Do teachers centers make a difference? Do they have an impact on teachers' view of themselves and children and on teacher behavior in the classroom? One well-known study suggests that teachers centers are having that kind of impact. The Coleman Report (1966) found that students who felt a strong sense of "internal control" over what happened to them, who felt that they had the resources for success within themselves and that personal effort paid off, were very likely to be doing well in school. Students who felt "externally controlled," believing that the deck was stacked against them or that success was mostly a matter of luck, were very likely to be doing poorly in school.

Teachers centers characteristically try to increase teachers' sense of control over their professional development, to strengthen their belief that they have the internal resources to continue their growth and to do their job well. Although centers to our knowledge have not measured changes in how much "internal control" teachers feel, center participants say things suggesting personal development on just that dimension: "I gained faith in myself"; "It gave me the courage to try"; "I've gained confidence in my ability to make and do many things"; "I've discovered talents I didn't know I had" (statements taken from a recent survey of participants at the Grass Roots Center at Cortland, New York). Just as pupils high on internal control in Coleman's study proved to be successful students, teachers center participants who gain confidence in their own resources seem likely to become better teachers.

What of research that has looked directly at centers?

Although teachers centers in Britain number over 600 and enjoy public support, research on their impact appears to be nonexistent (Rosner, 1972; Thornbury, 1973). The American track record has not been much better than that of the British, but it is improving.

Workshop Center for Open Education

A first step toward the serious study of American teachers centers was taken by a team of researchers from Education Testing Service (Chittenden et al., 1973). During 1972-73 they conducted an evaluative study of the Workshop Center for Open Education at the City College of New York.

In the major part of this study 15 teachers who had attended the center five or more times were interviewed. The scoring of these interviews coded for three things: (a) the apparent stimulus of a particular "learning"
reported by a teacher; (b) the nature of that learning; and (c) evidence of carryover into the classroom.

The ETS scorers found 107 codable instances of learning. Each of these they classified into one of six categories. More than half—57 instances—were categorized as “Adding discrete input.” This meant adding new specific ideas about methods, activities, and materials to one’s teaching repertoire without experiencing a change in thinking about the teaching-learning process. Remark ing on the frequency of the “discrete input” kind of learning, the interviewers noted that, “Virtually all the teachers commented on the practical help the center offered—concrete ideas relevant to their children and their classroom” (Chittenden et al., 1973).

The other 50 of the 107 codable learnings were distributed fairly evenly over the categories of change that the ETS team regarded as more “conceptual” in nature. These included “reinforcing learning” (having an existing idea strengthened); “possibilizing” (seeing new possibilities); “enriching a construct” (gaining in-depth knowledge in a given area); “construct change” (developing a new idea or rationale); and “integration of constructs” (making connections between ideas).

Different teachers showed different patterns of learning, as well as different patterns of using the center facility. These varied according to the “orientation” a teacher brought to the center. If a teacher came for immediate help with particular problems, then specific subject matter workshops were where the action was and “discrete input slotted into existing ideas” was what was gained.

The less teachers showed this “firefighting” orientation and the surer they were of their professional role, the more they revealed evidence of conceptual learning. They also used the center in a greater variety of ways: for discussion with other teachers, for example, or consultation with staff, or personal investigations, as well as for participating in workshops. One such teacher, fascinated by a stream table in the center, initiated a discussion with staff about its curricular possibilities that continued throughout the school year as the teacher and his children developed a stream table in their classroom.

Of the 107 instances of teacher learning scored in the interviews, 64 percent included a reference to implementation in the teachers’ own classroom. The nature of this implementation varied. Changes ranged from ongoing projects like the stream table to materials introduced for more specific purposes to the solution of a classroom management problem.

How did the children respond to these changes? For more than half of the reported innovations, teachers offered information about children’s reactions, and these in turn were scaled by the interviewers. Only one activity was judged a failure; 6 innovations were “accepted by” the children; 12 activities they “really liked” or “loved”; and with 17 activities the children not only responded very positively but the teacher saw new possibilities for further extensions as a result of the children’s responses.

Teachers least sure of themselves seemed to implement the most. Center participants coming for help with pressing problems showed the highest proportion of classroom carryover and also the least attention to children’s reactions. Center participants who were more confident of their role in the classroom were typically more selective about what they implemented, more attentive to how the children responded, and more likely to pursue curriculum extensions of a new activity. If the latter pattern of teaching stems from confidence about one’s role in the classroom, then centers that help teachers become more confident are clearly making a difference. At the Workshop Center at City College, Ted Chittenden (1975) reports, “If a teacher stayed on for three years, in every case there was a progression from ‘make-and-take’ kinds of concerns to involvement in personal learning, reflective discussion with staff, and construction of a point of view about teaching and learning.”

The ETS team never observed center participants teaching, but another evaluator
of the center did. In 1974-75, Patricia Bull both interviewed 15 teacher users of the center and observed their classrooms during the regular school day.

Bull (1975) found that all 15 teachers were practicing open education but to markedly different degrees. Teachers who had both attended the Workshop Center and received ongoing follow-through support from the center's on-site classroom advisory service were more consistently open or child-centered than teachers who had simply attended the center or received only short-term advisory help. The differences, Bull reported, were reflected in the children's behavior. In the classrooms without advisory support, “the use of materials and the children's apparent familiarity with the materials were minimal.” In classrooms with long-term advisory support, “activity was initiated and sustained by the children... their use of materials contained an enthusiasm and excitement, and taking of responsibility for materials and areas of the room was extremely evident.”

The Grass Roots Center

In a research evaluation (Scheers, 1974) of our center-based graduate program at SUNY at Cortland, we had trained observers visit the classrooms of a sample of our teachers—twice in November-December 1972, and twice again in May-June 1973. These observers used the Walberg-Thomas Observation Rating Scale (1972), a 50-item instrument on which informal and traditional teachers show sharp differences both in the United States and in England. The items encompass virtually everything that goes on in the classroom: how time, space, and materials are used, what the children are doing, how record-keeping is done, and the role of the teacher.

Our results indicated that our teachers were in fact developing the informal teaching style that our program encouraged. Of more general interest, however, is a finding that came from asking teachers to rate themselves on the same scale being used by the observers of their classrooms. The correlation between the observers' ratings and the teachers' self-ratings was .66 in the fall and .78 in the spring. This is not to suggest that direct classroom observation is unnecessary, but that if time or funds prohibit observation, teacher self-reports can be relied upon as a pretty fair indicator of what is going on.

Acting on that belief, we recently conducted a mail survey of approximately 200 teachers in central New York who had taken for college credit our 5-week Summer Institute, Fall Semester Institute, or Saturday Workshop Course. Approximately 25 percent returned the questionnaire.

One question asked, “How has participation in the Grass Roots Center affected what you do with children in your classroom?” This was followed by a checklist of seven kinds of change, each item asking the respondent to illustrate changes that occurred.

No teacher checked the “No change” category. Fully 85 percent reported having changed the physical environment, in most cases by introducing interest centers. Over 80 percent reported using materials, especially natural or teacher-made materials, in greater quantity or variety than before and for new or expanded purposes. Fifty-nine percent said center participation had affected how they structured their day. Changes here included such things as planning larger blocks of time for activities, allowing more “free time,” introducing an activity period into the morning, and ensuring more time for individual contact between teacher and child.

Ninety-two percent of respondents said the center had been a source of new projects (art, math, science, creative writing, puppetry) they had done with their children. Eighty percent checked “It has changed my relationship with and attitude toward children,” speaking here of increased freedom and trust, greater tolerance, heightened appreciation of individuality, and more awareness of both affective and cognitive development.

Under a final open item, 80 percent of the respondents took the opportunity to list additional ways the center had been valuable to them as a person or professional. For
different persons, the center was a place to share ideas with other teachers, a source of inspiration and confidence, the impetus for starting teacher and parent groups, a means of learning more about how children think and feel, and a vehicle for “experiencing firsthand the excitement of learning.”

In another part of the questionnaire, we asked the teacher to identify a center activity, a consequent “change I made,” and “the effect I observed on kids (please be specific).” Here the connections are clear between what the teacher did and how children responded. One teacher, for example, writes that as a result of the Summer Institute, she changed her room arrangement and categorized materials according to the need they would fulfill. She observed there was more order to the way the children worked in the room, more purposeful and prolonged activity, more overall enjoyment. Another teacher spent a Summer Institute involved in aesthetic education and set up an art center in her room. The change in her teaching was to “let everyone go, let them decide what to do,” and the outcome was “They’re creating things I could never think of.” Another teacher stated that an Institute had inspired her to keep more time for herself, “realizing I am a person, too.” “The kids seem to mirror me,” she reported, “when I’m happy and relaxed, they are too.”

Once again, direct classroom observation verifies this kind of teacher-reported
change. One member of our staff, Susan Dalziel, teaches/coordinates workshop courses that are based in schools rather than at the College. On the day that the course meets, she is typically in the school visiting classrooms and observing the variety of innovations in classroom organization and curriculum that teachers will themselves document in detail in reports at the end of the course (Dalziel, 1975; Lickona, 1975).

**Research from Other Centers**

The strategy of "taking the teachers center to the school" appears to be growing in popularity. The University of Connecticut's advisory service, for example, reports that its "greatest impact was demonstrated through on-site college credit courses designed by the faculty of a particular school" (Drumm, 1975). Such courses are also the stock and trade of the Greater Boston Teachers Center. In an evaluation of one of their many courses, "Language Arts for Teachers of Inner-city Schools," 83 percent of the teachers said they were working differently with at least some of their children as a result of the course, and 65 percent reported general changes in their teaching methodology. "Noticeable classroom use of materials" that had been made during a school-based course in individualizing instruction is also reported by the West Genesee/Marcellus/Syracuse University Teaching Center (San Hose, 1975).

Slowly, from around the country, the data are coming in. The Teachers Center at Greenwich, Connecticut, can boast of 100 percent positive teacher evaluations of two separate workshop series involving over 100 teachers—with 50 percent of the teachers spontaneously volunteering evidence of classroom implementation (Houghton, 1975). A sample evaluation report from a program sponsored by the Teachers Learning Center in San Francisco indicated that 77 percent of the participants "changed their instructional approach" (McNamara, 1975). Follow-up classroom observation, carried out at teachers' invitation by the Teachers' Active Learning Center in Oakland, California, found that center participants were developing a greater variety of activities, more options for children, and more extensions of activities into interdisciplinary curriculum development. The children were in turn observed to be responding with greater interest and higher levels of concentration while doing "academic" as well as "creative" tasks (Buxton, 1975).

The Bay Area Learning Center has received USOE funds for the past four years to support four different San Francisco-area professional development centers for administrators as well as teachers. The 1974-75 evaluation (Evaluation Research Center, University of Virginia, 1975) asked respondents to rate the extent to which they implemented practices they learned about at Center-sponsored workshops on a 5-point scale (from "implemented none of the practices" to "implemented all"). The extent-of-implementation ratings were 2.5 for building administrators, 3.1 for elementary school teachers and central administrators, and 4.0 for secondary administrators.

**Future Research**

As always, more research is needed. Here are some suggestions for future research on teachers centers:

1. It should be theory-based, anchored in some conception of what is involved in becoming a good teacher. Tom O'Brien (1974), for example, who directs the Piaget-based Teachers Center Project in Mathematics Education at Southern Illinois University, believes that becoming a good teacher means developing a point of view about how children think and a teaching repertoire that supports their thinking. A theory of teacher growth is important because it will tell the researcher not only what to look for in evaluating the impact of teachers centers, but also how to try to measure or record it. ETS's use of a theory of personal constructs in its study of teacher development is a good example of theory-guided research. A theory of teacher growth will also force research to attend to long-range teacher development, potentially the well-
spring of many specific teaching changes, rather than focusing only on immediate change in teaching behavior.

2. Research should involve center staffs. An encouraging example of such a project is now taking shape at the Chicago Teacher Curriculum Work Center under the direction of researcher Sharon Feiman (1975). The questions that intrigue her are, “How do teachers think children learn from materials?”, “How does teachers’ thinking about materials affect how teachers use them in the classroom?”, and “What kinds of experiences with materials in a teachers center develop what kinds of teacher understandings?” Feiman hopes to involve the Chicago Center Staff both in developing the instruments for the study and in collecting the data, including classroom observations.

3. Evaluations of the effectiveness of teachers centers should be prepared at some point to document positive effects on children as well as positive effects on teachers. In so doing, evaluators should be able to point out indicators of children’s growth and learning other than conventional standardized test scores. What is the evidence that children can work independently? Work together? Show curiosity? Pursue a problem? Test out their own ideas of interesting things to do with materials that are available to them? (For a splendid example of evaluation that looked at questions like these, see Eleanor Duckworth’s essay, “The Having of Wonderful Ideas,” 1973; and for a more comprehensive guide to child-centered evaluation, see the Workshop Center for Open Education’s Evaluation Reconsidered, 1973.)

The evidence reviewed here suggests that teachers centers do in fact make a difference in the lives of teachers and in what they do in classrooms. The question of how much and what kind of a difference, and how it affects the learning and development of children, has an important claim on the attention of American educational research.

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