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Faculty Collaboration for Better Teaching: Adult Learning Principles Applied to Teaching Improvement

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Teaching is something that most of us do behind closed doors, only in the presence of our students. It is on rare occasions that we are observed by our peers or that we team teach. Only infrequently do we discuss our teaching with our colleagues. Instructional improvement services are often provided in the form of confidential consultation with an expert.

The most widely accepted principles of adult learning suggest that adults thrive on collaborative learning. Adults are motivated by peer involvement and support, and sharing their experiences is a powerful resource for learning. This paper describes how these principles were employed in the design of an instructional improvement program for university faculty and attending physicians in a teaching hospital.

RATIONALE

Instructional development specialists use various approaches to enhance the quality of teaching in postsecondary settings. These efforts are successful to some extent, but faculty members in colleges, universities, professional schools, and graduate programs continue to pose challenges to the instructional development specialist.

Resistance to instructional improvement programs often is the result of competing values and perceptions of faculty roles.

Postsecondary faculty members tend to view themselves as scholars or professionals first, and teachers second. Even among those who do value teaching highly are faculty who believe teaching cannot be improved. If they think "you either have it or you don't," instructional improvement activities probably seem irrelevant to them.

When I began the process of designing teaching improvement programs for faculty in a university and a teaching hospital, I recognized that the faculty might be resistant to an approach that did not treat them as competent adults. They were all experts in their fields, had experience in teaching, and were successful professionals, although in these two settings, their roles and responsibilities as teachers varied greatly. The twenty-five faculty who participated in the program described here taught subjects ranging from engineering to economics in typical university classrooms and labs. The fifteen teachers at the teaching hospital, usually physicians in private practice, conducted attending rounds in internal medicine with a small group of six to eight residents and medical students for six hours a week for one month. Teaching sessions typically focused on cases presented by residents and students.

In attempting to motivate these adult learners to think about teaching, I drew on principles of adult learning to design a model for instructional improvement. In both settings these were the first formal programs designed to enhance instruction. I incorporated these principles to engender support for, and positive participation of faculty in, instructional improvement activities.

ADULT LEARNING PRINCIPLES

In the past ten years as we have become a "learning society" (Cross, 1984), theory and research on the adult learner have expanded greatly. Educators have increased understanding of the conditions that promote continued learning beyond traditional school years.

Brookfield (1986) summarizes the current research on adults as learners. "Adults learn best when they feel the need to learn and when they have a sense of responsibility for what, why, and how they learn. Adults use experience as a resource in learning so the learning content and process must bear a perceived and meaningful relationship to past experience" (p. 31).

Five principles of adult learning provide the foundation for the model of instructional development described in this paper. They will be explained briefly and supported by related findings from the literature on instructional improvement.

1. *Most adult learners are self-directed* (Tough, 1971; Knowles, 1984). Self-directed learning is a process in which the individual takes initiative in diagnosing needs, designing learning experiences, and evaluating learning. To respond to the self-directedness of adult learners, educators should be sensitive to learners' self-concepts. Their past experiences should be recognized as providing educational material, and there should be a general atmosphere of flexibility, regard for learners, and openness (Brundage and Mackeracher, 1980).

2. *Adult learners bring rich and varied experiences to the learning situation.* In his theory of adult learning, Knowles (1984) cites experience as the richest resource for adult learners; the analysis of this experience makes the learning relevant and generates involvement in adult learning activities.

3. *Shared experiences and mutual assistance facilitate adult learning.* Collaboration enhances the self-concepts of those involved and results in more meaningful and effective learning (Brundage and Mackeracher, 1980). In instructional improvement activities teachers report that what they liked best about in-service workshops was the sharing of ideas with other teachers (Holly, 1982).

4. *The motivation of adults for learning is usually intrinsic, rather than extrinsic.* In most cases adults enter into learning activities in order to solve a particular problem or satisfy a particular need. According to Brundage and Mackeracher (1980), this voluntary participation is likely to create a non-threatening climate of instruction that will result in a greater amount of learning. In instructional improvement activities, Lindquist (1979) suggests that faculty design the goals of the program. They know what their needs are so they should be the ones to define what effective teaching is. Experts cannot force faculty to change; faculty must see the changes as solutions to their problems.

5. *Feedback is very beneficial for adult learners.* It allows adults to evaluate their own learning and performance, to

understand their level of competence, to maintain their effort toward realistic goals, to correct errors, and to receive encouragement (Wlodkowski, 1985). Several sources of feedback can contribute to change in teacher performance: self-assessment, videotape, and consultation (Skeff, 1984). Classroom teaching is both easier to understand and easier to improve if one focuses on observable, changeable behaviors rather than on intractable generalities. Explicit feedback on the frequency of occurrence of specific behaviors in classroom teaching or intensive consultation or training focused on a limited set of classroom behaviors makes changing teaching behaviors a concrete and more easily accomplished task (Murray, 1985).

One source of feedback is self-assessment. It allows adult learners to compare their performance to a defined performance standard. This promotes more active planning and persistence toward the attainment of the standard. The criteria should be specific, preset, and agreed to by the teacher doing the assessment (Stritter, 1983). Rippey (1980) believes self-assessment should be undertaken in conjunction with assessment from students, peers, administrators and/or educational consultants.

Videotape can provide the teacher with feedback on performance. As part of the instructional improvement process, videotapes provide a record of performance for the individual and a specific focus for discussions between the faculty member and consultant. Videotaping has been used in instructional improvement programs in university teaching and in medical education (Melnick and Sheehan, 1976; Cassie, Collins, and Daggett, 1977).

As noted earlier, the instructional development specialist or consultant can be a valuable source of feedback (Erickson and Erickson, 1979). The consultant can engage the teacher in discussion by suggesting interpretations of teaching events, specifying salient behaviors and offering alternatives, and sharing expertise to resolve an instructional question (Carrier, 1980).

THE INSTRUCTIONAL IMPROVEMENT MODEL

With these adult learning principles in mind, I designed a three-stage model for instructional improvement. The process begins by having faculty develop criteria for effective teaching; it uses videotaping and consultation as vehicles for self-evaluation,

feedback, and collaborative assistance.

Stage 1—Volunteer faculty participants join a seminar to review the literature on effective teaching as it applies to their particular setting, purpose, and student population. They sort through sets of cards that contain descriptions of effective teaching found in the literature. This review helps them discuss teaching in specific terms. Through their discussions they come to agree upon a set of behaviors which they believe constitutes effective teaching.

This stage of the process recognizes and incorporates the self-directedness of these volunteers. It acknowledges their experience as teachers able to establish a definition of effective teaching that fits their setting; and it fosters collaboration through which their experiences are synthesized to produce a common standard of excellence.

Stage 2—Faculty participants use the standard of excellence they have developed to assess their own teaching performance. Since they participated in the establishment of the criteria for effective teaching, they are willing to be evaluated in reference to it. Faculty members are videotaped for one hour of teaching after which they view the videotape with the instructional development consultant in an individual conference. After each five minute segment the teacher and the consultant stop the tape to discuss the effective teaching behaviors which were present or absent in the segment. The viewing session is intended to be a positive, nonthreatening experience focused on particular behaviors. It is clearly oriented toward instructional improvement, not the evaluation of teaching. At the conclusion of the viewing session, the faculty member develops a list of effective teaching behaviors to incorporate more often in teaching. A second videotape made later in the term provides the faculty member with evidence of progress toward the accomplishment of these self-chosen goals for instructional improvement.

This stage of the process capitalizes on the intrinsic motivation of the adult learner. Each has volunteered to participate, which indicates a desire to improve teaching. The process uses feedback from self-assessment, analysis of videotapes, and discussion with the consultant using criteria that are specific, preset, and agreed to by the faculty participant. Individual viewing and consultation create a nonthreatening setting which

promotes learning. Participants set their own goals, consistent with the view of adults as self-directed learners.

Stage 3—All the participants have an opportunity to view the teaching behavior of their colleagues. The consultant edits the videotapes to identify particular episodes of effective teaching. The participants gather to view the segments and to discuss how the episodes illustrate the teaching behaviors they previously identified. Many teachers find observing others on videotape to be as beneficial as watching themselves. Perhaps this is because teachers usually work in isolation and so rarely see their peers practicing their craft.

This stage of the process uses the principles of adult learning that suggest the value of collaboration. As they discuss their teaching behaviors members of the group provide each other mutual assistance and support.

ILLUSTRATIONS OF THE MODEL

To illustrate the impact of the model, I will describe the experiences of several participants. One of the university faculty who participated in defining effective teaching was a professor of English literature. After watching himself on videotape, he identified three specific behaviors that he wanted to incorporate in his teaching to improve his performance. He wanted to be more explicit in stating his teaching objectives, more organized in developing major points, and more clear in presenting summaries at the end of class sessions. When I showed segments of his videotape to his colleagues during a group meeting, they admired his rapport and the way he responded to students. The climate he created welcomed student comments and questions. Through the program the professor gained a better understanding of his teaching, and he developed a set of target behaviors for improving his teaching. His colleagues benefited from the opportunity to analyze his teaching and to observe a model of lively student-faculty interaction.

When he observed himself on videotape, another university faculty member was amazed at the pace of his presentation of material. As a professor of engineering he presents complicated equations using the chalkboard. He intersperses humor with this material to allow students to catch up with him, but as he observed on the videotape, many of the students never caught

up. And no wonder the students did not have any questions . . . they were madly copying the equations and did not have time to think about what the professor said or what they wrote. The teacher was profoundly affected by this opportunity to observe himself on videotape. When the faculty group observed segments of his teaching on videotape, they praised his use of interesting analogies, many of which were humorous, and the animation he employed to make otherwise boring equations lively.

At the teaching hospital many of the attending physicians who observed themselves on videotape were surprised at how much they talked during attending rounds. This was informative since they defined effective teaching in terms of how well the teacher got the residents to think, solve problems, and organize information. One attending physician observed, "It looks like I am trying to impress everyone with how smart I am."

One of the most powerful episodes on tape showed the attending physician challenging students to apply information about a type of drug therapy to the case of a hypothetical patient. As the attending physician contributed more and more information and questions about the "patient," the students were required to explain their treatment plan. After viewing the segment, the other attending physicians openly admired this technique and they asked their colleague to tell them more about how he did it and how often. In the process, the group reaffirmed its belief in the role of the attending physician as a facilitator of thinking rather than a dispenser of knowledge.

SUMMARY

Participants in this program frequently discovered discrepancies between their ideal teaching model and their actual teaching. Since they developed the definition of effective teaching in collaboration with their peers, this discrepancy between ideal and actual teaching was non-threatening and stimulated a desire to improve. The activities of the model were based on adult learning principles; as predicted, the participants were actively involved, motivated to improve their teaching, responsive to feedback, and interested in sharing their perspectives with others. Collaboration promoted interest in the improvement of teaching, and prompted new respect for the teaching skills

of peers. Most of the teachers had never seen their peers teach, but once they did, they saw effective behaviors worth emulating.

Teaching doesn't need to be such a solitary activity. By creating opportunities for faculty to talk about their teaching and to observe each other, we stimulate them to think about teaching, to improve their own teaching, and to develop new levels of respect for the teaching skills of their colleagues.

REFERENCES

- Brookfield, S. D. (1986). *Understanding and facilitating adult learning*. San Francisco: Jossey-Bass.
- Brundage, D. H., and Mackeracher, D. (1980). *Adult learning principles and their application to program planning*. Toronto: Ministry of Education, Ontario.
- Carrier, C. A. (1980). Consulting with university faculty: A model for teaching improvement. Unpublished manuscript, University of Minnesota Instructional Systems.
- Cassie, J. M., Collins, M. B., and Daggett, C. J. (1977). The use of videotapes to improve clinical teaching. *Journal of Medical Education*, 52, 353-354.
- Cross, K. P. (1984). *Adults as learners*. San Francisco: Jossey-Bass.
- Erickson, G. R., and Erickson, B. L. (1979). Improving college teaching. *Journal of Higher Education*, 50(5), 670-683.
- Holly, F. (1982). Teachers' views of inservice training. *Phi-Delta Kappan*. 417-18.
- Knowles, M. (1984). *The adult learner: A neglected species* (3rd ed.). Houston: Gulf Publishing Co.
- Lindquist, J. (Ed.). (1979). *Designing teaching improvement programs*. Washington, D. C.: Council for the Advancement of Small Colleges.
- Melnick, M. A., and Sheehan, D. S. (1976). Clinical supervision elements: The teaching clinic to improve university teaching. *Journal of Research and Development in Education*, 9(2), 67-75.
- Murray, H. G. (1985). Classroom teaching behaviors related to college teaching effectiveness. *Using Research to Improve Teaching*. San Francisco: Jossey-Bass.
- Rippey, R. M. (1980). *The evaluation of teaching in medical schools*. New York: Springer.
- Skeff, K. M. (1984). Assessment by attending physicians of a seminar method to improve clinical teaching. *Journal of Medical Education*, 59, 944-950.

- Stritter, F. T. (1983). Faculty evaluation and development. In C. H. McGuire *et al* (Eds.). *Handbook of Health Professions Education*. San Francisco: Jossey-Bass.
- Tough, A. (1971). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. Research in Education Series, No. 1. Toronto: Ontario Institute for Studies in Education.
- Wlodkowski, R. J. (1985). *Enhancing adult motivation to learn*. San Francisco: Jossey-Bass.