The basis for the Iowa State University (ISU) Community College Induction/Mentoring (CCIM) Program is research that identified 43 exemplary community college teaching skills for over 200 research studies. The program is intended for vocational-technical instructors new to teaching at Iowa's community colleges. The 43 exemplary teaching competencies are grouped under 6 program constructs. CCIM uses a supportive network of trained mentors who know how to instruct students effectively and who want to share their knowledge with the next generation of instructors. Over a period of 2 academic years, new vocational instructors take 12 sequentially designed 2-day seminars conducted by ISU. CCIM uses a three-player team of checks and balances—a new instructor, a mentor, and an ISU instructor. Formative and summative evaluation is conducted throughout the CCIM program. Students evaluate the CCIM instructor's classroom/lab performance at the end of their first and second years of teaching and compare them to other instructors they have. Two-year test results of data analyses reveal that students rated the CCIM instructors significantly higher than other instructors in 15 of 18 survey items. Although this is a notable measure indicative of program success, added value measures such as participant job performance, retention, and satisfaction; supervisor satisfactoriness, student attendance, success, retention, and job success; and mentor satisfaction and satisfactoriness need to be addressed. (YLB)
Documenting Value Added Measures for the Iowa Community College Induction/Mentoring (CCIM) Program.

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At 46, Vicki Leaders needed answers. Only twelve weeks before she had decided to change her twenty year career as a operating room head nurse, and apply for the “nursing instructor” position at Iowa Western Community College in Council Bluffs, Iowa. She accepted the full-time position, but faced a possible five years of weekly 90-mile commutes to the nearest university for traditional teacher education courses required for state licensure for a full-time faculty position.

How could Leaders quickly acquire classroom skills? Could she afford to wait another five years to receive permanent certification and to decide whether she wanted to pursue a teaching career? Leaders was a perfect candidate for Iowa State University’s unusual new training series - the Community College Induction/Mentoring (CCIM) program. Now, two years later, Leaders is finished with certification. She’s practiced new teaching skills with her students, and has the support and guidance of an experienced mentor only a desk away.

“I could have used a lot more hands-on guidance when I started teaching twelve years ago,” says Leaders mentor. “When I started teaching, like most veterans, I was on my own...lonely, scared, and ill prepared.

These feelings are common for new staff. Therefore, CCIM pairs new instructors with experienced instructors/mentors from the start. Mentors meet regularly with CCIM participants, visit the classroom for observation and immediate feedback, evaluates lesson plans and serve as a local resource for assignments given during monthly CCIM seminars. CCIM participants are required to immediately apply specific teaching skills in their classrooms, such as second-level questioning or collaborative learning techniques. Participants also evaluate their techniques using Cross and Angelo (1990) classroom research techniques, and report results at the next CCIM seminar.

“I remember some of these techniques from my teaching methods course,” Leader’s mentor recalls. “But by the time I tried it with my students, we had already moved on to another concept. We didn’t get to use what we were learning while we could still get feedback from our professor.”

Leader’s immediate supervisor, Otis Elkin, says the CCIM program puts new instructors on a fast track to
learn teaching skills and give them interpersonal support. "In the past, new instructors had access to no one. After their certification classes were over, they just went back into the trenches to teach. With CCIM, they work with a mentor who can be there as a listener, to react and respond to the inevitable questions and frustrations of being a new instructor."

NEED

From their original goal of expanded access in the 1960s and 1970s, the nation's two-year colleges have moved to a goal of academic excellence in the 1980s and 1990s. As the movement toward a 20th century curriculum intensifies, a concomitant shift in emphasis from teaching to learning is occurring, requiring major role changes for community college instructors. In the 1990s and beyond, faculty will need to be as skilled in the diagnosis and treatment of student learning problems and challenges as they are in their disciplines (Cross & Fidelers, 1989). An important consequence of this trend is that traditional control concepts are being replaced by flexible control concepts implicit in collaborative learning (Johnson & Johnson, 1990), students learning to learn (Carnevale et al., 1989), and teaching as leading (Baker, Roueche, & Gillette, 1990). Accountability through "added value" measures will be a standard of success.

By the year 2005, approximately 40% of all 1995 community college faculty in the United States will have retired (AACJC, 1988). This prediction is true for Iowa as well. In addition, the 1990s community college curriculum is complex, outcome-based, articulated both internally and externally with high schools and four-year colleges, and requires integration of workplace basics (Carnevale et al., 1989). Further, the nature of community college students has changed. They are older and are more likely to be attending part-time, to have other responsibilities, and to lack basic learning skills and academic basics. For these reasons, community colleges need tenacious, competent personnel who have the tools and abilities to teach a wide range of students to be tough, independent, productive members of society (Shulman, 1987). The CCIM project meets a pressing need. "Added value" measures will document if such new tenacious, competent personnel are meeting the demand for maximizing student success. These measures are essential for accountability, return on investment and program modification.

RESEARCH

In 1990, John Van Ast, Associate Professor of Industrial Education and Technology at Iowa State
University, began researching community college teaching methods. He identified 43 exemplary community
college teaching skills from over two hundred research studies. He then asked 66 Iowa community college
administrators and 177 faculty to rank these skills for importance and how quickly they should be implemented
by new instructors. From this research, the ISU CCIM program for new vo-tech instructors new to teaching at
Iowa's community colleges was developed and implemented in 1992. The program goal is to maximize
instructor effectiveness and student potential. The forty-three exemplary teaching competencies are grouped
under six program constructs:

1. Increase student opportunities for quality educational success.
2. Offer the student positive orientation and direction through collaborative learning.
3. Motivate students to increase learning skills.
4. Recognize and encourage students' desire to learn.
5. Limit obstacles to student learning.
6. Empower students through effective teaching.

The induction/mentoring program uses a supportive network of trained mentors who know how to instruct
students effectively and who want to share their knowledge with the next generation of instructors. Over a
period of two academic years, new instructors take twelve sequentially designed two-day seminars conducted by
Iowa State University. These seminars carry a total of twelve undergraduate credits.

CCIM uses a three-player team of checks and balances. Teams include a new instructor, a mentor, and an
ISU instructor. Each mentor attends a one-day training session at ISU and plays an integral role in instructor
development.

Initial research results indicate that CCIM is producing more effective instructors than the traditional
program, which had been in place since 1966. The CCIM program is transferable to other teacher education
institutions and community colleges throughout the U.S. and Canada.

Presently, formative and summative evaluation is conducted throughout the CCIM program. Participants
have their students evaluate the CCIM instructor's classroom/lab performance at the end of their first and second
years of teaching. The students are also asked to compare these instructors to other instructors the students
have. Two year test results of the data analyses revealed that students rated the CCIM instructors significantly
higher than other instructors in 15 out of 18 survey items ($\alpha = .05$) (Van Ast, 1994). This is a notable measure indicative of the success of the CCIM program. However, added value measures such as participant job performance, retention and satisfaction; supervisor satisfactoriness, student attendance, success, retention and job success; and mentor satisfaction and satisfactoriness need to be addressed.

PURPOSE

The purpose of the CCIM two-year induction-mentor program design is to ensure that three essential services are provided to the beginning instructors in their critical first two years of teaching: a) continuing personal support; b) regular and responsive educative experiences which both extend and enrich the faculty members' initial preparation as well as address the particular demands of their day-to-day situation; and c) ongoing feedback and assessment of their performance and progress over time, culminating in a summative decision by the end of two years as to whether they should be relieved of their teaching responsibilities, continue on an initial licensure track, or be placed on a regular licensure track.

Shulman (1987) observed that the primary rationale for the induction-mentor program is that it leads to discernibly better instruction for students in the classroom/lab where beginning instructors are assigned. Although Shulman did not elaborate as to the rationale or value-added measures, a strong case can be made that it is unreasonable to expect the same level and quality of instruction from a instructor new to the community college classroom as from more experienced instructors, and that compensatory assistance needs to be provided to that instructor and at times directly to that novice instructor's students. Support for this position derives from studies which continue to find major differences in both diagnostic and planning abilities, as well as classroom performance, between more experienced and novice instructors generally.

Thus, continued support and education into the first two years of teaching isn't some peripheral nicety. It is necessary on-the-job training. The major up-front training which many major corporations provide for their new recruits is a prime example of the need generally to provide substantial assistance in the critical transition from the general professional and or occupational preparation and experience to the specific community college teaching responsibilities.

Having a built-in mentor from Day One of teaching career is just one innovative aspect of ISU's CCIM
program. Others include:

* a curriculum based on the competencies that supervisors and students want for community college vocational-technical instructors, rather than on what university professors think should be taught;
* immediate application in the classroom of each teaching skill learned;
* sequential presentation of teaching skills that build on competencies already mastered;
* continuous evaluation and improvement throughout the certification process;
* a support group of equally-new instructors, and
* a concentrated schedule completed in two years without evening or weekend commitments.

CCIM was designed to prepare community college instructors for the 1990’s and beyond. I wanted to know the most important skills for community college instructors and the order in which they needed to learn and use them. Resultant research led to a revised curriculum and format. The financing, promotion, and delivery of CCIM were cooperative efforts that involved the College of Education, Extended and Continuing Education at ISU, and a number of other entities both internal and external to the university. The result is a powerful outcome based community college instructor training program that breaks the mold.

The Problems, the Challenge

A Changing Student Population. Like other states across the nation, Iowa’s typical community college student is 28 years old, holds one part-time job, and is single or a single parent. These students have different learning styles than recent high school graduates and may lack academic basics. They need an instructor with strong teaching skills as well as vocational expertise.

A Static Teacher Preparation Program. Iowa’s typical new community college instructors also mirror those of the nation: they have vocational expertise but little teaching experience. Despite considerable research since the 1970’s, most community colleges have not changed professional development courses in 25 to 50 years. In Iowa, the same five teacher education courses had been required for all new instructors in the state’s 15 community colleges since 1966. A new instructor can enroll in courses at various universities, which often results in a lack of continuity in content or sequence. In addition, an instructor can stretch out completion of courses over five full years or even get an extension. This time frame focuses on meeting state board of
licensure requirements, not new instructor needs.

High Turnover in Faculty. Within the next ten years, an estimated 39 percent of Iowa's community college faculty are expected to retire. CCIM was implemented from a proactive position rather than waiting until the proverbial need occurred. In 1989, the Iowa Community College Personnel Advisory Committee encouraged the certification of new faculty within their first two years of tenure.

ISU's challenge became two-fold:

* to design a teacher education program that could meet the needs of a changing community college student population, and

* to deliver the program effectively and efficiently to a growing number of new instructors in multiple locations who have little educational experience.

Formative Research

Review of research literature within the past 20 years showed 43 different attributes of exemplary instructors. These attributes were validated in a 1991 study conducted by the ISU College of Education. The study included visits to more than 50 Iowa community college classrooms (and 1,000 community college students) and surveys of 66 community college administrators, and 177 community college faculty. More importantly, it showed that new instructors need to have certain skills within the first six months of their exciting, yet demanding new career.

The 43 attributes of an effective instructor can be categorized into six teacher constructs, the building blocks of the teacher education program. The constructs and competencies are as follows:

A. Increasing opportunities for quality educational performance and success

1. Operating from a clearly defined community college educational philosophy and mission

2. Viewing learning as a valuable activity in and of itself

3. Relating course content and value to real-life situations

4. Viewing his/her own role as a facilitator of learning

5. Expressing high expectations of students' self-worth

6. Encouraging belief in students' self-worth
7. Caring about students
8. Gaining a sense of satisfaction from achievement
9. Allowing students to take responsibility for their own learning

B. Offering positive orientation, guidance, and direction through coaching
10. Utilizing collaborative teaching/learning methods
11. Developing and teaching the learning to learn process
12. Demonstrating well-defined class/lab organization
13. Identifying course expectations and communicating them clearly
14. Matching needs of students with a structured plan for growth and improvement
15. Encouraging students' efforts through consistent and appropriate feedback
16. Reaffirming the goals, objectives, and value of the course and learning
17. Identifying and affirming students' responsibilities
18. Integrating applied listening, speaking, reading, writing, and computing skills
19. Integrating interpersonal, group process, problem solving, decision-making, planning, communication, reasoning, and organizational and management skills

C. Motivating students to increased satisfaction for and development of learning to learn skills
20. Motivating students to be totally involved in the learning process
21. Considering students' adult and experiential learning and soliciting their contributions
22. Incorporating students' experiences into class/lab teaching
23. Promoting trust and respect between student and teacher and among students
24. Encouraging independent thinking
25. Viewing student maturation as a desirable goal of education
26. Promoting student risk-taking

D. Recognizing and encouraging students' desire to learn
27. Diagnosing students' needs at the beginning of the course
28. Clearly communicating the goal and purpose of teaching through well-organized syllabi
29. Providing a forum for student input into course goals, objectives, personal expectations, and
needs

30. Being aware of the total student - including abilities, course readiness, skill preparation, maturity, and learning style

E. **Working to limit and/or eliminate learning obstacles**

31. Listening to students with an open and accepting attitude before responding
32. Exploring alternatives with students for changing unacceptable situations
33. Developing and/or modifying curriculum to meet students needs and potentials
34. Meeting with students outside of class/lab
35. Providing additional help for students
36. Encouraging students use of support and resource services
37. Encouraging peer and/or other tutoring and study skills

F. **Using effective performance as an expectation by which to empower students**

38. Setting and upholding standards of behavior
39. Being able to model expected behavior
40. Reviewing and clarifying student expectations regarding performance and outcomes
41. Making students aware of the reward, privilege, and consequence of their actions
42. Providing positive feedback and constructive criticism regarding student performance
43. Accepting their active involvement in the teacher/learning process

The Program

In CCIM, new instructors learn 43 teaching behaviors in a series of 14 credit-earning seminars. A total of 12 undergraduate credits are earned over the two-year program. For each year, six "day and a half" seminars and one "two and a half day" seminar are offered at a location central to all students enrolled in the courses. Enrollment is limited to thirty participants per course. Each two-day seminar is scheduled in August prior to starting class dates.

Participants are assigned a mentor by his or her institution. Mentors attend a one-day training program at ISU. Mentors play several roles, including: guide, role model, sponsor, counselor, coach, resource, and
colleague. The mentor’s goal is to help the beginning instructor develop and enhance: competence, self-confidence, self-direction, and professionalism. Mentor qualifications are stringent and competition for the honor has increased since 1992.

Teaching skills are sequentially taught and participants are required to use the new skills in their own classrooms. Faculty evaluate their success and also ask students to evaluate their effectiveness relating to student learning. Also providing feedback and guidance are the mentor, seminar facilitator and other new instructors in the program. Many classroom research skills as promoted by Cross and Anglo (1992) are implemented to access success, accountability, and prescribe change when needed.

Evaluation and Results

The program uses five sources for ongoing evaluation and one source for summative evaluation:

* participants;
* mentors;
* immediate supervisors of participants;
* students in participants’ classes; and
* CCIM facilitators.

Participants themselves found a high level of satisfaction with their success of classroom implementation.

In formative evaluations, mentors who were surveyed during the program consistently rated participants significantly above the mean on items such as:

* readiness to teach,
* classroom management,
* student participation,
* workplace attitudes, and
* fewer student complaints

Additional open-ended questionnaire items provided input for adjustments to seminar outcomes.

Immediate supervisors were probably most concerned and yet complimentary of their new faculty’s competence. They were unanimously supportive, with only one expressing concern about the expense of
instructor substitute pay.

Compared to other instructors not enrolled in the program, CCIM participants were recently evaluated significantly higher by their students on 15 of 18 survey items related to instructor performance and effectiveness in the classroom. Students are asked to rate the instructor/class based on perceptions on reaction and learning items in certain areas. They first rate their instructor who has taken CCIM classes. Then, they compare the instructor who has taken CCIM classes to other instructors who have not completed CCIM classes in each of the same competency areas.

The reaction items, as listed on the evaluation, are as follows:

1. The course appeared to be well-organized and presented logically.
2. The instructor identified clear objectives and set high expectations.
3. The grading procedures reflected the course objectives as outlined in the syllabus.
4. The instructor cares about students, treats them with respect, and is tolerant and fair.
5. The instructor stimulated my interest in the subject matter.
6. The instructor appeared to enjoy teaching the course.
7. During the semester, the instructor provided me with a clear idea of how I was doing.
8. The instructor knows the subject matter and explains it clearly.
9. The course content is related to real life and is up to date.

The learning items, as listed on the evaluation, are as follows:

1. Interaction in class is increased through the use of questions.
2. My input in class is heard, valued, and encouraged.
3. I am urged to succeed in this subject.
4. The use of additional help, resources, and effective study skills is encouraged.
5. I am involved directly in the learning process (through group participation, hands on experience, individual learning, etc.)
6. The course content and teaching styles are adapted to match various ways of learning.
7. Feedback is consistent and appropriate.

8. The reading and homework assignments are appropriate and relevant.

9. My understanding of the subject has increased.

Promotion

CCIM involves new instructors from nine of Iowa’s 15 community colleges. Enrollment of first-year participants in the 1994-1996 program doubled from the previous year. Similar growth is anticipated for the next four years. Administrators have asked that similar outcomes be developed for their veteran instructors and adjunct faculty.

ISU Extended and Continuing Education produced fliers and information on an ongoing basis about the alternative program as part of its course offerings. A 11-member advisory committee keeps community college administrators informed about progress and evaluation, and helps keep CCIM’s profile high. In CCIM’s third year, approximately 20 percent of the participants represent trainers and educators from business and industry, labor, and alternate schools.

Replication

Licensure of vocational and technical community college faculty is required in many other states. Most require the traditional five teacher education courses offered at higher education institutions. Nationally, approximately 40 percent of all community college faculty will retire by the year 2000.

The 1991 Iowa study showed that students, administrators and staff all valued the same 43 teacher competencies, regardless of a student’s age, vocation taught, and location or size of program. Using the Iowa research results, CCIM can be replicated and delivered across the country - wherever community college faculty training is required, needed or desired. The result would be more effective instructors trained earlier in their careers, plus the long-term benefit of a network of new teachers, their mentors, and community college administrators. Presentations about the content, process and success of CCIM are ongoing for the purpose of transferability.
Problems Encountered and Solutions Attempted

The major problem was that, "Why change the old system if it's not broken?" and "But we've always done it that way". CCIM has broken the mold of the traditional approach to community college teacher education. It is a view approach based on outcomes and skills needed by vocational-technical faculty in the classroom, to which various educational theories and philosophies can be applied.

Not all academicians approve of the applied, competency-based approach. But, CCIM's emphasis on evaluation and continuous improvement has documented success at the front line - with students.

Not all mentor relationships have provided needed support for new instructors. In a majority of cases, however, not only has adequate support been provided but the mentor also reports learning from the new instructor. Veteran teachers have been challenged to try new techniques in their own classrooms after witnessing a new instructor's success.

The seminar format requires a substantial time commitment and cooperation with administration for work release and/or travel funds. The monthly seminars, however, provide time to present and practice educational concepts that can be brought back directly to classrooms with immediate feedback. Group dynamics and ownership of what participants learn cooperatively in the program has resulted in enthusiasm among new teachers, partnership with new teachers at other institutions, and a higher level of employee satisfaction within this population.

Colleen Getsfred, a medical assistant instructor at Iowa Western Community College in Council Bluffs, has this to say about her first year in the induction/mentorin program:

"I started my job here (IWCC) one week before classes began. I didn't know how to teach, I had been working in a medical office. If it wouldn't have been for this program, I would've taught the way I had been taught in school, that is, traditional lecture with no interaction with other students or the instructor."

"My students' test scores this year are higher than last year, and they have a more positive outlook. I haven't changed my outcomes or content, just the way I've structured the classroom."

"Some of the older instructors see what I have done with collaborative learning and they want to use these concepts, but they don't know how. I really do feel that what we're learning is the way of teaching in the future."
CCIM's success and transferability is best exemplified by the vision for which it was designed;
"To maximize community college vo-tech faculty effectiveness, in order to maximize their
students potential for the 1990's and beyond."

Shulman (1987) said it best when he wrote the following:

Most of the current education reforms rest on the call for greater professionalization in teaching,
with higher standards for entry, greater emphasis on the scholarly bases for practice, more
rigorous programs of theoretical and practical preparation, better strategies for certification and
licensure, and changes in the workplace that permit greater autonomy and teacher leadership. In
large measure, they call for teaching to follow the model of other professions that define their
knowledge bases in systematic terms, require extended periods of preparation, socialize
neophytes into practice with extended periods of internships or residency, and employ
demanding national and state certification procedures.

However, few community college teachers are hired based upon teaching credentials, but
instead are hired based upon subject/program expertise. The State Department of Education
Licensure requirements (or lack of such requirements) in all 51 states confirm subject matter
emphasis.
REFERENCES


