

ACTION RESEARCH AND PROFESSIONAL DEVELOPMENT OF FACULTY

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Abstract

This study describes the challenges of designing and implementing a multi-site faculty professional development workshop on assessment, measurement, and evaluation of achievement in adult learners. The setting for the workshop was a system of post-secondary career training schools throughout the United States. As internal practitioners seeking to bring about change, the authors applied an action research methodology of planning, acting, observing, and reflecting to develop the program. Prior to the workshop, a needs assessment involving faculty, students, and administrators was used to determine the framework and instructional objectives for the program. The reflective, systematic program development process involving stakeholders, coupled with the resulting faculty development experience, promoted a learning culture within the organization.

Résumé

La présente étude fait état des défis posés par la conception et la mise en oeuvre d'un atelier multi-site de développement professionnel destiné au corps enseignant et portant sur l'évaluation de l'apprentissage des étudiants adultes. L'atelier s'est donné dans un réseau d'établissements post-secondaires à vocation professionnelle situés aux quatre coins des Etats-Unis. En tant qu'éducateurs désireux d'améliorer leur pratique, les auteurs ont cherché à développer ce programme par l'application d'une méthodologie de recherche-action caractérisée par la planification, l'action, l'observation et la réflexion. Dans la phase préparatoire, on a procédé à une évaluation de besoins auprès des enseignants, des étudiants et des administrateurs dans le but de préciser le cadre et les objectifs pédagogiques du programme. Fondé sur la réflexion et la participation des intervenants directs, ce programme de développement systématique—soutenu par l'expérience même que les enseignants y ont

acquise—a eu pour effet de promouvoir une culture de l'apprentissage au sein du réseau des établissements participants.

Evaluation of student learning is a key but time-consuming part of an adult educator's job. As a key element in the learning process, evaluation distinguishes formal education from other adult developmental experiences. The grades assigned by adult educators have an impact on the personal and professional goals of learners as well as on their self-esteem. Certainly, grades are used to provide feedback to learners, but they also influence decisions by others regarding employment, scholarships and eligibility for reimbursement programs. To be effective and meaningful, evaluation needs to be conducted by adult educators who are skilled in its application.

For many educators, assigning grades is a subjective process. Some instructors consider effort, attitude, participation, and attendance in the grading process. Others focus only on cognitive learning. For example, should a student's performance be compared to all students in the class, or should a student be judged by his or her personal improvement in a course? These issues were especially challenging to faculty in a post-secondary, proprietary, career school system. Therefore, a faculty development workshop to improve assessment and evaluation of adult learner's achievement was designed and implemented. These improvements in process were intended to foster a learning culture at the schools in the system. This article describes the action research process whereby these adult educators became adult learners.

Context of the Research

As program planners for the school system, we were responsible for designing the workshop discussed in this paper. The planning lasted seven months and involved four focus groups and two versions of a survey questionnaire with 77 items. The setting was a career-focused, post-secondary education system consisting of 19 schools in major cities across the United States. Within the system, over 1,000 faculty members teach in 15 subject areas within business, technology, and creative fields. Both associate and bachelor degrees are offered to 14,000 students. The student population consists of traditional and non-traditional, part-time and full-time, and classroom and online learners.

To provide students with experience from the field, faculty members in this organization are recruited from industry. The system of schools takes pride in hiring faculty who are successful and recognized in their respective

areas of work. In addition, all departments maintain a very active advisory committee to monitor industry's demands and trends. Instructors are also practitioners—many with active consulting businesses or studios. They come to the school with a great deal of professional expertise, but limited background in teaching methodology. The area of assessment and evaluation presented a challenge. The goal of this workshop was to provide instructors with the basic knowledge about evaluation and assessment they need to be more skillful educators.

Theoretical Framework for Fair Assessment

Much has been written regarding the unique characteristics of adult learners (Galbraith, 1990; Kidd, 1973; Knowles, 1984; Merriam & Caffarella, 1991). Adults are mature, possess a variety of valuable life experiences, and balance multiple roles and responsibilities. Kort (1990) recommends that faculty also be treated as adult learners. He also suggests that development programs not be related to faculty evaluation or promotion to avoid the perception that participation is mandatory or expected. We considered the uniqueness of adults in every phase of the workshop planning process.

The faculty development literature indicates many faculty members resist participation in training and development programs (Angelo, 1994). Generally, faculty members are overwhelmed with job responsibilities and view training as necessary for others, but not for themselves (Maxwell & Kazlauskas, 1992; Millis, 1994). In her examination of faculty development centers, Bakutes (1998) notes that many faculty members in higher education have content expertise, but limited knowledge about teaching. Palomba and Banta (1999) similarly observe that "The key to using the grading process for assessment is developing faculty expertise" (p. 162). Part of this expertise is developing criteria and standards for grading assignments.

In the evaluation process, Kopp (1987) explains, "evaluation strategies for adults are most effective when traditional authority roles are de-emphasized, and the learner's role as an autonomous, responsible adult is emphasized" (p. 50). Noting the sensitive issue of grading and evaluation, Brookfield (1992) points out that "Some adults, who in their public and professional personas may occupy positions of power, prestige, and responsibility, can be reduced instantly to childlike states of anxiety and dependence by the prospect of being evaluated" (p. 22).

Evaluation too often becomes a means to sort or compare learners, rather than a means to enhance learning. Most educators agree that evaluation should promote learning by focusing on learning outcomes and by

motivating learners to analyze material (Brookfield, 1992; Haladyna, 1999; Wiggins, 1993). In a literature review, Gronland and Linn (1990) report that students, including adult learners, who take courses on a pass/fail basis study less and learn less than when they submit themselves to the normal grading process. Furthermore, Foss and Fisher (1988) found that assessment strategies significantly influence learning behaviors. For example, objective questions about factual material caused learners to limit themselves to memorizing information. Higher level cognitive questions motivated them to use higher level thinking skills.

For higher education, Angelo (1999) asserts that "it's time to put the highest priority on doing assessment as if learning matters most" (p. 4). He notes the need for a paradigm shift to transform colleges from "teaching factories" to "learning communities." Cross (1998) finds that teachers have almost total responsibility for assessing student learning. She explains that "most teacher assessments tell students—often too little and too late—how they have done on a test or in a course, but not how they are doing as learners" (p. 6). In support of student learning, Suskie (2000) claims that "A fair assessment is one in which students are given equitable opportunities to demonstrate what they know" (p. 7). She offers seven steps to fair assessment: (1) have clearly stated learning outcomes; (2) match assessment to what is taught; (3) use many *different* measures and many different kinds of measures; (4) help students learn how to do the assessment task; (5) engage and encourage students; (6) interpret results appropriately; and (7) evaluate the outcomes of assessments.

To add to the challenge of understanding assessment and evaluation, educational terminology contains several closely related words which are often confused and used interchangeably. Indicative of great interest over the past 20 years, *assessment* has become one of the most used words in education. There is outcomes assessment, authentic assessment, needs assessment, and classroom assessment, which all have very different meanings. For this article, assessment refers to a multifaceted, comprehensive analysis of performance as described by Wiggins (1994). Assessments are used to analyze student accomplishment and to judge carefully the quality and range of achievement. Assessments can be informal, observable activities that do not necessarily result in a number recorded in the instructor's grade book. In addition to helping students know if they are learning, assessments help instructors know how effectively they are teaching.

The Action Research Approach

We were program planners in this study, but we were also practitioners seeking change in the organization; thus, the project quickly took on the dynamics of action research. According to Quigley and Kuhne (1997), action research is "essentially a systematic process of practitioner problem posing and problem solving" (p. 23). They identify four processes in action research: (1) planning—deciding how to deal with a problem; (2) acting—implementing a plan; (3) observing—paying attention and recording what is happening; and (4) reflecting—analyzing outcomes and revising plans for another cycle of acting. Action research alternates between action and critical reflection, with continual planning and observing throughout. Stringer (1996) describes action research as a look, think, and act process to solve problems in practice.

After identifying the instructors' need for understanding classroom assessment, planning began for the workshop. We believed that well-planned faculty development programs can make a difference by fostering a positive learning culture within an organization.

Implementation and Outcomes of the Practitioners' Change Process

In this section we describe the process and outcomes according to Quigley and Kuhne's (1997) action research components.

Planning

As a system of proprietary schools, this organization is in the business of education. Therefore, a combination of two curriculum models was used to guide the decision-making process: Kirkpatrick's (1998) 10-step process for planning and implementing training programs in human resource development and Caffarella's (1994) 11-step process for program planning in adult education. In general, models serve to organize the process of program development by providing guidelines and suggestions for performing various planning tasks. One model does not necessarily fulfill the needs of all adult educators. Even though each of their models contains a set of steps that can appear to be linear, both Kirkpatrick and Caffarella acknowledge the need for flexibility in planning.

The need for professional development in assessment of student achievement was first identified during a faculty focus group convened to discuss training needs. Following this focus group session, a variety of information-collecting activities evolved that included the various learners (students and faculty) as well as administrators, from the early stages of

program development onward. A detailed questionnaire was developed, and slight variations of it were adapted for use with each of the three audiences—faculty, administrators, and students.

The five-page faculty needs assessment questionnaire contained six components: (1) a checklist of 13 items plus an open-ended item about grading methods currently used and/or about which further information was desired; (2) a yes/no checklist of eight items plus an open-ended item about criteria used in determining grades; (3) a checklist of eight items about the types of questions (multiple choice, essay, completion) currently used and/or about which more information was desired; (4) a checklist of 10 items about the studio techniques (objective-meeting/problem-solving, rendering techniques, finished comprehensives) currently used and/or about which more information was desired; (5) 22 yes/no questions about grading procedures used (such as do students know grading expectations, do you maintain accurate documentation, are grading policies designed to reduce competition among students, do you provide qualitative feedback, do you give extra credit assignments); and (6) five open-ended questions about grading (criteria used, confidence in current procedures).

The faculty needs assessment questionnaire was distributed in mailboxes to 148 faculty members. Forty-two (29%) of the questionnaires were completed and returned. The results of the faculty needs assessment reflected a need for knowledge and skills in measurement and evaluation techniques. High interest areas were learning contracts, class critiques, checklists, rating scales, pretests, case studies, and self evaluation. Most faculty members expressed high levels of interest toward the topic. It was obvious that faculty had many styles of grading which included both norm-referenced and criterion-referenced standards, point and letter grade systems, and various levels of organization and criteria. Not surprisingly, the majority of assessments were conducted in the cognitive domain.

As leaders of the organization, nine administrators also completed the questionnaire. Administrators consisted of deans of academic affairs and department chairpersons. Their areas of focus were establishing clear criteria and developing a variety of criterion-referenced assessment techniques. They expressed concern over grade inflation throughout the system. The administrators were also looking for communication and documentation to reduce legal and ethical challenges of the school system.

Two student focus groups were also conducted as part of the needs assessment. Announcements were posted throughout the school and students were invited to participate in a general discussion about grading and

evaluation. Both focus groups took place at the same school as lunchtime meetings, with pizza and beverages provided. A total of 23 students participated (or ate) in the focus groups. They completed a slight variation (adapted for the student perspective) of the questionnaire that faculty and administrators had completed. The last five questions of the questionnaire were discussed in the groups. Overall, the students expressed satisfaction with the assessment techniques already in place. They accepted a culture in which the instructor set standards, assigned grades for a level of proficiency, and in which higher grades reflected higher proficiency. Their primary interest was receiving as much educative feedback as possible in as many formats as possible, other than cognitive-type tests. The students wanted clear standards for evaluation with no surprises. Interestingly, the students were more concerned about their overall grade point average than with any individual course grade.

After these questionnaire results were tabulated and analyzed, a focus group of 11 faculty members from the same school as the student focus group was convened to discuss the suggested workshop content. Later, another system-wide faculty focus group was convened. It consisted of a telephone conference among 10 faculty members from 10 different schools throughout the nationwide system. These faculty representatives echoed many of the same concerns and issues. They clarified the workshop content to be covered.

Input from these focus groups was used to arrive at the final workshop design. The learning objectives for the instructors' professional development workshop were to: (a) define and explain basic assessment terms as they relate to the classroom environment; (b) identify and determine components of instructional objectives; (c) determine assessment techniques which support instructional objectives; (d) compare and contrast assessment techniques for effectiveness in the cognitive, affective, and psychomotor domains; (e) develop techniques to assess student achievement in each of the three learning domains; (f) critique instructor feedback comments to *identify* those that support student learning and improvement; (g) modify course grading system; (h) compare and contrast traditional letter, point, and percentage systems for determining student grades; and (i) assess personal performance in communicating clear, accurate, and fair student evaluations. Based on these objectives, the instructional content was designed for the workshop.

Acting

Workshop development was an extensive, time consuming process. Planning steps included selecting participants, determining the best schedule and format, creating a budget, selecting appropriate facilities, selecting appropriate trainers, selecting and preparing audiovisual aids, and coordinating the program. Because of the close relationship among all of these steps, much of the work was completed simultaneously.

The focus groups had debated about the audience for the workshop. Some instructors argued that schools should deliver it as part of their in-service program. Others argued it should be part of an orientation program. They also considered offering it on an as-needed basis. Furthermore, there was debate over whether to make the training voluntary or mandatory. To ensure quality dialogue and transfer of learning, the training group size was limited to 20–22 participants per workshop.

Another related administrative issue was the length of the workshop. The module's length was projected at six hours. Because of time limitations on faculty, one option was to hold the session as two half-day workshops. Another was to hold it during the lunch hour or preparation time for one hour every week for six weeks. Still another option was to pay faculty to attend the workshop and hire substitutes to teach their classes.

The location of the sessions represented another challenge. Discussions focused on whether the workshop should be at the school or off-site. If it were at the school, faculty would likely be interrupted. If it were off-site, there would be transportation and facilities costs to consider.

Because of the unique needs of each school, these coordination choices were ultimately left up to each institution. As the program designers, we recommended the workshop as mandatory in-service training to take place in one all-day, on-site session. Because multiple workshops were being offered at each school, faculty had the flexibility to schedule the workshop at their convenience and outside their regular teaching schedule. Following the initial round of workshops, the topic of assessing student achievement would be presented as part of an orientation program for new instructors. As a job aid for the on-site coordinators, however, administrative checklists were included in the leader's guide, which is described below.

Observing

We agreed on the importance of modeling the principles of adult learning in workshop planning and facilitation. The program design was highly interactive, making use of individual, partner, and small group experiential activities. The activities were designed to address both individual and

organizational change, as recommended by Kirkpatrick (1998) and Caffarella (1994). Pre-program announcements asked faculty members to bring their tests and syllabi to the session. In workshop exercises, faculty immediately applied the concepts to their materials, and received timely feedback.

A related design issue was consistency and duplication of delivery. Because there were 19 schools and the system did not have anyone dedicated as a system trainer, a leader's guide was created as a standardized resource for facilitators. The format was flexible enough so the facilitators could make it "their own," yet structured so they would not duplicate effort. Considerable time was devoted to the design of the leader's guide, support materials, and packaging. The leader's guide contained both an outline of each section of the module and a "scripted" version to help the facilitator prepare to teach the module. Transparencies and participant handouts were created as well as answer keys and explanations. Participant manuals provided the course and content overview, activities, assessment examples, related articles, and a resource list. Disks were provided so the facilitators could easily modify and duplicate the documentation.

Once the design was complete, a pilot program was conducted, which provided an opportunity for formative evaluation. One of the schools volunteered to conduct the pilot as part of its regular faculty in-service program. Forty-eight faculty members participated in two workshops. Minor modifications in time allocations were made to the program as a result of feedback from the pilot study. Most faculty members appreciated the interactive format. A few participants recommended deleting the ice breaker because the group members already knew each other. We replaced the ice breaker with a shorter activity, but thought it necessary to orient the participants to an enjoyable, positive atmosphere. One of the trainers suggested giving faculty participants pre-program articles on how to write instructional objectives and link objectives to assessment.

To build a community of learning throughout the 19-school system, every effort was made to promote collaboration and communication with faculty, students, and administrators. All stakeholders shared the goal of improving student learning. It was decided to certify instructors in the system as workshop facilitators. This process served as a form of reward and recognition for faculty. Schools could nominate strong faculty who were interested in the topic of assessment and evaluation. The process consisted of participating in the workshop, team teaching it with a "certified" facilitator, and then teaching it on their own. Through a coaching and mentoring process, new trainers gained subject matter expertise. Once certified, they

could teach the module at their own schools or perhaps be called upon to deliver the workshop at other schools in the system.

Reflecting

Kirkpatrick's (1998) four-level evaluation model (reaction, learning, change, and results) is a key work for determining the effectiveness of business training programs, and offers educators a valuable tool in program evaluation. In business settings accountability tends to be high, and Kirkpatrick addresses the training benefits to the organization, as well as to the learner.

Four measures were used to establish the effectiveness of this program: end-of-workshop reaction surveys, review of instructor records and course syllabi, classroom observations, and stakeholder focus groups. According to Kirkpatrick, "If training is going to be effective, it is important that trainees react favorably to it. Otherwise, they will not be motivated to learn" (p. 25). Reaction surveys included ratings on facilities, content, presentation, and learning activities. Additional comments and signatures were optional. The program achieved an overall rating of 4.56 on a 5-point Likert scale evaluation sheet.

A review of instructor records provided a basis for comparing assessment practices before and after the training session. The records, which were reviewed by the academic department directors and the program designers, included course syllabi, project descriptions, and faculty grade books. Faculty were aware that their course syllabi were being reviewed for attention to objectives and methods of assessment. There was a noticeable improvement in the quality of instructional objectives. One-third of the instructors clarified at least one instructional objective in their syllabi. The syllabi also included more assessment strategies. Learning contracts and self/peer evaluations were more common following the training.

Evaluation of behavior or transfer of training is Kirkpatrick's third level of evaluation. Change in behavior was determined through classroom observations conducted by department directors, who noted the level of communication regarding grades and grading criteria. Classes targeted were first course meetings, class critique sessions, and sessions in which major projects or exams were returned to students. These observations and subsequent discussions were carried out in conjunction with annual performance reviews. Instructors reported that they felt more confident about their assessment policies, and that this confidence transferred to improved learner interaction.

Focus groups with stakeholders were a part of the initial needs assessment. Following the training, focus group meetings with students, faculty, and academic department chairpersons re-visited the same issues to determine the effectiveness of the training workshop. Because of the long process of designing and implementing the workshop, pre- and post-training focus groups did not yield valid comparisons. The student focus group consisted of only eight students—none of whom participated in the pre-training needs assessment group. All eight students were satisfied with the current assessment process. In a separate focus group of seven faculty members and four administrators, most of the participants had not been involved in the pre-training groups either. However, all of the focus group participants except one administrator had participated in the workshop. Both faculty and administrators reported heightened awareness regarding assessment. Faculty members reported devoting more time to writing meaningful comments and returning assignments more promptly.

Conclusions

As program planners in a post-secondary school, we undertook an action research project to design and implement a faculty professional development workshop. In this program on assessment, measurement, and evaluation of adult learner achievement, the faculty were themselves adult learners, which presented an interesting challenge to us. We were modeling the behaviour we were asking faculty to adopt.

Assessment and evaluation of adult learning forces faculty to apply judgement to a learning situation. Even though this may be an unpleasant task for many educators, this feedback is invaluable to adult students. Institutions, government agencies, and accrediting boards may use assessment information, but the primary purpose of assessment in this particular organization (and many others) is to promote adult learning.

The program planning models of Kirkpatrick (1998) and Caffarella (1994) served as useful guides for designing a faculty workshop in a business environment. Using two models allowed for more effective decision making and attention to detail. These models guided the action which was followed by critical reflection on the development process. Furthermore, Kirkpatrick and Caffarella both recognize the importance of stakeholder participation in planning. Having faculty trainers co-present increased faculty support for the program. The message to faculty was they were valued and respected.

Kirkpatrick's four-level evaluation model served as a valuable tool for determining the effectiveness of the program. Interestingly, Kirkpatrick does

not address the issue of evaluation in his curriculum design model until after the training is implemented. One of the strengths of Caffarella's curriculum development model is the early consideration she gives to transfer of training and evaluation. Caffarella plans for learning in the belief that there are enhancers and barriers to the learning process. Standards for achievement are established prior to the instructional design process.

In our planning process, we found a shortage of current literature about assessment and evaluation of adult learner achievement. In some cases, we were forced to adapt theory from secondary education (e.g., Chase, 1999; Worthen, White, Fan & Sudweeks, 1999) and higher education (Angelo, 1999; Palomba & Banta, 1999) to adult learners. Additional research in both quantitative and qualitative aspects of assessment and evaluation of adult learners would be a valuable contribution to the field of adult education. Although the number of subjects in action research projects may be too small for results to be generalizable to larger populations, the data contributes to the theory-to-practice literature. In short, we found need for further study on professional development for adult educators and on evaluation of professional development programs.

It appears that well-planned faculty development programs do make a difference to adult learning. Through action research, practitioners can apply their understanding of organizational culture to guide positive change. This workshop provided faculty with useful knowledge about assessing adult learners' achievement. Perhaps more important than a successful professional development activity, this design process fostered a learning culture. In the future, faculty will be challenged by under-prepared students, technological innovations, and increased accountability. Faculty must be active in meeting these and many other challenges through lifelong learning and professional development. Excellence in adult education is inseparable from the excellence of its faculty.

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