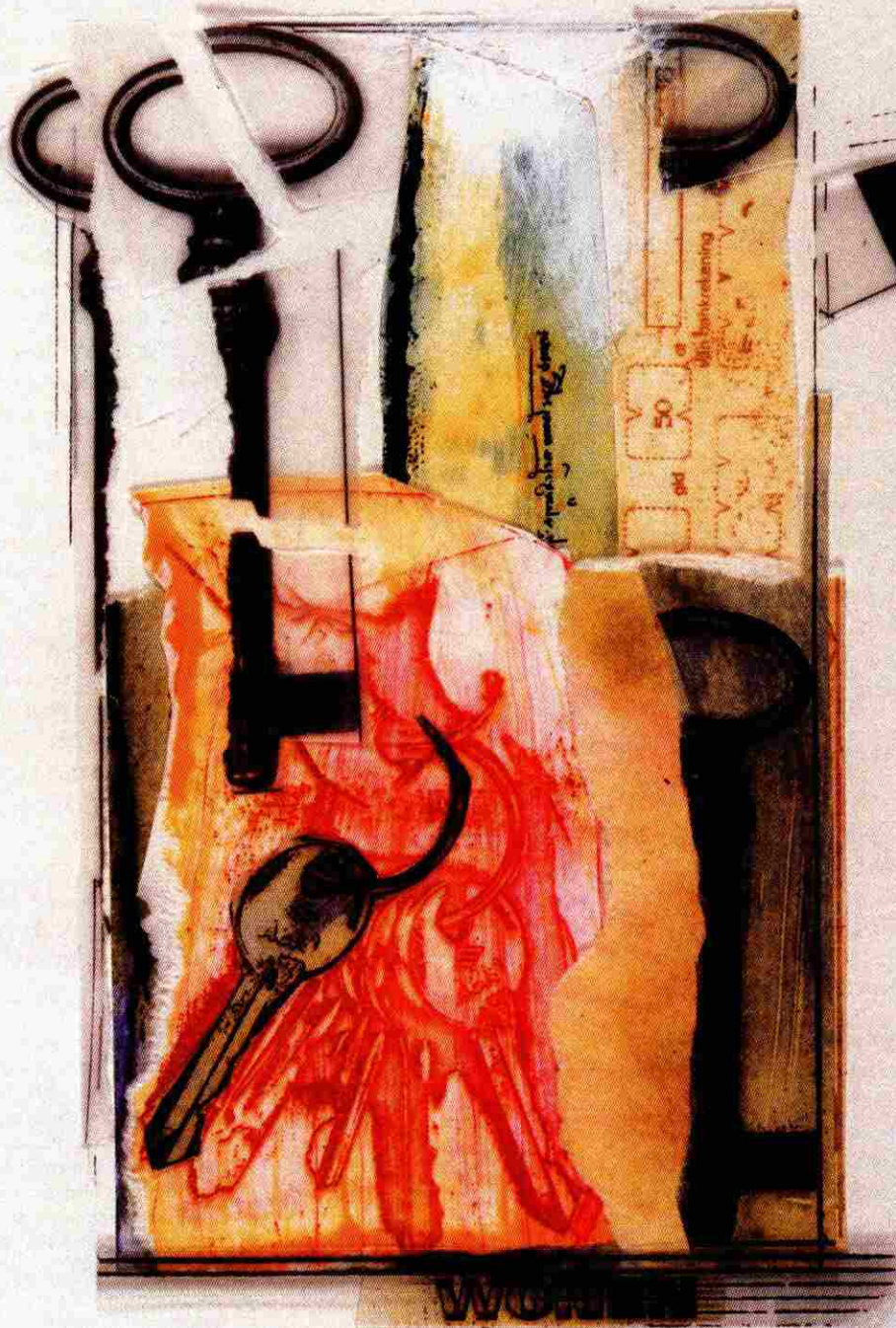
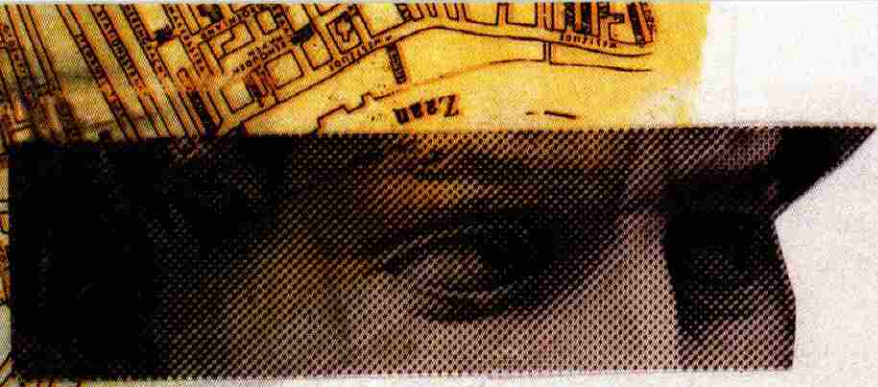


# FOCUS ON



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LEARNING,

# TRANSFORM TEACHING

Concerns about the effectiveness of college teaching are of long standing. Historically, college faculty have not been well prepared to teach or expected to develop instructional prowess across their careers. College students, however, have changed, and those differences intensify the concerns about teaching. Many traditional instructional approaches respond ineffectively to the learning needs and life situations of today's college students. And this disconnect between instructional approaches and learning needs is occurring at a time when college graduates require increasingly sophisticated intellectual skills to function in the modern world.

In the last decade, both these concerns about faculty members' ability to teach today's students and advances in the cognitive sciences have led to a new interest in learning. We have stopped assuming that learning is the automatic, inevitable outcome of teaching. Certainly, good teaching and learning are related. However, when we make the paradigm shift first proposed by R.B. Barr and J. Tagg and start with learning, connecting what is known about how people learn to instructional practice, we come at teaching and its improvement from a very different direction.

**BY MARYELLEN WEIMER**

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But while everyone is in favor of learning, at the classroom level not much has changed. Instruction is by and large still about teacher performance. Nothing illustrates this better than the large family of techniques labeled “active learning.” Since research and common sense both confirm that students need to be active, engaged, and involved if they are to learn deeply, endorsement of these techniques is widespread. But even when students participate in more active learning activities, classroom policies, assessment methods, and teaching are generally unaffected. In some fundamental sense, then, students are still the passive recipients of education rather than active agents in control of their own learning processes.

A focus on learning requires a set of changes much more profound and far reaching than can be accomplished by the infusion of new teaching techniques, as relevant to learning as many of them are. Students need to not only engage the material actively, they also need to take more responsibility for their own learning. A commitment to learning challenges teachers to revisit long-held assumptions about who’s responsible for what in the teaching-learning process. It should change how they handle central elements of instruction like course design and assessment, and it should significantly change what teachers do when they conduct class.

## FIVE KEY CHANGES TO PRACTICE

In *Learner-Centered Teaching: Five Key Changes to Practice*, I identify five aspects of current instructional practice that adversely affect learning, recommend and illustrate alternative approaches, and document the positive impact of the approaches. Even a brief exploration of each illustrates how much changes when learning is the focus of all aspects of instruction.

### 1) The Balance of Power

*The problem: Faculty make too many decisions about learning for students.*

In college, students make few decisions about their own learning. To illustrate the pervasiveness of faculty control, consider these questions. Who decides what students learn? Who controls the pace at which the content is covered? Who determines the structures (for example, assignment and tests) through which the material will be mastered? Who sets the conditions for learning (things like attendance policies and assignment deadlines)? Who evaluates the quantity and quality of the learning? In the classroom itself, who controls the flow of communication, deciding who gets to speak, when, and for how long? Teacher authority, in part defined as the right to make these decisions, is so taken for granted that most faculty members no longer recognize the extent to which they direct student learning.

How this exercise of power affects learning has been explored by radical pedagogues, Freire most notably, and by feminist pedagogues. These educational theorists do not be-

lieve students’ disconnectedness from learning stems from deficiencies in the students themselves. Instead they link it to faculty control that deprives students of power over those learning processes that directly affect them.

*The solution: In responsible ways, faculty should share decision-making with students.*

Radical and feminist pedagogues propose a more democratic and egalitarian view of education—one that opens up to student involvement in decision-making about all components in the learning process: the activities and assignments of the course, classroom policies, course content, and evaluation activities.

When teaching is learner-centered, power is shared, not transferred wholesale. Faculty members still make key decisions about learning—just not all of them and not always without student input. And power is redistributed in amounts proportional to students’ abilities to handle it. Just as the 16-year-old is not given the keys and the car for the weekend, learner-centered teachers do not let beginning students run the classroom or teach themselves.

*Examples:* In order to involve students legitimately in decision-making about their learning, I no longer require a whole set of assignments but only one or two. After that, students select from a cafeteria of differently structured options. In some cases they also decide how many and how much of a particular assignment they will complete. Moreover I let students make key decisions about the class’s participation policy. They identify which behaviors (asking and answering questions, making comments, reacting to the comments of others, for example) will count and what classroom conditions will motivate those contributions.

*The result: Teachers control less, but students are more involved.*

Most faculty respond viscerally to the idea of relinquishing control. Students will surely take advantage of the situa-

tion. What if they orchestrate a coup and overthrow the teacher? In my experience (and that of many others), students do just the opposite. They try to return the power—to reclaim the comfort of a classroom that absolves them of decision-making responsibilities.

Redistributing power does not cause learning directly. But it does have dramatic effects on motivation—on how hard students are willing to work without complaint. Furthermore, as Freire learned in his work with illiterate peasants, the experience of power motivates learners to accept still more responsibility and builds a commitment to succeed. Educational research of various kinds has shown that empowerment significantly affects student performance, even the performance of marginal, poorly prepared students—the very ones faculty see as most in need of direction and control.

### 2) The Role of the Teacher

*The problem: Classroom action still features teachers.*

If the goal is learning, then students must do the hard,

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hands-on work it requires—at home and in class. However, when it comes to who's working hardest, especially in class, most teachers win hands down. They deliver the content; lead the discussion; and preview, review, and provide examples of the content. They solve the problems, construct the diagrams, ask and often answer the questions.

Much evidence confirms the teacher-centeredness of most instruction. For example, in a study of participation behavior, C.E. Nunn found that less than 6 percent of total class time involved student participation. In no classroom observed did students speak for more than 23 percent of class time. D. Hoyt and S. Perera asked faculty members themselves to identify which of nine different teaching methods they used as primary and secondary approaches. Forty-five percent listed a combination that included lecture as their primary approach.

*Solution: Teaching should support student agency.*

The necessary role change for teachers is well known; it has been described metaphorically for years. Guides and coaches more effectively promote learning than do sages. But most faculty are not able to translate those analogies into concrete instructional behaviors. What do guides and coaches *do* when they teach?

Guides provide leadership and they do work hard, but their job is to show others how to do something, not to do it for them. In the classroom, then, guides don't always organize the content, summarize the discussion, solve the problems, or construct the matrices. They curb their propensity to tell students everything and motivate students by letting them do the legitimate work of the discipline. In doing so, they lead students to those places where the beauty, symmetry, magnitude, and diversity of the discipline can be experienced and appreciated firsthand.

Based on performance in previous games and who's next on the schedule, coaches figure out what players need to do during practice. Teacher coaches design learning experiences that take students' current knowledge to the next level. They sequence learning activities so that they connect and build synergistically.

*An example:* Most faculty feel they must "go over" the syllabus because students don't read it. In contrast, learner-centered teachers might distribute the syllabus and then let students read it during a period of silence. After asking for questions and hearing none, they might test knowledge of the syllabus with a short, ungraded quiz. After inviting students to confer with one another, they might query students as to the correct responses. Introducing new assignments with their description in the syllabus, referring students to it when they ask questions answered there, and other similar actions reinforce the importance of the syllabus and give students real reasons to read it.

*The result: Students build knowledge for themselves, and teachers confront the messiness of learning.*

From constructivist theory we have learned that students need to make meaning for themselves; they need to connect new knowledge to what they already know and organize and apply information in ways that make sense to them. This not only results in a deeper understanding—it creates autonomous, independent learners. Students often ask poorly framed questions, answer off the mark, can't think of an example, and circle around the point. A learner-centered teacher must be able to step into that mess and provide the kind of direction and leadership students need in order to take what they do know to the next level. These teachers relinquish control only to reassume it at a point when learners understand that they need help.

### 3) The Responsibility for Learning

*The problem: Faculty "force" learning on reluctant participants.*

Faculty often respond to passive, immature, and ill-prepared students by creating rules and requirements that govern learning activities. Attendance is mandatory, make-up exams are prohibited, and late papers are not accepted. Assignments are submitted in installments; participation is required, and coming to class late, leaving early, talking, eating, and chewing gum are all taboo. If students haven't figured out what it takes to learn, rules will be established.

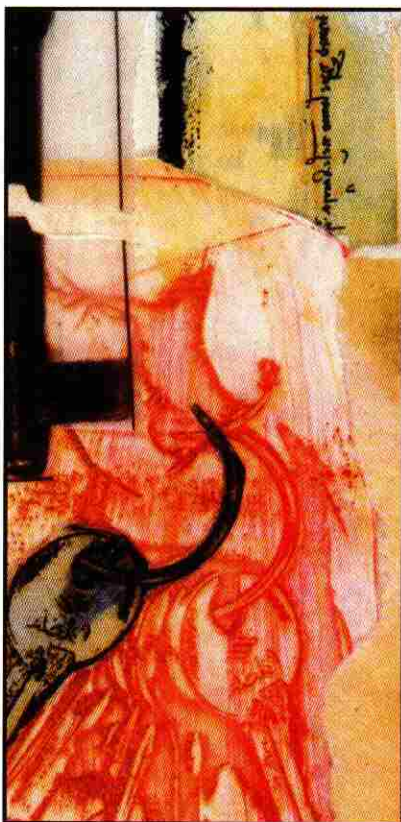
And that's not all. Motivation is also supplied. Quizzes encourage students to keep up with the reading. Extra credit motivates them to track down a reference. Bonus points offer incentives to complete homework. Classrooms have become token economies where students perform for points, not for reasons related to learning. Most college students today are the antithesis of independent, intrinsically motivated, self-regulating learners.

*The solution: Faculty should create learning environments that motivate students to accept responsibility for learning.*

In learner-centered environments, students do what it takes to learn on their own, without or with fewer externally imposed rules and requirements. Classroom environments can affect the motivation to learn and the willingness to accept responsibility for learning in pervasive and significant ways.

Empirical work (like that of B.J. Fraser) characterizes climates conducive to learning in terms of the psycho-social relationships between teacher and students and among students themselves. These relationships are personal and they engage students, connecting them with the content and each other. In learner-centered classrooms, teachers respond to individual learning needs with carefully organized and innovative activities.

*An example:* Learning environments can be structured so that they solve pesky, mundane problems like getting students to class on time. I once arrived five minutes before a math class I was observing started to find that most of the class and the instructor were already there. An overhead on the projector listed the homework problems for the day. It remained there



for two minutes after class started, then was taken down and never put back up. Arrive late to that class and you missed something important, the homework.

The principle that there be direct consequences for student action (or inaction) applies to countless aspects of instruction. Do students come to class without having done the reading? What happens to them as a result of that? Students should experience consequences when they come to class unprepared. They should not be rewarded with a carefully crafted summary supplied by the teacher.

*The result: Students grow increasingly autonomous and need teachers less.*

When students are more in charge of their own learning, they rely less on teachers. Those who study autonomous learners provide compelling portraits of mature, responsible students. As B.J. Zimmerman notes,

They approach educational tasks with confidence, diligence, and resourcefulness....Self-regulated learners are aware when they know a fact or possess a skill and when they do not.... Self-regulated students proactively seek out information when needed and take steps to master it. When they encounter obstacles such as poor study conditions, confusing teachers, or abstruse textbooks, they find a way to succeed.

But faculty should not worry about being phased out any time soon. Most college students today start from the other end of the dependent/independent continuum.

#### 4) Function of Content

*The problem: Faculty make covering content their top priority.*

Faculty's strong content orientation finds expression in the metaphor used to describe what faculty members do to course material: They "cover" it. More is always better when it comes to content. That long-standing assumption drives instructional decision-making, regularly preventing faculty from doing what they know promotes learning. This explains why, even though almost all faculty members endorse active learning, many still use few of its techniques. "I just have too much to cover in this course," they say. But how often do faculty discuss how much content is enough in the course for majors, the entry-level course, or the first-year or senior seminar?

The quest to cover content ignores a documented litany of negative impacts of this strategy on learning. Noted learning researcher P. Ramsden says it unequivocally: "The message of scores of studies on student learning is unambiguous: Many students...can reproduce large amounts of factual information on demand; they have appropriated large quantities of detailed knowledge; they pass examinations successfully. But they are unable to show that they *understand* what they have learned."

*The solution: Teachers should build their students' knowledge base and develop their learning skills and learner self-awareness.*

Learner-centered teaching is not about content-free courses: students must develop a knowledge foundation. But learner-centered teachers look for approaches that marry learning strategies to content. Content is "used" (not "covered," Finkel cautions) to help students acquire a repertoire of strategies, approaches, and techniques that can be used to master increasingly sophisticated content on their own.

And the converse is true as well: even though the focus may be on a strategy (learning to summarize material presented in class, as in the example to follow), the activity that teaches that skill is at the same time being used to help students master the content. Course material is also used to develop learner awareness. Students need to understand *how* they learn, including their natural proclivities and preferences as learners.

*An example:* Those challenging last five minutes of class when students "pack up" mentally and physically can be used to develop student abilities to summarize and integrate class material. Students can be given two minutes and asked to review their notes, underlining the ideas they think are key. Then they might be told to trade notes with a person sitting nearby and discuss what each has underlined. Or a single student might be asked to take notes on an overhead transparency. During the last five minutes that student's notes are shared with the rest of class and collectively underlined, elaborated, or revised. Or students might be asked to generate a potential exam question using material in their day's notes.

*The result: Teachers cover less, but students learn more.*

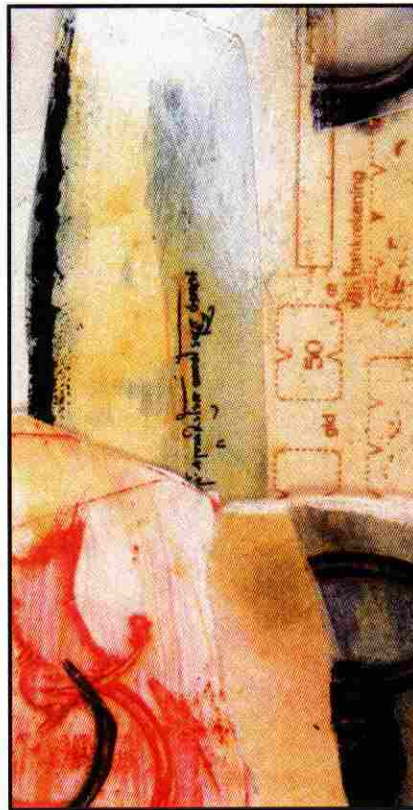
Much like releasing control, the decision to let go of coverage is a difficult one for most teachers to implement. Sometimes it cannot even be an individual decision. If the course is part of a sequence or contains material that subsequently appears on accrediting exams, the decision to exclude that material may have negative consequences for students and programs. The relationship between content and process is a complicated one, full of tension and dilemmas. Nonetheless, learner-centered teaching is about a better balance between covering content and teaching learning skills.

Work in both cognitive and educational psychology (for good examples, see Ramsden and Biggs in Resources) documents that when there is an emphasis not just on what students learn but on how they are learning it, a deeper kind of understanding results that enables them to retain and apply what they have learned. And students leave courses with the skills and awareness that enable them to keep learning on their own for years to come.

**5) The Purposes and Processes of Evaluation**

*The problem: Evaluation activities are grade oriented and completed exclusively by teachers.*

Too often faculty equate learning, grades, and the evaluation process, even though students know (many, firsthand)



that it's possible to get grades with little or no understanding of the course material. Grades and learning are related, but the relationship is more oblique than straightforward. For example, grades may do a good job of measuring some kinds of learning, like memorization or rote recall. But skills like analysis, synthesis, and evaluation are much more difficult to assess reliably. And while grades may successfully promote encounters with content, questions arise as to the kind and quality of learning that results. Finally, most students leave college without any experience of evaluating their own or others' work. Because teachers evaluate students almost entirely and exclusively, students graduate without important self- and peer-assessment skills.

*The solution: Evaluation activities should be used to promote learning and to develop assessment skills.*

Students are motivated to get grades. Learner-centered teachers work to harness that motivation so that students leave evaluative experiences with a grade *and* a deeper understanding of both the material and their performance.

But doesn't the need for good grades compromise students' abilities to be objective when they engage in self- and peer assessment? Under some circumstances yes, but not under all, according to extensive research on self-assessment (like that analyzed by N. Falchikov and D. Boud in Resources). And learner-centered teachers do not abdicate legitimate grading and feedback responsibilities. Students do not assign their own grades, but they do participate in activities that teach them how to accurately assess themselves and their peers.

*An example:* I incorporate self- and peer-assessment in my evaluation of class participation. Students set for themselves a participation goal consistent with our class-generated policy. An assigned partner provides feedback the student uses to prepare a mid-semester progress report. I respond to that self-assessment with my own feedback.

At the end of the course, students submit well-documented descriptions of their participation and assessments of how many of the 50 points possible they believe they have earned. I make my evaluations before reading theirs. If the assessments are within three points, I record whichever one is higher. To my amazement, about 85 percent of the time we are within the three points, and when we are not, the problem is more often under- rather than over-evaluation.

*The results: Short term, fewer arguments over grades. Long term, more successful self-monitoring of learning.*

Learner-centered approaches do not diminish the importance of grades, but they do put grades in a larger context. The more experience students have at self- and peer-assessment the better they become at it. (For a convincing empirical example, see C.M. Kardash in Resources). The most immediate benefit? They are less surprised by their grades and more like-

ly to believe that the grades reflect what and how well they have learned.

## WILL A FOCUS ON LEARNING TRANSFORM TEACHING?

*For individual faculty?* Are faculty members likely to incorporate changes in their teaching practices that will make their teaching learner-centered? And is the adoption of techniques like those described above likely to lead to fundamental change in the classroom? The answer relates to how faculty manage the instructional change process.

College teachers find educational research intellectually appealing, sometimes even convincing, but it almost never motivates change the way learning techniques that address everyday classroom dilemmas do. In particular, techniques that focus on student learning tackle widespread problems like students' passivity and their failure to act as mature, responsible learners. And instructional improvement aimed at increasing learning avoids the negative baggage associated with efforts to "fix" teaching (and teachers). Finally, trying something new, especially if it can be easily implemented, gives an invigorating lift.

But the way faculty select and implement new teaching strategies often compromises their effectiveness. Faculty often choose new techniques quickly; they rely on gut feelings. The process is neither systematic nor reflective. And then, if faculty adapt the chosen strategy to fit how they teach, what they teach, and whom they teach, they are apt to make those changes intuitively, not analytically.

Finally, the assessment of how well the technique has worked is generally emotional and unsystematic, rather than a process of thoughtful analysis that incorporates objective feedback. So even

though the new approaches may change what happens in the classroom, they do so haphazardly and often without leading to more significant changes.

For these techniques to effect deep and lasting change in the classroom, they must work synergistically. Little research exists to support the impact of synergistic strategies, but we do have a set of experiences reported with remarkable consistency across the practitioner literature. If faculty members are to incorporate learner-centered techniques into their teaching in an unsystematic or piecemeal way, then those techniques must build and grow on each other in ways that are obvious and compelling enough to motivate faculty to keep changing.

In my own case I didn't begin by aspiring to be learner-centered. I simply thought students would do better in my public speaking course if they were not so anxious. I started giving them choices about assignments to build their confidence. But these modest changes produced results: My students started changing, and the differences I saw in them implicated me. It

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was no longer enough to fuss with the course; I needed to do things differently. Once I did, that changed my students even more, and at some point there was no going back. Later I realized that the process had changed some of the most fundamental things I believed about teaching.

Can learning transform teaching? It has the potential to do so. Those of us who have implemented learner-centered approaches sometimes hardly recognize the teachers we've become. But can it transform whole institutions?

**At Institutions?** As promising as the focus on learning is for individual faculty, change at that level still happens one classroom at a time. The change will be significant if many individual classrooms change, but it won't be systemic. Going

after groups of courses, be they part of a major program or core curriculum, means much greater impact for the students, the faculty, and the institution.

Although learner-centered approaches are appropriate everywhere in the curriculum, their application in a general education curriculum holds special promise. Students rarely arrive at postsecondary institutions with well-developed learning skills or as empowered, confident learners, which in part explains the popularity and effectiveness of first-year seminars and transition-to college-programs. By working with students early in their college experience, we position them for greater success in college and their continued development as learners after college. Faculty may be concerned that beginning students are the least likely to handle more decision-making and responsibility as learners. But we have learned from the radical pedagogues that these approaches are most successful with marginal students. My learner-centered efforts have occurred in entry-level, required communication courses that regularly meet at 8 a.m. and enroll decidedly average students.

Another rationale for making general education courses *learning focused* relates to the curriculum itself. In these service courses, faculty are most likely to be willing to cover less material. With courses that introduce a discipline, it's easier for faculty to understand that students need to learn those habits of the mind characteristic of the discipline—how those in the field think critically, ask questions, frame answers, explore controversies, and reason from problems to solutions.

In general education courses, faculty might be more willing to develop learning skills in the process of establishing a knowledge foundation. Moreover, faculty who teach these courses often have a history of collegial collaboration, having worked with colleagues from other disciplines on courses that share common goals and objectives.

General education has already been the focus of many reform efforts, some focused on introducing contemporary themes and others on pursuit of more holistic objectives. Most of these efforts have been characterized by elaborate planning processes, notable for the kind of discourse they promote over the goals of the program and for the innovative plans that emerge. They are less splendid at the point of implementation. Could this be because the attention is still too much on content and not enough on process? What might transpire in a general education reform initiative where faculty agree to use content, course structure, and pedagogical methods to develop students as learners?

It is difficult to imagine any faculty member going about the business of teaching as usual in core courses so designed. And it is encouraging to imagine the effects of a set of learning-focused experiences on the typical disconnected, uninterested, and passive beginning college student. These experiences might not only shape the general education program but also influence other courses as more mature, self-directed learners make their way into the disciplines.

After more than 20 years of initiatives aimed at cultivating more effective instruction, the paradigm has shifted. When we start from the learning side, a powerful dynamic emerges. Rather than promoting new teaching techniques that may or may not lead to learning, beginning with learning can start a change process that ends with transformed teaching. ☐

