

Increasing college retention with a personalized system of instruction: a case study

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ABSTRACT

This case study addresses the exigence of low retention and graduation rates of college students. The authors sought to incorporate the perspectives of all three stakeholders implicated in retention efforts—administrators, faculty, and students—by implementing a personalized system of instruction (PSI) in eight of their college courses. This case study reports on two of the courses in which PSI was implemented—Rhetorical Theory and Public Speaking. In the PSI courses, students were asked to engage individually in reading, writing, discussing, and applying the concepts of the course in a self-paced, self-directed format. The case study explains the format of the courses and provides sample study-guide concepts, quiz questions, think-piece questions, and grading options for the two courses. The benefits reported by instructors of and students in the two courses are outlined as well as possible questions that might be raised about this method of instruction. The authors suggest that PSI instruction, which largely died out after its peak in the 1970s, may deserve a second look as an effective method for retaining and graduating college students

Keywords: retention, graduation, Personalized System of Instruction, higher education, My Freshman Year, Generation on a Tightrope

ACKNOWLEDGEMENT: This manuscript prepared with the assistance of a publication grant from Text and Academic Authors Association (TAA)

INTRODUCTION

Issues of student retention have become increasingly central to all stakeholders in higher education because of low completion rates for students who begin college. Only 56% of students graduate within six years (Briody, 2013), and the rate is lower for minorities—43% for Hispanics and 38% for Blacks (Saxon, 2010). For students, retention means that they graduate from college and thus have the potential to secure better jobs and experience greater earning power. Retention is important to administrators and faculty because retention and graduation rates affect federal funding, donor support, and reputation. Retention rates also affect local and national economies; students who graduate make “big contributions to their states’ economies as well as our international competitiveness,” argues Kati Haycock, president of The Education Trust (Saxon, 2010). Her claim is confirmed by the fact that college dropouts cost the United States \$4.5 billion in lost earnings and taxes (Yoder, 2012). Explains Pat Callan, executive director of the National Center for Public Policy and Higher Education, “The country is facing a shortage of college graduates as the baby boomers, the best-educated generation in history, begin to retire. Our completion rates are one of our greatest Achilles’ heels” (Saxon, 2010).

Although many remedies have been suggested and implemented for addressing low retention rates, what often is not acknowledged is that the different stakeholders have substantially different perspectives on what will keep students in school until they graduate. Two recent books on higher education—*My Freshman Year: What a Professor Learned by Becoming a Student* by Rebekkah Nathan (2005) and *Generation on a Tightrope: A Portrait of Today’s College Student* by Arthur Levine and Diane R. Dean (2012)—provide insights into the different perspectives of each group. In the former, Nathan (later revealed to be Cathy Small, an anthropology professor at Northern Arizona University) engaged in an ethnographic study of students during a sabbatical year when she enrolled as a freshman in her own university. In an effort to understand her students’ lives, she lived in a residence hall, took a full load of courses, ate her meals in the student cafeteria, joined student clubs, and played sports, all without disclosing that she actually was a professor. *Generation on a Tightrope* is a data-driven review of the demographics of today’s college students. Levine and Dean (2012) surveyed 5,000 college seniors as well as student-affairs officers at 270 community colleges, colleges, and universities and visited 31 campuses across the United States to generate a portrait of the “attitudes, values, and experiences” that define today’s college students (2012, p. x).

Together, these books offer a basis for understanding the various perspectives on retention held by administrators, students, and faculty and help explain why many of the programmatic efforts directed at retaining students are not as effective as the stakeholders hope they will be. The books suggest that administrators focus on creating a successful college experience by giving students choices and increasing faculty-student interaction, faculty focus on quality teaching and learning as the primary means for increasing students’ interest in school, and students’ primary focus is a teaching style that takes into account the digital culture in which they live and time management. These different perspectives are described in more detail in the sections below.

PERSPECTIVES ON RETENTION

The Administrative Perspective

Choice is an element considered important to student success by administrators. Choice is offered to students, for example, in that they may choose from among numerous majors and minors, and at many institutions, students are allowed to design their own majors. Students have multiple options for course formats, including conventional courses, hybrid courses, online courses, weekend courses, independent studies, and internships. In addition to academic options, students have choices about kind of housing, number of roommates, and the type and number of extracurricular activities and clubs in which to participate.

College administrators also believe that meaningful student-faculty interaction is essential to keeping students in school and “that more contact time between professors and students will raise student retention rates” (Nathan, 2005, p. 140). Professors’ office hours are seen as crucial sites for meaningful student-faculty exchanges. The administration at some universities requires that professors not only hold a certain number of such hours per week but work in their offices a specified number of days so that they are regularly available to interact with students. At some institutions, students are required to secure the signature of a faculty advisor on their course-registration forms to ensure that students interact at least once a term with a faculty member. Administrators also work to provide freshmen and sophomores with classes taught by full professors instead of adjunct instructors and graduate teaching assistants, believing that students’ contact with the brightest and most accomplished professors will result in interactions that inspire and engage students. Administrators seek lower student-faculty ratios in classes for the same reason: Lower class sizes allow faculty members and students to get to know each other more easily. The assumption is that by interacting with faculty in more substantial ways, students will be more committed to their learning and will complete their degrees.

The Faculty Perspective

The faculty perspective, in contrast, emphasizes quality teaching and successful learning as keys to retention and graduation. The assumption of faculty members is that if they teach well, students will become excited about and engaged in what they are learning and thus will be motivated to stay in school. Faculty members want their classes to be “exciting or self-revelatory” (Nathan, 2005, p. 131), believing that “a genuine emphasis on the quality of undergraduate teaching and learning” is the deciding factor that will produce high graduation rates for students (Rosensohn, 2011).

To this end, professors employ a variety of pedagogical strategies designed to induce successful learning. They carefully plan the learning objectives for their courses and engage in outcomes assessment to measure whether their students meet those objectives. They plan glitzy multi-media lectures in which they use PowerPoint, Prezi, and videos from YouTube to attract and hold students’ attention. They ban laptops and cell phones from the classroom to minimize distractions. They assign readings that provide depth of understanding for students and design assignments and activities that reinforce that learning. They are careful to start a lecture where the previous one ended to provide a “logic and continuity to the narrative” (Nathan, 2005, p. 136). Faculty believe, in other words, that if they teach well, their students will learn effectively,

and the content they learn will be a primary motivating force for staying in school and making steady progress toward graduation.

The Student Perspective

For students, the digital nature of their culture and a shortage of time are crucial considerations in the matter of retention. The current student population rated the launch of the World Wide Web as the key event that shaped their lives (Levine & Dean, 2012, p. 20) rather than any political event or national disaster, suggesting just how much new technologies and immediate access to information are important to this generation. Because students are “digital natives” (Levine & Dean, 2012, p. xxi), how universities teach is a factor that contributes to their success or failure from students’ perspective: “Digital technologies permit multitasking and individualized and interactive learning. The preferred content and modes of learning for students are concrete (practical) and active (hands on). But professors favor serial tasking, doing one task at a time, and passive (hands off, for example, reading) and abstract (theoretical) learning” (Levine & Dean, 2012, p. 22). Levine and Dean (2012) suggest that universities need to start where students are and begin to make use of rather than resisting students’ technological capabilities and inclinations, which means that education no longer can be tied to everyone doing the same thing at the same moment:

Rooting education in a uniform amount of seat time being exposed to teaching and a fixed clock is outdated and no longer makes sense. . . . As a consequence, higher education must in the years ahead move away from its emphasis on teaching to learning, from its focus on common processes to common outcomes. With this will come the possibility of offering students a variety of different ways to achieve those outcomes rooted in the ways they learn best. (p. 169)

For students, openness to and use of technology, flexibility, and active engagement in the classroom best address their learning preferences and facilitate retention.

Lack of time also emerged as a critical factor in navigating college for students. Students today have 2.88 hours a day of down time compared to four hours a day in the 1970s (Nathan, 2005, p. 33). The primary activity taking up students’ time is work. Nathan (2005) found that two-thirds of students have to work because of the high cost of tuition. Levine and Dean (2012) report an even higher figure of 69%, with half of those who work devoting over 20 hours per week to their jobs (pp. 25-26). Working while going to school has become the norm for many of today’s students largely because, since the mid-1980s, yearly tuition increases have been a primary strategy used by universities to offset shortfalls in funding.

The economic downturn that began in 2008 has only made paying for college more difficult, and many students find themselves in even more precarious situations than was the case when Nathan was a “freshman.” Levine and Dean (2012) report that one quarter of the students surveyed reported that “someone whose income they depended on had been unemployed while they were in college” (p. 26), so today’s students are increasingly responsible for paying for college on their own. Managing the constraints on their time, typically caused by their need to work, is important to students’ ability to graduate from college.

To manage the limited time available for school, students engage in workload management. Not attending all class sessions is one means of managing workload; if there is no

attendance policy or the instructor provides copies of lecture notes, students will cut classes “to free up more time in their lives” (Nathan, 2005, p. 119). Cutting back on the amount of time they spend on class preparation is another way by which students save time. They learn what Nathan (2005) calls a “spartan efficiency”—picking and choosing what to do depending on the most urgent demands and expectations of the particular class session (p. 121). Selective reading is another strategy students use for time management. Students ask themselves whether the reading is necessary—whether they will be asked to answer questions on the reading in class or whether there will be a test on the material. If the answer is “no,” students are less likely to do the assigned reading. Even Nathan (2005), as professor-turned-student, found herself employing this strategy when, in one of her classes,

the professor mentioned that he had put an extra article on a Web site that would amplify the subject of his next lecture and that he would like us to read it for the next class. As he began reciting the Web address, I found myself chuckling, realizing that I had no intention of doing this reading and would not even copy down the information. (p. 138)

Nathan (2005) came to see that the behaviors of students that she found annoying in class—eating, sleeping, studying for another class, and checking email—are acts of multitasking to save time and are enabled by students’ digital culture. Students are constantly engaged in and moving among various activities—going online while they eat, talking on the phone while walking to class, and doing homework while watching TV. They engage in multitasking in the classroom as a way to manage a shortage of time.

A CROSS-CULTURAL CONVERSATION

The remedies for addressing retention that are proposed and implemented by institutions of higher education tend to be less effective than expected because of the nature of college students today. Nathan (2005) sees the three stakeholders—administrators, students, and faculty—as engaged in a “cross-cultural conversation” (p. 132), often talking past each other despite their shared objective of a successful college experience that leads to student retention and graduation. When administrators seek to give students more choices, most of the choices are irrelevant because students are making decisions largely on the basis of time. A greater number of choices in terms of types of courses to take means little when students are devising their course schedules not on the basis of interest but on the day and time that courses are offered. Offering students “an endless slate of activities” (Nathan, 2005, p. 45) is meaningless if they are unable to take advantage of these activities because of time constraints.

The effort by university administrators to cultivate faculty-student interaction also is impacted by students’ lack of time. Nathan (2005) realized that office hours are “posted for each professor based on personal schedules and preferences” without regard for students’ schedules (p. 112). She discovered, in fact, that meeting with professors outside of class is difficult because students’ schedules are already filled with other obligations. The institution

had designated no unscheduled hours during the week when meetings, lectures, film series, or other events could be held without interference. So attending a special film showing, or taking a class field trip, or even getting to a professor’s office hours often mean sacrificing some other commitment. (Nathan, 2005, p. 112)

Not surprising, then, is that many students reported to Nathan (2005) that they do not interact personally with faculty, advisors, and other college staff even on a monthly basis. When they do, they typically choose asynchronous forms of communication such as email, Facebook, and Blackboard that take less time and can be done at any time rather than visiting with individuals in person.

The strategies employed by the faculty for quality teaching and successful learning also are not likely to have the desired impact on students because of the many demands on students' time. A professor's effort to provide an engaging and coherent course is received by students simply as another fragment in the environment to which they are asked to pay attention. As Nathan (2005) explains,

I see now what I didn't see before. In the time between my Tuesday and Thursday classes in introductory anthropology I have taught only one other class. . . . By contrast, my students have had at least four other classes in between, maybe more, and they have completed many other reading and writing assignments in the interim, in addition, perhaps, to working a job and attending residence hall or club programs. (p. 136)

The high-quality learning that faculty thought they were providing for students, then, often does not have the desired effect.

THE GOAL

As faculty members, the authors wanted to contribute to the retention of students on their campuses by addressing and taking into account the perspectives of all stakeholders. They wanted to create learning experiences for their students that were exciting and engaging and that would motivate them to continue their college educations. They wanted to give their students choices they really wanted and could use and that took into account their desire for practical and active knowledge as well as time constraints. They also wanted to design courses in which students interacted with faculty in meaningful ways about content and truly learned the course material. They wanted to design courses, in other words, that incorporated the administration's and the faculty's perspectives on what contributes to retention, but they wanted to implement these objectives in ways that met the needs and desires of contemporary students.

A PERSONALIZED SYSTEM OF INSTRUCTION

In seeking to develop a system that effectively meets stakeholder needs and leads to students' retention and graduation, the authors examined various pedagogies and practices that feature choice, faculty-student interaction, and mastery of content in a format that addresses students' needs in terms of learning styles and time management. Numerous approaches have been developed that provide for various alternatives in the classroom, including non-graded education, continuous-progress education, adaptive instruction, and style-based instruction (Charles, 1980; Frymier & Joekel, 2004; Karlin & Berger, 1974; Keefe & Jenkins, 2000; Jenkins & Keefe, 2001; Søvik, Eikeland, & Lysne, 1981). The authors ultimately determined that an approach to instruction called a *Personalized System of Instruction* or *PSI*, which was popular in the 1970s, was most comprehensive in containing the elements that have been identified as

important to retention. Attributed most directly to the work of Fred Keller (1968), PSI was Keller's effort to implement in education the principles of B. F. Skinner's behaviorist psychology. In particular, Keller wanted to integrate the learning of small bits of information with immediate and positive reinforcement (Carpenter, 1974; Chance, 1984; Keller, 1968, 1972). Keller's system included the following elements:

1. A self-paced feature that allows students of differing entry levels and abilities to learn at their own rate.
2. A mastery requirement that allows students to continue only after the mastery of previous material has been demonstrated.
3. The utilization of peer proctors for immediate scoring, feedback, tutoring and support.
4. The minimal use, if any, of lectures. . . .
5. The use of texts and study guides for the communication of course materials. (Cracolice & Roth, 1996, p. 2)

Peak interest in personalized instruction occurred between 1972 and 1979. The *Journal of Personalized Instruction* was dedicated to the subject, the Center for Personalized Instruction served as a clearinghouse for PSI information (Eyre, 2007), and hundreds of teachers implemented PSI courses in disciplines including psychology, chemistry, engineering, physics, anatomy, freshman composition, music, accounting, and communication. The trades, including turbomachinery, clothing instruction (Warden & Brandi, 1981), and sports instruction (Metzler, 2001) also adopted PSI instruction because of the emphasis on the mastery of skill sets that build on one another (Cracolice & Roth, 1996; Price, 2001). Research consistently showed the effectiveness of PSI courses. Students earn superior ratings on exam performance and retention of material in these courses when compared to traditional course formats (Cracolice & Roth, 1996), students tend to spend more time studying in PSI courses, and the multiple formats required for learning the material often result in overlearning and thus better long-term retention (Buskist, Cush, & DeFranpre, 1991; Cracolice & Roth, 1996; Chase & Houmanfar, 2009; Sherman, 1992).

In the next section, a case study is described that shows how a personalized system of instruction was introduced into two college courses. Although only two courses are discussed in detail in this report of the case study, the authors implemented this system in eight different classes at three universities over the course of a year (syllabi for all eight of the courses are available from the first author).

IMPLEMENTATION OF A PERSONALIZED SYSTEM OF INSTRUCTION

The two courses that constitute the case study described here are two common courses in a communication curriculum—Rhetorical Theory and Public Speaking. Rhetorical Theory is a three-credit upper-division class for communication majors designed to introduce students to key theories and concepts in classical and contemporary rhetoric, including those of Aristotle, Cicero, I. A. Richards, Stephen Toulmin, Richard Weaver, Kenneth Burke, bell hooks, Jean Baudrillard, and Michel Foucault. The course was taught in a traditional semester-long format that met twice a week for 75 minutes each day. Public Speaking is a three-credit freshman-level general education course designed to help students develop skills in presentational speaking appropriate to a variety of communication contexts. The course was taught in a one-week intensive format, meeting 8:30-3:30 on a Saturday and at the same time the following Monday through Friday. These two courses were chosen for this case study because they allowed for

experimenting with PSI across a variety of contexts—courses for majors and general education courses, semester-long and intensive formats, and theory- and skills-based courses.

The personalized system the authors developed consisted of four basic elements: reading, writing, discussing, and applying. After an introduction to the course and a few background lectures (designed, in part, to show students that the instructors did indeed have the skills required to present traditional lectures), students began the first step: *reading* the textbook on their own. The textbook was divided into units, and a study guide was prepared that gave students a list of the important ideas and concepts for each unit. When reading the chapter(s) for a unit, students were asked to take notes—the *writing* component—using the study guides prepared by the instructors to help them identify the key ideas. Table 1 (Appendix) presents representative concepts from the study guides for both courses.

When they finished taking notes on the content of a unit, students *discussed* the concepts with a classmate who also had taken notes on that unit, using the study guides as a reference. They took turns discussing their answers from the study guide, asking questions of clarification and application designed to ensure that both members of the pair were comfortable with the material. Students were encouraged to pair up at the beginning of the course so they could count on someone being available in class with whom to discuss the material when they were ready to do so. If a student was ready to talk with someone about a unit, however, and no class member was present who was ready to discuss the same unit, the instructor served as the student's partner and listened to the student talk through the concepts.

In the last step of the process, students *applied* their knowledge by taking a short-answer essay quiz over the unit. These quizzes required that they apply the concepts to an artifact or a hypothetical situation. For the quizzes, students could use the notes they had taken on the study guide, but they could not use their textbooks, a policy that ensured that students took good notes on the material. Students were required to answer six out of eight questions correctly on each quiz in order to move on to the next unit. If they did not pass the quiz the first time, they studied the concepts again or reviewed them in a discussion with the instructor and then re-wrote the questions they missed until they reached the required number of points to pass. For sample quiz questions for both courses, see Table 2 (Appendix).

Students who wished to earn a grade of A or B in either course had to complete a written assignment in addition to the quizzes. In Rhetorical Theory, this assignment took the form of a think-piece paper that was written in response to questions generated by the instructor (see Table 3 in Appendix for sample think-piece questions). In Public Speaking, this assignment took the form of a self-evaluation paper in which students evaluated their progress in public speaking.

In the Public Speaking class, a certain number of presentations had to be passed in addition to the quizzes and paper. Students had to master the presentations at the level of a B. Otherwise, they repeated a speech, just as they repeated quizzes they did not pass, until the required level of mastery was reached. Because of the prevalence of speech anxiety among students, providing them with the opportunity to re-do a speech if they could not finish it or did poorly on it was a relief for them. In all assignments in the PSI courses, mastery of material was emphasized.

Students attended class only when they were prepared to participate in one of the activities required to complete a unit—take a quiz, give a presentation, talk over concepts—or consult about a quiz or speech. In the classrooms, many activities were happening simultaneously, with students working at their own pace. Some students took notes on the units in class, other students talked through units with a partner, others asked the instructors questions

about the material, and others took quizzes. In the Public Speaking class, presentations were given at a set time each day to ensure an audience for the speakers.

The instructors served as class managers and facilitators in the courses. As students entered the classroom, the instructors asked what they were working on that day: Did they have questions about the material they had read, did they need a partner with whom to talk about concepts, or were they ready to take a quiz or give a speech? The instructors circulated among the conversing pairs, helping clarify concepts and answering questions or, in Public Speaking, working individually with students who were crafting their presentations. The instructors dispensed quizzes when students were ready for them and graded them as students finished. If the instructors were not able to finish grading the quizzes in a given class period, they graded them after class and emailed students their grades that evening to provide the immediate feedback that is an important dimension of mastery in the PSI format.

Students' final grades in the PSI courses were dependent on the number of units they chose to complete. Students selected the grade they wanted to earn at the beginning of the course and completed the assignments required for that grade; see Table 4 (Appendix) for the grading options for both courses. Some students initially aimed for an A, but, as the term progressed, were willing to accept a lower grade. Others chose to work toward a B or C grade from the beginning as a way to manage a lack of time. In Public Speaking, students who had high anxiety about speaking often admitted their delight at being able to select a grade of C, thus minimizing the number of speeches they had to present.

BENEFITS OF PSI INSTRUCTION

The authors' personal experiences with PSI courses and students' written comments on evaluation forms following the completion of the courses demonstrated some major advantages in addressing aspects of the college experience that are critical to student retention and graduation. First, the PSI courses contributed to student choice, which university administrators see as important, but they did so in a way that actually provided students with choices that mattered to them. The choices provided are limited choices within the parameters of a classroom so students can feel empowered and motivated without being overwhelmed with options. As one student wrote following the completion of the course, "I personally liked this structure for it gave us as students much freedom while still learning all of the necessary material." For students juggling a full load of courses and work, the PSI courses offered a way to complete credits efficiently. Students had a choice about what grade to earn, when to engage the material, and when to attend class. Even if the class day and time were not ideal for them, most students managed to make the PSI class work for them (only one student out of 30 in the Rhetorical Theory class and one out of 25 in the Public Speaking class withdrew prior to the end of the semester without completing any units).

The administration's view that meaningful faculty-student interaction is crucial to graduation rates happened naturally in the PSI courses. In the discussion about concepts on the study guide, answers on quizzes, or the best approach to take for a speech, rapport was naturally and genuinely created between the instructors and the students in the classes. Not only did the instructors talk individually to students about their answers to quiz questions, but they found that they addressed other patterns evident in how students approached learning generally. The instructors shared their observations about learning methods and styles with the students, telling them, for example, that they applied the concepts in sophisticated ways, really seemed to

understand the material, did an especially good job of linking concepts, did not seem to read questions carefully before crafting answers, or needed to elaborate more fully on their answers. Students were given specific feedback about their learning processes and not just about the products of their learning. As a result of this interaction, students had professors who knew them and their work well for when they needed letters of reference for internships, job applications, and applications for graduate school. Moreover, because these interactions occurred during regular class time, students did not need to make room in their schedules for visits at specified hours to faculty members' offices.

Faculty-student interactions also benefited because they were not subject to the rules that govern many classrooms—rules about attendance, tardiness, late papers, and the like. Although students needed some time in the PSI classes before they actually believed that their instructors really were not interested in why they did not attend class on a particular day, students no longer needed to generate excuses for not coming to class or to ingratiate themselves with their instructors in the hope that they would be lenient if something came up that prevented them from turning in an assignment on time. The instructors were freed from listening to and trying to obtain documentation of excuses, keeping track of attendance, and meting out the consequences if students missed too many classes. The faculty-student relationship changed dramatically with this approach from a top-down to a peer relationship.

The PSI courses met the faculty members' desire for students to learn and engage content. That students mastered the material to a certain level of competency before they moved on to the next unit meant that the authors knew that their students understood the material in these classes; students could not simply skim a chapter or get by without reading it at all if they wanted to progress in the courses. As one student in the Public Speaking class said, "I was surprised how much I actually learned in these few days of class and feel that, due to the structure of the class, I actually retained more information." Even those who chose to earn a grade of C engaged the material they did cover several times, so the result was a highly effective learning environment. "The professor cared about student achievement but also expected students to take their part in learning. I found the material much easier to learn this way," was the response of one student to her PSI class. Students also evaluated their courses and instructors highly in PSI courses (Carcolice & Roth, 1996), suggesting that they viewed the learning experience as a positive one. The instructor in the Rhetorical Theory course earned ratings of 5.9 out of a scale of 6.0 on both the instructor and overall course rating, while the Presentational Speaking course was rated 6.0.

The instructors also were pleased that students assumed greater responsibility for their learning in the PSI classes. The locus of control was on the students, and they were more fully engaged in the learning process. Not one student complained in either class about the grade an instructor "gave" him or her in the course; instead, several students expressed sentiments similar to the student who said, "I was going to go for the A, but I ended up choosing a B." One student expressed the responsibility she felt compelled to adopt in her PSI course in this way: "I LOVED this class. I really took a hold of the material because I was accountable for my progress in the class. If I did not read or take notes, then I would not finish. This really made me do all my work and read the chapters all the way through." Another commented, "This format made it all up to me to get on top of my work and become more responsible with my learning." Another noted, "You definitely have to work independently, but that's a good thing! By far the best course structure at this university."

An additional benefit of the PSI courses beyond the impact on administrative, faculty, and student needs in regard to retention was that the remedy of PSI instruction was not dependent on external resources. It did not cost the institutions at which the courses were taught any additional funds. They did not have to hire extra staff such as retention “czars,” they did not have to implement separate sections of freshmen courses to focus on community building, and they were not required to implement complex early-warning systems designed to intervene if students were not succeeding in particular classes. The instructors were able to implement PSI in their own classes as part of their regular pedagogical obligations without writing grants, spending hours in meetings collaborating with others about new programs, or waiting for the latest round of initiatives to be mandated. Faculty often are resentful of administrative efforts to impose retention initiatives on them into which they have had little input and believe will have little effect. They often experience “retention fatigue,” as Barefoot (2004) explains, especially when the imposed remedies are not “inclusive and engaging of faculty” (p. 19). PSI offered a way for the individual instructors to assume personal agency in regard to retention efforts.

From the students’ perspective, the PSI format allowed them to engage in effective time management. They were not required to sit through three classroom hours of instruction for 16 weeks as they would be in a conventional format; they attended class only when they were ready to complete one of the tasks required for them to complete a unit. They could take notes on the material at any time of the day and in any location, making it easier for this component of the process to be fit into their schedules. As one student noted at the end of one of the courses, “The flexibility you offer makes it a great choice for individuals like me, who have very busy schedules.” Another wrote, “This course helped me be so much more efficient than other courses. I could read and take notes on the material during slow times at work or when my kids were sleeping. It helped a lot!” While it could not be determined that the PSI classes devised directly increased retention, that the students could complete a class efficiently and flexibly means they are one class closer to graduation.

The students also appreciated the hands-on, active learning format of the PSI courses. They were required to engage the material in four different ways—reading, writing, discussing, and applying—and they were able to engage in most of these activities while doing other things. The instructors allowed students to listen to music while taking the quizzes, thus duplicating their typical mode of studying and working, a policy on which several students commented in the course evaluations. “I loved that I could listen to my music while taking the quiz. That made taking the quizzes fun and relaxing, and I felt more confident because this is how I usually study.” They could also eat lunch while taking a quiz, step out to make a phone call, or text someone without reprimand.

Finally, though not an issue connected directly with retention but a concern of institutions of higher education nonetheless, the instructors found that PSI courses counter grade inflation. In all of the courses taught using a PSI format, the final grade distribution of students included several Cs, many Bs, and only a few As. Not all students choose or earn As in PSI courses taught in this format, so grades are not inflated in such courses.

POSSIBLE DRAWBACKS TO PSI INSTRUCTION

Although the four authors involved in the case study did not experience any major disadvantages to their teaching in the PSI format, at the end of the courses, they identified some potential reasons why some professors and students might not find such instruction advantageous

or appropriate. In institutions in which faculty are rewarded for traditional classroom practices—the ability to lecture and to lead class discussions, for example—this format may not be appropriate. In addition, the instructor could be accused of not really “teaching” in PSI courses because the kind of instruction looks so different from conventional modes (Buskist, Cush, & DeGrandpre, 1991). Institutions that hold to rigid definitions of hours of instruction in the classroom could question the flexible class attendance that is built into this mode of instruction.

There are potential drawbacks for faculty as well. Some faculty members may simply prefer the lecture spotlight and the greater degree of command of the classroom environment that lecturing offers. The PSI format also requires that faculty be highly comfortable with and knowledgeable about the material. Because they must be able to talk individually with students about it, the format may not be a desirable mode for faculty who are still trying to master the course content themselves. Finally, the level of preparation required before a course begins is another reason faculty may decide not to employ this approach. Units of material, study guides, and quizzes must be developed in their entirety in advance of the start date of the course.

There are reasons why students might prefer a more traditional approach. Some students may prefer the anonymity of a large-lecture format where they do not need to interact with their professors in any substantial way, in spite of the other advantages the format offers. Some students may simply not be prepared to work on their own in the way that PSI courses require. Students must manage themselves in PSI classes—manage their time, practice self-discipline, and complete the work they choose to do for the grade they desire. Finally, procrastination can be an issue for students as well. One student who did not begin completing units in the Rhetorical Theory course until only a month remained in the semester articulated this potential disadvantage in this way: “I love this format, but it can sure come back to bite you in the ass if you’re not careful!”

A COMEBACK FOR PSI?

PSI declined as a pedagogical approach in the college classroom, largely because of the facilitative role of the instructor in PSI courses (Cracolice & Roth, 1996). “The instructor becomes a ‘facilitator of learning’ in a PSI course” (Cracolice & Roth, 1996, p. 5), which is at odds with the lecture system that is prized in the traditional education system. Instructors in colleges and universities continue to be praised for lecturing well, and the rigidity of the tenure system means untenured faculty are reluctant to deviate too much from traditional institutional norms for what a classroom environment looks like. Another factor may be the initial workload required: the formation of study guides, exams and tests can be “daunting tasks for even the most experienced instructor” (Cracolice & Roth, 1996, p. 5). Finally, as Skinner’s principles began to be rejected in the academy, PSI courses began to decline in popularity as well.

The authors’ experiences with PSI courses, however, suggest that now may be the time for PSI to make a comeback as an effective method for retaining college students and supporting their progress toward graduation. The method is one that meets the needs of contemporary college students for a hands-on and active system of instruction that also helps them address their time constraints; it also meets the objectives and interests of faculty and administrators, seeking to create the kind of college experience that will keep students in school to graduation. In fact, PSI courses may be a face-to-face version of online courses, offering the time flexibility of course completion that online courses do but within a regular classroom format. PSI instruction suggests the need to reexamine and extend the possibilities for mode and format of instruction

beyond simply face-to-face or online. PSI courses offer an alternative that offers the best of both worlds.

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APPENDIX

Table 1
Sample Study Guide Concepts

Rhetorical Theory

1. Name the three elements Isocrates identified as crucial for rhetorical and political success.
2. Identify the six parts of Stephen Toulmin's layout of argument. Define the six parts and give an example of each.
3. Identify the type of argument that is most ethical, according to Richard Weaver, and explain why.
4. Explain what Kenneth Burke means when he says that humans are "separated from our natural condition by instruments of our own making."
5. Explain how bell hooks defines *critique* and how it challenges the ideology of domination.
6. Explain the relationship Foucault sees between discourse and knowledge.

Public Speaking

1. Identify the four modes of rhetoric.
2. Name and define the five interactional goals. For each, give an example of a presentation in which that would be your primary goal.
3. Name three criteria for evaluating information found on the Internet.
4. Explain why having a clear organizational pattern in a presentation is important.
5. Identify three effective ways by which to introduce a presentation.
6. Define *twirk*.

Table 2
Sample Quiz Questions

Rhetorical Theory

1. Use I. A. Richards' notion of the semantic triangle to show the different meanings that Blacks and Whites have for the Confederate battle flag. Draw two semantic triangles—one for each group's meaning. (Artifact: a speech by Roy Barnes about the Georgia flag)
2. Define *modal qualifier* in Stephen Toulmin's layout of argument and identify the modal qualifier in the ad. (Artifact: ad for Renaissance hotels)
3. Kenneth Burke says that persuasion works through identification. How is identification being created in the letter? (Artifact: "Letter from Ana," a pro-anorexia Web site)
4. How does Jean Baudrillard's concept of simulation function in the case of the concrete goose? (Artifact: pictures of concrete geese dressed in seasonal attire in yards in Columbus, Ohio)
5. Stan Goff's letter, "Hold On to Your Humanity," is an example of what hooks calls *decolonization*. Use the letter to show how hooks' concept of love is being used to decolonize readers' minds. (Artifact: "Hold On to Your Humanity" by Stan Goff)

Public Speaking

1. Identify two assumptions of invitational rhetoric in Lewis Pugh's speech at the back of the textbook. Show how each assumption is evident in Pugh's presentation.
2. Distinguish *presentational speaking* from *public speaking*.
3. Universities have been called "marketplaces" of diverse ideas because they are one of the few places in society in which multiple perspectives are sought, encouraged, and valued. Which of the factors—safety, openness, freedom, and value—most supports the idea that a university is a marketplace of ideas? Which of these factors might make parents the most nervous? Support your choices.
4. During your presentation, someone starts chanting slogans about the university's involvement in industries that are benefiting from the war in Afghanistan. How would you handle this using re-sourcement? Be specific. Define *re-sourcement* as part of your answer.
5. Name two organizational patterns that you can find in Jessica Jackley's presentation at the back of the textbook. Explain your selections.

Table 3
Sample Think-Piece Questions

Rhetorical Theory

1. Do the three genres of speaking—deliberative, forensic, and epideictic—still apply today? Are there rhetorical situations today that cannot clearly be defined by one of these genres? If so, do we need to add some genres to or subtract some from the classical list?
2. Select a sentence of your choice and demonstrate the way in which it is working using I. A. Richards' seven comprehending activities—indicating, characterizing, presenting, valuing, influencing, managing, and purposing.
3. Richard Weaver suggested that a tyrannizing image or an ideal of excellence lies at the center of culture. How would you characterize the tyrannizing image of our contemporary culture? What is the ideal of excellence it represents?
4. Kenneth Burke provides a definition of the human being that provides the basis for his theory of rhetoric. Formulate your own definition of the human being. In what directions and toward what rhetorical concepts would this definition lead you if you were to formulate a theory of rhetoric based on it?
5. Jean Baudrillard sees seduction as a specific rhetorical strategy. How might this strategy be integrated into communication theory? How might it change how we view communication?
6. Examine the discourse of the communication discipline and discuss the rules that govern the form its concepts and theories must assume to be accepted as knowledge, using Michel Foucault's methods of analysis. What are the rules concerning, for example, the organization and style of the discourse? What terms are recognized as valid and which as invalid in the discourse? Who is allowed to be involved in the formation of concepts and theories?

Table 4
Grading Options

Rhetorical Theory

To receive a grade of A, you must satisfactorily complete the following:

- 8 units: Classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault
- Discuss concepts from 8 units with a classmate
- Complete 8 quizzes on the 8 units
- Complete 3 think pieces from 2 different units

To receive a grade of A-, you must satisfactorily complete the following:

- 8 units: Classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault
- Discuss concepts from 8 units with a classmate
- Complete 8 quizzes on the 8 units
- Complete 2 think pieces on a unit of your choice

To receive a grade of B+, you must satisfactorily complete the following:

- 7 units: You may choose from among classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault
- Discuss concepts from 7 units with a classmate
- Complete 7 quizzes on the 7 units
- Complete 2 think pieces on 2 different units

To receive a grade of B, you must satisfactorily complete the following:

- 7 units: You may choose from among classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault
- Discuss concepts from 7 units with a classmate
- Complete 7 quizzes on the 7 units
- Complete 1 think piece on a unit of your choice

To receive a grade of C, you must satisfactorily complete the following:

- 6 units: You may choose from among classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault.
- Discuss concepts from 6 units with a classmate
- Complete 6 quizzes on the 6 units

To receive a grade of D, you must satisfactorily complete the following:

- 5 units: You may choose from among classical rhetoric, Richards, Toulmin, Weaver, Burke, hooks, Baudrillard, and Foucault.
- Discuss concepts from 5 units with a classmate
- Complete 5 quizzes on the 5 units

Public Speaking

To receive a grade of A, you must satisfactorily:

- Give the *speech of introduction*.
- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on all 6 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 4 *major presentations* on time (receiving at least 20 points on each) and turn in a speaking plan for each on the day you speak.
- Give 1 *impromptu presentation*.
- Write a *self-reflection paper* (earning a score of + or \checkmark) and submit it by noon the Monday following the end of the class.
- Contribute to class learning as an audience member and presenter by completing one major presentation and at least one quiz by the end of Tuesday.

To receive a grade of A-, you must satisfactorily:

- Give the *speech of introduction*.
- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on all 6 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 3 *major presentations* on time (receiving at least 20 points on each) and turn in a speaking plan for each on the day you speak.
- Give 1 *impromptu presentation*.
- Write a *self-reflection paper* (earning a score of + or \checkmark) and submit it by noon the Monday following the end of the class.
- Contribute to class learning as an audience member and presenter by completing one major presentation and at least one quiz by the end of Tuesday.

To receive a grade of B, you must satisfactorily:

- Give the *speech of introduction*.
- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on 5 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 3 *major presentations* on time (receiving at least 20 points on each) and turn in a speaking plan for each on the day you speak.
- Give 1 *impromptu presentation* or write a *self-reflection paper* and submit it by noon the Monday following the end of the class. (If you complete both of these assignments, you will receive a B+ for the course).
- Contribute to class learning as an audience member and presenter by completing one major presentation and at least one quiz by the end of Wednesday.

To receive a grade of B-, you must satisfactorily:

- Give the *speech of introduction*.

- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on 5 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 2 *major presentations* on time (receiving at least 20 points on each) and turn in a speaking plan for each on the day you speak.
- Give 1 *impromptu presentation* or write a *self-reflection paper* and submit it by noon the Monday following the end of the class.
- Contribute to class learning as an audience member and presenter by completing one major presentation and at least one quiz by the end of Wednesday.

To receive a grade of C, you must satisfactorily:

- Give the *speech of introduction*.
- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on 4 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 2 *major presentations* on time (receiving at least 20 points on each) and turn in a speaking plan for each on the day you speak.
- Give 1 *impromptu presentation* or write a *self-reflection paper* and submit it by noon the Monday following the end of the class. (If you complete both of these assignments, you will receive a C+ in the course).
- Contribute to class learning as an audience member and presenter by completing one major presentation and at least one quiz by the end of Thursday.

To receive a grade of D, you must satisfactorily:

- Give the *speech of introduction*.
- Turn in the *list of presentations* you will be giving by the end of class on Saturday.
- Pass *quizzes* on 3 units of textbook material. A passing grade on the quizzes is a score of 6 out of 8 points.
- Give 1 *major presentation* on time (receiving at least 20 points on it) and turn in a speaking plan for it on the day you speak.
- Give 1 *impromptu presentation* or write a *self-reflection paper* and submit it by noon the Monday following the end of the class. (If you complete both assignments, you will receive a grade of D+ in the course).