

# ProdigyConnect Faculty Catalog

At Prodigy Anesthesia, we see the big picture... and every individual that's a part of it.

## Are Your Students Ready for Boards?

## Find Out with the All-New Early Warning System

### What is the Early Warning System?

The Early Warning System (EWS) employs a machine learning algorithm on examination score data on the 25 standardized board simulations in ProdigyConnect. It uses this data to stratify the risk for board failure as Low, Moderate, and High. This data is presented in the traffic light indicator beside each student's name in the faculty dashboard. Red is used to indicate high risk, yellow for moderate, and green for low risk. Gray indicates that there is not enough data on the student to make a prediction.

You can use this indicator to trigger a deeper exploration into the student's performance or even employ the automated remediation system to create a board review that is tailored to the individual learner's particular weaknesses.

NS	Student	#1	#2	#3	#4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20	# 21	# 22	# 23	# 24	# 25
)	Student, 19	52	81	47	68	61	52	27		12	75	58	85	40				67	65	31	68	77	64			
	Student, 20		41	29	17	1/1		34	47	58								100								
	Student, 23	98	44	95	17	40		51	61	41	40	44	66	33	30	32	47	47	61	10		19	36			
)	Student, 24	44	38	59							69				M						(49)					
0	Student, 26	70	56	43	68	93	85	93	82	85	81	47	66	89	59	56	54	77	65	40	77	77	77			
	Student, 27		Mal			100							M		M			58	52		53	6	15			

### Research Opportunities

ProdigyConnect is now collecting data on nearly 100 individual metrics on student performance and behaviors within the learning management system. Examples of the data being captured includes examination scores, number of articles viewed, number of flashcards viewed, number of times the student has reviewed recommended material, etc.

Prodigy Anesthesia is seeking to partner with faculty to combine this data in de-identified form with the pass or fail status of a large set of students. Once collected, we will drop all of the data into a series of machine learning algorithms to create an even more sophisticated tool for predicting the risk of board failure.

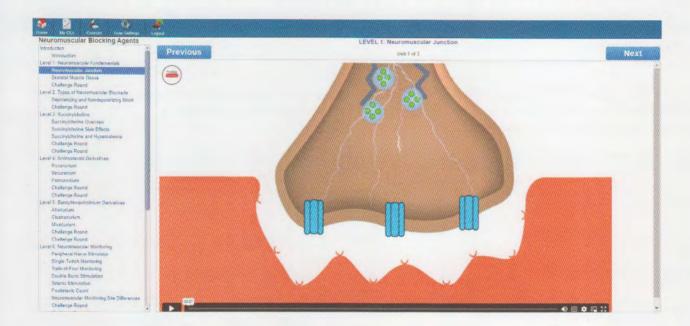
If you are interested in participating, please contact Peter Stallo at pstallo@prodigyanesthesia.com



## **MasterClass**

The MasterClass is a 100-hour comprehensive board review that ensures your students are ready for boards without requiring any faculty intervention. Over thirty courses present information in an easy to understand and highly visual manner. Each course integrates challenges throughout the material that are designed to prepare them mentally to answer board-style questions.

Each course ends with a final exam. The student must score at least an 80 to get credit for completion. If the exam is not passed on the first attempt, half of the questions are replaced and the exam is presented again. If they do not pass the second attempt, half of the questions are replaced yet again and a third attempt is offered. If they do not pass on the third attempt, they must restart the course from the beginning. As faculty, you can monitor their progress through the MasterClasses as well as their exam attempts.



### Course Listing

- Respiratory Fundamentals
- Cardiac Fundamentals
- Endocrine Fundamentals
- · Renal Fundamentals I
- · Renal Fundamentals II
- Hepatic Fundamentals
- Understanding Receptors
- · Cell Biology
- · Professional Issues
- · Physics for Anesthesia
- · Legal and QI Concepts
- Local Anesthetics
- Pharmacokinetics
- · Chemistry for Anesthesia
- Inhalation Anesthetics
- · Anesthesia Workstation

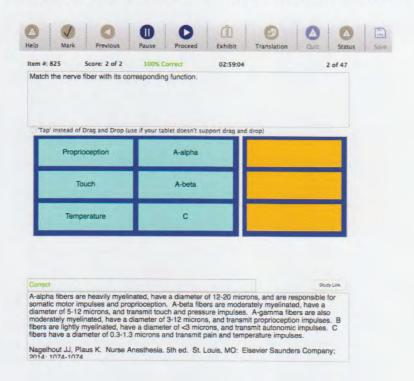
- · Obstetric Anesthesia
- Intravenous Anesthetics
- · Neuromuscular Blocking Agents
- Airway Management
- · Three Lead ECG
- Patient Monitoring
- Geriatric Anesthesia
- Neuro Fundamentals
- Patient Positioning
- · Obesity and Anesthesia
- · Neuraxial Anesthesia
- Opioid Agonists and Antagonists
- Neonatal Anesthesia
- · Pediatric Anesthesia
- Hematology and Blood Products
- · Fluids and Electrolytes

## **Exam Simulator**

### As real as it gets.

The Exam Simulator in ProdigyConnect is designed to match the exact look and feel of the exam system used at the Pearson Vue testing centers. By exposing students to potentially hundreds of hours of computerized exam simulations using this system, we help to foster a sense of comfortable familiarity with the NCE exam--at a time when every psychological tool is critical.

On their own, students can take up to 25 pre-constructed, 100-question NCE simulations and compare their results through percentile ranking to every other student taking the exact same exams. They are also able to take hundreds of other exams based on specific categories and topics. As faculty, you can assign up to 5 more secure exams to the students.

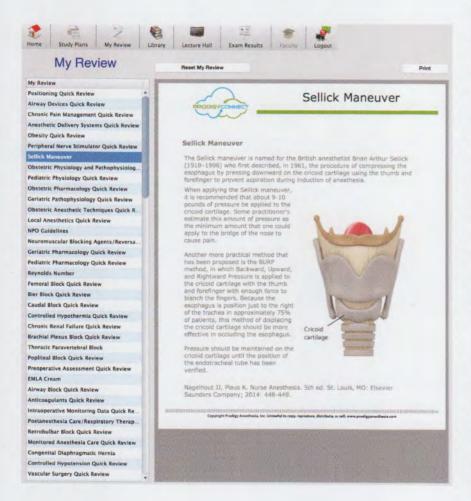


Students can choose to take practice exams in Practice Mode or Simulation Mode. Practice Mode gives them feedback on every response along with a rationale, citation, and a link to the study material in which the concepts are found. Simulation Mode removes all feedback except the clock. As they get closer to boards, we recommend they use Board Simulation mode so they can practice maintaining their focus on the question at hand.

## My Review

### The most efficient review method available.

My Review uses an advanced statistical algorithm to monitor every single item response a student submits. It works in the background to predict the odds that the student will miss the next question in all of the hundreds of NBCRNA subtopics. It combines that analysis with calculations that predict the odds each subtopic will appear on boards and presents the relevant study materials to the student in order of statistical importance.



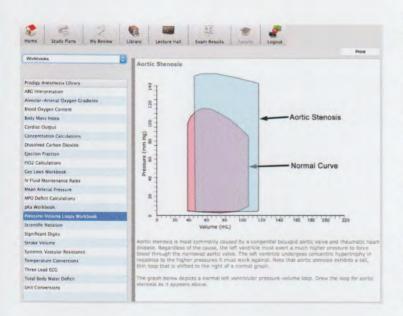
For example, imagine a student takes an exam and scores a little better in airway management than they do in valvular diseases. The student may assume they need to focus on valvular disorders, but the algorithm might determine that they are still better off focusing more on airway management first, because they are far more likely to encounter questions on that topic. Once it makes all of the calculations, it ranks the study materials from top to bottom based on which topics would be most likely to increase their board exam score the most.

Once a student has studied the material diligently, they should take another exam and then open My Review again. Topics they improve upon will filter down towards the bottom of the list as the topics that would benefit them most percolate to the top.

The whole point of My Review is to save them from studying material that they already know and/or has little statistical relevance to the test. That is different for every student, however, and My Review creates its recommendations based on their individual performance at that particular time.

## **Prodigy Library**

# A comprehensive review library available via computer, tablet, or smartphone.



The Prodigy Library is a comprehensive resource that contains everything a student needs to pass boards.

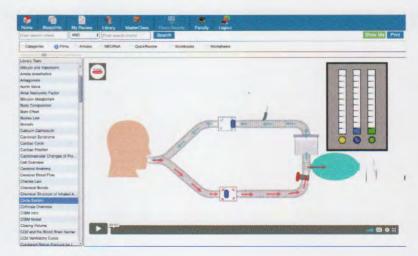
There are over 700 illustrated articles in the library covering everything from ABO blood compatibility to Zenker's diverticulum.

A collection of over 3700 flashcard-style questions covers an enormous range of material in an easy-to-digest format.

Twenty-three workbooks take students step-bystep through more complex topics such as ECG interpretation, ABG interpretation, gas laws, and anesthesia calculations.

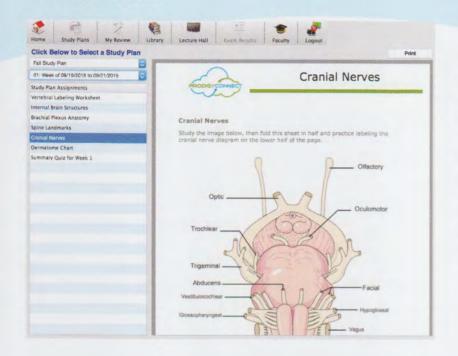
The Prodigy library contains over 180 animated videos that explain complex topics in a visual way that makes comprehension easier than ever. Whether they are learning about pressure-volume loops, how respirometers work, or the Bohr effect, everything is easier to understand when they can see it in action.

ProdigyConnect is the most visual learning system available in anesthesia.



## **Blueprint Designer**

A customizable study plan generator for both faculty and students.



Students can create their own comprehensive study plan simply by selecting the start and end dates of their desired study period.

The study plan creator will divide the study materials into balanced weekly reading assignments and even automatically create a summary quiz at the end of each week so they can monitor their own progress.

An even more powerful tool is the blueprint designer. Faculty can select and organize topics to match a syllabus and even include off weeks for holidays. A weekly quiz is automatically generated based on the topics you select. Your students will all be synchronized onto the same study plan, and you can monitor their weekly exam progress from your computer or tablet.

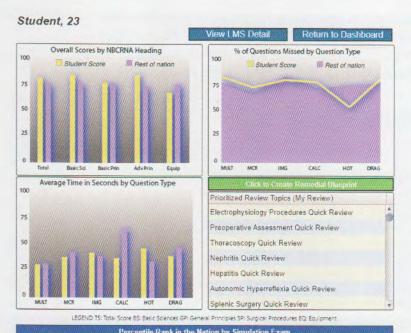


The blueprint designer is perfect for organizing a review for an entire class or creating customized remediation for individual students.

## **Student Analysis**

# View every detail of an individual student's activities and identify problems before they ever reach boards.

Clicking a student's name in the Faculty Dashboard accesses all of their activities in the ProdigyConnect system. From here, you can identify problem areas as they arise and see how the student compares to the rest of the students in the system.



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Date	Exam	Score	TS Rank	BS Rank	GP Rank	SP Rank	EQ Rank	
01/04/2018	SEE Simulation Exam	76	78	87	68	55	70	.00
01/30/2018	Simulation Exam 1	61	23	24	22	23	23	00
01/30/2018	Simulation Exam 2	71	44	76	13	18	9	-
03/28/2018	SEE Simulation Exam	71	70	62	57	68	68	
05/14/2018	Simulation Exam 1	69	47	40	50	40	23	
	Misce	Haneous (	Quizzes Taker	ı İndepende	ntly	WWW.	SVEWSON	WW
Date	Exam Name		AND SHARE SH	T	S BS	GP	SP E	Q
2018-01-04	SEE Simulation Exam			7	6 90	71	63 7	4
2018-03-28	SEE Simulation Exam		7	71 74 68			2	

Students have free access to 25 pre-configured NCE simulations. For each of these simulations, you can see their percentile ranking overall and in each NBCRNA category.

Charts such as Performance by Question Type and Average Time Spent by Question Type can provide insight into whether a student is investing their time wisely on complex questions.

The Topics By Percentage Correct list provides the statistical foundation for the automated remediation system.

In addition to the pre-built simulations, you can also view their performance on every other exam they take, including exams by particular topic, weekly quizzes, and more. If their performance is lagging in any facet, you will be able to detect it here.

The Student Analysis screen provides you with an update of the student's progress at any point in time. Combined with the Faculty Dashboard, you can identify potential issues long before a student reaches the board exam. And, with the automated remediation system, you can now do something about it.

## **Faculty Dashboard**

### Monitor your school's progress in real-time.

The Faculty Dashboard is your window to how your program is performing. It highlights your students at risk for failing boards so you can intervene before they attempt the exam. You can also anonymously compare your program to other programs based on first-time pass rate, class size, and program design.

The analysis doesn't just compare exam scores--it analyzes every single item response by each of your students and compares them to every item response submitted by every other student in the system. By collecting an average of 50,000 item responses from students a day and a database of over 50 million total item responses, it provides an extremely powerful and accurate analysis method.



Is your school weaker in a particular NBCRNA category? Do they manage their time effectively? The analysis windows will show you plainly how they perform as a group.

The Faculty Dashboard allows you to pick and choose the classes of students from your school you wish to analyze. You can also choose to analyze only faculty assigned exams, only exams taken independently by students, or a combination of both.

The faculty dashboard provides a bird's-eye view of your entire program

### **Frequently Asked Questions**

#### How often do you update your materials?

We update the materials in ProdigyConnect on a continual basis, and we release those updates daily. With over 3700 flashcard questions, 700 articles, 180 films, 23 workbooks, 4500+ exam questions, and hundreds of trivia app questions, we maintain a library of over 9,000 individual citations. The central database structure is designed around the NCE candidate handbook, so the software is also updated whenever any changes are made to it.

#### Do you use the NBCRNA bibliography?

Yes, all study materials are derived solely from the NCE bibliography. As soon as the NCE bibliography is updated, we update the citations in ProdigyConnect.

#### Can other schools see my students' scores?

No. Faculty can see all of the details for their own students, but the comparison data from other schools remains anonymous.

#### What if I need help with the software?

We are a full-time business and are readily available to help you. Our typical response time to an email during regular business hours is less than an hour.

#### What steps do you take to prevent students from cheating on exams?

When a secure exam is started, the students are unable to access material in the Prodigy library. If the computer loses power or a student 'pulls the plug' on an exam, they are forced to resume where they left off. Also, if a student logs into one device and then tries to login to another device, the first login is disconnected.

### What are your qualifications?

Peter Stallo began programming at the age of 10. He started computer animation at the age of 20, winning the National Telly Award for best medical animation in 2002.

He obtained an MSN in 1999 from USM in Adult Health Nursing--producing a virtual reality-aided computer program for nursing education. He graduated from UAB in 2004 with a Master's of Nurse Anesthesia and again in 2020 with a Master's in Healthcare Simulation. He is currently pursuing his PhD at Massachusetts General Hospital Institute of Health Professions.

#### How much does it cost?

If ProdigyConnect is a mandatory part of the curriculum, it is provided free for up to eight faculty members, and student licenses are provided at 30% off of the regular price of \$499.99 (\$350 per student for a four-year license). Schools who elect to purchase SIMVANA, the virtual reality anesthesia simulator will receive a 50% discount (\$250 per student for a four-year license). One-year and two-year licenses are also provided for \$175 and \$315 respectively.