At North Dakota State University annual follow-up studies have been conducted on teacher education graduates of the secondary teacher preparation program since 1963. Each year, survey forms are sent to all teacher education graduates of the previous year and to the principals or superintendents of graduates who are teaching. The purpose of the follow-up studies is program evaluation, focusing on accountability and program improvement. Results of the surveys are considered in decision making about curriculum development. In addition to the annual graduate and administrator surveys, North Dakota State University has conducted or participated in other national and institutional follow-up activities. Although not all recommendations from the follow-up studies result in curriculum changes, some recommendations have initiated discussion and eventual change. Some of these changes have been in the areas of classroom management, evaluating student learning, and multicultural education. Faculty development has been provided, and data from follow-up studies have been used in program planning and revision. Examples of the survey forms sent to graduates and supervisors are included. (IAH)
Follow-up Studies in Program Evaluation

Dr. Patricia D. Murphy, Dean
School of Education
North Dakota State University

Symposium
Evaluation and Follow-up Studies Make a Difference in Teacher Education

Annual meeting of the
American Association of Colleges for Teacher Education
San Antonio, Texas
February, 1992
Follow-up Studies in Program Evaluation

Hummell and Strom (1987) attribute increased use of follow-up studies to institutional demands for accountability and to accreditation demands. At North Dakota State University (NDSU), formal follow-up studies have been carried out annually, at least since 1963. For us, yes, they are worth the trouble.

At NDSU approximately 100 secondary teachers are prepared each year. We prepare no elementary teachers. Secondary teachers are prepared in agricultural education, English, history, home economics, mathematics, modern languages, music, physical education, sciences, social sciences, and speech. We send out a survey form to all the teacher education graduates of the previous year. We also send a form to the principal or superintendent of all the graduates who are teaching--now first-year teachers. Data are analyzed separately for those teaching and those not teaching.

The purpose of the follow-up study is program evaluation, to make judgments about the worth of the program. Although Galluzzo and Craig (1990) describe four purposes for teacher education program evaluation (p. 605), we focus on two--improvement and accountability. Whether or not educators wish to use the term "accountability," they are invariably involved in curriculum and instructional decision making. And to make these decisions, program evaluations are necessary.

While the debate has continued over what is, or ought to be, acceptable as program evaluation (see, for example, Worthen & Sanders, 1973, pp. 17-26, or Brinkerhoff, Brethower, Hluchyj, & Nowakowski, 1983, pp. xiv-xx), the view of program evaluation at NDSU has been that the purpose is to make judgments about the worth of the program as a part of an overall curriculum development process.

There are four major components to program development: (a) identifying the program goals and objectives (what is necessary for a beginning teacher), (b) selecting the means for
attaining the goals and objectives (courses, activities, experiences), (c) organizing these means
(sequence, instructional methods), and (d) evaluating the outcomes. These four are
interdependent. The evaluation of each of these four components is continuous and each is
affected by all of the others. Decisions on the selection of educational objectives, selection and
organization of subject matter, organization of instructional methods and learning experiences, and
use of systematic evaluation procedures are philosophically based (Tanner & Tanner, 1980). At
NDSU the philosophical base is our view of what a beginning secondary teacher needs to know
and be able to do. The program evaluation needs to reflect the interconnectedness of all of these.

Faculty, with input from students, practitioners, and advisory committee members, design the
program. They plan the program goals and objectives to reflect what a beginning teacher should
know and be able to do, design courses to provide the content and opportunities for learning
activities to meet the objectives, organize and sequence the activities, and design the program
evaluation to see how well the program is accomplishing the goals. The program evaluation also
examines the appropriateness of the goals and objectives, courses and content, learning activities
and experiences, and the evaluation process, as well in identifying data that will provide evidence
of effectiveness.

When a program is defined to include antecedents or preexisting conditions, such as the
characteristics of the students (set by the program's admission requirements), the processes of the
program (learning activities and experiences), and the outcomes, then follow-up studies can
contribute meaningful data related to program outcomes or effects. Follow-up studies may also help
to identify unintended outcomes. First-year teacher comments to the open-ended questions may
point out any unintended outcomes.

Since one of the goals at NDSU is program improvement, program participants, both faculty
and former students, play an important role in providing feedback. Information from follow-up
studies is used by program faculty to make adjustments in the program. The input from employers
(principals and superintendents) of the first-year teachers is also used.
A survey form is used to solicit input from the graduates of the teacher education program. The form is designed to reflect the objectives of the program. There are 26 items to be rated using a five-point Likert scale from Very Effective to Very Ineffective. A copy of the current form (pink) is attached (page 9). We fill in the former student's name and major before we send it out.

As the program has been revised, so has the survey form. For example, NDSU had a Dean's Grant project from 1980 to 1983 to prepare secondary teachers for mainstreamed learners in their classrooms. We added items to the survey form during the first year of the project although the graduates who would receive the form had not had the planned instruction. We did the same thing when the state mandated that coursework on North Dakota Native Americans be added to the teacher preparation program. We added items to the survey form before the graduates could be expected to have received the instruction. When changes are made in the program, there should be changes in the evaluation ratings. If the changes in the instructional program were effective, the ratings by the graduates in those areas would improve.

When the faculty completed their identification of the theme, model, and knowledge bases undergirding the program for the NCATE visit under the redesigned standards, the survey form was revised to reflect those objectives. At that time, the entire undergraduate curriculum was changed and a common core for all secondary teachers was implemented in September, 1987.

Since the context of the teaching position is important, the first-year teachers are asked (back side of form) to describe students in their classrooms on two dimensions—racial diversity and handicapping condition. In addition, there are open-ended questions about their perceptions of the strengths of the program and ways to improve the program in the areas of the teaching specialty and teaching skills.

Data Analysis

In April, the survey form is mailed to all teacher education graduates of the previous year. A similar survey form is sent to the administrators of all graduates who are teaching (their first
A copy of the current form (beige) is attached (page 11). We fill in the first-year teacher's name and major before we send it.

Data are analyzed using a computer program. Data are kept separate for those teaching and those not teaching. Data are reported for the entire group, and by the teaching specialty. (All names are removed.) A report is prepared by the Dean's Office including the summary data, comparison of data to previous year(s), and interpretations of the results. The report also includes the data from the school administrators. All comments written in by graduates (teaching and not teaching) and by administrators are typed as an appendix of the report. The report is distributed to the School of Education Curriculum Committee and to teacher education faculty.

**Results**

About half of those prepared to teach are employed as teachers at the time the survey is sent out (April of the year following graduation). The response rate on the survey ranges from 72%-82%. The response rate for the administrators (as the employers of the graduates) is higher, 84%-96%. The administrators also rate the teachers' effectiveness as higher than the first-year teachers rate the effectiveness of their preparation.

**Other Follow-up Activities**

In the spring of 1989, NDSU participated in a national data collection effort spearheaded by the National Center for Research on Teacher Education at Michigan State University (Freeman, 1989). The 1987-88 graduates were sent the survey. No form was sent to administrators. The items on the form were developed together with the participating institutions. In an attempt to meet everyone's needs, the survey form was longer and asked questions related to more topics. Our response rate that year was 64.3%. We had comments from some of our graduates that the form "didn't apply" to them. For example, there were items for elementary teachers. We are glad we participated and felt it was worthwhile. We agree with Loadman (1989) that linkages can be productive in program evaluation efforts. There is now a network developing for sharing evaluation
practice and data. We agree that is valuable. We have, however, continued our own survey form. It is improved as a result of our participation in the national data collection project, for example, better items. We feel the need for more specific feedback related to our program. The national survey was not particularly useful in tracking program changes.

In 1987, telephone interviews were conducted with the graduates who were teaching. Questions focused on the effectiveness of their preparation in relation to their jobs as first-year teachers. In addition, they were asked if there were ways in which faculty or others could assist them. The data did not provide additional information beyond the survey so the interviews have not been continued. It did help the first-year teachers feel important.

In 1986, an additional sheet was added to both the first-year teacher and the administrator form. It sought information from both as to the kind of help desired in a beginning teacher assistance program. These data provided one basis for a funding proposal to develop an assistance program.

Much earlier, a study was carried out on concerns of first-year teachers related to situational factors (Lundstrom & Murphy, 1976). In this study, the first-year teachers received a letter each month telling them we cared about how they were doing and encouraging their participation in returning a card responding to an incomplete sentence, "The way I feel about teaching this month is . . ." Content analysis was used to categorize responses as positive, negative, or neutral. Further, the response was categorized as to the topic or concern expressed, such as work load, administration, students, teaching in general, teacher's own capabilities, colleagues, or parents. In addition to contributing to our knowledge about the concerns of first-year teachers, it was an effective kind of follow-up study. The first-year teachers also loved all the attention! (At that time, most of them were teaching in very rural, isolated areas of North Dakota.)

**Uses of the Follow-up Study Data**

Recommendations, ratings, and comments from follow-up studies do not, by themselves, result in changes in the program. Multiple data sources are used. When the administrators report
the same things as the first-year teachers, more attention is given and change is more likely. However, recommendations for changes in the program from follow-up study data have been implemented. As an example, ratings on managing learner behavior were low in the follow-up studies, especially in some teaching fields. There was also some anecdotal evidence from some classroom teachers that some of our first-year teachers were having some trouble with "discipline." These things (along with others) were considered and in the creation of the common core curriculum, a course on classroom management was added. Since then, ratings on this item have gradually increased.

Reported feelings by first-year teachers with regard to evaluating student learning (also supported by administrator comments and requests for help from faculty by some beginning teachers) resulted in a required course in appraising student learning in the new common core. It previously had been required only in some teaching specializations.

Multicultural education and teaching mainstreamed learners in regular classrooms are infused in our program, not offered as separate courses. Comments from first-year teachers (again supported by administrators) have resulted in increased instructional time and strategies in these two areas. Again, ratings have gradually improved.

In the last five years, the teaching assignments of several faculty have been changed (not solely based on follow-up study data, but it had an effect). Conferences have been held and faculty development provided for some faculty to address concerns raised in the follow-up studies. Not all changes have related to the curriculum.

Data from follow-up studies (along with other inputs) have been used in program planning and revision. Now that we have in place a common program to prepare secondary teachers, the data from the follow-up studies have more meaning. Faculty can no longer say, "Well, that doesn't apply to music," or "... to history." Since the professional education component is common to all, weakness in that preparation applies to all. As mentioned in the Katz, Raths, Mohanty, Kurachi, and Irving (1981) article, faculty could synthesize the curriculum in a new way (which they need at
NDSU in the creation of the common core) and it would likely, according to Katz et al (\textsuperscript{11}), "give rise to inter-faculty contention" (which it did).

Conclusion

In conclusion, at NDSU, we do report data for those teaching separately; we include employers (principals or superintendents), and the focus is on program evaluation, not employment information. Data from the follow-up studies provide baseline information on our first-year teachers. We find follow-up studies an excellent source of data, not the ratings per se, but the change in the ratings over time (the three years it takes to complete the program). They have had an impact on the program, its direction and its development.

Program development through program evaluation is enhanced with the defining of what it means to be a beginning teacher, how the beginning teacher is to be prepared, and what data are indicators of effective preparation (Galluzzo & Craig, 1990, p. 612). Inclusion of follow-up data in the mix for program decision making is a worthy goal.

Since most of our teacher education graduates leave the state, classroom visits are not practical. (They accept teaching positions in states where salaries for beginners are significantly higher.) While follow-up studies are not perfect, they are about the best we have, and we feel they are worth the effort.
References


### TEACHER EDUCATION PREPARATION
North Dakota State University
School of Education

Do not mark in these boxes.

**Planning Instruction**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Very Effective</th>
<th>Effective</th>
<th>Somewhat Effective</th>
<th>Ineffective</th>
<th>Very Ineffective</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>a. Planning and writing lessons (e.g., flexibility in activities, clarity of plans, time allocation for activities)</td>
<td>5 4 3 2 1</td>
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<tr>
<td>22</td>
<td>b. Developing clearly stated instructional objectives</td>
<td>5 4 3 2 1</td>
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<tr>
<td>23</td>
<td>c. Putting subject matter in a sequential order</td>
<td>5 4 3 2 1</td>
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<tr>
<td>24</td>
<td>d. Designing and organizing instructional activities to enhance learning</td>
<td>5 4 3 2 1</td>
<td></td>
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<td>25</td>
<td>e. Selecting or developing instructional materials or media to enhance learning</td>
<td>5 4 3 2 1</td>
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**Implementing Instruction**

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<th>Ineffective</th>
<th>Very Ineffective</th>
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<tr>
<td>26</td>
<td>f. Applying learning theory and principles of learning</td>
<td>5 4 3 2 1</td>
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<tr>
<td>27</td>
<td>g. Managing learning behavior (e.g., reinforcing appropriate behavior, preventing misbehavior, controlling misbehavior, and discipline)</td>
<td>5 4 3 2 1</td>
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<td>28</td>
<td>h. Using a variety of instructional techniques to accommodate differences in learning styles and abilities among students</td>
<td>5 4 3 2 1</td>
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<tr>
<td>29</td>
<td>i. Understanding various customs, values, and diverse cultural backgrounds of students</td>
<td>5 4 3 2 1</td>
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<td>30</td>
<td>j. Demonstrating sensitivity to contemporary democratic issues such as racism and sexism (e.g., treating all students equitably, selecting unbiased resources, and using nonstereotypical language)</td>
<td>5 4 3 2 1</td>
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<tr>
<td>31</td>
<td>k. Using community resources to enhance student learning</td>
<td>5 4 3 2 1</td>
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**Implementing Evaluation**

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<tr>
<td>32</td>
<td>l. Designing or selecting valid and reliable evaluation instruments suitable to instructional objectives and the conceptual level of the student</td>
<td>5 4 3 2 1</td>
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<td>33</td>
<td>m. Conducting and using observation techniques to evaluate student progress or student behavior (e.g., the use of rating scales, checklists, or anecdotal records)</td>
<td>5 4 3 2 1</td>
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<tr>
<td>34</td>
<td>n. Using evaluation for making instructional decisions (e.g., for review, grouping of students, remedial work, placement)</td>
<td>5 4 3 2 1</td>
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<tr>
<td>35</td>
<td>o. Using a variety of evaluation devices or activities for progress reports, feedback, or grading</td>
<td>5 4 3 2 1</td>
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<td>36</td>
<td>p. Evaluating student growth on a continuous, systematic basis</td>
<td>5 4 3 2 1</td>
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**Developing Professional Behavior**

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<tr>
<td>37</td>
<td>q. Evaluating one's own instructional skills through gathering, interpreting, and using data for self-improvement</td>
<td>5 4 3 2 1</td>
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<td>38</td>
<td>r. Establishing and maintaining effective working relationships with colleagues and other individuals encountered in professional situations</td>
<td>5 4 3 2 1</td>
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<td>39</td>
<td>s. Encouraging students' feelings of self-worth</td>
<td>5 4 3 2 1</td>
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<td>40</td>
<td>t. Accenting constructive criticism and suggestions for professional improvement</td>
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<td>41</td>
<td>u. Developing and maintaining effective teacher/student relationships</td>
<td>5 4 3 2 1</td>
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<td>42</td>
<td>v. Developing skill in verbal and written communication</td>
<td>5 4 3 2 1</td>
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<td>43</td>
<td>w. Understanding the value of reflecting a professional appearance</td>
<td>5 4 3 2 1</td>
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<td>44</td>
<td>x. Understanding the value of participating in professional groups or activities</td>
<td>5 4 3 2 1</td>
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<td>45</td>
<td>y. Developing knowledge of the subject matter</td>
<td>5 4 3 2 1</td>
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<td>46</td>
<td>z. Managing materials, facilities, and the program</td>
<td>5 4 3 2 1</td>
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</table>
2. How many students in your classes are classified into each of the following groups? (Please indicate a number, not percentage or words.)

<table>
<thead>
<tr>
<th>Racial groups:</th>
<th>Handicapping conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Emotionally disturbed</td>
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<tr>
<td>65</td>
<td>Hearing impaired</td>
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<tr>
<td>50</td>
<td>Mentally handicapped</td>
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<tr>
<td>53</td>
<td>Orthopedically or health impaired</td>
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<td>56</td>
<td>Speech impaired</td>
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<tr>
<td>59</td>
<td>Visually handicapped</td>
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<td>62</td>
<td>Learning disabled</td>
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<td>68</td>
<td>____Asian</td>
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<td>71</td>
<td>____Black/Negro</td>
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<td>74</td>
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<td>77</td>
<td>____Native American</td>
</tr>
<tr>
<td>80</td>
<td>____Caucasian</td>
</tr>
</tbody>
</table>

3. Based upon your professional experience, in what ways could we improve our program regarding:

a. subject matter specialty?

b. teaching skills?

4. What do you consider to be the strengths of the teacher education preparation (e.g., teaching methods, student teaching) in your undergraduate program?

5. Please make any comments on any items not previously included.
## Evaluation of Teacher Education Graduates

**North Dakota State University**
**School of Education**

**Do not mark in these boxes.**

<table>
<thead>
<tr>
<th>Name of Teacher</th>
<th>Name of Respondent</th>
</tr>
</thead>
</table>

**Name of School**  
**Title of Respondent**  
**Date**

---

### Directions:

For each of the items below, circle the number which reflects your evaluation or attitude regarding the teacher. Circle only one number for each item. The information you provide will be used to evaluate the teacher education program rather than the teacher.

- **5—Very Effective**
- **4—Effective**
- **3—Somewhat Effective**
- **2—Ineffective**
- **1—Very Ineffective**

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### Planning Instruction

1. For each of the following, evaluate the effectiveness of the teacher's:

<table>
<thead>
<tr>
<th></th>
<th>Very Effective</th>
<th>Somewhat Effective</th>
<th>Ineffective</th>
<th>Very Ineffective</th>
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</tbody>
</table>

### Implementing Instruction

1. Applying learning theory and principles of learning
2. Managing learning behavior  
   - (e.g., reinforcing appropriate behavior, preventing misbehavior, controlling misbehavior, and discipline)
3. Using a variety of instructional techniques to accommodate differences in learning styles and abilities among students
4. Understanding various customs, values, and diverse cultural backgrounds of students
5. Demonstrating sensitivity to contemporary democratic issues such as racism and sexism (e.g., treating all students equitably, selecting unbiased resources, and using nonstereotypical language)
6. Using community resources to enhance student learning

### Implementing Evaluation

1. Designing or selecting valid and reliable evaluation instruments suitable to instructional objectives and the conceptual level of the
2. Conducting and using observation techniques to evaluate student progress or student behavior (e.g., the use of rating scales, checklists, or anecdotal records)

---

### Developing Professional Behavior

1. Evaluating one's own instructional skills through gathering, interpreting, and using data for self-improvement
2. Establishing and maintaining effective working relationships with colleagues and other individuals encountered in professional situations
3. Encouraging students' feelings of self-worth
4. Accepting constructive criticism and using suggestions for professional improvement
5. Developing and maintaining effective teacher/student relationships
6. Exhibiting skill in verbal and written communication
7. Reflecting a professional appearance
8. Participating in professional groups or activities
9. Demonstrating knowledge of the subject matter
10. Managing materials, facilities, and the program

---

**Note:**

- Use the provided scales to rate the effectiveness of the teacher's activities.
- The evaluation is based on information gathered to evaluate the teacher education program rather than the teacher themselves.
2. To prepare a better teacher, in what ways could we improve our program regarding:
   a. subject matter specialty?

   b. teaching skills?

3. Please make general comments on any items not included above.