A study of students in a public relations course showed support for a service-learning instruction-
al model enhancing critical thinking and problem solving and reducing rote memorization. Data
were collected from 40 undergraduates in a pretest/posttest design and showed significance on 11
of 19 critical-thinking and problem-solving items. Students said they would recommend the course
to others, worked harder in it than in most courses, and were satisfied with their expected grade.

As our world becomes more complex and uncertain, colleges and universities are exploring
ways to engage students in activities that will enhance students’ learning. Students must be able
to apply their education to their professions and be able to solve problems, think critically and cre-
atively, and gather useful information, from a plethora of available information in the digital age,
to make decisions in new situations (Aker, 2003; Bransford et al., 1999; O’Leary, 2002; Lynott,
1998; Page & Mukherjee, 2007). Public relations students can certainly benefit from this type of
instruction because their chosen professional field will require these practical skills.

The question is what type of instructional approach would most benefit college students and
those studying public relations. In the words of one critical literacy scholar: “The older modes of
a university education—the sage on a stage—no longer function” (Gray, 2005). In the words of a
professor who has received numerous awards for her teaching: “It is time to shift the limelight off
ourselves and onto our students” (O’Leary, 2002). O’Leary advocates for an active-learning and
problem-based approach in the college classroom.

Acker (2003) identified an emphasis on active, participatory learning and developing students’
critical-thinking, analytical, and problem-solving skills among the common attributes of exemplary
professors. He contends “the most accomplished teachers succeed in engaging their students
actively in the learning process, involving them in participatory exercises and discussions as prob-
lem solvers rather than treating them as ‘empty vessels’ to be filled with knowledge” (Acker, 2003,
p. 4). He states that this approach tends to have better learning outcomes and is preferred by
students over traditional approaches that treat them as passive learners.

Bransford et al. (1999) describe active learning as a way to help people take control of their
own learning and know whether they know, an outcome defined as metacognition (p. 12). Active
learning strategies can promote the metacognitive process in most college subjects and has been
shown to increase retention in the course and in college (Fritz, 2002). Ziegler (2001) contends that
active learning is an appropriate response to the problems faced by adult educators who “work in
a world that is constantly changing, where there are more questions than answers, and where
barriers and frustrations continually impact their work” (p. 3).

So active learning can be a valuable approach in a number of subjects and settings. Improving
students’ critical-thinking and real-world problem-solving skills is a necessary component of this
type of learning. The concept is not really new. John Dewey (1933) referred to this process as
reflective thinking in which learners actively apply information to new situations, testing their
knowledge against real-world problems.

Journalism and public relations students can benefit from an active learning approach as well
(Anyaegbunam & Ryan, 2003; Brislin, 1999; Gillmor, 2009; Grow, 1991; Huang, 2006; Lloyd,
 Slater, & Robbs, 2000; Lubbers & Gorcyca, 1997; Shoemaker, 1993; Strohm & Baukus, 1995;
Wilkins, 1998). The nature of the media environment is such that public relations students will
have to analyze, synthesize and evaluate information for decision making in a changing media
landscape (Lloyd, Slater, & Robbs, 2000; Strohm & Baukus, 2005).

Strohm and Baukus (2005) used reflective learning theories to teach media planning students
“tolerance of the ambiguity and lack of closure that is a basic part of media-planning activities,
flexibility in approaching media-planning difficulties, and the ability to adapt to changing indus-
try, media, and audience conditions” (p. 55). They suggest teaching strategies for fostering skills
within “four key areas of media planning: delineation, in which the problem is identified and struc-
tured; information gathering and dealing with missing data; diagnostics, including information
Certainly journalism programs teach knowledge and skills students need to be able to transfer to real-world circumstances in their professional lives. According to Anyaegbunam and Ryan (2003), “... it is increasingly important to prompt reflective thinking [critical thinking] among journalism students to support them in their transition from learners to practitioners in a dynamic environment that demands autonomy and innovativeness” (p. 2). One method of this knowledge transfer is service-learning, which combines active learning with volunteerism. It is an experiential style of learning in which students engage in an activity that provides a service to a community or particular organization and explore an academic topic as well. According to Fiske (2002) the core concept of service-learning is that it combines service objectives with learning objectives with the intent that the activity changes both the recipient and the provider of the service. Ideally, those working in academic and professional public relations settings could strengthen each others’ results through this process.

Research on whether service-learning can improve outcomes for public relations students is not widespread. The study sought to determine students’ perceived value of an instructional model that presents the opportunity for service-learning and their thoughts on whether the model increases their critical thinking and real-world problem-solving skills.

This study was designed to answer two research questions:

**Research Question 1:** Does a service-learning instructional model increase students’ perceptions of their critical-thinking skills?

**Research Question 2:** Does a service-learning instructional model increase students’ perceptions of their real-world problem-solving skills?

**METHOD**

Participants: A total of 40 undergraduate students enrolled in an introduction to public relations course participated in the study during fall semester 2009 in a university in the southeastern region of the United States. Introduction to public relations is a required course for all journalism majors at the university. The study lasted the entire 15-week semester. The participants in this study fit the typical, homogeneous attributes of the general student population at the university, where about 92 percent of the overall student population is White, not of Hispanic origin, and 51 percent are female. Participants were traditional, college-age (18- to 25-year-old) students. The students were mainly journalism and communication majors with an interest in print or broadcast journalism, public relations and corporate communication, or web design and publishing. Although the study sought feedback from all students participating, only 25 matched pairs were available for analysis at the end of the study.

Students were selected for study because the introduction course is their first encounter with the formal study of public relations at the college level and lends itself well to active learning through service-learning. Traditionally students enrolled in the course select a nonprofit or campus organization to study in a case study approach. Like media planning (see Strohm & Baukus, 1995; Lloyd, Slater, & Robbs, 2000), the public relations campaign planning process contains a lot of unknowns. It is fertile ground for developing critical-thinking and problem-solving skills. The course received a campus Quality Enhancement Program grant to support the service-learning component of the study. This provided a budget for classroom activities and was used mainly for final presentation supplies.

**PROCEDURES**

Design: Through traditional lecture and in-class activities, students were taught the principles of public relations and the foundations for public relations campaigns. They studied the four-part public relations process for the first one-third of the semester and decided which nonprofit organization they wanted to serve that semester. Students gained added insight into contemporary public relations practices by keeping a weekly reading journal of public relations current events articles from news and trade publications. These news items were included in class discussion each week. Unlike previous semesters in which students chose an organization to serve in a more hypothetical role, for this study students formed groups in which they would provide practical service to an organization. For the remaining two-thirds of the semester, four-member groups researched the same nonprofit organization, including its publics, developed a program to address its public relations needs, created effective communication messages, decided which media to use for those messages, and developed an evaluation plan to measure the success of the program. Groups proposed a public relations campaign for the organization in a formal presentation at the end of the semester. Representatives of the nonprofit organization judged the final projects to determine which group had the best public relations campaign proposal. Students were asked to reflect upon and provide feedback to the professor on what they contributed individually to the group project and what they learned from the experience.

A pretest/posttest design was used to determine the effects of the instructional model (service-learning project) on the students’ perceived progress on critical thinking and real-world problem solving.

Pretest: A baseline survey of all students in each class section was used to determine their previous experiences in other courses with classroom activities that may influence critical thinking and real-world problem solving before they were exposed to the treatment. It also asked their previous experiences with active and service-learning in the classroom.

Treatment: Classroom activities, including lectures, transformed the classroom into a set of pseudo public relations agencies. Student groups even gave themselves mock agency names. They engaged in research about their client and its publics, created a campaign to improve public relations for the client, crafted messages intended to reach specific audiences, and formulated an evaluation plan to determine the effectiveness of the campaign.
Posttest: A repeat administration of the baseline survey was used at the end of the semester to measure the effects of the experiential teaching method on progress on critical thinking and real-world problem-solving. It also asked about active and service-learning experiences and students’ perceptions about the course and their performance in it.

MEASURES

Instruments: The pretest was a 22-item questionnaire in which 19 statements related to critical thinking and problem solving were applied to a Likert scale measuring students’ perceived level of progress on specific learning objectives in a typical course, such as learning to “identify new information that is needed to draw conclusions,” “think creatively,” or “solve real-world problems.” Students reported their level of progress ranging from “no progress” (1) to “exceptional progress” (5). Three questions asked students’ level of agreement with statements on whether the student had ever engaged in active or service-learning in other courses. Students reported their level of agreement ranging from strongly disagree (1) to strongly agree (6). The posttest was a 25-item questionnaire in which the same 19 items as in the baseline were asked about critical thinking and problem solving, three asked the level of active or service-learning accomplished in this course, and an additional three asked whether the student would recommend the course to other students, the level of work involved in the course compared to a typical course, and whether the student was satisfied with his/her expected grade in the course.

RESULTS

Of the 40 total participants, there were 25 matched pairs t-test was used to test the effects of the instructional model on students’ (N = 25) perceived progress toward specific critical-thinking and problem-solving outcomes. A test of homogeneity of variance showed no significant difference in pretest scores. With homogeneity of variance assumed, the t-test revealed significant differences for 11 of the 19 critical-thinking and problem-solving items and significant differences for all three of the active and service-learning items. There were significant pre-post test results, at the .05 level or above, for the amount of progress made on items 3 (understanding the limitations of correlational data), 4 (identifying evidence that might support or contradict a theory or hypothesis), 5 (identifying new information that is needed to draw conclusions), 10 (analyzing and integrating information from separate sources to solve a complex problem), 11 (recognizing how new information might change the solution to a problem), 13 (thinking critically), 14 (thinking creatively), 15 (solving real-world problems), 17 (analyzing and critically evaluating other perspectives), 18 (making effective decisions), 19 (working effectively with others as a member of a group), 20 (avoiding mainly memorizing information), 21 (participating in active learning rather than lectures), and 22 (encouraging students to get involved in improving their community). The highest significance was found for item 5 “identify new information that is needed to draw conclusions” \[t(24) = 5.018, p = .000\], item 14 “think creatively” \[t(24) = 5.250, p = .000\], and item 15 “solve real-world problems” \[t(24) = 4.308, p = .000\].

Also students said the course did not mainly emphasize memorization \[t(24) = -4.797, p = .000\], it involved students in active learning rather than solely depending on lectures \[t(24) = 10.115, p = .000\], and it encouraged students to get involved in improving their community \[t(24) = 10.151, p = .000\]. A high percentage said they would recommend the course to other students (88%) and were happy with the grade they expected to receive (88%). Most (80%) said they worked harder in the course than in a typical course.

DISCUSSION

These results offer some support to answer research questions 1 and 2, that the service-learning instructional model in the classroom does positively impact some aspects of students’ critical-thinking and real-world problem-solving skills. This study lends support to the concept that participating in active or service-learning can enhance students’ ability to identify new information needed to draw conclusions, to think creatively, and to solve real-world problems. The service-learning project provided an active learning opportunity and decreased students’ extensive use of rote memorization of information in the classroom. However, other items related to critical thinking and problem solving were not significantly impacted by the instructional model in this study.

The small number of students in the study, and the even smaller final pool of matched pairs of scores, may have contributed to this outcome. More study is needed to better understand whether the instructional model can impact scores on more questionnaire items. Also further study should include a specific comparison between the service-learning approach and a traditional instructional model in a public relations course. For example, a replication of this study with one section taught through service-learning (experimental group) and another section taught through a traditional approach (control group) would yield better results to determine whether service-learning influences students’ perceptions of gains in critical thinking and real-world problem solving. This would also provide insight into whether service-learning itself contributes to high student satisfaction with the course and their performance in it as well as their activity or participation levels. On the posttest, students reported high satisfaction with the course and their performance in it and high participation levels, but the research design did not allow for the measurement of satisfaction and participation between the two types of instructional approaches in a public relations course alone. So this outcome cannot necessarily be attributed to service-learning.

Another limitation of the study is that it merely measures students’ perceived progress on critical thinking and problem solving. It does not specifically measure actual progress on these learning objectives. A follow-up test such as a critical thinking assessment measuring progress on critical thinking and problem solving would add validity to studies such as this. Perhaps future study can add this...
important element to the body of research.

A beneficial outcome of this study is that it found the strongest significance on measures directly related to key components of active/service-learning, teaching students to find information to draw conclusions, think creatively, and solve real-world problems. The work students did to formulate an information and fund-raising campaign for a nonprofit organization helped develop these skills. Students not only proposed a solution to a problem for the nonprofit, but they also improved their own practical skills, skills they will need in their future careers. Results support the concept that active and service-learning are ways to avoid rote memorization of information in the classroom and instead apply information or knowledge to solve problems. These skills are helpful to college students in many disciplines but can be vital to the success of students pursuing a career in the dynamic, challenging field of public relations.

To incorporate service-learning into the classroom, a professor can obtain a list of organizations from the local chamber of commerce which usually includes the contact information for the person in charge of public relations for the organization. Once an initial relationship is established between the public relations courses and local organizations, often organizations will routinely contact the public relations faculty to inquire about working with students. Other professors have established a more formal method of integrating service-learning into the classroom by disseminating requests for proposals (Rogers & Andrews, 2010). Organizations are often eager for an outside perspective on their public relations concerns. Certainly whether a professor takes a formal RFP approach or the less formal approach taken here, involving students in real-life public relations work can enhance their education and provide them with networking opportunities with local public relations practitioners to increase their future job opportunities.

So while this study has found some support for the use of service-learning to improve public relations students’ perceived critical-thinking and problem-solving skills, more research is needed to determine more specifically how the approach compares to more traditional instructional models used in the public relations classroom for enhancing the learning of these valuable skills. Future study should include the extent to which the instructional approach impacts actual, rather than perceived, critical thinking and problem solving.

REFERENCES


