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Topics in Computer-Based Reading and Writing

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In the Department of Reading Education at the University of Georgia, each faculty member is encouraged to develop an elective graduate course that most closely reflects his or her professional interests and expertise related to literacy. *Topics in Computer-Based Reading and Writing*, the course that I describe here and that I proposed and first taught in 1991, was my response to that customary encouragement. It reflects my primary professional interest in technology, particularly computer technology and digital texts, and how it is effecting changes in our conceptions and use of literacy.

The course compliments another older Departmental course offering related to literacy and technology: *Computer-Based Instruction in Reading Education* (see Labbo & Reinking, this volume). That course was developed in the early 1980s by George Mason, perhaps the most widely known scholar interested in computers and reading during most of the 1980s. When I arrived at UGA in 1985 as an assistant professor, George graciously shared the teaching of alternative sections of the course with me because of my own interests in technology. Reflecting George's primary interests, the course focused on the use of software in the teaching and promotion of reading in K-12 classrooms. After George's retirement in 1990, I continued to teach the course with that focus. More recently, my colleague, Linda Labbo, who is quickly emerging as a recognized scholar in technology and early literacy, and I have team taught a section of the course, and as of this writing Linda has taught it once on her own. I also wish to acknowledge the influence of her research and theoretical perspectives on my teaching of the "Topics" course I focus on here.

Although I have always enjoyed teaching the established course focusing on classroom applications of technology, it did not really allow for a full consideration of the larger issues in which I was also interested. For example, exactly what is the relation between technology and literacy? Are there fundamentally unique characteristics of electronic, digital texts? If so, what are they and how do these characteristics compare to conventional printed texts? What are the implications for literacy theory and research, broadly speaking? Is it possible that computer-based reading and writing may change in some fundamental sense how we conceptualize literacy? May it change what we teach under the head of literacy instruction and how think about teaching it? These are more basic, abstract, forward thinking questions more directly related to theory and research than to day-to-day considerations of using computers in classrooms. *Topics in ComputerBased Reading and Writing*, the course I proposed in 1991 and describe here, allows me and my students to explore such questions.

The course, like many upper-level electives in our Department, is usually taught one quarter (soon to be semester) every other year. A typical section has 10 to 20 students, approximately half who are in a master's or specialist program and half who are in a doctoral program. The students typically come from programs in Reading, Language Education, Instructional Technology, and Elementary Education, not coincidentally because these are the departments to which I send announcements about the course in the quarter before it will be offered. Typically, several of the students have previously taken the older course focusing on classroom applications. Some of the master's in Reading Education have chosen a specialization in the area of technology and literacy, and some of the doctoral students plan dissertations in this area.

There are several challenges I face in planning and implementing this course, and I will highlight a few here. A practical problem has been making students and their advisors aware of the distinction between the course and the established, related technology course. Invariably some students show up the first day of class expecting a hands-on computer course where they will have an opportunity to explore software they might use in their elementary school classrooms. So, the syllabus tries to make this distinction clear. Interestingly, in all but one case, after I go through the syllabus and explain the focus of the course, students who enrolled with the wrong expectations stay instead of dropping the course. This trend and the lively discussions that are typical during the course itself suggest to me that the content is inherently interesting, and relevant, to even more practice-oriented students.

Another problem has been focusing on the concept of hypertext in the course. Hypertext is a useful focal point for the course content because it raises a number of critical questions and issues. For example, the Bolter book (1991) that is required reading for the course focuses on hypertext to raise larger issues. Additionally, all students are required to learn to use Storyspace, a utility software program that enables them to create hypertext documents to complete other course requirements.

However, despite my pointed explanations that hypertext is only an example, many students see the course as promoting hypertexts over printed texts. Some enjoy being involved in a new form of reading and writing, but others seem distracted by a need to defend printed texts as superior, a position that is reinforced by some glitches and difficulties in using Storyspace. I also require students to become involved in small group discussions over email, which has been problematic for some of them.

Perhaps the greatest challenge though is the inherent difficulty in coming to terms with rapidly changing technologies for reading and writing and their increasing use in an ever widening circle of daily events. But, that is not just a problem that must be dealt with in creating the syllabus, it is the justification for the course itself.

Sample Syllabus
Topics in ComputerBased Reading and Writing

Course Description

Catalog Description

Research and theory related to computerbased written discourse. Compares electronic and printed texts, addressing implications for reading and writing texts, for developing literacy, and for conducting research.

Further Description and Disclaimer

This course focuses on the consequences of the increasing shift from printed to electronic forms of reading and writing. That is, how is literacy changing when we depend increasingly on electronic forms of reading and writing, and what are the implications of the move away from printed materials? The course is designed to address such questions broadly from various perspectives. Classroom instruction, specifically instruction aimed at enhancing literacy, is a dimension of this focus. However, this course is not designed to familiarize teachers with available technology and commercial software that can be used for instruction. Students whose primary interests are related to discovering uses for the computer in teaching reading or writing should consider enrolling in the course ERD 711, Computer-Based Instruction in Reading Education. Occasionally, software will be demonstrated in this course and students will have an opportunity to use computers, but these occasions are aimed at providing examples that lay the ground work for discussing issues and clarifying concepts. That said, it is likely that teachers who take this course will develop a different perspective on the role that technology may play in instruction, which may be quite useful in guiding their use of computers in the classroom.

Required and Supplemental Readings

Required Reading

Bolter, J. D. (1991). *Writing space: The computer, hypertexts, and the history of writing*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Supplemental Readings

Supplemental readings are required to receive an *A* or *B* in this course. An annotated bibliography of suggested supplemental printed and electronic readings will be distributed during the first class. {Available to readers at the Web site accompanying this text.}

Computer Software

Bolter, J. D., Joyce, M., Smith, J. B., & Bernstein, M. (1993). *Storyspace*. {Computer program}. Cambridge, MA: Eastgate Systems.

Class Format

Class meetings will typically include the following activities: (a) small and whole group discussion of the weekly required reading in the Bolter text, (b) lecture/presentation/discussion on relevant topics selected by the instructor, (c) demonstration of computer application(s) related to activity *a* or *b*, and (d) independent time for computer work and/or consultations with instructor.

Course Requirements, Grading, and Evaluation

General requirements and conditions:

1. Provide full reference citations in APA style whenever possible.

2. Written work may be submitted via email.

3. No work for the present quarter's grade will be accepted after the date of the final exam.

4. Work submitted to satisfy requirements will be considered acceptable or unacceptable. Unacceptable work may be resubmitted for credit subject to item 3.

5. The instructor will offer to write a letter of recommendation/commendation for students who achieve a grade of *A* and whose performance in the course is especially meritorious.

6. The instructor will not assign a grade of incomplete. Under extraordinary circumstances where the instructor approves completion of some require-

ments after the completion of the course, a lower grade will be assigned and changed when the requirement has been successfully met.

(*Note*. Some course requirements outlined in the following sections are negotiable on an individual basis. That is, students who wish to propose comparable activities relevant to this course are encouraged to discuss their ideas individually with the instructor.)

Minimum requirements (successful completion of which will result in a *C* for the course):

1. Regular attendance and active participation in class activities. (Given that this class meets only once a week, no more than one class may be missed without affecting the final grade for the course.)

2. Weekly participation in an email discussion of the assigned reading in the Bolter text. The class will be divided into small groups for that purpose. Members of the group will take turns jump-starting the email discussion each week. Each week, the assigned reading in Bolter must be read no later than the Monday morning of the week it is due. Small group email discussions will occur from Monday through Thursday of each week culminating in a class discussion. In class, the leaders of each email discussion group will rotate to another small group to summarize the discussion of their respective groups.

3. Submit a two- to three-page, typed reaction to class discussion and activities each week. Written reactions to one class period are due by the subsequent class period. Reactions may be submitted to the instructor via email.

Requirements for a *B*:

1. Satisfy items 1 and 2 under minimum requirements. Completion of item 3 in the minimum requirements is not necessary for those seeking a *B*.

2. Write a two- to three-page reaction to 10 supplemental readings (from at least 5 different sources). At least half of the reactions must be submitted by the fifth class meeting. Supplemental readings not on the suggested list distributed in class or mentioned by the instructor are acceptable but must be approved in advance.

3. Complete *one* of the following:

a. a take-home final consisting of short answer and essay questions related to the content of this course. *OR*

b. write a 10- to 20-page paper speculating on the nature of literacy in 20 years.

Requirements for an *A*:

1. Satisfy items 1 and 2 under minimum requirements. Completion of item 3 in the minimum requirements is not necessary for those seeking an *A*.

2. Create a hypertext comprised of one's own prose and existing texts (e.g., the required text, supplemental readings, etc.). The hypertext may also be expanded to include audio and visual elements (thus becoming a hypermedia application) for those who have, or who are inclined to develop, the expertise to do so. To complete this task, students must learn to use *Storyspace*, a word processing program designed to create hypertexts, or they must use some other application that allows them to create a hypertext document. The *Storyspace* application is available for the Macintosh and MS DOS platforms, although the MS DOS version has proved to be far inferior and more frustrating than the Mac version. The goal of the final hypertext document is to reflect the student's engagement with the issues central to this course (as described in the previous section entitled "Course Description" at the levels of learning that Bloom has described as analysis and synthesis.

3. Keep a log describing progress in the developing the hypertext and reflecting on the process of creating it. (Parts of the log may find its way into the hypertext, too.)

4. Complete an electronic take-home final. That task will require that students elaborate on a hypertext dealing with the content of the course and developed by the instructor. In other words, students will add texts and links that merge with the instructor's hypertext perhaps using existing texts from the students' own hypertexts. It is anticipated that the richer and more extensive the effort to complete requirement Number two, the easier this task will be.

(*Note*: Students will be asked to declare the grade they are seeking no later than the third class meeting. After that time students may later opt for a lower grade but not for a higher grade.)

Tentative Class Schedule, Topics, and Assigned Readings

Class 1	Course introduction, introduction to hypertext, demonstration of *Storyspace*
Class 2	Transformations of text, theoretical perspectives and issues, are we moving to a posttypographic era? What does that mean? Historical perspectives?
Class 3	Must declare grade sought for course, transformations of reading and writing, what are the implications of new forms of reading and writing
Class 4	Transformations of literacy in classrooms and schools, what are the implications of digital reading and writing on the way classrooms and schools deal with literacy?
Class 5	Transformations of teaching and learning, what are the implications of digital reading and writing on the conduct of teaching and learning in classrooms?
Class 6	Transformations of society, what are the implications of an increased use of digital reading and writing on societal issues such as copyright, intellectual property and plagiarism?

Class 7	Transformations of mind, what are the cognitive effects of literacy and how might they change in a posttypographic world?
Class 8	Transformations of literacy research, how might electronic texts effect changes in the agenda of literacy researchers?
Class 9	Summary, reflections, and the future of literacy in a posttypographic era
Class 10	Jay Bolter visits class to respond to your questions and comments
Class 11	Final and all written work due