

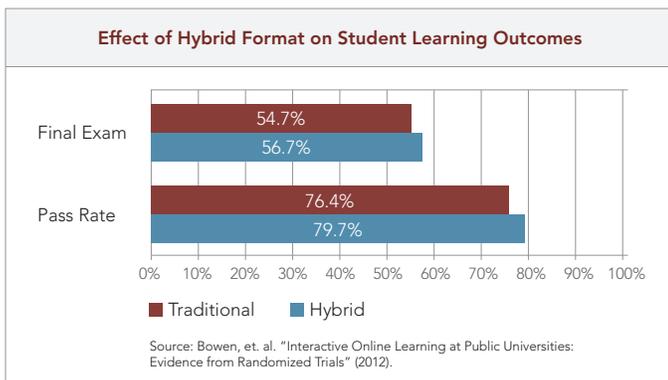
Improving Student Outcomes with Technology Learning Solutions

Enhanced technology learning tools hold great potential for improving basic learning outcomes including mastery of course content, completion rates, and time-to-degree.

Recently, a new study from Ithaka S+R, a not-for-profit consulting and research service, **ITHAKA S+R** titled *Interactive Learning Online at Public Universities: Evidence from Randomized Trials*, found that student learning outcomes in a sophisticated interactive online course (using machine-guided learning and limited face-to-face instruction) closely equaled outcomes in traditional, instructor-led courses.

About the Methodology

Ithaka S+R arranged for six different public institutions to teach the same introductory statistics course to 605 students. In each, a control group was enrolled in a traditional classroom-based course, while a test group took a hybrid course using computer-based instruction in concert with one face-to-face meeting each week. Students were selected randomly for the two different groups.



Ithaka S+R also concluded that the results of this study are “remarkable; they show comparable learning outcomes for this basic course, with a promise of cost savings and productivity gains.”

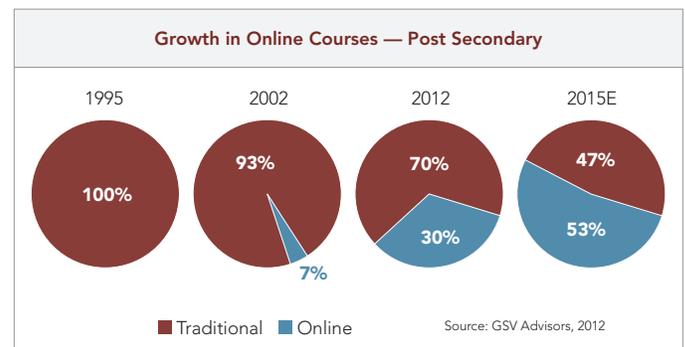
Cost Savings and Productivity Over Time

The Ithaka S+R study found that students in hybrid format courses spend approximately 25% less time on course work each week compared to students in traditional courses, concluding that the same learning outcome could be achieved in less time. “Crude cost estimation models” suggest that delivering more instruction online could save between 19% and 57% of costs, with the exact number varying by the specific implementation of the course format.

The Ithaka S+R study also showed that technology learning solutions can increase student output and potential enrollment while keeping faculty numbers and space needs the same. If successful, the result will be higher productivity of teaching and learning.

Improving Learning Outcomes with Navigate™ from Jones & Bartlett Learning.

Using enhanced technology tools to support the growing trend in online learning also has the potential to increase student outcomes while improving retention.



Developed by Jones & Bartlett Learning, Navigate is an easy-to-use and fully customizable online learning platform that combines authoritative content with interactive tools, assessments, and robust reporting and grading functionality. Navigate gives instructors the tools they need to turn insight to action with learning analytics tied to real-time student performance. Designed to help students take control of their learning, Navigate creates the learning environment necessary for students to master concepts through dynamic content delivery and authentic assessments tied to learning objectives. The result is higher retention, increased critical thinking skills, and greater career readiness.

- In a recent case study, 85% of students agreed that Navigate helped them understand the material more quickly.
- An instructor using Navigate said that “having the preloaded content saved a tremendous amount of time, so I could answer more student questions and monitor students more effectively and efficiently.”

References:
Bowen, W.G., Chinges, M.M., Lack, K.A., & Nygren, T.I. (2012). Interactive Online Learning at Public Universities: Evidence from Randomized Trials. Retrieved August 13, 2012: <http://www.sr.ithaka.org/research-publications/interactive-learning-online-public-universities-evidence-randomized-trials>

Recently, Jones & Bartlett Learning pilot-tested Navigate Public Health 101 in an undergraduate, introductory Public Health class. At the conclusion of the class, 20 students were asked to complete a survey that rated the courseware on several indicators: engagement with the class materials; time savings; learning outcomes; and overall product value.

Engagement with Class Materials

The pilot study showed that the online lectures, interactive exercises, assessments, and monitoring clearly engaged students in understanding the key concepts in Public Health.

- ▶ **95%** of the students liked that Navigate enabled them to monitor their own progress and felt an increased sense of engagement compared to a traditional textbook alone.
- ▶ **90%** reported that the activities and practice exercises made learning more enjoyable than just a book alone.

STUDENT FEEDBACK

"The matching activities and questions in between the lecture helped me understand the concept better ... if I couldn't understand the question or if I got it wrong then I would go back a few pages in the lecture."

—Student, American University

Time Savings

Most students agreed that Navigate helped them:

✓	Understand the material more quickly than a textbook alone
✓	Get through the printed text more quickly than using a textbook alone
✓	Prepare for exams more efficiently

For instructors, the time savings were significant with the majority saying that Navigate:

✓	Helped me organize my teaching
✓	Saved me preparation time
✓	Helped me monitor my students' progress more effectively
✓	Helped my students study more effectively
✓	Saved me time which I could use to improve my instruction

Learning Outcomes

Most students reported having a better understanding of the material (95%) and a better grade in class (85%) as a result of using Navigate Public Health 101.

PROFESSOR FEEDBACK

"...having the preloaded material saved a tremendous amount of time that I would've otherwise spent, so I could answer more student questions and monitor questions more effectively and efficiently."

—Brenda Kirkwood,
Associate Professor, American University

Features

Both students and instructor agreed that the robust features of Navigate helped them learn or improve their understanding of the material.

The activities and practice exercises in Navigate PH101...	% Agree
... prepare me well for my day-to-day coursework.	85%
... prepare me well for my graded assignments.	80%
... help me identify my strengths and weaknesses.	80%

STUDENT FEEDBACK

"The activities are useful in showing me what aspects of a chapter I had more difficulty understanding."

—Student, American University

Overall Value

Students reported:	% Agree
I am glad my instructor chose Navigate Public Health 101.	94%
I would recommend Navigate Public Health 101 for this course in the future.	88%
I want to continue using Navigate Public Health 101 in this class.	81%

Summary

Improving learning outcomes while reducing the cost of delivery continues to be paramount for most higher education institutions. For more information on how Jones & Bartlett Learning can help address these issues, just visit us today at www.jblearning.com.