

EMS Digital Curriculum Solutions Shown to Significantly Impact Student Success

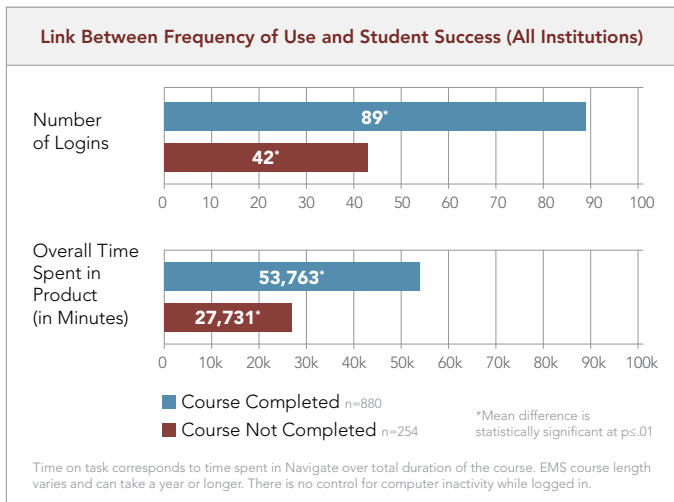
Jones & Bartlett Learning has been continuously conducting research on student performance while using the EMS Advantage, Preferred, and Premier digital curriculum solution packages. Additionally, we have been collecting feedback on overall customer satisfaction with these packages. Recently, we performed three studies to measure the effectiveness of the EMS digital curriculum solutions.

- **STUDY ONE** evaluated how well students performed in class when utilizing the various resources available in the digital curriculum solution packages.
- **STUDY TWO** measured how satisfied students were with the resources of the digital curriculum solution packages.
- **STUDY THREE** collected a range of customer feedback on our most advanced curriculum solution package: the Premier Package.

For these research studies, Jones & Bartlett Learning surveyed a select number of instructors and students who provided results and feedback on utilizing the digital curriculum solution packages throughout their courses. The results were linked to how frequently students logged in to the resources of the digital curriculum solution packages and the time spent within the resources.

Students Who Use the EMS Digital Curriculum Solution Packages More Frequently are More Likely to Complete Their Course or Training Program Successfully

The first study showed consistently that students who completed their course used the resources in the digital curriculum solution packages more frequently. Based on a sample size of almost 900 students enrolled in EMS courses, successful students accessed the digital resources more than twice the amount of time as those who did not complete the course successfully. In addition, successful students spent almost double the amount of time working in the digital resources. Statistically, the differences are significant.

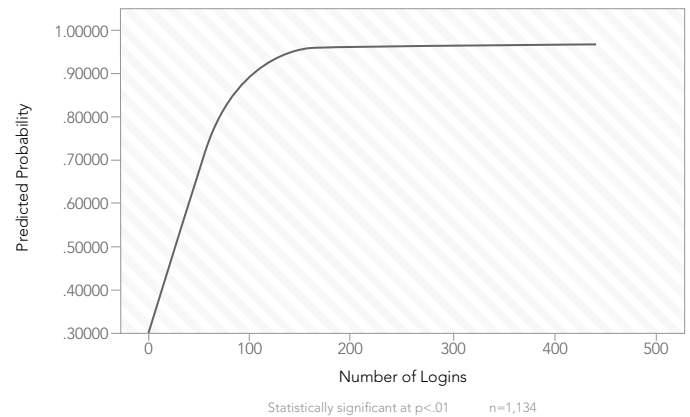


What's more, we can predict the probability of students completing their course based on the frequency of use by using a Logistic Regression Model. For example, students who logged in to the resources rarely will have approximately a 30% to 40% chance of completing their course successfully, while students who access the resources 100 times or more throughout the course will have a predicted pass rate of 90%. A similar prediction model can be estimated based on the amount of time students spend in the resources throughout the semester. Both prediction models are statistically significant.

LOGISTIC REGRESSION MODEL

The more frequently students log in to the product, the more likely they are to complete their class.

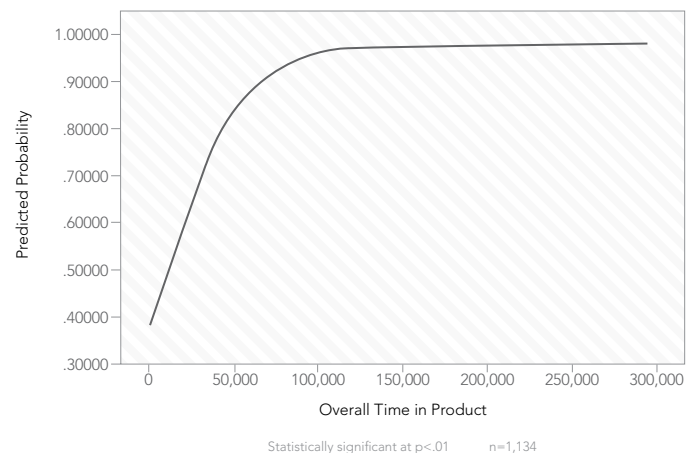
$$\text{Prob ("Pass")} = \frac{1}{1 + e^{(.866 - 0.035 * \text{Logins})}}$$



LOGISTIC REGRESSION MODEL

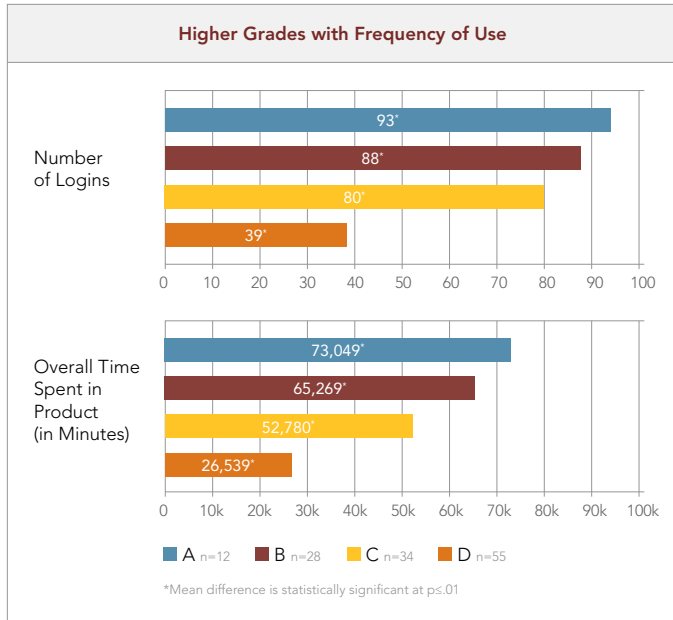
The more time students spend in the product, the more likely they are to complete their class.

$$\text{Prob ("Pass")} = \frac{1}{1 + e^{(.487 - 0.00004 * \text{Minutes})}}$$

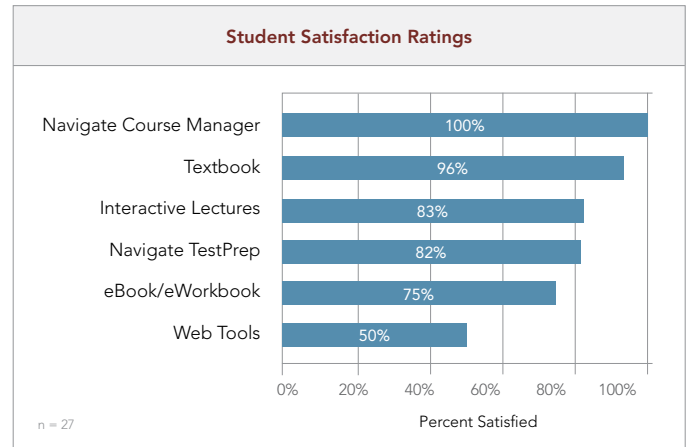


There is a Positive Relationship Between the Time Spent in the Resources and Course Grades

The first study also showed that students with higher grades spent more time in the resources. For instance, in a course at a medium-sized EMS training program, students who scored an “A” had logged in to the resources more frequently and utilized them more intensely than students with lower grades. The difference is statistically significant.



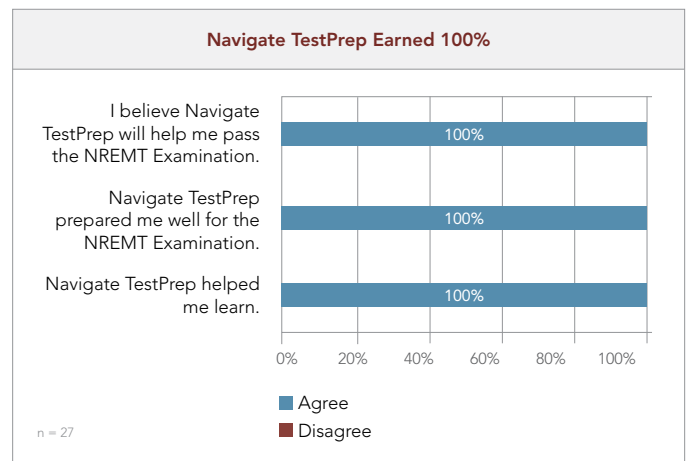
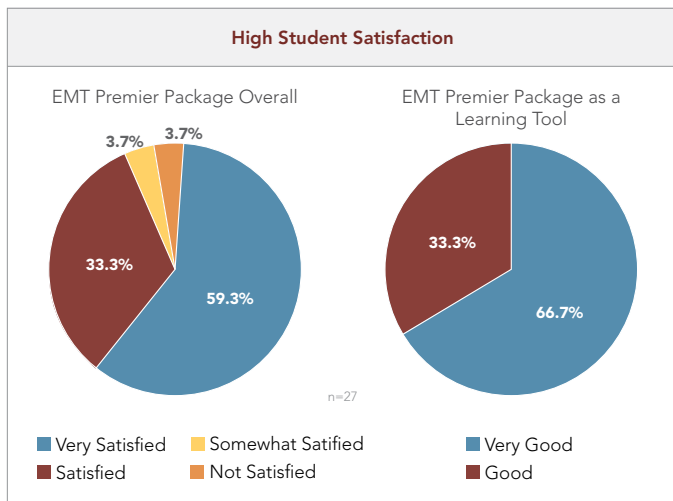
- 93% of students were highly satisfied with the resources in the Premier Package.
- 100% of students rated the Premier Package as a “Very Good” or “Good” learning tool.
- All of the students who used the Premier Package upgrade agreed that they would recommend the Premier Package to other students.



We also asked students to rate their satisfaction level with each of the resources available in the Premier Package. For the majority of the resources, the ratings were highly favorable.

Overall, Instructors and Students Were Highly Satisfied with the Premier Package and Agreed That it Was an Invaluable Learning Tool

As a part of our research efforts, a select number of institutions were upgraded to the Premier Package, which added to the student resources an eBook/eWorkbook, Navigate TestPrep, and Interactive Lectures. At the conclusion of the course, both students and instructors provided us with a wide range of survey feedback on these resources.



Most impressively, 100% of students agreed that Navigate TestPrep was a useful and valuable tool in preparing for and passing the National Registry of Emergency Medical Technicians (NREMT) certification exam.

Conclusions

- Students accessing the resources in the digital curriculum solution packages are more likely to complete their EMS courses.
- There is a positive relationship between the time spent in the digital curriculum solution packages and students’ grades.
- Both students and instructors are highly satisfied with the resources available in the digital curriculum solution packages.