



Introduction



Going from Professional to Professor in Nursing

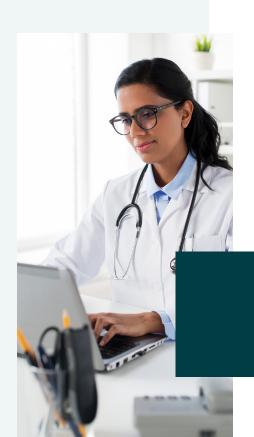
Nursing is a teaching profession, no matter the setting. Nurses teach patients about their conditions, nutrition, treatment options, and much more. Experienced nurses teach new nurses — both those who have just graduated and passed the NCLEX and those who are new to the unit (or specialty). Nurses can even teach physicians. Since nurses spend more time with patients and often come across as less intimidating, patients may share concerns with their nurses that they wouldn't share with their doctors.

After spending time as mentors to new nurses and as healthcare coaches to patients, some nurses decide to take their experience to the classroom for a more traditional teaching role. But years of real-world teaching experience aren't always enough to make a great nurse educator.

What They Don't Teach You in Nursing School

Nursing school often focuses on clinical skills, like how to administer medications and perform clinical assessments. Nursing students also learn about community health, health policy and legal issues, nursing leadership, research, and (of course) anatomy and physiology. While these subjects are critical for nurses, they don't prepare nurses to teach in a classroom setting.





And while experience can take them a little further toward the goal of becoming skilled and competent professors, it can't take them across the finish line.

The final piece of the puzzle? Traditional teaching skills. Here are just a few of the things nurses without a background in education will need to know:

- Curriculum design
 - Course design
- Student feedback
- Student assessments
- Class management
- Exam item creation

There's a lot to know, but the good news is that ExamSoft's multi-solution platform can help. But before we dive in, let's explore teaching a bit more.

What Is Pedagogy?

Pedagogy, simply put, is the theory and practice of teaching — how we teach. Since there are different styles of teaching, it's important to choose the right one (or more), based on factors such as the subject, the learning environment, and the goals — to name a few. For example, nurse educators may take a hands-on approach to clinical skills, whereas, a literature teacher may use the Socratic method and ask questions to encourage critical thinking.

An instructor must be open to changing pedagogical strategies if one method isn't delivering results in a certain subject or for a cohort of students. Data analysis can show educators what is working and what isn't.



Different Teaching Styles

Here are just a few pedagogical methods to consider:

Direct Instruction

This teaching strategy is the one we are probably all most familiar with. According to Teach. com, it is "the traditional teaching strategy that relies on explicit teaching through lectures and teacher-led demonstrations" [1]. Students then complete homework assignments based on what they learned in the previous lecture. While this may be the style students are most accustomed to, it doesn't always yield the best learning outcomes.

Flipped Classrooms

The opposite of direct instruction, this model presents students with prerecorded lectures they watch before attending class; the students then complete assignments in-class. This method allows students to progress at their own pace and get guidance directly from the instructor as they work on their assignments.

Kinesthetic Learning

This type of teaching is crucial in nursing school, as it focuses on hands-on learning. A good example of kinesthetic learning is nursing students checking vitals on a training mannequin.



Differentiated Instruction

Originally intended for students with special needs, this teaching strategy tailors instruction to individual students. For example, some students may learn better with one-on-one instruction, while others may learn best from visual instruction.

Inquiry-Based Learning

In this method, teachers ask students to come up with their own questions what are they curious about? It is then the students' job to do the research, finding sources, answering questions, and overcoming obstacles that come up along the way. Instructors play more of a supportive role in this method and guide their students when difficulties arise.

Expeditionary Learning

Perfect for classes in community health nursing, this strategy involves project-based learning in real-world scenarios. A student may attend a public health event at a local community center, for example.

These teaching strategies, and many others, can accommodate the use of more or less technology, depending on what the situation calls for and what is available.





Bloom's Taxonomy

Experienced nurses who are new to the classroom may have never undergone formal training to teach. Of course, they teach every day on the job — patients, new nurses, and even physicians — but many aspects of pedagogy may be unfamiliar. One of the most important concepts in teaching is Bloom's Taxonomy. According to TeachThought, "Bloom's Taxomony is a hierarchical ordering of cognitive skills that can, among countless other uses, help teachers teach and students learn" [2].

Educators can use Bloom's Taxonomy to do many things in the classroom, including the following:



ExamSoft's multi-solution platform can help with each of these.

Bloom's Taxonomy has been in constant use since Benjamin Bloom published his ideas in 1956. In 2001, Anderson and Krathwohl published a revised version that shifts to a more dynamic model. Using verbs (and gerunds) to label each level, the revised taxonomy more accurately describes the dynamic ways in which we learn.



The following list outlines the revised version of Bloom's Taxonomy:



Remember

- Recognize
- Recalling

Understand

- Interpreting
- Summarizing Comparing
- Exemplifying

Classifying

- InferringExplaining

- **Apply**
- Executing
- Implementing

Analyze

- Differentiating
 Organizing
 - Attributing

Evaluate

 Checking Critiquing

Create

- Generating
- Planning
- Producing



Curriculum Design for Nurse Educators

According to Karen Schweitzer, business school admissions consultant, curriculum developer, and education writer, "Curriculum design is a term used to describe the purposeful, deliberate, and systematic organization of curriculum (instructional blocks) within a class or course" [3]. Simply put, it's an instructional plan.

Before designing curriculum for any course, the instructor needs to consider many factors, including the following:

- Goals
- Restraints and limitations (e.g., technology, online vs. in-class, knowledge and skill level of students)
- Length of course
- Instruction methods available
- Curriculum mapping



Curriculum Mapping

Curriculum mapping is one way to design curriculum. Again, professors must consider the desired outcomes, the skill level of students. the institutional initiatives or goals, the learning materials, and the pace. A curriculum map is often just a simple, graphic way to organize the curriculum. Imagine a spreadsheet with rows and columns outlining each unit, the objectives, materials used, assessments, etc.



Student Assessments

Student assessments can be quite different. For example, an experienced nurse might observe a new nurse perform a specific procedure. This is an informal example, and remediation can happen immediately. This type of assessment is usually a oneon-one scenario.

A more formal example is a summative test in the middle of a semester for every student in the class. The assessment is not tailored to each student and remediation is not immediate.

Test Analysis

Well-constructed, fair, and equitable assessments are an essential part of education. Does each student have the same chance at success based on the exam? Does the exam actually test the students' knowledge of the subjects? Is each topic in the course included? These are just a few of the questions that professors need to consider when writing an assessment.

The answers to these questions give you a clear picture of what is working and what isn't after the students have finished their exams. To get the most out of a test analysis, it's crucial that teachers analyze each item, or question, on the exam.

Item Analysis

To analyze the quality of an exam, educators must evaluate each individual item. This may not be as simple as it seems because educators use various "psychometrics" to evaluate exam items.



Here are a few things to consider when judging the quality of an item:

Item Difficulty Index (p-value):	This is the proportion of exam-takers who answered the question correctly. If an item has a p-value of .20, for example, it means that 20% of exam-takers got the question right.
Discrimination Index:	This is the difference in question performance between students who scored well on the exam as compared to students that scored poorly on the exam. A positive index means that higher-performing students have a high likelihood of answering correctly, and poorer performers are more likely to select an incorrect distractor.
Upper Difficulty Index (upper 27%):	This is the exam difficulty index for exam-takers who perform in the top 27%.
Lower Difficulty Index (lower 27%):	This is the exam difficulty index for exam-takers who perform in the bottom 27%.
Point Bi-serial Correlation Coefficient:	This is the correlation between the exam-taker's response on a specific question and their performance on the overall exam. A higher point bi-serial index is ideal as it indicates that performing well on this question more than likely equates to performing well on the overall exam.
Kuder-Richardson Formula 20 (KR-20):	This is the consistency in item difficulty for the exam overall. This helps determine the reliability of an assessment and the likelihood that a similar performance occurs upon additional administration of the exam.



The Importance of **Exam Integrity**

Though it seems pretty obvious why exam integrity is important — fairness and accuracy — there's much more to it. For example, if a licensing exam becomes compromised due to academic dishonesty, it invalidates the license awarded. In the case of nursing, cheating could lead to dire patient outcomes. The situation could literally be life or death.

Exam integrity is also important for the academic institution. Assessment results can be the difference between an institution or program becoming accredited or not, which affects a number of things, including retention rates of students and instructors, funding, reputation, and more.





The solution for faculty, staff, and administrators is ExamSoft. Our webbased platform helps educators create and grade exams more quickly (and easily) than ever before. ExamSoft generates reports that highlight successes and learning opportunities for each student. This is also where exam administrators will find psychometrics on questions and exams. Everything is on one platform, and the reports from ExamSoft will help educators improve their teaching and student outcomes.



Examplify is the testing application for students and exam-takers. This is where students download and take their assessments on their own devices, such as a PC, Mac, or iPad, or on computers in a lab on campus or onsite.







One of the foremost concerns when giving any assessment — online or on paper — is security, and ExamSoft provides multiple safeguards to ensure examintegrity. A pillar of exam security is the verified identification of the exam-taker. While checking IDs works great for smaller, in-person testing centers, it doesn't work well for remote exams or large-scale inperson exams. That's where ExamID comes in.

ExamID is the most advanced facial recognition software of its kind, making exam-taker identification faster, easier, and more reliable than ever before. Not only is it the perfect solution for remote exams, but it also works great for exams in auditorium-style classrooms, where it's difficult to keep track of each student in the room.





Academic dishonesty can be a problem in any setting, but it is especially problematic when administering exams remotely. ExamMonitor uses the latest in A.I. analysis to detect any attempts at cheating. This remote proctoring solution records each exam to provide evidence of student behavior for administrative review.

Here's how it works. After an exam-taker has verified their identity with ExamID, ExamMonitor records audio and video through the device's webcam while simultaneously capturing the on-screen experience. When the exam is complete, ExamMonitor uploads the recordings to ExamSoft. If the A.I. flags any suspicious behavior, a trained professional will review the files. Faculty and administrators will also receive a proctoring report noting any abnormalities. WiFi is not required for the duration of the exam - only for the identification verification component and uploading files.



ExamID's two-step authentication process, using a username and password and biometric facial recognition, makes exam-taker impersonation nearly impossible. ExamID also virtually removes the possibility of human error.



The solution for formative assessments, ExamNow helps instructors gauge class progress in real time. Think of formative assessments as ungraded quizzes. As opposed to summative exams at the end of a unit or semester, formative assessments allow educators to see where students are in the learning process. This can help identify opportunities for remediation. The information gathered from formative assessments also shows instructors where they may need to adjust their lessons or pedagogical techniques.



ExamSCORE allows instructors to apply rubrics, or specific criteria for grading, to assessments, eliminating the risk of subjective grading. This tool also makes grading easier; teachers can use it on their computers or tablets wherever they happen to be.



Curriculum mapping can be a great way to design a course or curriculum, but it takes time to do it right. With ExamSoft's mapping tool, MAP, instructors can plan their courses with a number of objectives in mind. This tool doesn't just help teachers and students achieve course objectives, it also helps them meet institutional, programmatic, and accreditation and licensure standards. This mapping solution also allows instructors to download their maps to Microsoft Excel.





Through EAS+Y, ExamSoft offers experienced education experts trained in assessment best practices help improve student, faculty, and program success.

Clients can request onsite visits, both in the U.S. and abroad. ExamSoft also offers an array of webinars to choose from, so faculty and administrators can find information tailored to their needs. Clients can also secure an EAS+Y consultant on retainer for a predetermined amount of time.

Exam Assessment Content Reserve

Formative exams are crucial in education. They ensure that students don't fall too far behind their learning milestones. This is especially important for programs that lead to licensure and certification. To improve assessments, ExamSoft has partnered with experts to offer categorized exam content that allows instructors to gauge students' readiness for the big exam. Content includes items for the NCLEX-RN.

Nurses know the importance of a good education, and while experienced nurses have the knowledge and clinical skills to share with new nurses and nursing students, they may not be familiar with everything that goes into being a great professor. With ExamSoft, nurse educators can take their instruction to the next level.





Summary

While nurses are skilled and experienced teachers in real-world settings, many need a bit of help when it comes to pedagogy, curriculum design, assessments, and other aspects of high-level instruction. The reporting and analytics tools that ExamSoft provides — and so much more give nurse educators the information they need to improve outcomes from their students, their programs, and their institutions.



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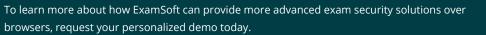
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