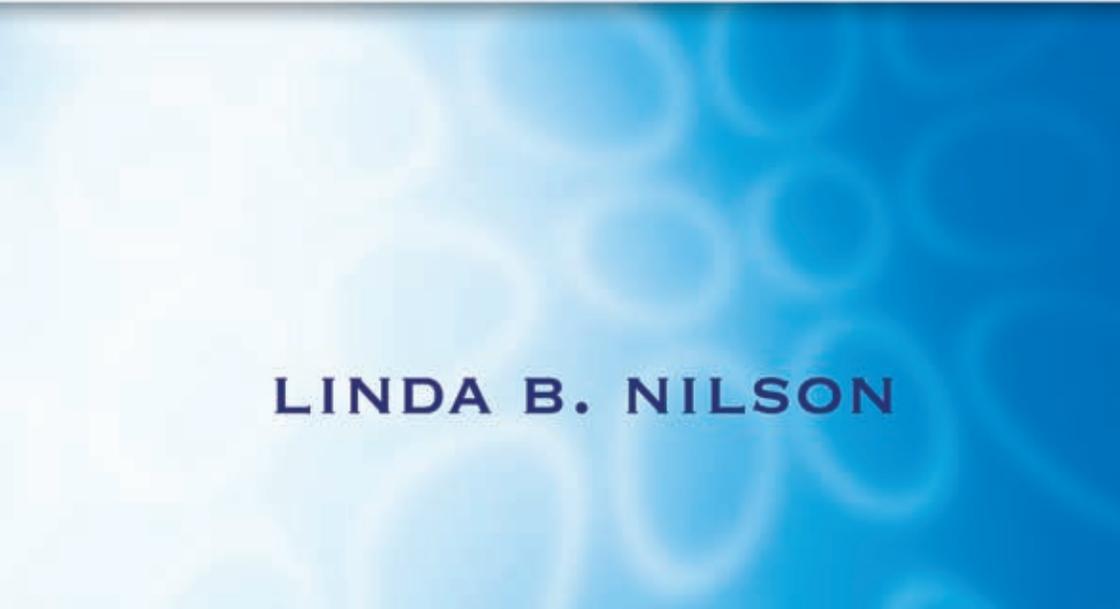# The Graphic Syllabus and the Outcomes Map

COMMUNICATING YOUR COURSE

LINDA B. NILSON

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Communicating Your Course

Linda B. Nilson

To my father,

Frank S. Burzotta,

who taught me the joys and benefits

of thinking visually.

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About the Author

Linda B. Nilson is founding director of the Office of Teaching Effectiveness and Innovation at Clemson University, where she also teaches a graduate course in college teaching. She is the author of *Teaching at Its Best: A Research-Based Resource for College Instructors* (Anker, 2003), now in its second edition, and the co-editor of *Enhancing Learning with Laptops in the Classroom* (Jossey-Bass, 2005). She is presently serving as associate editor of volumes 25 and 26 of *To Improve the Academy,* the major annual publication of the Professional and Organizational Development Network in Higher Education (POD). (She will serve as editor of volumes 27 and 28.)

Over the years, Dr. Nilson has written many journal articles and book chapters and has conducted national and international sessions and workshops on dozens of topics related to teaching effectiveness, assessment, classroom management, and scholarly productivity.

Before coming to Clemson, Dr. Nilson directed the Center for Teaching at Vanderbilt University. Prior to this, she directed the Teaching Development Program at the University of California–Riverside (UCR) and taught a very popular graduate seminar on college teaching. At UCR she developed the "disciplinary cluster" approach to training teaching assistants, which received coverage in *The Chronicle of Higher Education,* and exported the approach to Vanderbilt.

Dr. Nilson entered the area of instructional and faculty development in the late 1970s while she was on the sociology faculty at UCLA. After she distinguished herself as an excellent instructor, her department selected her to establish and supervise its teaching assistant training program. As a sociologist, she published in the areas of occupations and work, social stratification, political sociology, and disaster behavior.

Dr. Nilson is active in several professional associations: on the regional level, the Southern Regional Faculty and Instructional Development Consortium; on the national level, the POD Network and Canada-based Society for Teaching and Learning in Higher Education; and on the international level, the annual Improving University Teaching Conference and the International Consortium for Educational Development.

A National Science Foundation Fellow, Dr. Nilson received her Ph.D. and M.S. degrees in sociology at the University of Wisconsin–Madison. She completed her undergraduate work in three years at the University of California–Berkeley, where she was elected to Phi Beta Kappa.

Preface

This book has been more than 25 years in the making. I first conceived of hand-drawing a flowchart of my course organization around 1980, but I didn't dare share the idea with a colleague. At the time, I was working at a Research I university, a place where faculty didn't talk about teaching and frankly didn't care what their colleagues did or didn't do in their classes. It took many years for the academic teaching ethos to start changing. Even in the early 1990s, it was still not completely acceptable for tenure-track faculty in research universities to discuss their teaching challenges or innovations. But in 1994, several years after I had started directing teaching centers, I finally sufficiently trusted someone with whom I could share my graphic syllabus idea. That person was Dr. A. Darlene Panvini, currently an associate professor of biology at Belmont University, who was then my assistant director of the Center for Teaching at Vanderbilt University. Not only did she instantly grasp the benefits of the graphic syllabus, but she went right to the task of designing one for her freshman seminar, Conservation Ecology. (Her creation is Figure 3.19 in this book.) She is the first person recognized in the Acknowledgments because her enthusiastic support gave me the courage to share the idea again and deepened my scholarly interest in visuals as teaching tools.

One reason to look to graphics to enhance student learning is that text, even though it remains the academic medium of choice, has had mixed success in motivating student interest and teaching concepts and relationships. Text worked quite well back when we used college as a social sifting and sorting mechanism; the students who survived were created in our image and knew how to learn from text. But text began to falter as soon as we started using college to educate the broader society. To add to the challenge, each successive student generation came to us having been raised with more and more captivating visual media, such as large-screen television, special-effects movies, surrealistic video games, and an increasingly animated web. By now, these media have supplanted the book as a major form of entertainment and as the predominant K–12 instructional tool. Chapter 1 in this book details the limitations of text in today's college population and argues for a change of media.

After I became interested in using graphics as teaching tools, I soon discovered that a cadre of psychologists trained in cognition and learning had already published a convincing body of research that supported the superi-

ority of visuals for knowledge processing and memory. Chapter 2 summarizes this literature, making a strong case in favor of using visuals to enhance student learning.

If this work was so new to me, how familiar could it be to other faculty developers and faculty outside of psychology? Besides, haven't we Homo sapiens always depended more on our sight for survival than on any other sense? We certainly wouldn't have made it on our limited olfactory and auditory sensitivities, as most other mammals did. Perhaps our heavily literate culture will prove to be a short-term detour in the grander history of humankind.

Chapters 3 and 4 are largely devoted to showcasing model graphic syllabi and outcomes maps and recommending ways for you, the reader, to create these graphics yourself. Among the how-to suggestions on designing a graphic syllabus in Chapter 3 are five types of course organization that are relatively easy to represent visually, along with graphic syllabus examples. The how-to for an outcomes map simply extends the recommended way to design a course, which is around student learning objectives. A comprehensive list of objectives for a given course will include some that should be met early in the term, others to be met at various times in the middle, and the most complex ones to be achieved at the end. No doubt a few of the earlier objectives are designed to prepare students to tackle later ones. So why not sequence and flowchart all the objectives so students can see, in advance and as they progress, the process of their learning? Maybe then they will realize why they should bother to learn A, B, and C when all they are truly interested in is mastering X, Y, and Z.

Not surprisingly, these graphics enhance course organization, and Chapter 5 demonstrates how they uncover gaps, sequencing errors, tangential topics, and a general lack of flow in the ordering of course topics and learning objectives. A topical organization and a course design that are cohesive, logically constructed, and transparent *even to students* are likely to result in greater student learning, if for no other reason than that the students will find in these an accurate, ready-made structure for them to process, organize, and store the course material. Our minds retain only what they can file in a mental structure, and nothing provides structure like a memorable visual.

Appendix A features more than two dozen memorable graphic syllabi for an array of disciplines. The variety, creativity, and amount of knowledge available just for the looking are astounding. This is the most entertaining (and hopefully inspiring) part of the book. Information on affordable software for electronically creating graphic syllabi and outcomes maps is provided in Appendix B.

Reading this book requires that you engage both hemispheres of your brain. May you find it a refreshing and relaxing mental workout! If you are motivated to try your creative hand at a graphic syllabus or outcomes map, I would delight in your sharing the results with me.

Linda B. Nilson
Clemson, South Carolina
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Acknowledgments

It takes a village to write a book, even one that is single-authored. Some very generous and creative people have inhabited my village, and quite a few of them made meaningful contributions to the book. My gratitude goes first to Dr. A. Darlene Panvini, who was the first person with whom I shared the idea of the graphic syllabus while we both worked at the Center for Teaching at Vanderbilt University. She loved it and used it. Had she reacted tepidly, I would have put the idea back in the closet, where it had already spent 15 years, and there would be no book.

Thanks also to Dr. Patricia Connor-Greene, professor of psychology at Clemson University and the second person I confided in about the graphic syllabus idea. She was so encouraging that I got the nerve to start sharing it in workshops for the Clemson faculty and my colleagues at conferences. During one such workshop at the 2001 conference of the Society for Teaching and Learning in Higher Education in Newfoundland, I met Dr. Ernest Biktimirov, associate professor of finance at Brock University in Canada, who appreciated the graphic syllabus and other uses of visuals in teaching. We went on to coauthor three articles, disseminating our ideas in the field of finance. I thank him for being the finest possible collaborator.

Other individuals to whom I owe gratitude for their enthusiastic support are Dr. Cynthia Desrochers, my counterpart at California State University–Northridge, who so supported the graphic syllabus idea that she conducted workshops for her own faculty; Dr. Teresa Dawson and Dr. Martin Wall from the University of Victoria, who graciously went out of their way to collect graphic syllabi for me from their Canadian colleagues; Robert Littleson, lecturer in accountancy at Clemson, who wholeheartedly embraced the use of graphics in his teaching; Jennifer Russell at the Academy of Art University in San Francisco, who also provided contact help; and three dear colleagues—Dr. Kate Brinko at Appalachian State University, Dr. Andre Obérlé at the University of Scranton, and Dr. Barbara Millis at the University of Nevada–Reno—who invited me to facilitate graphic syllabus workshops with their faculty.

Over the years I was encouraged by many faculty and graduate students at Clemson and throughout the United States and Canada—and even a few from places as far away as Australia. Some of them shared with me their final graphic syllabi and outcomes maps and granted me permission to showcase

them in this book. The graduate students in my fall 2006 College Teaching class—Irem Arsal, Uzay Damali, Pamela Galluch, Leslie Moreland, Samuel Otim, Mohammed Raja, Nicholas Roberts, and Jeff Shockley—submitted the highest quality graphics I had ever received from students in that course and gave me permission to display their fine work here. All of these creative people made this book possible and its graphics inspiring.

Special thanks are due to those who believed in the idea of my writing this book: Dr. Desrochers, Dr. Connor-Greene, and Mr. Littleson, who positively reviewed my book proposal, and Jim Anker, president of Anker Publishing, who nodded his approval with a book contract. My husband Greg supported my efforts every day, encouraging my writing, celebrating my progress with me, and never complaining about my longer work hours.

Finally, I thank my father, Frank S. Burzotta, to whom I have dedicated this book. A commercial artist with a deep appreciation for the visual arts, he taught me to draw as soon as I could control a crayon and started taking me to art museums when I was by far the youngest person in the building. He refined my artistic judgment and cultivated in me a visual way of thinking that I used throughout my schooling to help me understand and retain what I was learning in almost every discipline. This turned out to be a strategy well worth sharing.

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The Limits of a Text Syllabus

By tradition, a syllabus is a text document. Over the years it has grown from a compact one- to two-page schedule of course topics, assignments, and tests to a five-page, ten-page, or longer laundry list of information required by institutions (e.g., Americans with Disabilities Act accommodations and academic integrity policies), some accrediting agencies (e.g., student learning objectives/outcomes), departments (e.g., number of office hours), and students themselves (e.g., policies regarding grading, attendance, tardiness, participation, late homework and papers, makeup tests, and the number of minutes to wait for a late instructor). The syllabus checklist shown in Figure 1.1 lists the *basic* information that should appear in a syllabus.

In response to the current litigious trend, some instructors have started putting a scheduling disclaimer at the end of the document. This provides them with some flexibility to adjust course activities to the students' background and progress and make allowances for illness, weather, power disruptions, and the like. Item #44 on the syllabus checklist provides the following legal caveat/disclaimer: "The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better student learning."

In the same spirit, I recommend inserting an additional caveat/disclaimer after a list of student learning objectives/outcomes, as discussed in item #18 in the syllabus checklist:

> Students may vary in their competency levels on these abilities. You can expect to acquire these abilities only if you honor all course policies, attend classes regularly, complete all assigned work in good faith and on time, and meet all other course expectations of you as a student.

It is probably just a matter of time before some student initiates a lawsuit because, for whatever reason, he or she hasn't achieved the promised outcomes.

Figure 1.1

Syllabus Checklist

Basic Course Information

1. Course number, title, and credit hours

2. Classroom number and building

3. Days and hours of class meetings

4. URL of the course's web site

5. Required or recommended prerequisites, including permission of instructor

6. Breadth or major requirements the course fulfills

Section and Extra Sessions Information

7. Required or optional discussion sections or labs, with section/lab numbers

8. Name of teaching assistant

9. Classroom/lab room number and building

10. Days and hours

Information About Yourself

11. Your name and title (so students know how to address you)

12. Your office location, office phone, email address, and office hours

13. Your home phone and calling restrictions, such as "call before 10:00 p.m." (optional)

14. Relevant professional information about you, such as degrees and universities, teaching experience, research areas, other universities where you've worked, and relevant nonacademic experience

Information About Course Support Staff (teaching assistants, technicians)

15. For each staff member: office location, office phone, email address, and office hours

16. For each staff member: home phone and home phone restrictions (or have your teaching assistants develop their own syllabi)

Information About Course Coverage and Objectives

17. Course description, including "popular" topics the course does not cover

18. Your ultimate student learning objectives/outcomes—that is, what students will be able to do by the end of the course—as well as your major mediating objectives/outcomes. Add these caveats/disclaimers: "Students may vary in their competency levels on these abilities. You can expect to acquire these abilities only if

you honor all course policies, attend classes regularly, complete all assigned work in good faith and on time, and meet all other course expectations of you as a student."

Information on the Readings

19. Required and recommended books, articles, and the like with complete citations (author/editor, title, date, edition, publisher, journal, etc.), as well as price and where available

20. Existence of a course pack and where to purchase it

21. Why you chose the readings, at least the required ones

22. Where to find readings on reserve

23. Whether/where commercial lecture notes are available and how helpful they may be

Other Required Course Materials

24. Any required materials such as software, special calculators, cleaning supplies, safety equipment or clothes, art supplies, photography supplies, paper

25. Where to find/purchase them

26. Approximate costs

27. When they will be needed

Course Requirements and Grading Standards

28. Grading system (percentages, points, curve, etc.)

29. Graded course requirements:

    - How many of what types of assignments
    - Number and types of quizzes and examinations
    - Group component of individuals' grades, including peer evaluation procedures
    - Electronic communication
    - Class participation
    - Lab and discussion section assignments

30. General standards/rubric by which you will grade papers, problem solutions, other written work, electronic communication, and in-class participation (details come later)

31. Study and assignment aids to be distributed, such as study guides, review questions, directions for writing papers, lists of possible paper/project topics

32. Percentage of the course grade (and/or number of points) for each course component