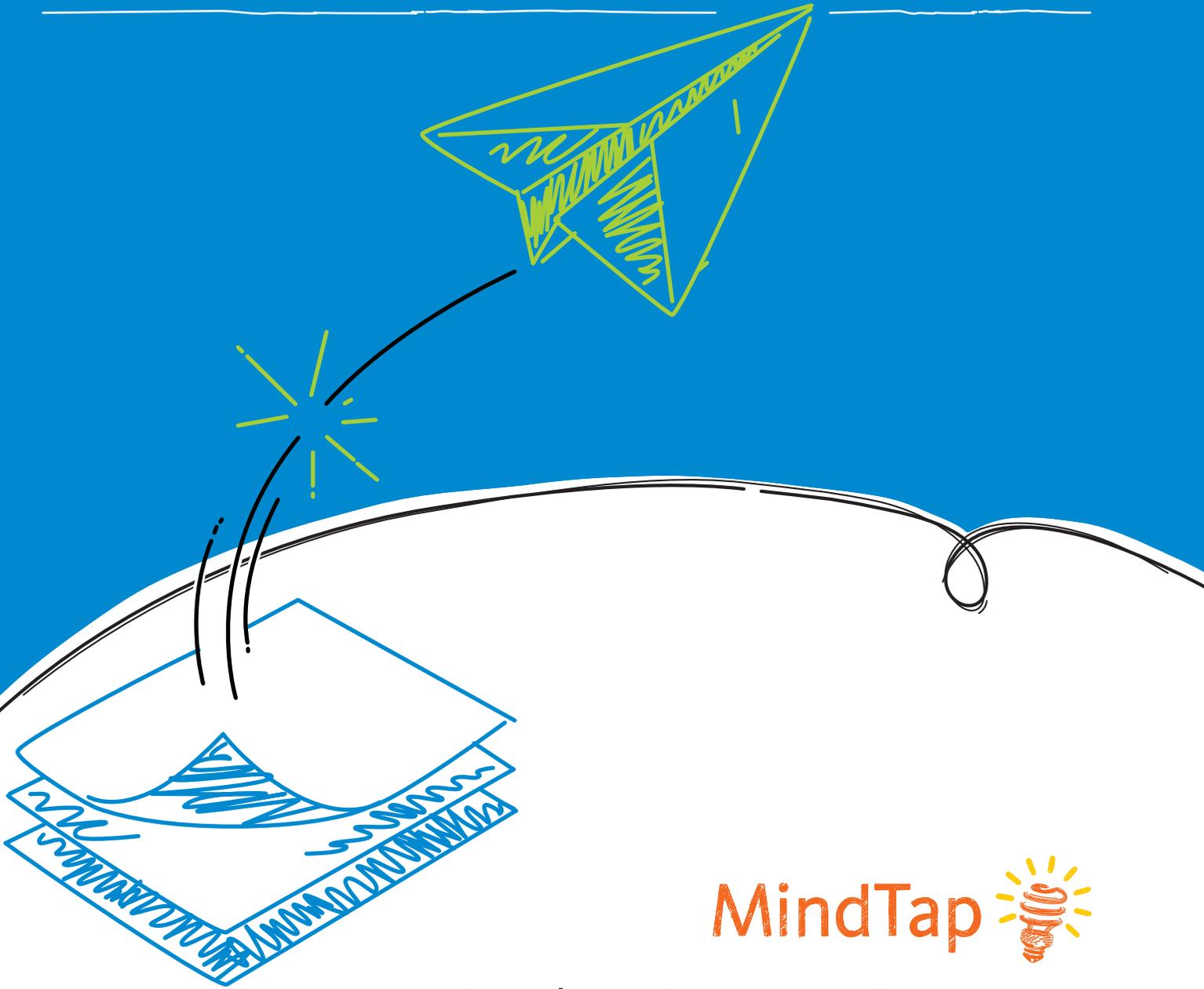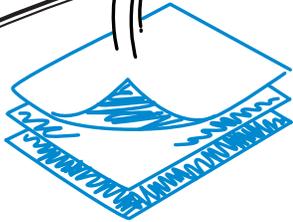MindTap

Student Learning Improves Significantly with MindTap

A study of the impact of Cengage Learning's MindTap on student learning in post-secondary psychology courses

CENGAGE
Learning®

Student Learning Improves Significantly with MindTap

About MindTap

MindTap is an online, personalized learning experience built on Cengage Learning's content that combines student learning tools—readings, multimedia, activities, and assessments—into a Learning Path that guides students through their course. Instructors can personalize the experience by customizing Cengage Learning content and learning tools, including adding their own content via apps that integrate into the MindTap framework with Learning Management Systems.

About This Study

MarketingWorks and SEG Measurement, two independent research firms, conducted a comprehensive study of MindTap's effectiveness in post-secondary psychology courses in the fall of 2014 using an array of qualitative and quantitative methods. The primary goal of the study was to determine the extent to which MindTap users improved their psychology knowledge and skills more than a control group of students who used the same textbooks and other technology-learning supports but did not use MindTap. Further, the study investigated faculty and student perceptions of the product.

A total of 14 psychology instructors in 13 different institutions of higher education participated in the research. A posttest of psychology knowledge and skills taught in the course was administered to compare the amount of learning between MindTap users (6 treatment instructors) and non-users (8 control instructors). High school GPA was used to place all of the students on the same baseline for comparison.

The six treatment instructors also provided feedback about MindTap throughout the semester, and students did the same

in a focus group and through an online survey at the end of the term.

Students Learn More with MindTap

Students in classes using MindTap achieved significantly higher psychology posttest scores, than students in classes using the same textbooks and other digital resources but without MindTap, as indicated below. The results show an effect size of .33 (Cohen's D), indicating that students in the treatment group using MindTap performed about one-third of a standard deviation (33%) better than students in the control group not using MindTap (F=5.33; p=.02). This level of growth is consistent with a student moving from the 50th to the 63rd percentile.

I think MindTap helps students achieve higher levels of learning because it gives them more content and a fuller view of the field so they can get more than an in-class experience.
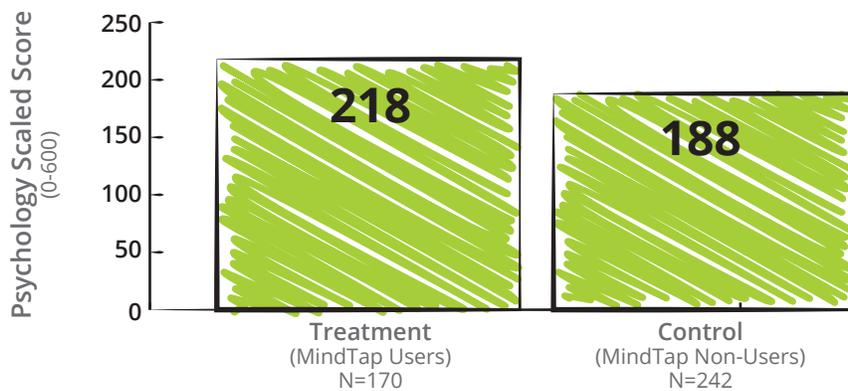
Joseph Grande
Instructor
Wilmington University

Figure 1. Comparison of Psychology Posttest Scores Between MindTap Users and Non-Users

MindTap Users Score Higher on Psychology Post-Tests

Psychology Scaled Score (0-600)

218 — Treatment (MindTap Users) N=170

188 — Control (MindTap Non-Users) N=242

Overall, MindTap is a great, user- friendly system. It frees up time and resources for other things. Since students have already had some engagement with the material prior to our first class discussion of each chapter, class discussions are more interactive. This takes some of the teaching pressure off of instructors and allows more time for activities, demonstrations, and supplemental material to be shared.

Ayanna Lynch
Instructor
Bowie State University

MindTap Receives Praise from Instructors

All of the instructors felt that MindTap impacted both student engagement and student preparedness in the course, and five of the six felt that MindTap made teaching easier or better.

Similarly, all agreed that....

- MindTap contributed to student learning and to enhancing students' critical thinking skills.
- MindTap contributed to students' ability to monitor student performance.
- MindTap helped students get through the course and keep them focused on the areas where they needed the most help.

Five of the six instructors agreed that...

- Grade It Now and Immediate Feedback/Explanations in homework assignments helped students overcome roadblocks.
- MindTap's assignments helped students understand course concepts' application to real-world situations.

Most instructors agreed that:

- The scores and feedback students received in MindTap were accurate and of high quality.
- The feedback in MindTap was appropriate and helpful to students.
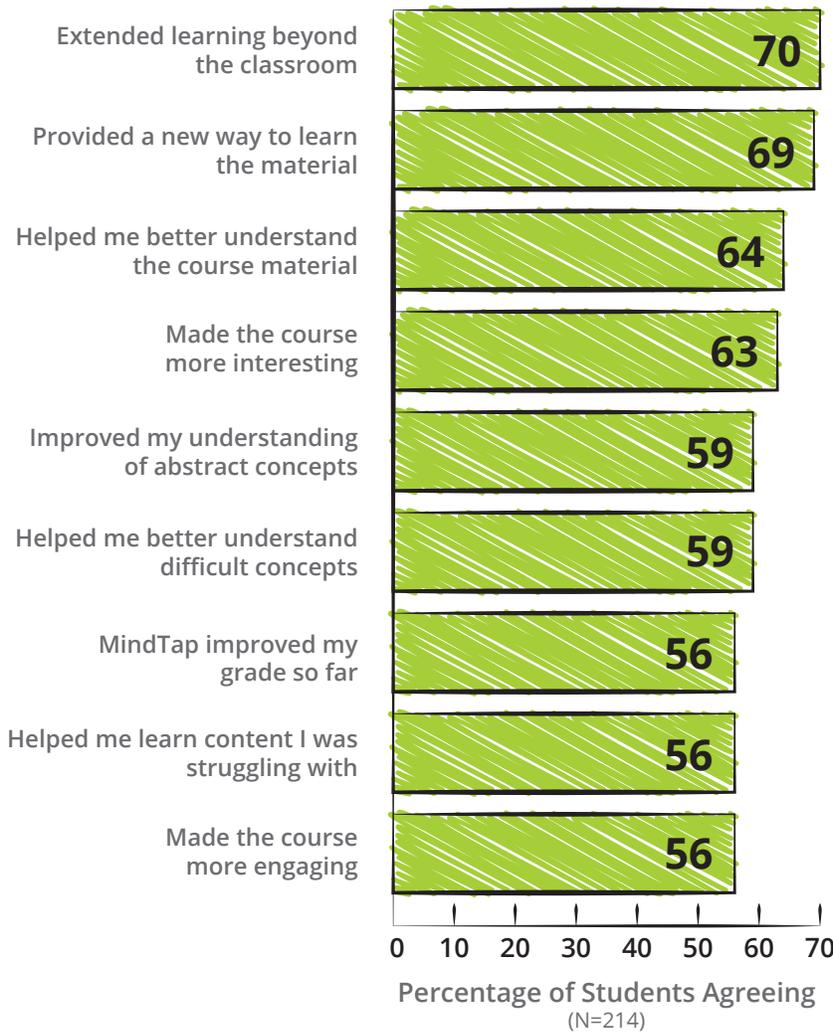- MindTap's content worked well with my textbook in this course.

MindTap Meets A Variety of Student Needs

A majority of all the students surveyed at the end of the course strongly agreed or agreed with the following statements related to the impact of MindTap on their learning.

Figure 2. MindTap Meets a Variety of Student Needs

MindTap Meets a Variety of Student Needs

Statement	Percentage
Extended learning beyond the classroom	70
Provided a new way to learn the material	69
Helped me better understand the course material	64
Made the course more interesting	63
Improved my understanding of abstract concepts	59
Helped me better understand difficult concepts	59
MindTap improved my grade so far	56
Helped me learn content I was struggling with	56
Made the course more engaging	56

Percentage of Students Agreeing
(N=214)

MindTap is very helpful. I've retained a lot more information this year than when I took psych previously. I don't think it would have happened without MindTap. I've become more interested in psych because of it.

Aitana
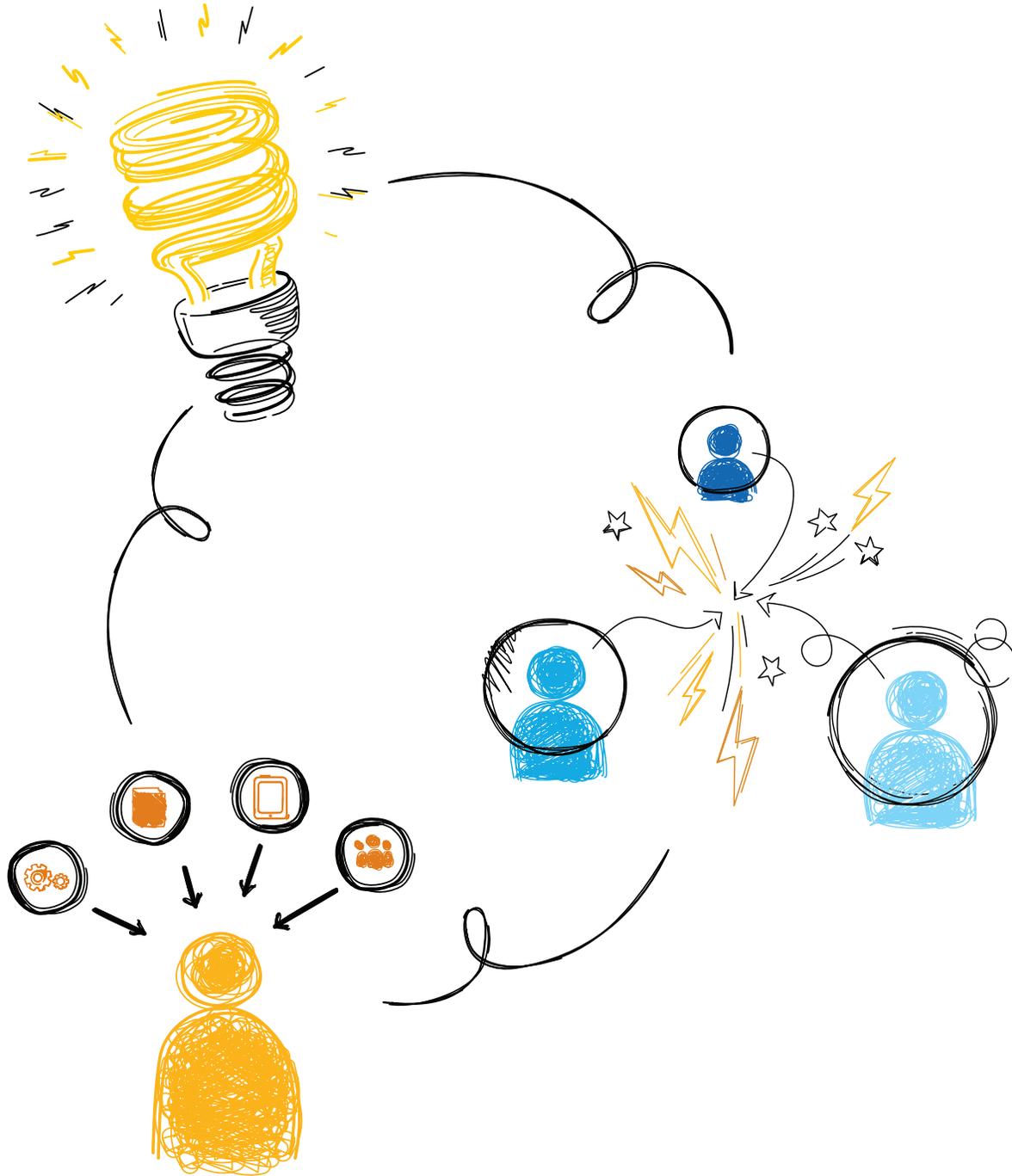Student
Bowie State University

I've learned a lot more than I would have otherwise had I not been using MindTap. It helps me understand the subject, and I just do better overall with it.
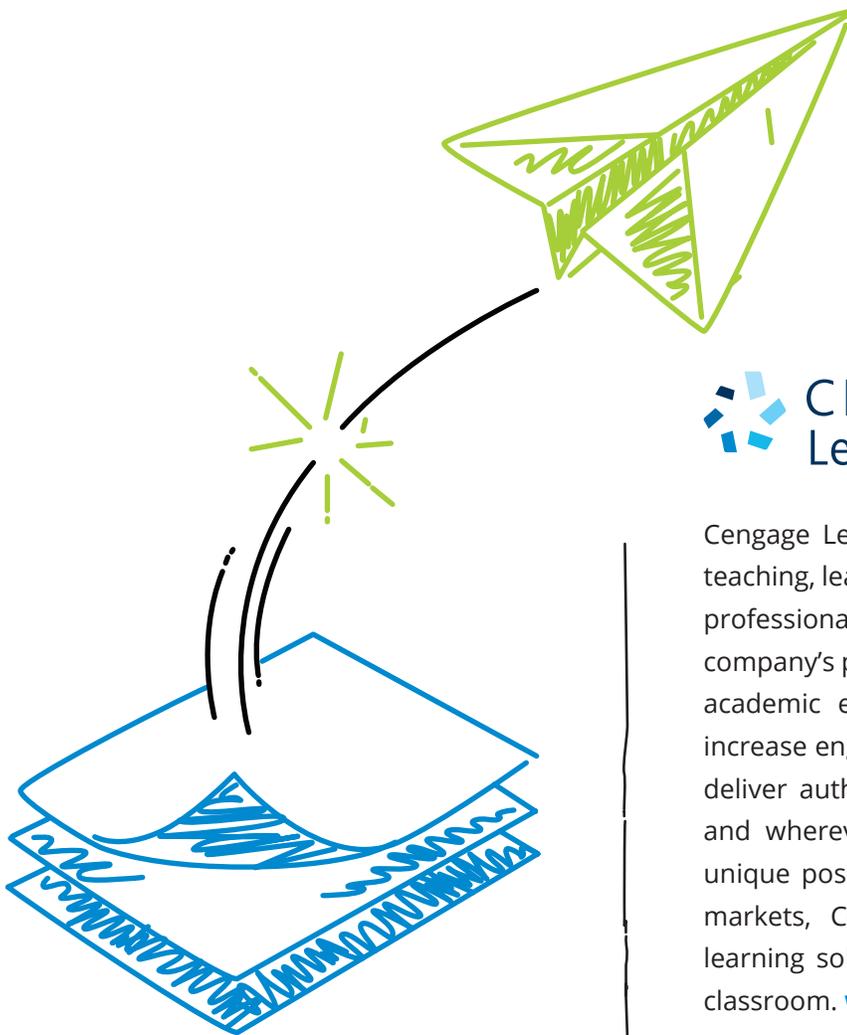
Daina
Student
Utah Valley University

Conclusion

In a national, semester-long study, students using MindTap in psychology courses showed significantly greater growth in psychology knowledge and skills than students who did not use MindTap but did support their learning with other digital tools. Almost all instructors and a majority of students judged MindTap to be effective in helping to teach students the content of their psychology courses. MindTap can be an effective tool to increase student learning and improve instructor productivity.

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A paper based on the study presented here has been peer-reviewed and accepted for presentation at the EdMedia 2015: World Conference on Educational Media and Technology in Montreal.