Lippincott PassPoint Case Study

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Program

The nursing program at Nevada State College is a BSN program with students on either a full- or part-time track. *PassPoint* is used in the final-semester NCLEX-preparation course. There are 50 to 60 students each semester across both tracks. The program started in 2002, with the goal of being a middle-tier school—fitting between the university and the community college. Nevada State College only offers a BSN, and tuition is lower than at the university. As a result, the program attracts students who don't necessarily feel they have to go to the university, which is more expensive. According to Dr. Coffman, "There are lots of really smart students in the program including students from other countries, and many speak more than one language. Overall, students struggle with their personal lives the most—they can get distracted with all of their other responsibilities. Some have to work—but it's not ideal. It is better if students can take more time to study if they need it."

Course Structure

The course is organized around weekly proctored ATI tests, which help students assess their NCLEX® readiness. Students also have mock interviews, resumé help, and a three-day live review. *PassPoint* is used adjunct to ATI—students take 50-question, instructor-created exams in *PassPoint* to prepare for the ATI tests. For example, Professor Coffman made one customized *PassPoint* assignment in pediatrics and a similar one in maternity. Students then use these

assignments for extra practice questions as they prepare for the ATI exams and the NCLEX. About 30% of the course grade is based on doing 5,000 to 6,000 questions. Instructors tally questions each week, and students answer about 500 to 600 questions each week in a 14-week semester.

At the beginning of the course, the instructor tells students the reason the program uses the products they do in the course:

a) ATI is a curriculum-based tool and used throughout the curriculum. If students have a course in pediatrics they take a pediatrics ATI test.

b) *PassPoint* is built around computer adaptive testing models. Students can use *PassPoint* to increase their content mastery as they practice. "I also like that students can answer a lot of questions in *PassPoint* and that the questions are on the computer," says Dr. Coffman. "Students don't get a grade for doing the *PassPoint* questions, but usage factors into their question counts."

c) Hurst is a three-day live review and it is used as it is conceptually based.

The program's use of these three complementary products maximizes exposure from different points of view. Professor Coffman believes she gets better buy-in from students—to all three products—by explaining how they vary and by helping students address different needs as they progress through the semester.

Students pay for all the products, and so they need to be convinced that they are spending their money wisely.

Students take the ATI Comprehensive Predictor at the end of the program and have two attempts to achieve the benchmark of 72%. If students do not make the benchmark on the second try, they fail the course and have to come back and take it again—so it is high stakes. Most students achieve the benchmark by the second try.

PassPoint Implementation

Students use *PassPoint* primarily to practice and take more NCLEX-style questions. Students complete a worksheet each week that indicates how many questions they answered, where the questions came from, and which topics. The questions they answer each week are totaled. Students can earn 30% of the course grade by doing the minimum number. Professor Coffman looks at these worksheets to make sure that students are remediating in the areas they need to develop. Students then get one grade at the end for the total number of questions they answered.

At the end of the semester, when student are remediating in their weak areas, Professor Coffman talks to them about how throughout the semester they have been taking tests in ATI and quizzes in *PassPoint*, all of which show what they know. They have experience looking at rationales to see what they might have missed, but in general they are looking at how well they are doing and how prepared they are in certain areas. So Professor Coffman tells them that in the two-week remediation, "it's do or die—they need to pass the ATI and so it's really important to focus on what they don't know." They are required to do focused reviews in ATI and focused remediation in *PassPoint* and really study what they don't know. As Dr. Coffman points out, "This is a different mindset—true remediation—and they are working hard to fill in the blanks in their weak areas. They know they know a lot and they think that's enough. They've been through the program, but now they need to really focus, and remediate in their weak areas. It is important that they realize they don't know everything and that they need to be humble."

Student Usage

Professor Coffman looks at the usage and mastery data in *PassPoint*, but she tends to focus more on how students are doing on their ATI exams. She sets deadlines for the *PassPoint* assignments to encourage students to take them before they take the ATI tests. Students are allowed to use other NCLEX preparation products, but *PassPoint* is especially helpful for remediation. Here's another example of how students are using *PassPoint* to remediate.

Students who do not achieve the benchmark on the ATI Comprehensive predictor on the first try have two weeks to remediate then retake. Professor Coffman sits them down, and they go into the ATI test report and look at the NCLEX categories to see how they scored. They look at the two or three topics in which they are the weakest and then we use that information to make a plan for remediation. They then go a little deeper and look at the different questions they missed. "You can't go into ATI and take a basic care and comfort test, or create something on your own. But you can in *PassPoint*. So we look in *PassPoint* and make sure they know how to create their own quizzes in the areas they are weak in. That is really helpful that you can create quizzes based on the NCLEX categories," says Professor Coffman.

Current Cohort Usage

Student *PassPoint* usage for the students who graduated in spring 2017 (N =59) is shown in Table 1. Usage and Mastery Level (ML) are shown separately for the full- and part-time students.

Table 1: Overall Student *PassPoint* Usage and Mastery

	Program Type	N	M	SD
Number of Log Ins	Full-time	44	38.61	19.83
	Part-time	15	32.53	20.05
Number of Quizzes	Full-time	44	28.39	56.73
	Part-time	15	11.20	20.05
Number of Questions	Full-time	44	1080.57	688.31
	Part-time	15	689.33	462.44
Overall Quizzing ML	Full-time	44	2.45	1.41
	Part-time	15	1.75	.99
Remediation Links	Full-time	44	2.07	6.32
	Part-time	15	2.13	4.78

Students answered an average of 1,604.09 questions (+/- 523.65) and achieved an average overall quiz ML of 5.25 (+/- 1.44). Figure 1 shows the distribution of the number of questions answered by students across the semester.
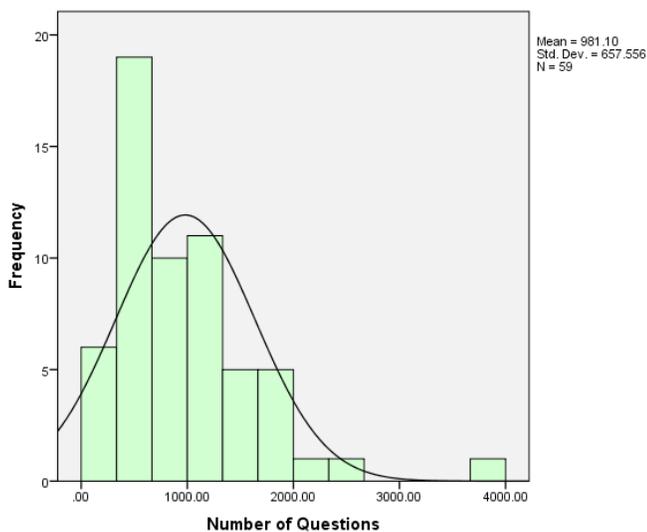

Figure 1: Number of quiz questions answered

Students were able to take practice exams in *PassPoint* throughout the semester. Most students (73%) took only one practice exam with an average of 1.77 (+/- 1.58) for the full-time students and 2.20 (+/- 3.12) for the part-time group. Overall exam usage, however, was low with a total of 111 exams completed across the cohort (see Table 2).

Table 2: *PassPoint* Practice Exam Usage and Mastery

	Program Type	N	M	SD
Number of Exams	Full-time	44	1.77	1.58
	Part-time	15	2.20	3.12
Number of Exam Questions	Full-time	44	237.95	179.56
	Part-time	15	251.67	260.75
Exam ML	Full-time	44	6.82	1.08
	Part-time	15	7.11	.78

A Pearson correlation analysis was used to explore the relationship between *PassPoint* usage and mastery variables. A Pearson product-moment correlation was run to explore the relationship between the number of questions answered in *PassPoint* and overall ML. There was a strong, positive correlation between the number of quiz questions students answered and their overall quizzing ML, r(59) = .884, p < .01. Thus we see that with increased usage students were more able to correctly answer more difficult quiz questions and mastery of the content improved (see Table 3).

Table 3: Correlation Between Quiz ML and Number of Quizzes, and Questions

		Number of Questions	Overall Quizzing ML
Number of Exam Questions	Pearson Correlation	1	.884**
	Sig. (2-tailed)		.000
	N	59	59
Overall Quizzing ML	Pearson Correlation		1
	Sig. (2-tailed)		
	N		59
** Correlation is significant at the 0.01 level (2-tailed).			

Student Feedback

General feedback on *PassPoint* as students went through the semester was that the questions were easier than the ATI questions. Professor Coffman reminds students that quizzing in *PassPoint* is adaptive and they need to keep quizzing and then they will start to see the more difficult questions. If they don't keep working in *PassPoint*, they won't see the harder questions, so it is important to remind them that they need to get past the beginning part. As they increase in mastery, the questions will get more difficult. At the start of the course, Professor Coffman does a presentation on mindset (based on ideas from *Mindset* by Carol Dweck). She talks to the students about how computer adaptive learning is based on the growth mindset, not a fixed mindset—you are never done and you are constantly growing and learning more. There is a nice correlation between the concept of mindset and the way students are learning with adaptive quizzing.

NCLEX® Outcomes

In a recent quarter, the program had a 100% NCLEX pass rate, and typically it has been between 95% to 100%. According to Professor Coffman, "We work hard at it and we get results. Our students are mostly second career students—they have a lot going on, with family commitments, work, and so on. But they really work very hard."

Advice for New *PassPoint* Users

Professor Coffman recommends the following: "Understand how *PassPoint* fits with other products and explain that to the students—it is not just a big bank of questions. Students need to know and appreciate the different approaches. It was helpful to have the publisher's rep come round once in awhile. And when I first was using *PassPoint* the tech support folks were very helpful—I got the support that I needed. "

"You can't go into ATI and take a basic care and comfort test, or create something on your own. But you can in PassPoint. So we look in PassPoint and make sure they know how to create their own quizzes in the areas they are weak in. That is really helpful that you can create quizzes based on the NCLEX categories."