the data collected in this investigation a number of statistical comparisons were rendered to determine the independence of the two scales and instrument stability. The results of these tests, briefly noted earlier, indicate the scales are both stable and independent. Table 2 provides a summary of responses expressed as percentages from the graduates regarding the quality (effectiveness) and value (importance) of thirty instructional components in the secondary program. The collected data were tabulated separately with respect to the elementary and secondary program divisions because the respective instructional components were quite different.

Insert Table 2

Perceptions of first year graduates summarized in Table 2 indicate some discrepancies exist between what is being presented and what should be stressed to prepare candidates for the classroom. An example of a discrepancy involves the ratings on the unit, classroom control techniques, where recent graduates rated the need for instruction on this topic to be great, but perceived the effectiveness of the current instructional program to be wanting.

Conclusions

A significant reason for undertaking this investigation was to collect reactions and reflections of first year graduates, especially those gainfully employed as classroom teachers, on the nature of the teacher preparation program they had recently completed. Data of this nature were collected as noted by the summaries in Table 2. This information combined with perceptual ratings of supervisors on parallel instruments have enabled the
instructional staff to render decisions on replacing and revising various instructional components of the preparatory programs. In addition, data from these sources have been combined with compatible information collected during the instructional program by regression techniques to form algebraic equations for curriculum decision making based on longitudinal data.

A second reason for undertaking this investigation was to develop an efficient procedure for conducting follow-up studies. The procedure established, efficiency not withstanding, required a temporal span of four months to complete and yielded functional responses from approximately 60% of the sample. A summary of the procedures includes:

1. Compiling an address list utilizing certification files, self-addressed postcards, alumni records and telephone directories.

2. Developing a durable mailout instrument on a single sheet which can be folded, sealed, and mailed directly.

3. Scheduling two mailouts approximately 4-6 weeks apart.

4. Telephoning non-respondents if total returns are less than 60% of the sample.

5. Providing summaries of results to participants of the follow-up survey.

In conclusion, the need for follow-up studies in teacher preparation programs is increasing due to a press for accountable teachers and teaching. If program-related information is obtained through follow-up techniques and used to monitor program quality, questions on the value of preservice programs for teachers can be addressed directly with this information.
REFERENCES


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Padilla, Bennie, J. Follow-up Study of Graduates from the 1973 Los Angeles City College Registered Nurse Program, Los Angeles City College, California, 1974, Eric #88556.

### Figure 1

Request Form for Recent Graduates to Remit on Gaining Employment

<table>
<thead>
<tr>
<th>NAME:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>HOME PHONE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SCHOOL ADDRESS</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PRINCIPAL'S OR EMPLOYER'S NAME</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SCHOOL OR BUSINESS PHONE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>TEACHING OR JOB ASSIGNMENT</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table I
Biographic Information of Participating 1973-74 Graduates

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>40</td>
<td>83</td>
</tr>
<tr>
<td>Occupational Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching-Elem. School</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Teaching Middle School</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Teaching-High School</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Teaching-Post Sec.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Seeking Adv. Degree</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Housewife</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Unemployed</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Employed in Field Other than Education</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Future Educational Plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intend to seek advanced degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td>NO</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>MAYBE</td>
<td>7</td>
<td>29</td>
</tr>
</tbody>
</table>
### Table 2

**Summary of Responses Expressed in Percentages of Secondary Area Graduates on Follow-Up Instrument**

<table>
<thead>
<tr>
<th>Skills of Classroom Activities</th>
<th>Importance Scale</th>
<th>Effectiveness Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classroom control techniques</td>
<td>47 22 17 6 4</td>
<td>17 16 15 13 10</td>
</tr>
<tr>
<td>2. Using audio-visual media</td>
<td>49 36 34 26 14</td>
<td>35 28 25 17 11</td>
</tr>
<tr>
<td>3. Discussing controversial issues</td>
<td>55 42 30 19 10</td>
<td>32 27 22 18 14</td>
</tr>
<tr>
<td>4. Introducing and concluding lessons</td>
<td>57 37 17 9 4</td>
<td>36 24 19 15 9</td>
</tr>
<tr>
<td>5. Giving directions</td>
<td>48 34 26 14 3</td>
<td>30 24 21 15 9</td>
</tr>
<tr>
<td>6. Answering questions</td>
<td>50 41 31 20 14</td>
<td>29 22 18 14 10</td>
</tr>
<tr>
<td>7. Classroom control techniques</td>
<td>47 22 17 6 4</td>
<td>17 16 15 13 10</td>
</tr>
<tr>
<td>8. Teaching discussions</td>
<td>55 42 30 19 10</td>
<td>32 27 22 18 14</td>
</tr>
</tbody>
</table>

Skills for:
- Lesson Planning.
- Applying psychology of learning.
- Individualized instruction.
- Using performance objectives.
- Constructing tests.
- Interpreting test results.
- Applying Flanders' interaction analysis (to teaching).
- Evaluating grading systems.
- Identifying curriculum trends.
- Using different instructional modes.
- Interpreting history of education.
- Interpreting philosophies of education.
- Pretesting for individualization.
- Identifying teacher's attitudes affecting student behavior.
- Using professional journals.
- Interpreting history of education.
- Interpreting philosophies of education.