

# An Authentically Simulated Approach to Disciplinary Literacy Instruction In a Study Strategies Course

**SONYA L. ARMSTRONG**  
NORTHERN ILLINOIS UNIVERSITY

**RITA REYNOLDS**  
NORTHERN ILLINOIS UNIVERSITY

*This manuscript describes a first-year college study strategies course designed to introduce students to literacy practices typical in academic settings. Given constraints imposed by institutional requirements on students' schedules during their first year, an authentic course pairing with a content area course is rarely possible; therefore, the study strategies course described in this manuscript is intended as a possible alternative by providing authentically simulated instruction in three disciplines (biology, psychology, and history).*

Scholars have increasingly added to the body of literature on disciplinary literacy practices (Hynd, 1999; Hynd, Holschuh, & Hubbard, 2004; Shanahan & Shanahan, 2008). Within this larger body of scholarship, much work has been focused on the field of postsecondary transitional (see Author, 2010 for a discussion of this term) or developmental literacy (Briscoe & LeMaster, 1991; Chase, Gibson, & Carson, 1994; Holschuh, 2003; Nist & Simpson, 2000; Simpson & Nist, 1997). Despite this emphasis on the discipline-specific nature of academic literacy practices within the scholarship, a significant divide remains between what is endorsed in the theoretical literature and what occurs in practice in developmental reading and study strategies classrooms. Notably, many study strategies courses continue to have as their curricular focus a very limiting emphasis on generic strategies or a one-size-fits-all approach (Reynolds & Werner, 2003).

In effective reading and study strategy classrooms, strategy-focused instruction moves beyond the confines of basic procedural aspects of strategic reading and studying (for example, identifying the various steps involved in SQ3R) and delves into issues of

metacognition and self-monitoring (Simpson & Nist, 2002). What is often lacking has to do with the conditional knowledge (that is, when to use a particular strategy and why) needed for active, effective use of these strategies within authentic academic learning situations (Simpson, Stahl, & Francis, 2004). Within the field of transitional literacy, many have called for a more comprehensive approach to reading and study strategies instruction that emphasizes issues of strategy transfer across disciplines (Simpson & Nist, 2002; Simpson, Stahl, & Francis, 2004). In spite of the urgings of these scholars, discipline-specific literacy practices are typically not taught—at least not explicitly—in most high school or college settings. Beginning college students, being in the midst of a literacy transition, need opportunities for explicit discussion of when, where, and under what conditions particular reading and learning strategies ought to be employed.

Some have argued that an ideal situation for providing students with explicit instruction on disciplinary literacy practices would involve pairing a reading or study strategies course with a single content course, such as an introductory psychology or humanities course. (Commander & Smith, 2003; Hodges & Agee, 2009; Johnson & Carpenter, 2000). However, this is not always possible, especially for first-year students enrolled in developmental courses and programs. This manuscript describes such a situation and outlines one possible alternative: an authentically simulated approach. In the next section, we begin by explaining the context and need for the development of such an alternative approach. Next, the overall structure of the course is explained, followed by a description of the types of assignments and assessments included in the course.

### **The Need for an Authentically Simulated Approach**

While an authentic pairing is desirable, many practical and often institution-specific barriers make scheduling such pairings unlikely or impossible for students enrolled in developmental courses and programs. For example, at Northern Illinois University, students gaining alternative admission through the CHANCE (Counseling, Help, and Assistance Necessary for a College Education) program are usually enrolled in a full load of developmental courses for the first year of their academic

careers. Their exact course schedules depend on the outcomes of departmental placement measures, but generally, first-semester students are enrolled in an English composition, a reading or study strategies, a mathematics, and a communications course. This means that very few are enrolled concurrently in a literacy-based study strategies course and a content area course, making an authentic pairing for purposes of disciplinary literacy instruction impossible. Despite these constraints, a need remains for a course that provides students with practice and experiences using study strategies within authentic academic situations, specifically, introductory-level general education courses like those students will be taking following their work in transitional literacy.

In the absence of an authentic course pairing, an alternative was developed by providing authentically simulated instruction in three disciplines. That is, students read and practice strategy applications on whole chapters from actual introductory-level biology, psychology, and history textbooks with the goal of taking discipline-specific exams on the material in these chapters; however, because this authentic reading, strategy-application, and exam-taking occur within the context of a study strategies course, an element of simulation is still involved (hence the term authentically simulated). The purpose of this course is to facilitate the transition to typical college-level literacy practices across the disciplines. The course focuses heavily on procedural, metacognitive, and conditional aspects of strategy usage (Nist & Simpson, 2000; Simpson, Stahl, & Francis, 2004).

The next section will describe the overall structure of the course, followed by a discussion of the specifics of the course, including the assignments and assessments.

### **Overall Structure of the Course**

The course is structured as five modules (see Kellner & Paulson, 2006, for a similar modules-based study strategies course) with each module focusing on a different learning context or situation. The first module is situated within students' most immediate course context, the study strategies course. In this module, students are introduced to a variety of reading and study strategies with an emphasis on the cognitive and metacognitive

processes underlying the strategies. The first module is followed by three discipline-specific modules: one for biology, one for psychology, and one for history. In these modules, students are reading authentic textbook chapters typical of these courses and are taking authentic exams created by experts within the respective disciplines. The final module is a self-selected academic context, which allows students to practice the concept of transfer by identifying some current or future course situation and anticipating and designing strategies appropriate for that situation (see also Kellner & Paulson, 2006).

### Course Text

The course textbook is a custom text which is divided into two main sections (a study strategies instruction section and a content-area section). The first section contains individual chapters from several well-respected and often-used study strategies textbooks (Carter, Bishop, & Kravits, 2007; Hazard & Nadeau, 2009; Sellers, Dochen, & Hodges, 2005) on topics such as learning and knowledge, metacognition, textbook-studying, and listening. The second section contains individual chapters from typical introductory-level textbooks in biology (Campbell, Reece, Taylor, Simon, & Dickey, 2009), psychology (Ciccarelli & White, 2009), and history (Goldfield, Abbott, Anderson, Argersinger, Argersinger, Barney, & Weir, 2008).

During the first module, students read and practice strategy use on the chapters from the first section of the textbook. In this way, students are both reading about and applying reading and study strategies. Then, students read and practice strategies on the biology chapter for Module 2, the psychology chapter for Module 3, and finally, the history chapter for Module 4. The final module does not involve any textbook readings.

**Module 1.** The first module is an overview of various types of strategies and is set within the context of the immediate study strategies course; that is, students practice applying various strategies to the required course readings from the first section of the course textbook. During this first module, students are introduced to an overview of the theoretical aspects of reading and study strategies, including metacognition and schema. In addition,

the first module offers an overview of the types of strategies students will be practicing throughout the semester (e.g., active reading, note-taking, rehearsal, test-preparation, and vocabulary-development).

**Modules 2-4.** The next three modules provide opportunities for students to experiment with the types of literacy practices used in particular academic disciplines (biology, psychology, and history). Each of these modules is set within the context of a simulated introductory-level content area learning situation, thereby helping students to prepare for courses in those disciplines. During each module, instructors model and students practice previewing textbook chapter readings. The modules begin with a close-analysis of a representative introductory-level course syllabus from that discipline, followed by application of vocabulary-development strategies, active reading strategies, note-taking strategies, written rehearsal, or test-preparation strategies within the given discipline. These modules are set up so that students will read a representative chapter from an actual college-level textbook (one chapter for each discipline) three times, each time practicing different strategies discussed and modeled in class. Each of these modules concludes with an examination on the material in that module's content area chapter. Because all examinations are designed by a member of the respective academic department and are in formats representative of those disciplines, students are able to experience the types of test situations they will encounter in their next-level courses.

The activities and tasks students are assigned in each of the modules are intentionally designed to simulate similar situations within these content areas. This not only provides students with an introduction to disciplinary literacy differences, but it also enables students to learn how, when, and why to transfer, adapt, or modify strategies. Students first learn about the strategy, then they practice the strategy with a specific purpose while reading their assigned textbook chapter, and finally they do a self-reflection and self-evaluation on their use of the strategy.

**Module 5.** The fifth module is the culmination of everything the students learn in this course. After trying out a wide variety of strategies all semester, students are asked to design their own

strategy and explain how, when, where, and why to use it (see also Kellner & Paulson, 2006). This is their opportunity to create a strategy of their own and to explain their rationale for the use of this strategy in an academic situation of their choice. In this module, students teach their colleagues about their self-designed strategy and write a paper explaining their process and decision-making while creating the strategy.

### Assignments and Assessments

Within each of the first four modules, students are asked to apply various types of strategies, including course analysis, vocabulary development, active reading, note-taking, and written rehearsal or test-preparation in the context of a particular reading and learning situation.

**Course analysis applications.** The purpose of the first strategy application is to provide students with practice "reading" various types of syllabi. In the first module, the course syllabus for the study strategies course is analyzed in a brief essay. For Modules 2, 3, and 4, actual course syllabi from representative content-area courses are reviewed and analyzed. This application emphasizes the importance of a course syllabus in general, but also demonstrates for students how to use a syllabus as a tool for success in their other courses. It also provides some experience reading syllabi across disciplines and asks students to infer from each syllabi what the individual course/professor values.

**Active reading applications.** Several active reading strategies (e.g., SQ3R, text annotation, comprehension monitoring) are introduced in class and modeled for students over the course of the semester. Students are asked to choose one and apply it to the assigned reading for each module. Following this strategy application, students reflect on their experience with the strategy in that module's particular learning context. This reflection allows students to determine whether the strategy is appropriate for texts typically associated with that discipline, and whether all, part, or none of the process is something they might use again or adapt for another context.

**Note-taking applications.** Students learn about a variety of note-taking strategies (e.g., Cornell, the outline method, the

charting method, split-page notes, T-notes, and formal sentence outlines) and, again, are asked to apply one note-taking strategy to each module's reading before reflecting on their experience. Although issues specific to note-taking during class discussions and lectures are introduced, the focus of the applications is on taking notes while reading a course text.

**Written rehearsal/test-preparation applications.** Several rehearsal strategies are introduced in the class with the emphasis on written, rather than oral, rehearsal strategies (e.g., concept cards, concept maps, charting, question/answer strategy and timelines). In addition test-preparation strategies, including basic testwiseness, and creating a study guide, are discussed and practiced.

**Strategy-mastery assessments.** At the conclusion of each of the first four modules, students demonstrate their mastery of the strategy practice by taking an examination on the material within the textbook reading associated with that module. The first strategy-mastery assessment is a concept-based exam that allows students to demonstrate their understanding of major concepts from their study strategies reading (e.g., metacognition, schema, and Bloom's Taxonomy). The discipline-specific examinations for Modules 2, 3, and 4 are designed by the specific departments and are reflective of the exam format often associated with that discipline (i.e., the biology exam is objective; the psychology exam is mixed format; and the history exam is essay-based). This provides additional authenticity to the structure and content of the exam, and also familiarizes students with what will be expected from them in an actual biology/psychology/history class.

### Conclusion

Although a simultaneous, authentic pairing between a study strategies course and an introductory-level content area course may be preferable, it is not always a realistic or practical possibility for first-year students enrolled in multiple developmental courses. However, as isolated, one-size-fits-all, or generic study strategies are shown to be ineffective for students (Reynolds & Werner, 2003), a situated approach that allows students to explore reading and study strategies within particular academic learning contexts



is essential. The course presented in this manuscript is one possibility for circumventing practical issues of scheduling while still maintaining an emphasis on the disciplinary nature of reading and study practices through an authentically simulated approach.

## References

- Briscoe, C., & LeMaster, S.U. (1991). Meaningful learning in college biology through concept mapping. *American Biology Teacher*, 53, 214-219.
- Campbell, N.A., Reece, J.B., Taylor, M.R., Simon, E.J., & Dickey, J.L. (2009). *Biology: Concepts and connections* (6th ed.). Benjamin Cummings: Menlo Park, CA.
- Carter, C., Bishop, J., & Kravits, S.L. (2007). *Keys to college studying: Becoming an active thinker* (2nd ed.). Pearson/Prentice Hall: Upper Saddle River, NJ.
- Chase, N.D., Gibson, S.U., & Carson, J.G. (1994). An examination of reading demands across four college courses. *Journal of Developmental Education*, 18, 10-16.
- Ciccarelli, S.K. & White, J.N. (2009). *Psychology* (2nd ed.). Pearson/Prentice Hall: Upper Saddle River, NJ.
- Commander, N.E. & Smith, B.D. (2003). Developing adjunct reading and learning courses that work. In N.A. Stahl, & H. Boylan (Eds.). *Teaching developmental reading: Historical, theoretical, and practical background readings* (95-109). Boston: Bedford/St. Martin's.
- Goldfield, D., Anderson, V.D., Weir, R., Abbott, R.E., Argersinger, J.E., Argersinger, P.H., & Barney, W. (2008). *The American journey* (Concise Edition, Combined Volume). Pearson/Prentice Hall: Upper Saddle River, NJ.
- Hazard, L.L. & Nadeau, J. (2009). *Foundations for learning*. Pearson/Prentice Hall: Upper Saddle River, NJ.
- Hodges, R. & Agee, K.S. (2009). Program management. In R. F. Flippo & D.C. Caverly (Eds.), *Handbook of college reading and study strategy research* (2nd ed.) (351-378). New York: Routledge.
- Holschuh, J.P. (2003). Do as I say, not as I do: High, average, and low-performing students' strategy use in biology. In N.A. Stahl, & H. Boylan (Eds.). *Teaching developmental reading: Historical, theoretical, and practical background readings* (316-329). Boston: Bedford/St. Martin's.
- Hynd, C. R. (1999). Teaching students to think critically using multiple texts in history. *Journal of Adolescent and Adult Literacy*, 42(6), 428-436.

- Hynd Shanahan, C., Holschuh, J. P., & Hubbard, B. (2004). Thinking like a historian: College students' reading of multiple historical documents. *Journal of Literacy Research*, 36(2), 141-176.
- Johnson, L.L., & Carpenter, K. (2000). College reading programs. In R. F. Flippo & D.C. Caverly (Eds.), *Handbook of college reading and study strategy research* (321-363). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kellner, D. & Paulson, E. J. (2006). Reading academic textbooks: A "multiple-paired" reading course. *Innovative Learning Strategies*, 18, 2-10.
- Nist, S.L. & Simpson, M.L. (2000). College studying. In M.L. Kamil, P.B. Mosenthal, P. D. Pearson, and R. Barr (Eds.), *Handbook of reading research* 3, (645-666). Mahwah, NJ: Lawrence Erlbaum.
- Reynolds, J. & Werner, S.C. (2003). An alternative paradigm for college reading and study skills courses. In N.A. Stahl, & H. Boylan (Eds.). *Teaching developmental reading: Historical, theoretical, and practical background readings* (86-95). Boston: Bedford/St. Martin's.
- Sellers, D., Dochen, C.W., & Hodges, R. (2005). *Academic transformation: The road to college success*. Pearson/Prentice Hall: Upper Saddle River, NJ.
- Shanahan, T. & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78 (1), 40-59.
- Simpson, M.L. & Nist, S.L. (1997). Perspectives on learning history: A case study. *Journal of Literacy Research*, 29, 363-395.
- Simpson, M.L. & Nist, S.L. (2002). Encouraging active reading at the college level. In C. Collins Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (365-377). New York: Guilford Press.
- Simpson, M. L., Stahl, N. A., & Francis, M. A. (2004). Reading and learning strategies: Recommendations for the 21st century. *Journal of Developmental Education*, 28(20), 2-15.

---

Dr. Sonya L. Armstrong is assistant professor of postsecondary literacy and director of the College Learning Enhancement Program at Northern Illinois University.

Rita Reynolds is a doctoral student at Northern Illinois University.