

School Name Missouri State University, Springfield, MO

Course Name Introductory Psychology

Course Format Flipped/Hybrid

Key Results With MyPsychLab, student learning gains increased from 30 percent to an average of 79 percent, as measured by a comparison of pre- and posttest scores. In addition, the university's per-student costs were reduced by 10 percent.

Submitted by

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Course materials

Psychology by Ciccarelli and White with MyPsychLab

Course Redesign Goals

From 2010 to 2013, the governor of Missouri and Missouri's public four-year institutions established a major course redesign initiative. The institutions partnered with the National Center for Academic Transformation (NCAT), utilizing the successful models and lessons learned from NCAT's course redesign programs. Our Introductory Psychology course, which serves over 2,500 students each year, was selected as Missouri State University's representative in this initiative and was one of the first to go through this redesign process.

Despite being a popular course, Introductory Psychology had delivered less-than-satisfactory learning outcomes for many students. The course, before redesign, was lecture-based and typically taught by approximately 65% full-time faculty and 35% adjunct instructors. While there were common general education goals across all sections, each instructor was responsible for the choice of content and delivery of course material. This produced significant variability in what material was covered from section to section and led to "course drift" and inconsistent outcomes.

The goals we identified included improving student learning, reducing course drift, incorporating best practices teaching strategies, increasing course-completion rates, and reducing institutional costs. Five full-time faculty members worked as a team throughout the planning, pilot, and implementation of the course redesign. All sections were redesigned using the same syllabus, textbook, online course materials, and staffing plan.

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Implementation

The redesign included significant changes to the staffing structure. The traditional course had one instructor per section. The redesigned course utilizes seven staff members per section including one full-time faculty instructor, one Senior Learning Assistant (a graduate assistant or adjunct instructor), and five Undergraduate Learning Assistants. So, although the redesigned course seats 300 students per section compared to 153 in the traditional course, the ratio of staff to students decreased from 1 staff member for every 153 students to 1 staff member for every 43 students.

To improve learning outcomes we transformed the traditional course into a blended or hybrid course with a flipped classroom model. In this model, students read the textbook or eText and complete the MyPsychLab chapter study plan and media assignments prior to attending class.

Assessments

48 percent	Unit exams (four)
18 percent	MyPsychLab chapter study plan and media assignments
16 percent	Comprehensive final exam
7.5 percent	Participation
6 percent	Study session attendance
3 percent	Research participation
1.5 percent	Introduction letter + Week 1 online training and quiz

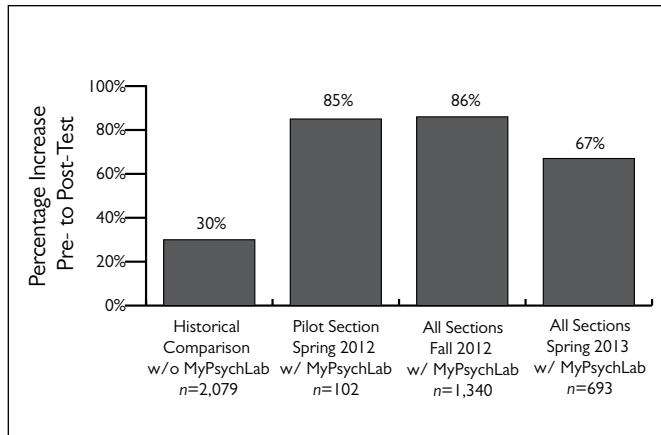


Figure 1. Comparison of Traditional and Redesigned Sections on a 30-Item Comprehensive Pre- and Post-Test Exam

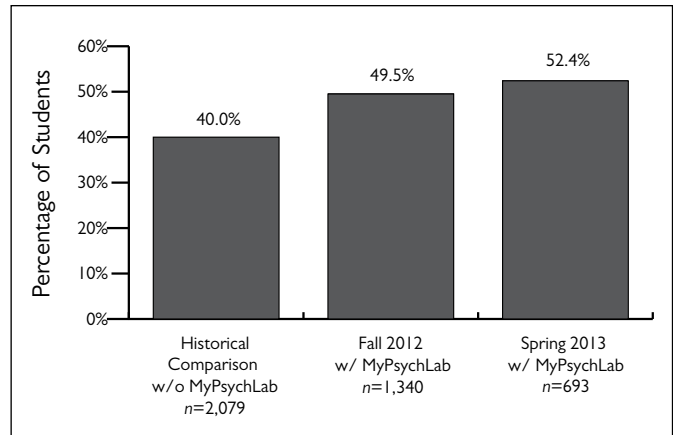


Figure 2. Overall Course Grade of A or B

Results and Data

Student learning gains have more than doubled, as measured by increases in a comprehensive pre- to posttest before redesign versus after redesign with MyPsychLab (figure 1). Further, we have seen a 31% increase in the number of students achieving overall course grades of A or B (figure 2), indicating that many more students are demonstrating mastery of the material. In addition, despite having a relatively inexpensive traditional course at \$73/student, the combination of increasing section size and more efficiently assigning instructors and learning assistants brought the cost down to \$66/student—a 10% reduction in instructional costs.

The Student Experience

One of the challenges we faced before the redesign was the inability to identify and proactively reach out to struggling students early in the semester. In the redesigned course, early intervention teaching strategies, resulting in improved learning over the course of the semester, were introduced. The combination of frequent online assignments in MyPsychLab, used formatively to identify students' areas of weakness, and a staffing structure that allowed for more frequent and personalized monitoring of student progress resulted in clear gains in learning.

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Because students are reading the textbook and actively engaging with the material in MyPsychLab outside of class, they’ve started coming to class better prepared and more willing to participate in class discussions. As a result, we can now focus on more difficult concepts (based on students’ performance on MyPsychLab assignments) and incorporate more active learning strategies (e.g., use of clickers, classroom demonstrations, online activities) into the seated class period. The students report they find these methods more engaging, and data indicates they are achieving greater mastery of the course content.

Conclusion

After two years, and via a number of quantifiable measures, we have clear evidence of the efficacy of our redesigned course. Further, we’ve accomplished the majority of the goals identified at the beginning of the redesign. Reducing the D/F/W rate proved to be the most challenging goal; however, our most recent data suggests a significant reduction in the overall rate is now occurring. Overall, we believe we have created an innovative class utilizing many “best practices” in teaching. We developed a course that reduced course drift, was implemented at a lower cost than the course’s traditional counterpart, and, most important, resulted in greater student learning.

References

- Danae L. Drab-Hudson, Brooke L. Whisenhunt, Carol F. Shoptaugh, Mary C. Newman, Ann Rost, Rachel N. Fondren-Happel (2012) Transforming Introductory Psychology: A systematic approach to course redesign, *Psychology Learning & Teaching*, 11(2), 146-157. <http://dx.doi.org/10.2304/plat.2012.11.2.146>
- Danae L. Drab-Hudson, Brooke L. Whisenhunt, Carol F. Shoptaugh, Mary C. Newman, Ann Rost, Rachel N. Fondren-Happel (2013) Course Redesign in Introductory Psychology: Efficacy After Two Years. (Submitted manuscript)