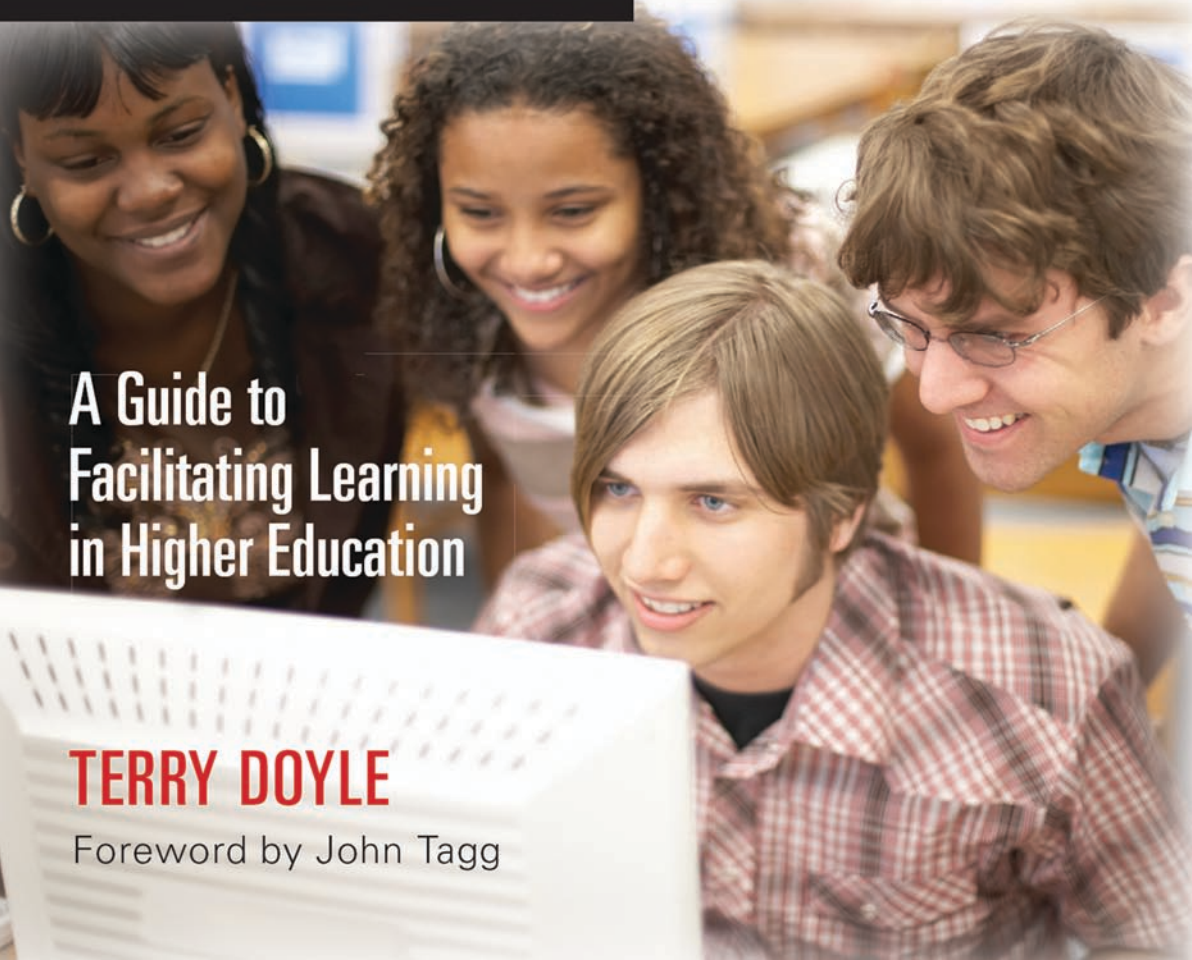


# Helping Students Learn

in a  
**Learner-  
Centered**  
Environment

A photograph of four diverse students in a classroom setting. Three students (two women and one man) are standing and looking at a computer screen, while a fourth student (a man) is sitting in front of the screen. They are all smiling and appear to be engaged in a collaborative learning activity.

A Guide to  
Facilitating Learning  
in Higher Education

**TERRY DOYLE**

Foreword by John Tagg

HELPING STUDENTS LEARN IN A  
LEARNER-CENTERED ENVIRONMENT



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*Terry Doyle*

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 **Routledge**  
Taylor & Francis Group  
NEW YORK AND LONDON

First published 2008 by Stylus Publishing, LLC.  
First Edition, 2008

Published 2023 by Routledge  
605 Third Avenue, New York, NY 10017  
4 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

*Routledge is an imprint of the Taylor & Francis Group,  
an informa business*

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**Library of Congress Cataloging-in-Publication Data**  
Doyle, Terry, 1951–

Helping students learn in a learner-centered environment: a guide to facilitating learning in higher education / Terry Doyle.—1st ed.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-57922-221-5 (cloth : alk. paper)—

ISBN 978-1-57922-222-2 (pbk. : alk. paper)

1. College teaching. 2. Student-centered learning. I.

Title.

LB2331.D66 2008

378.1'7—dc22

2007038267

ISBN 13: 978-1-57922-222-2 (pbk)

ISBN 13: 978-1-57922-221-5 (hbk)

ISBN 13: 978-1-00-344506-7 (ebk)

DOI: 10.4324/9781003445067

*For Julie,  
the love of my life*



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<http://taylorandfrancis.com>

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## FOREWORD

In this book, Terry Doyle addresses the central paradox that frustrates efforts to improve the quality of undergraduate education. For a variety of reasons, most of them good, college and university faculty these days are more interested in the learning processes of their students than ever before. Many faculty members and administrators are grappling with how to get their students to learn more and better. Yet in talking with educators about making our institutions more learning centered, the question I hear most often is “But how can we get the students on board?” At the root of the quest for more learner-centered institutions lies this paradox: Students, the learners, aren’t convinced. Students need to be persuaded that learning is the central purpose of their schooling. They do not come to us believing this. And they are not necessarily comfortable with the idea of taking charge of their own learning. Indeed, much of the resistance—or apparent resistance—of faculty to new ways of teaching is rooted in the apparent intractability of students. How do you recognize the authority of students as learners, give students responsibility for their own learning when, essentially, they won’t take “yes” for an answer?

Terry embarks from the realization that if we want to improve the quality of undergraduate education, we need to start where we are, not where we wish we were, or where we think we ought to be. And he correctly identifies the biggest challenge in taking a learner-centered approach: getting the learners to buy into it. Drawing on long experience as a classroom teacher as well as his work with teachers in many disciplines as a faculty developer, Terry is really addressing two audiences in this book. The primary audience is, of course, college and university faculty. But the ultimate and long-term audience consists of the students in our classes, the learners who are the real decision-makers in this process. Consistently, throughout every chapter, he keeps this double focus. There is never any doubt that this book is mainly about students, and that its core message is to be offered to and shared with students.

This is not a book about teacherly sleight of hand, legerdemain, or clever techniques and moves that will allow us to trick students into remembering the stuff we want them to remember. Terry's message is utterly transparent. He is urging us not only to take a brain-based approach to teaching, but to show our students how their brains and memories work so that they can understand how to learn most effectively. He grapples with the hardest challenges that classroom teachers face when they try to give students responsibility for their own learning: getting them to work in groups, to give and take serious feedback on their work, to stand up and talk in front of a class, to take a deep approach so that their learning will last a lifetime, rather than a surface approach that produces learning that will fade at the end of the term. And in each case, he is talking to us about how to talk to students, how to shape students' tasks and roles, and how to engage students in designing their own learning environments. If the learning is going to get done, it is the students who are going to do it. Terry is consistently clear about this, and it shapes his approach in every chapter.

The apparent variety and complexity of the research on learning prevents many teachers from taking a more learner-centered approach in their own classrooms. The research on the brain and on cognitive processes points out new directions for teaching, but it seems to the casual observer to point out quite a few different new directions. Too many to keep track of all at once. And that research is often embedded in large books that look like major investments of time and attention. Even if the average professor of math or sociology did have time to keep current with research on the brain and cognitive science, the prospect of presenting it to her students—while still teaching math or sociology—would be daunting, to say the least. Terry has been keeping up on the research. And he has done a splendid service here by presenting the most important implications of research on learning concisely, accurately, and accessibly. In doing so, he not only explains it to us, but he helps us to see how we can explain these principles to our students. Even more importantly, he illustrates how we can shape our students' experience in the classroom so that they can discover many of these essential principles for themselves. The author has a clear bias, but it is a bias that emerges from the research: he consistently prefers to let students discover for themselves their own capacity as learners. Because, as he shows us over and over again, if they learn it for themselves, they really learn it.

Ultimately, I think that the paradox that our students pose for us is easily understood. Most of our students shy away from taking responsibility for their own learning because they think it will make things harder for them. They think it will be more work, with no clear reward. And, frankly, I think some of our faculty colleagues are a bit hesitant for the same reason. But they are wrong. What this book illustrates is that a deep approach to learning, and to teaching, can be richer without being harder and offer rewards that are not even accessible through surface approaches. Once they begin to see the long-term rewards, students and faculty will become engaged and committed to the learner-centered classroom.

For the individual teacher, this book offers a dozen points of entry to a more learner-centered approach to teaching. And it provides the apparatus for engaging students in the enterprise. But the greatest challenge of learner-centered teaching remains bringing the learners along. How much easier this would be, and how much more productive, if the approach that Terry describes here became the new standard, if it became the rule rather than the exception. Students resist taking responsibility for their learning because they aren't used to doing so. It is, for a depressingly large number of students, a new concept. But if many teachers at an institution adopted these principles, if a critical mass of teachers in a department or a faculty pursued learner-centered teaching as a goal, then it would multiply the benefits by orders of magnitude. If students came to see learner-centered teaching as normal, as the expected, as what most teachers do, teaching well would be vastly easier, and we would be much closer to fulfilling the promise of lifelong learning for all of our students.

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## ACKNOWLEDGMENTS

To a great extent this book was 30 years in the making. The ideas in this book are the result of thousands of conversations about teaching and learning that I had with my many colleagues here at Ferris State, and I thank them all for their openness and willingness to share their ideas about teaching and learning. I have had more conversations with my lovely wife Julie than anyone else. For the past 23 years, Julie has taught in the Hospitality Programs here at Ferris State. We have spent many pleasurable hours discussing students, curriculum, and pedagogy, trying to develop ways to optimize our students' learning. I also want to thank my two children, Jessica, who served as my much-needed unofficial editor, and Brendan, who allowed me to use some of his personal school adventures in this book.

I am indebted to my close friends and colleagues, Mike Cairns and Dan Burcham, who, for the past 30 years, have been both sounding boards for my ideas and resources for increasing my understanding of how students learn. These men have greatly enhanced my work on teaching and learning. Thanks, too, to the many faculty members who participated in the workshops I facilitated on learner-centered teaching for their questions and insightful ideas about optimizing students' learning. Their contributions helped formulate the ideas for this book, especially those of Cecil Queen, Dan Adsmond, and Jennifer Johnson.

I especially want to thank Maude Bigford and Judith Hooper for their editorial help and their many years of friendship. I owe thanks, as well, to the nursing faculty at Ferris State for reading early drafts of chapters and providing very helpful feedback. Thank you also to Jennifer Cox for her many hours of help with the bibliography for this book and to Jessica Pawloski, who helped with many of the charts and drawings in the book.

The content in this book was enhanced by the work of Andrew Roberts of Middlesex University, who allowed me to use his examples of effective report and paper writing, and Professor Edward Vockell of Purdue University at Calumet, who allowed me to include his excellent examples of how to

help students develop metacognition skills from his book, *Educational Psychology*. I also want to thank Maryellen Weimer, whose presentation on our campus 5 years ago set in motion my thinking about learner-centered teaching and led to many of the ideas in this book, and John Tagg, for his willingness to write the foreword to this book. Thanks, as well, to Milt Cox and Laurie Richlin, who welcomed me into the Lilly conference family 10 years ago and have given me outlets for my ideas on learner-centered teaching at the Lilly conferences. Finally, I want to thank Henryk Marcinkiewicz for helping me get started in faculty development work and for encouraging me to do more writing.

## INTRODUCTION

I am one of those education lifers. Every fall since I was 5 years old, I have headed off to school, and I've been on one side of the desk or the other for the past 51 years. In that time I have experienced some amazing teachers, including Mr. Zelinski in 8th grade, and Sr. Marybride Ryan and Dr. Dave Yarrington at Aquinas College. I have also experienced some of the poorest teaching ever perpetrated on a student. I learned in spite of some teachers and because of others. What I have learned from going to school for the past 51 years is that teachers can make learning fun, interesting, exciting, and challenging, or they can make it awful, boring, painful, and useless. Teachers can encourage learners or discourage them. My best teachers were not only encouraging and supportive, but they also taught me how to learn. They helped me not only to see the value of the content, but to grasp the greater value of being able to learn whatever I became interested in on my own.

Creating a learner-centered environment is the most important thing an educator can do to optimize students' learning. At first this concept might be a bit uncomfortable for students, most of whom are accustomed to teacher-centered learning experiences. Their learning has largely been controlled by teachers and, as students, they have had few, if any, choices about what and how to learn. They have spent most of their time in traditional learning environments, and, for most, their academic success has reinforced the value of those traditional experiences. Students have no reason to think their college learning experiences will be any different. As college- and university-level educators, we can, and should, change this.

A learner-centered environment *is* different. It requires students to take on new learning roles and responsibilities that go far beyond taking notes and passing tests. It is an environment that allows students to take some real control over their educational experience and encourages them to make important choices about what and how they will learn. In learner-centered classrooms, collaboration is the norm, not an occasional class activity.



These changes will initially be difficult for many students. Most will be uncomfortable with their new roles and responsibilities, and some will be downright hostile toward them. It is up to us, their teachers, to help them understand these changes and teach them how to learn in this new environment. We must work with them to develop the skills and knowledge they need to be successful in learner-centered classrooms. Our students are not prepared to do this on their own; it is too unfamiliar and requires too many new skills that many students do not possess. This book will guide you as you help your students adapt to learner-centered classrooms, teaching them new skills and making them comfortable with their new responsibilities.

Most important, students will need a clear understanding of why teaching has shifted from teacher-centered to learner-centered. They need to understand that teaching, like all professions, must allow research to inform its practice. They need to see that we are obligated to make changes in how we teach if research shows that those changes will improve our students' opportunities to learn. Bransford, Brown, and Cocking (2000), in their book, *How People Learn*, state it powerfully:

Many people who had difficulty in school might have prospered if the new ideas about effective instructional practices had been available. Furthermore, given new instructional practices, even those who did well in traditional educational environments might have developed skills, knowledge and attitudes that would have significantly enhanced their achievements.

Our students will benefit from understanding the research that has motivated us to change our teaching practices, because this same research explains how they can become better learners. For example, most teachers who practice learner-centered teaching give cumulative exams, not to make their students' lives miserable, but because research on memory formation strongly indicates that cumulative exams, as opposed to exams for which students can cram, offer a greater opportunity for students to relearn repeatedly the most important information in the course, leading to a deeper understanding of material and long-term memory formations.

Three separate but related events have informed the writing of this book. The first was realizing, 5 years ago when I first started working with faculty on how to develop a learner-centered practice, that I had missed a very important step in their preparation. I had not discussed with them how they

should prepare their students for the new roles and responsibilities they would be asked to take on in this new learning paradigm. I had been too “teacher-centered,” and I’d forgotten about the learners. Old habits die hard. I realized that students would need a clear rationale for this change and a new set of skills that would enable them to be productive learners in learner-centered classrooms. I immediately began to develop strategies that would help my colleagues introduce learner-centered teaching to their students, and that would enable them to teach their students how to learn in a learner-centered environment.

The second event took place at the 2005 Professional and Organizational Development Network in Higher Education (POD) conference. As I looked at the session topics, I realized that many of them focused on how to teach, even those that dealt with learner-centered practice. I did not attend all of these sessions, so I don’t know if the presenters addressed ways to help students learn, but the session titles reinforced the need to emphasize the students’ role in learner-centered environments. I had already been thinking about that idea a great deal before the conference. In fact, the title of my session was “Helping Students Learn in a Learner-Centered Environment.”

The third event was Stylus asking me to write this book. Publishers make it their business to know the needs and desires of the markets they serve. If learner-centered education was something on Stylus’s radar, it confirmed for me that this topic should be addressed more formally. I already knew that if learner-centered practice was to be successful, then students would need clear reasons why they should adopt this approach, and they would need to learn the skills necessary to handle their new roles and responsibilities. This book represents my best ideas, using research to inform my practice, about how we can help our students learn effectively in a learner-centered classroom.

The first four chapters focus on the importance of creating clear rationales for moving from a teacher-centered to a learner-centered practice and what this means for students. It is simply human nature for our students to want to know why things have changed and how those changes will affect them. This includes *why* we want them to collaborate often but also work on their own at times; *why* we are asking them to teach each other, evaluate each other, and evaluate themselves; and *why* we are asking for so much feedback about what and how they are learning. It also explains *why* we now give cumulative exams and reflective journal assignments, and *why* we make so

much of the students' work public. We cannot forget that most of our students come from a very traditional, teacher-centered learning environment, and to get them fully engaged in these new learning practices, we must continually help them to understand *why* we are asking them to change, and become significantly more involved in their learning experience.

The last eight chapters focus on the skills our students will need to learn or improve if they are to be effective learners in this new environment. They include learning on one's own; creating meaningful learning when working with others; taking more control over their learning; learning how to teach other students; becoming better presenters and performers of their learning; developing the abilities to be lifelong learners; and learning how to self-evaluate, how to evaluate others, and how to give meaningful feedback about their learning to others, including the teacher.

Most important, this book has been written to answer the single most-asked question I hear when I'm working with faculty groups: How do I help my students adjust to a learner-centered practice? I hope it offers some good answers.

---

## OPTIMIZING STUDENTS' LEARNING

**M**any people who had difficulty in school might have prospered in their learning had the new ideas about effective instructional practices been available at the time. Furthermore, even those who did well in traditional educational environments might have developed skills, knowledge, and attitudes that would have significantly enhanced their achievements (Bransford et al., 2000, p. 5).

I began my teaching career as a reading teacher in 1972. In 1974, I was hired as a reading consultant for a rural northern Michigan school district. In this position I had the wonderful opportunity to take part in a yearlong development program for teachers of reading sponsored by the state of Michigan. This program, called The Right to Read, brought together reading consultants and teachers from across Michigan to work with leading researchers and practitioners of the reading process.

One of the first people who visited with our group had spent a great deal of his life working in adult literacy programs. As a young reading consultant, I had an interest in adult literacy and was looking forward to hearing about how to help adults learn to read. I was especially interested in discovering what specific reading techniques and materials I should use. My mind was filled with the teacher-centered questions that a young teacher working in 1974 often asked.

But instead of talking about strategies and materials, the speaker spent most of his time talking about the powerful changes that occur in families when the family leader transitions from being dependent on other family members for his or her literacy needs to no longer needing them. He talked about how important it was to teach families how to adjust to this new kind

of independence. I had never stopped to think that a good deed like bringing literacy to an adult could in fact have significant effects on the person's family members, some of which might be difficult to adjust to. This powerful lesson of how one person's desire for self-improvement can affect so many other people has remained etched in my memory. What I learned from this lesson I have ingrained in my teaching, and, whenever I think about changing my teaching methods, I know that I first need to consider the implications for my students and what help they might need to adjust to the changes.

When we consider changing our teaching, there are many questions we need to ask beyond the very important question, Does the new approach enhance students' learning? For example, when a teacher decides that he or she is going to begin using small groups, the teacher needs to consider how this change will affect the students. Questions such as the following all need to be answered if the group work is to be successful, regardless of what the research says about how group work can benefit learning:

- Do the students understand why I want them to learn in small groups?
- Do they know how to work together in small groups?
- Do they know how to communicate with each other without my guiding the interaction?
- Are they able to figure out on their own what roles each member is to play in the group?

Learning how to help our students adjust to the changes that a learner-centered teaching approach requires of them is the central purpose of this book. As faculty members who have adopted a learner-centered approach to teaching, we must be willing to help our students become successful learners in a learner-centered environment. For most of our students, this learner-centered environment will be a significant departure from their earlier learning experiences, and they will not be able to adjust to it on their own. It will disrupt the expectations of schooling that have become hard-wired in their brains over the previous 12–16 years. It will change their responsibilities and their roles by asking them to take on many of the functions for which the teacher used to be responsible. These role changes will also represent more work for students.

In *Redesigning Higher Education* (1994), Gardiner points out “that if our students do not understand the learning process—the chief engine of education—they are not going to learn very much in our courses no matter what we do. One of the most valuable actions we could take to improve learning—and thus the productivity of both our students and our institutions—would be to teach our students how to learn.” Gardiner’s recommendation gains even more importance and greater validity in a learner-centered environment, where the traditional roles of students change dramatically. In this chapter and throughout this book, I detail the new learning roles and responsibilities that students face in a learner-centered classroom. I also describe specific ways that faculty can help students adjust to these new roles in which learning is more than listening to lectures, taking notes, and passing tests.

### Teaching Is Difficult Work

I wish to begin by acknowledging a simple fact: teaching is difficult work. It is especially difficult for higher education faculty, because so few of us have had any formal development in teaching practice. However, it is difficult for *all* educators, regardless of experience or training, because we have little control over many of the very important aspects of students’ lives that significantly affect their learning. For example, teachers have little control over the academic backgrounds their students bring to their courses, including the depth and breadth of their knowledge of the subject area, their critical-thinking skills, their ability to transfer knowledge from one context to another, and their abilities to organize information and study effectively. Additionally, teachers have little control over the social and emotional factors that affect students’ learning, such as students’ interest in a subject, their motivation for learning, their life goals, their family life, their personal health, and their finances. If this were not enough, a college professor teaching a three-credit course has only 1.7% of his or her students’ time each week in which to teach them the History of Western Civilization or the Principles of Macro Economics. Teaching is not just challenging; it is difficult.

Here is another simple fact: teachers can positively impact students’ learning, and highly skilled teachers can impact students’ learning to even greater extents (Berry, 2005, p. 290). Despite all of the potential factors that, on any given day, can negatively affect students’ learning, teachers who know how to create community, engage students actively in their learning, make