Book Review

Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco: Jossey-Bass/Wiley. \$33 (hardcover), 258 pp. (ISBN 0-7879-5646-5). Excerpt available: www.josseybass.com

Reviewed by Patrick N. Foster

How many times have we heard (and probably told college students) that the difference between high-school and college was this: blame the teacher if a high-schooler fails—but a failing college student isn't the professor's responsibility? Maryellen Weimer doesn't buy this. That's not to say she absolves today's college students—whom she characterizes as passive, distracted, and extrinsically motivated—for poor performance. But, in *Learner-Centered Teaching*, she argues that professors are obligated to create an environment in which students and teachers share responsibility for learning.

Learner-Centered Teaching is not about changing the corporate university structure, or even about restructuring curriculum. For the most part, Weimer advocates changes to individual sections of individual courses by individual teachers. These changes are based on assumptions, both stated and implied, which run counter to prevailing practice. Among them are that:

- Professors and college students can "share power" (p. 23) in the college classroom.
- The theories and beliefs of "radical and feminists pedagogues" (p. 28) deserve our attention, careful consideration, and, in many cases, adoption.
- Professors should spend more time producing and consuming introspective research about college teaching and learning.
- A sweeping change to learner-centered teaching can be done without changing the professor's and students' roles in assigning grades (e.g., p. 90, 130, 144).

That teachers can functionally share "power" with students is a provocative assumption, and advocating such an orientation is equally provocative. But on the other hand, the book's title appears reasonable—what's wrong with a little "Learner-Centered Teaching?"

In fact, isn't good teaching, by its very nature, at least learner-focused? If an ideal K-12 technology program could be deduced from our literature over the past twenty years, it would probably have as much of a learner focus as practicable in this era of standards. The greatest impact of technology teacher

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educators like Donald Maley is probably the successful dissemination of this philosophy through college programs and into classrooms across the US and elsewhere.

It seems likely that many technology teacher educators model learner-centered teaching for pre-service teachers. At the college level, Weimer suggests taking a step beyond a Maleyian [Maleyesque?] junior-high classroom and involving students in text selection, syllabus construction, and content selection.

Organization

A little more than half of the text proper (Part One, Chapters 2-6) focuses on "what changes when teaching becomes learner-centered" (p. 21). To Weimer, there are five major changes: the balance of power, the function of content, the role of the teacher, the responsibility for learning, and the purpose and processes of evaluation (p. ix). The last three chapters (Part Two, Chapters 7-9) focus on implementing the changes Weimer advocates.

I found Part One to be the more compelling, perhaps due to Weimer's liberal use of anecdotal examples and research citations, both of which are woven seamlessly into the text. Much of Part Two felt like a reiteration of the foregoing material, at least until the book's final chapter.

The book also includes 55 pages of back matter: three appendices, including a sample course syllabus; references; and a detailed nested subject index. *Learner-Centered Teaching* is available as a .pdf file from online booksellers (for the same price as the hardcover), and the whole of Chapter 1, formatted as it is in print, can be read for free at the publisher's website.

Changing the College, One Classroom at a Time

Weimer acknowledges that ideally, students, administrators, and other stakeholders would accompany college teachers in transforming the culture of higher education. But until then, she proposes that professors, in their classrooms, make unilateral changes within their sphere of influence.

The first, and most fundamental needed change, she says, is to balance power in the classroom. Coupling personal experiences with her readings of feminist theory and cognitive psychology, she contrasts the "traditional power structures and the role of authority in the classroom" with "more democratic and egalitarian views of education that open it to the possibility of different kinds of learning" (p. 10). Weimer provides a framework for identifying power-sharing opportunities and for altering courses to take advantage of them. Some suggestions seem easy enough (like having students negotiate the course-participation policy), others oblique (such as not calling on students randomly even if the class is unresponsive), and some challenge the basis of the traditional teacher-learner relationship. Among the most surprising of the latter is to give students a significant voice in the selection of content.

I can picture the reactions of at least some of my colleagues here:

- We are preparing students to be teachers. What if they choose NOT to study the Standards for Technological Literacy, classroom management, and curriculum development?
- This is a lab class. We have procedures and safety rules that must be taught. Maybe this isn't the course to experiment with this level of student input.
- How can students choose the content when the content is beyond my control? In our state students must take Praxis II.
- Is this really what we want to model for our students? When they get their first teaching job, I don't want them asking teenagers what content to teach!

These potential concerns (some of which might have great merit upon closer inspection) are in addition to the more general objection, applicable to fields beyond technology teacher education, that the college professor has been hired to teach to the best of her or his ability—and that while some student input is healthy, letting the students make these decisions is an abdication of responsibility.

I believe Weimer, while acknowledging that professional fields might adapt her ideas to some degree, would nonetheless charge that teacher educators are too focused on content. She refers, at times humorously, to professors' "allegiance to content" (p. 47) and "the race to cover content" (p. 48). This seems to describe us well, although it does not address whether content may be more important in some fields than in others.

The second major change Weimer advocates—"that students need to be told less and discover more" (p. 12)—rings true, with two important caveats. First, some courses are prerequisites for others, provide content required for a licensing exam, or in some other way, have a special emphasis on content. Second, the subject being taught may have an influence on the way students learn; "It is more difficult to see how knowledge can be socially constructed in science, math, and engineering fields where there are more 'right' answers and much less disagreement about the status of knowledge" (p. 12). Weimer removes neither of these issues as an impediment to moving from a content-centered to a learner-centered classroom. The implication is that the balance of power should be corrected immediately, even if changing the function of content is slowed by curricular, political, or other facts of college life.

Changing either the teacher-student power balance or the meaning of content requires two further changes, Weimer says: teachers must "position themselves alongside the learner and keep the attention, focus, and spotlight aimed at and on the learning processes" (p. 76), and students, with faculty assistance, must develop "the intellectual maturity, learning skills, and awareness necessary to function as independent, autonomous learners" (p. 95). She is particularly adamant that college students become responsible for learning. Of course, if classrooms are to be learner-centered, and if learners are

to share power with professors, the role of the student changes just as radically as that of the teacher or the content.

Professors and institutions share the blame with students for a culture in which learning is passive, Weimer says. And don't get her started on our "rule-based approaches" that function as "token economies" wherein students are only motivated to act if sufficient points are offered (p. 96-97)! "Development as an independent learner," she writes, "is not the inevitable outcome of formal educational experiences" (p. 16). The final major change Weimer proposes, in the purpose and process of evaluation, is part of the answer to promoting intrinsic learner motivation:

...what students are most likely to learn in a course is directly related to what they are evaluated on. Evaluation is not just something used to generate grades; it is the most effective tool a teacher has to promote learning. (p. 17)

If this sounds safe enough, Weimer proposes linking assessment and learner empowerment in an even deeper way:

Given the fact that faculty evaluate student work so entirely, the idea that students should be involved in the process strikes many faculty as a radical alternative. ... Can they be involved in self-assessment activities without compromising faculty responsibility to certify what they know and can do at the end of the course? (p. 130)

As is her approach throughout the book, Weimer handles this issue first by acknowledging that the entire notion is "on the edge" or "radical" to college teachers and administrators (e.g., p. 130-131), then asking why it strikes us this way. She follows this with (usually empirical) research citations—for example, a meta-analysis of student self-assessment that found that such assessment, under certain circumstances, is highly correlated to faculty assessment. Finally, she provides examples of faculty who have tried the approach.

Applying Weimer's Ideas

As radical as many of Weimer's ideas are, it would certainly be possible to reengineer a technology teacher education course to include some of her recommendations. Take, for example, the lab teacher's concern: "This is a lab class. We have procedures and safety rules that must be taught."

Of course, no one is going to suggest that a teacher put herself or himself in legal danger by not teaching safety rules. But a manufacturing lab instructor could begin the course with a tour of the laboratory facilities and hand out several manufacturing curricula. The students could be given the responsibility for determining what equipment and processes to include in the course. This content selection could be overseen by the instructor, who would have opportunity to influence the choices if the need arose.

The same approach could be used in courses that in part prepare students for Praxis II. Students could be assigned to research the exam and identify which components would be appropriate, for instance, in a manufacturing

course. Again, the instructor, as the resident expert, would exert influence when applicable.

Final Thoughts

Even though I have cited some of the more provocative examples from the book, much of the material in *Learner-Centered Teaching* would be agreeable to most teacher educators and technology educators. Then again, the book's audience appears to be professors who have had no formal training as teachers. Weimer's repeated chiding of professors for being unaware of the literature on teaching methodology, for example, suggests this. Teacher educators could agree with Weimer on every point and still not implement her ideas in certain classes on the basis that they are modeling K-12 teaching methods to prospective teachers.

Nonetheless, I offer this review not because I felt that the book needed a critique, but because I believe that the ideas Weimer presents could benefit technology teacher educators, even if we are not her primary audience.