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ABSTRACT

This report explores the question of what constitutes success in teaching from the perspective of the teacher. A survey of elementary and secondary teachers was conducted using both questionnaires and interviews. Responses were classified as cognitive, affective, or other. Responses were judged cognitive when pupil learning was indicated as a sign of successful teaching. An affective rating was used when responses indicated a positive attitude or feeling that occurred within the classroom. The affective category yielded the highest number of responses across all grade levels. Regardless of teaching level, most teachers defined their success in terms of their pupils' behaviors rather than themselves or other criteria. It was clear from the interviews that teachers defined success in the classroom from a unique perspective that research has yet to explore. It is proposed that, by paying more attention to the needs of preservice and inservice teachers for success, teacher education programs might provide models of teacher behavior in the classroom that evoke positive student response.

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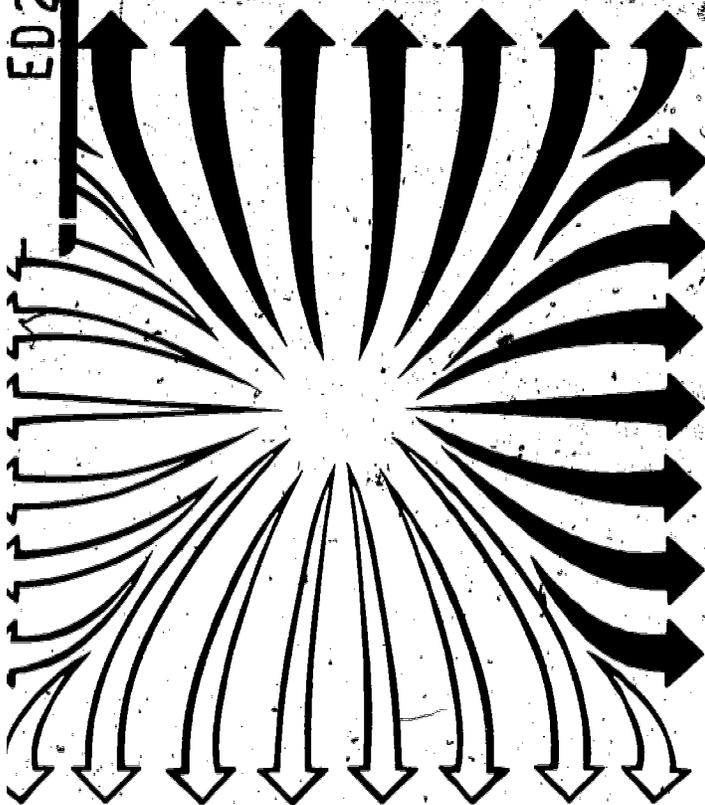
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**Current
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TEACHERS' CONCEPTIONS OF THEIR OWN SUCCESS

by

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FOREWORD

Educational researchers have been trying for years to define successful teaching, but this short report indicates that their concept of success may be at odds with that of teachers. The ERIC Clearinghouse on Teacher Education is publishing this current issues paper to stimulate discussion on the important topics of teacher effectiveness and process-product research, and to add another clue to the mystery of teacher burnout. Of the latter, it seems obvious that feelings of success will enhance self-esteem and self-confidence, which in turn will reduce harmful stress. Researchers, teacher educators, and school administrators are encouraged to investigate and capitalize on the antecedents for success as teachers define the term.

The Clearinghouse acknowledges with appreciation this professional contribution to the educational literature. Dr. Berj Harootunian is a professor in the Syracuse University School of Education and is director of the Division for the Study of Teaching. Dr. Gwen P. Yarger is an assistant professor who also serves as coordinator of the West Genesee/Syracuse University Teaching Center. Acknowledgments also go to the content reviewers.

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TEACHERS' CONCEPTIONS OF THEIR OWN SUCCESS

What is it about teaching that makes teachers feel successful? Physicians achieve success when they cure patients or ease their discomfort if incurable. For lawyers, success is even more obvious as often it is couched in terms of "winning" or "losing" the case or a favorable ruling on a point of law. Do teachers experience the kinds of success that doctors, lawyers, and other professionals have? How do teachers find or achieve success when they teach?

Surprisingly, few researchers have questioned how teachers define success in their daily lives. Some myths abound, for example, secondary teachers perceive everything, including success, in terms of content; elementary teachers, in terms of skills or the child's development. Researchers have concentrated on variables that describe the teacher, including their self-concepts (Seaton et al. 1978), their success orientations (Keislar 1979), and the like (Dunkin and Biddle 1974), and they have attempted to link such variables to teacher behaviors in the classroom (process) and to the production of gains in student learning (product). Hence, teachers have been defined as "successes" for performing appropriately or for producing student learning gains. In each of these instances, the researcher, not the teacher, has determined the criteria for success. Evertson and her colleagues (1975) reported that highly successful teachers (as determined by student gain) were not very different from the less successful ones in the accuracy of reporting their classroom behavior. The question essentially remains, is the teacher's definition of success congruent with the researcher's? From the perspective of the teacher, this report explores the question of what constitutes success in teaching.

In a sense, the research described might be thought of as a step toward providing an intentionalist account of teaching, as explained by Fenstermacher (1979). According to his view, "the researchers' attentions would turn to the subjectively reasonable beliefs that teachers already hold. An examination of these beliefs and the study of evidence bearing upon them would become the initiating focus for teacher effectiveness research" (p. 169). Fenstermacher anticipates the demise of attempts to convert the results of process-product research to rules for effective teaching, and notes that "it would be wise to learn something about the subjectively reasonable beliefs of teachers."

Harré and Secord (1972), whose position parallels Fenstermacher's, believe that "the things people say about themselves and other people should be taken as seriously as reports of data relevant to phenomena that really exist and which are relevant to the explanation of behavior" (p. 7).

A related, but conceptually different, approach to the mental life of the teacher was set forth by Shulman and his colleagues (Shulman and Elstein 1975; Shulman and Lanier 1977), who noted that research typically slights the problem of how teachers think about their pupils and instructional problems. Shulman argued that a key issue for research on teaching is the relationship between teacher behavior and teacher thought.

In a different context, Snow (1974) also stressed the importance of investigators taking detailed account of what subjects think about during experiments on teaching. He suggested that even if a researcher has to use artificial experimental conditions, the study designed to include a comparison group in which subjects are allowed "to perform in their own idiosyncratic ways may be enlightening" (p. 279).

This brief account examines with evidence the adequacy of the process-product approach to research on teaching that has dominated the past decade. Our study follows others that have departed from typical process-product research methodologies to explore teachers and teaching through less conventional means. For example, sociologist Daniel Lortie (1975) used a number of sources and strategies to collect information

on "teaching work" and the "outlook" of teachers. He analyzed historical reviews, local and national surveys, the research of others, and content from interviews. Lortie found that the sentiments of teachers reflected their daily tasks and the realities of classroom life (pp. 184-85). Among psychologists who have addressed the problems of teaching and teachers, David Hunt (1976) took serious and continuing account of the teachers' perspective. According to Hunt, it is important to do so "not only for communication but especially in attempting to implement a program" (p. 215). If explicit attention is not given to the characteristics of the teacher, changes or adoption of new procedures may not be instituted because they may be too far out of line with teachers' ideas and attitudes. Hunt conceived of both teaching and the study of teaching as understanding persons-in-relation. He has used his ideas in conducting research in school settings where teachers are his colleagues and equals.

Whether other researchers of teaching will follow Hunt's lead is debatable. More important is that people other than researchers are paying attention to the generalizations from process-product research about teaching and teachers, and some of these generalizations are being put to use without adequate consideration of their limited scope. Unlike Hunt's work, seldom have these studies considered the teachers' perspectives in the data collected. When they have, the consequences for the researcher have sometimes been a surprise, as is the case in this paper.

For the most part, the teacher's perspective has been ignored--research and policy questions both are decided as if that variable does not exist. Recent calls for accountability and commissions on competency exemplify the scant attention paid to the teacher's perspective. Some years ago, Jackson (1968) questioned the existence of "engineering" approaches to teaching and the study of teaching. For him, teaching was an opportunistic process; seasoned teachers seize any opportunity for students' benefits. Jackson distinguished between the teacher's ultimate and primary concerns. Ultimately, a teacher is concerned about the learning of pupils in his or her class, but primarily

the teacher's attention is on the activities and tasks that achieve and maintain student involvement. This distinction is important and will be discussed following the description of our study of teachers' perspectives of success.

Background on a Study of Success

This research project grew from a previous attempt by Harootunian (1980) to ascertain observable teaching behaviors that differentiate a teacher's best and worst teaching, as defined by the teacher. In this pilot study, once a week for 10 weeks, each teacher audiotaped a lesson being taught that was at least a half hour long. The only variable of any consequence that even hinted at a distinction between the most successful lesson and the least successful one was humor. The highest rated lesson had more humor. This and other results suggested that teachers were judging their practice using criteria that were not readily observable.

Humor was the only one of several comparisons that showed a significant difference. However, humor has not been an important variable in the research literature on teaching. Although it may have been a chance occurrence, the fact that humor was the only difference between these teachers' two extreme teaching episodes made us more curious to find out what internal criteria the teachers used in judging themselves.

Methodologically, a number of trade-offs came into play. We wanted any discovery not only to have adequate scope, but also to be of sufficient depth. To satisfy both, we decided to conduct the study of two phases: In the first, we used a questionnaire survey to a large sample of teachers; in the second, we interviewed at length 50 of those teachers about their successes.

Phase One: The Questionnaire

Participating teachers in the study were all members of one school district serving a predominantly

white, middle to lower class population. The sample included 82 elementary, 88 junior high, and 67 high school teachers for a total population of 237. The teachers ranged in experience from one to 39 years, with an average (median) of 12.1 years.

The most important item on the questionnaire asked teachers to list any events in their teaching that they regarded as successes. There were no expectations of what or how many events should be listed. In addition, demographic information on the respondents regarding teaching level, years of experience, etc., was collected. The last item asked if the respondents would be willing to be interviewed about their responses.

An unstructured questionnaire on teaching success was found in the earlier study to be the most feasible method of eliciting the kinds of information needed. We left the instrument unstructured because we thought that a structured questionnaire might suggest responses that were not representative of teachers' thinking.

As the purpose of the study and the directions were explained, the reactions of the teachers to the questionnaire were varied, but four kinds of reactions were readily observed: Some teachers set about the task of listing their successes immediately; others stared into space for several minutes before beginning, while others joked among themselves saying that success was being able to "make it through the day" and asking, "How do you spell SUCCESS?" Teachers displaying one of these three behaviors eventually engaged in the task.

The fourth reaction was the continued staring into space, staring at the paper and starting to write only to pull the pencil away from the paper. At first, we thought these teachers needed additional directions or that they preferred not to participate in the study. When asked, however, each responded that he or she simply could not think of any success in the classroom. Each was sincere and appeared to be mentally searching for even a single memory of a successful event. One elementary, five junior high, and 11 high school teachers made up this fourth group, all of whom willingly provided responses to the other questions.

The content of the responses was analyzed and categorized according to several criteria--cognitive,

affective, or other; pupil, self, or other. The frequencies of different responses, as well as the initial response, were analyzed separately. Five data tables are reported in the appendix.

The mean number of successes listed by the total sample of teachers was 4.46. Elementary teachers were the most articulate with a mean of 4.96 successes listed; the mean for high school teachers was 3.75, and for junior high teachers it was 4.53. The differences between senior high teachers and elementary teachers could not be explained by chance, indicating that the former group defined less success in teaching than elementary and junior high teachers. Why this is so is open to speculation. (See Table 1.)

Next, the teachers' responses were categorized according to whether the source of success was the child, self, other, or none. Examples of responses categorized as "child" were "enthusiasm of my kids," "pupil's grasping an objective," "kids listening." Responses under "self" included "enjoy teaching of a very difficult concept" or "if I feel at the end of the week not too far behind." Responses for "other" are exemplified by "response and enthusiasm by parents" or "when no one recognizes a student of mine as special ed." "None" meant there was no written response.

Regardless of teaching level, most teachers defined their success in terms of their pupils' behaviors rather than themselves or other criteria. The mean number of success responses that could be categorized under "child" was 3.22 for elementary, 3.14 for junior high, and 3.10 for high school teachers. These averages indicate that the differences among the three levels of teachers are chance fluctuations. (See Table 2.)

We also classified the success responses according to cognitive, affective, or other categories. Responses were judged cognitive when learning was indicated, such as "students learning to read successfully," and "good grades on quizzes and tests." An affective rating was used when responses indicated an attitude or feeling that occurred within the classroom, as "positive student attitude," and "applause after I have read the students a story." Other was used when responses did not fit the first two classifications, such as, "parent.

recognition," and "compliments from other teachers." The affective category yielded the highest number of responses across all grade levels. (See Table 3.)

Assuming that a teacher's initial response might be a better index of what that teacher regarded as a successful event, we carried out a separate analysis for such responses categorized by level of teaching. Using the same categories as for the source of success (child, self, other, or none), we found important differences only in the self and none categories. (See Table 4.) Elementary teachers tended to define success more in terms of themselves, while high school teachers did not. Also, high school teachers were overrepresented under none, while elementary teachers were underrepresented. The last finding remains the major reason for the significant differences when the responses are categorized as affective, cognitive, other, or none since the same individuals are, of course, involved. (See Table 5.) The following list gives the initial written responses of the 24 teachers whose interview data are reported in the next section:

"Student enthusiasm."

"Being in a good mood."

"See reading scores in June higher than in September."

"When the class is paying attention."

"Having a lesson run smoothly."

"Students pay attention when they see you are ready."

"Feedback from children."

"Student enthusiasm."

"Good organization."

"Students respond in class by asking questions, answering questions, etc."

"One-to-one basis with students."

"Smiling faces."

"When students respond freely in a discussion and the mood is cooperative."

"Willingness of students to get involved in classroom discussions."

"Responses from students that show enthusiasm."

"When students raise their grade after testing."

"Children excited about a lesson."

"Student appreciation."

"Positive feedback from students."

"Firmness, but fairness with students."

"When children in my top reading class show evidence they are finally reading with more depth and sophistication, I feel great."

"Children who relate the teaching to everyday incidents and report back how the teaching meant something in that incident."

"Children's enthusiasm."

"Student feels he has learned something."

Analyses were carried out to determine if length of teaching experience was related to the type and number of initial successes. In the total sample, length of teaching experience was found to relate negatively to the number of successes ($p < .01$), but these results were confounded by teaching level. Median number of years teaching for the elementary teachers was about 13.5; for junior high, 8.4; for senior high, 15.2. Separate analyses by level revealed no significant relationships between length of teaching and number of successes. Although these data are ambiguous at best, they provide a hint of support for the phenomenon of teacher burnout among novice teachers. From our data, level of teaching seemed to be a more important factor related to success than number of years of teaching per se, but the issue is not clear. The question of changes in success over time is considered in the next section.

In sum, the results of the questionnaire survey yielded surprises in what they showed and what they did not show. The commonly held belief that secondary teachers think of success primarily as cognitive or subject matter achievement was not supported, at least not in how these teachers conceived of their success. Also, why the elementary teachers defined more successes is open to speculation. Perhaps elementary school children have more opportunity to succeed, and as they grow older the opportunities decline for judging successful teaching. This explanation would be

reasonable if teachers' success instances were predominantly cognitive, but in this study the highest frequency of response occurred in the affective category. Perhaps, that result reflects simply the longer time elementary teachers spend with their classes, or the greater enthusiasm and lack of inhibition younger children exhibit. Both of these interpretations are sheer speculation and need to be studied further.

The evidence from this study clearly showed that classroom teachers at all levels define success in different ways from researchers and policy makers who study effective teaching. As Jackson (1968) aptly stated, teachers are concerned about the "stylistic qualities of their own performance as much as in whether specific goals were reached and specific objectives attained" (p. 166).

Although it was less clear from the responses and not readily apparent, the task of defining success in teaching was not easy for most of the teachers, and it seemed that few of them had given it much thought. This last finding by itself has implications for teacher education and teacher development. For example, Sparks and Hammond (1981) advocate a stress reduction technique whereby teachers discuss their successes in small groups. Such discussions lead to better self-awareness of the positive things that occur in their classrooms.

Phase Two: The Interviews

To attain a deeper understanding of teachers' perspectives of their success in the classroom, we interviewed 50 of the teachers who answered the questionnaires. The results reported here are from 24 of the interviews, all of which were conducted by the second author of this report. All of the teachers knew her as coordinator of the local teacher center, but she was not involved with any of them in a supervisory or evaluative capacity.

The interviews consisted of a series of open-ended questions to probe how teachers viewed success. All interviews were audiotaped in the teachers' respective

classrooms or a quiet place in their school during a time when they were not directly interacting with students. The duration of these interviews varied considerably. What follows are the noteworthy results from analyses of these sessions.

After brief small talk to break the ice, the interviewer gave the teacher his or her questionnaire and asked if anything needed to be changed, deleted, or elaborated. Eleven teachers reaffirmed their responses without change, while a few others restated their original responses in different words. For example, one teacher's original definition of success was, "See reading scores in June are higher than in September." In the interview, this response was expressed more abstractly as, "student progress." Essentially, the interviews confirmed the findings of the questionnaire data in terms of initial teacher response, which were reported verbatim previously.

Another question asked about the differences between a teacher's definitions of success at the beginning of the teaching career and the day of the interview. A few themes emerged that support a developmental stage hypothesis of how teachers change with experience. The answers demonstrated that a teacher changes from being concerned with survival and preoccupation with him or herself to possessing confidence in knowing what to do. Watts (1980) noted, "beginning teachers, by and large, are rigid, insecure, intimidated by students, other teachers and their own expectations," and master teachers possess confidence, ease, insights into children, and organizational and management techniques. The following excerpts from the interviews mirror what Watts found:

"Each year I have improved; I'm more organized now."

"I floundered. Taught everything as whole class. General problems. No individuals. Now I'm more aware of how to help and of materials. My priorities are different--they used to be control; now I know what I can do best. Lots of one-to-one."

"Success is more defined and long-range now, I can better define my own teaching and rely on myself now."

"First couple of years I was more concerned with overall class scores on tests, results of group. Also more concerned about myself. Now I look more to individual student and less at self."

"More confidence now. I've changed what I do, teach different things now. I accept that you can't reach all children 100 per cent."

"I had no student teaching--it was sink or swim. I spent more time on materials and less on students and was more self-conscious about being liked. Doesn't matter now."

"At first I didn't hear individual responses from 30 students in a large classroom. Now I work more with individual students so I get more feedback."

"Before, I gave information. Now, I need to teach skills of how child can find information for self."

"Years ago I talked to the larger group. Now I'm more concerned with individual learning, chatting; I'm less aloof."

We do not wish to leave the reader with the impression that we got a perfect fit with developmental stage theory, as less than five teachers gave unique responses. For example, one teacher stated that all years were equally successful and were the same. Another replied that the "kids you succeed with are the same as when you first start teaching and so are the failures."

From these responses, there appear to be three

major shifts in the definition of success as teachers gain in experience. One is an increased focus on the individual learner and less on the group as a whole. A second reflects an increase in teaching skills; many teachers noted that they possessed more and higher levels of teaching techniques, and one teacher commented on having a "bag of tricks now." The last shift comes in the teacher. Teachers alluded to their greater confidence, flexibility, and sensitivity; they had changed, and their perspective of success shifted accordingly.

To clarify what the teachers meant by success, we asked them to specify and give examples of their lack of success, or unsuccessful events, in their teaching. Ten of the 24 teachers defined lack of success as not reaching the pupils. This result is consistent with the questionnaire findings in that, if success is defined as the involvement of students, then lack of success occurs when students do not respond. Interestingly, seven teachers defined lack of success as a child with a behavior or discipline problem in the class. From the definitions, it would appear that success is not defined as the absence of discipline or behavior problems, but their presence indicates a lack of success. For another seven teachers, lack of success was defined as failure of their students to perform or achieve cognitive goals. Again, success is not defined as performance or achievement, but the obverse--failure--defines lack of success in the classroom.

The question, "how can teachers attain greater success?" generated the greatest variety of answers. The overwhelming response (every teacher except one mentioned it) was more and better instructional materials, but this focus on materials should not be overstated; it was our sense that teachers would not assign their highest priority to the acquisition of materials. As one teacher put it, "Materials help, but are not essential." Others noted that they needed to use their materials differently or needed help in developing new materials.

Although not the first response, half of the teachers mentioned support, understanding, feedback, and help from administrators as important. Eight of the 24

suggested that support and more contact with colleagues would lead to more success in teaching, and five thought that support from parents might be beneficial.

The teacher's responses are important for what they did not mention. Only two of the 24 mentioned reduced or limited class size as a factor in successful teaching, one teacher mentioned a more flexible curriculum, and no one talked about wages or hours as success factors. The list of items the teachers did not mention is infinite and includes behavioral objectives, value clarification, self-awareness experiences, etc. From the responses, it seems clearly apparent that these teachers were considering success in the classroom from a unique perspective that research has yet to explain.

The inevitable response of our teacher sample to the question of how they felt when they were unsuccessful was stated as "anger," "frustration," "withdrawn," "disappointment," "tension," "anxiety," "discouraged," "tired," and so on, while the consequence of success led to words like "happy," "feel good," "satisfied," "exhilarated," "elated," "at ease," "lots of energy," "very positive," and so on. These results are neither new nor surprising; the point is that positive feelings can likely occur or increase when all concerned have a better grasp on the antecedents for these feelings. That grasp requires knowing what is going on inside the teacher as well as inside the classroom.

Implications for the Study and Practice of Teaching

One rather obvious application of the results of the evidence collected for this report would be in the school setting. It seems apparent that teachers need opportunities to experience, recognize, and share more short-term, or even daily, success in their classrooms.

Researchers have been defining teacher success (or effectiveness, to use their label) in terms of ultimate concerns, but they have paid scant attention to the teacher's primary concerns (Jackson 1968). In defining the tasks of teachers, this research suggests the

necessity to have indices of success that reflect the primary concerns of teachers to achieve and maintain student involvement.

Improvements and developments in teaching cannot be based solely on the assumption that teachers are a breed apart who are willing to delay gratification, that they view success only as long-term student achievement. Quite the contrary, our results indicate that teachers define their primary tasks as successful when other people (usually students) smile, praise, or reward them in some way. The lack of congruence between what teachers need and the increasing emphasis on teachers performing in specified ways are likely to produce increases in teacher stress and burnout.

If we have perceived correctly what the teachers in our study have said, the maintenance of pupils' involvement in what is being taught is one of the crucial tasks by which teachers judge their success. One implication is that teaching tasks revolving around pupil involvement are prerequisites to all other tasks confronting the teacher, including large group instruction, and minimizing disruptive behavior. Until recently, process-product research has said little about pupil involvement, and the importance of such involvement, although obvious to teachers, has remained a relatively unstudied phenomenon. As Medley and Crook pointed out, "pupil learning results from pupil behavior" (1980, p. 299) and, to understand and clarify teaching, educators need to find out what kinds of teacher behavior affect pupil behavior that results in learning. In other words, the link between what teachers do and their ultimate concerns (pupil learning) occurs indirectly through the teacher's primary concerns (pupil involvement, pupil behavior). Both teacher education and research on teaching need to address this connection more specifically, both because the linkage is essential from the teacher's perspective and because it makes sense if the complexities of teaching are going to be unraveled.

The ecology of teaching has been put out of balance by various movements that have seized teacher education in recent years. The issue is not that teaching inductively, or learning by discovery, or competency-

based teacher education and other such approaches are appropriate or inappropriate, but rather that these approaches usually have been carried out with disregard for or ignorance of their effects on teachers. The unintended consequences of these movements have not been fully realized. For example, if people choose teaching because they like to talk or see children smile, or because they want to be like one of their teachers, and these individuals are treated as not having these or other characteristics, then teacher education will continue to ignore the needs of its clients. Almost two decades ago, Travers wrote, "Teachers do not change their ways of behaving simply by being told that learning would proceed with greater efficiency if they behaved differently" (1962, p. 529). Our research leads us to propose that by paying more attention to the needs of preservice and inservice students, teacher education programs might provide models of teacher behavior in the classroom.

A final implication for teaching and teacher education focuses on the concept of teacher development. Two distinct paths of development were evident in our study. First, our data and those of other researchers showed that teaching can be conceived as stages or phases of development. These stages range according to experience from survival as a novice teacher to self-actualization as an expert teacher. Second, one of the tasks for teacher education and research on teaching is to map and use these levels of teacher development to foster teacher improvement. The existence of varying levels of development means that teachers need different treatment in inservice programs. This requirement seems so obvious, but yet it is so difficult to put into practice. The development from the survival level of the beginning teacher into the expert or master teacher is a difference for which teacher education must make explicit provisions. Hunt (1976) proposed one way of accommodating these differences across all levels. He suggested "optimal mismatch" as a developmental strategy, through which the training environment focuses just above the level at which someone functions most comfortably. In such a mismatch, the teacher can function satisfactorily, but is "pulled" toward the

higher developmental level. However, regarding Hunt's optimal mismatch, we are also mindful of Stern's caveat:

While it may be true that pearls come from aggravated oysters, you can only get milk from contented cows. Pearls and milk each have their uses, and people will continue to exercise their preference for one or the other, but it would be a pointless exercise of freedom to insist on milking oysters. (1961, p. 728)

Whatever the appropriate match between development and training, sufficient evidence from our study suggests that a teacher's developmental phase is likely to relate to his or her efforts to respond to pupil needs. The fact that teachers perceive themselves to be more successful over time presents an optimistic outlook for teaching and teacher education.

To quote Jackson, "The path of educational progress more closely resembles the flight of a butterfly than the flight of a bullet" (p. 166-67). Research on teaching might well be advised to bite the bullet and acquire butterfly nets. With these, they can chase the elusive, individual characteristics that teachers consider to be marks of successful teaching. That knowledge should provide food for thought when decisions are made to change teaching, the study of teaching, and the preparation of teachers.

REFERENCES

- Dunkin, Michael J., and Biddle, Bruce J. The Study of Teaching. New York: Holt, Rinehart and Winston, 1974.
- Evertson, Carolyn M., and Others. Texas Teacher Effectiveness Project: An Investigation of Selected Presage-Process Relationships. Report No. 75-16. Austin: Research and Development Center for Teacher Education, University of Texas, 1975. (ERIC Document Reproduction Service No. ED 147 277.)
- Fenstermacher, Gary D. "A Philosophical Consideration of Recent Research on Teacher Effectiveness." In Review of Research in Education, No. 6, edited by L.S. Shulman. Itasca, Ill.: F.E. Peacock, 1979.
- Harootunian, Benj. "Teacher Effectiveness: The View from Within." Theory into Practice 19 (1980):266-70.
- Harré, R., and Secord, P.F. The Explanation of Social Behavior. Oxford, England: Basil Blackwell, 1972.
- Hunt, David E. "Teachers are Psychologists Too: On the Application of Psychology to Education." Canadian Psychology Review 17 (1976):210-18.
- Jackson, Philip. Life in the Classrooms. New York: Holt, Rinehart and Winston, 1968.
- Keislar, Evan R. Attributions of the Success-Oriented Teacher for Students' Success and Failures. Paper presented at the Annual Meeting of the American Educational Research Association, April 1979, San Francisco, Calif. (ERIC Document Reproduction Service No. ED 177 129.)
- Lortie, Dan C. School Teacher. Chicago: University of Chicago Press, 1975.
- Medley, Donald M., and Crook, Patricia R. "Research in Teacher Competency and Teaching Tasks." Theory into Practice 19 (1980):294-301.
- Seaton, Hal W., and Others. The Relationship of Self-Concept, Knowledge of Reading, and Teacher Effectiveness. Paper presented at the Annual Meeting of the National Reading Conference, 1978.

St. Petersburg Beach, Fla. (ERIC Document
Reproduction Service No. ED 165 119.)

Shulman, Lee S., and Elstein, A.S. "Studies of Problem Solving, Judgment, and Decision Making: Implications for Educational Research." In Review of Research in Education, No. 3, edited by

F.N. Kerlinger. Itasca, Ill.: F.E. Peacock, 1975.

Shulman, Lee S., and Lanier, J.E. "The Institute for Research on Teaching: An Overview." Journal of Teacher Education 28 (1977):44-9.

Snow, Richard E. "Representative and Quasi-Representative Designs for Research on Teaching." Review of Educational Research 44 (1974):265-91.

Sparks, Dennis, and Hammond, Janice. Managing Teacher Stress and Burnout. Washington, D.C.: ERIC Clearinghouse on Teacher Education and the American Alliance on Health, Physical Education, Recreation, and Dance, 1981. (ERIC Document Reproduction Service number not yet assigned; Clearinghouse No. SP 017 376.)

Stern, George G. "Environments for Learning." In The American College, edited by N. Sanford, pp. 690-730. New York: John Wiley and Sons, 1961.

Travers, R.M.W. "A Study of the Relationship of Psychological Research to Educational Practice." In Training Research and Education, edited by R. Glaser. Pittsburgh, Pa.: University of Pittsburgh, 1962.

Watts, Heidi. "Starting Out, Moving On, Running Ahead, or How the Teachers' Center Can Attend to Stages in Teachers' Development." Teachers' Center Exchange. Occasional Paper No. 8. Second Edition, November 1980.

APPENDIX: DATA TABLES

TABLE 1
Means* for Success Responses

Teacher Level	N	Mean	Standard Deviation
Elementary	82	4.96	1.70
Junior High	88	4.53	1.98
Senior High	67	3.75	2.70

*Senior High mean differs significantly from Junior High mean ($t = 2.36$, $df = 153$, $p < .05$) and from Elementary mean ($t = 6.88$, $df = 147$, $p < .01$). No other significant differences.

TABLE 2
Means* for Success Responses
in Child Category

Teacher Level	N	Mean	Standard Deviation
Elementary	81	3.22	1.81
Junior High	83	3.14	1.77
Senior High	56	3.40	2.24

*No significant differences between means ($p \leq .05$).

TABLE 3
Means* for Success Responses
in Affective Category

Teacher Level	N	Mean	Standard Deviation
Elementary	81	3.48	1.62
Junior High	83	3.88	1.70
Senior High	56	3.68	2.03

*No significant differences between means ($p \leq .05$).

TABLE 4
Frequency* of Initial Responses
as Child, Self, Other, or None

Teacher Level	First Success Response							
	Child		Self		Other		None	
	N	%	N	%	N	%	N	%
Elementary	63	77	11	13	7	9	1	1
Junior High	68	77	8	9	7	8	5	6
Senior High	52	78	2	3	2	3	11	16

*Chi square to test independence between teacher level and response category is 18.82. $df = 6$, $p < .01$.

TABLE 5
 Frequency* of Initial Responses
 as Affective, Cognitive, Other, or None

Teacher Level	First Success Response							
	Affective		Cognitive		Other		None	
	N	%	N	%	N	%	N	%
Elementary	63	77	15	18	3	4	1	1
Junior High	57	65	19	22	7	8	5	6
Senior High	47	70	7	10	2	3	11	16

*Chi square to test independence between teacher level and response category is 18.33, df= 6, p < .01.