

Junction to a New Beat:

Development of Self-Directed ECG Course



PRESENTERS:
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BACKGROUND:

Barriers to adult learning are consistent obstacles for nursing professional development (NPD) practitioners. The diverse experience of adult learners, in conjunction with the disruption to traditional classrooms generated by the pandemic, created a need for modifications to education.

GAP ANALYSIS:

1. Social distancing challenges
2. Varying clinical competencies
3. Increase organizational needs
4. Summative course evaluation requests

DESIRED OUTCOMES:

- Increase the number of learners in a self-directed program
- Focused on engaging learners and applying knowledge to real-life ECG situations
- Validating ECG Interpretation competency
- Maintaining current course integrity, pass rates, and cost-effectiveness

INTERVENTIONS:

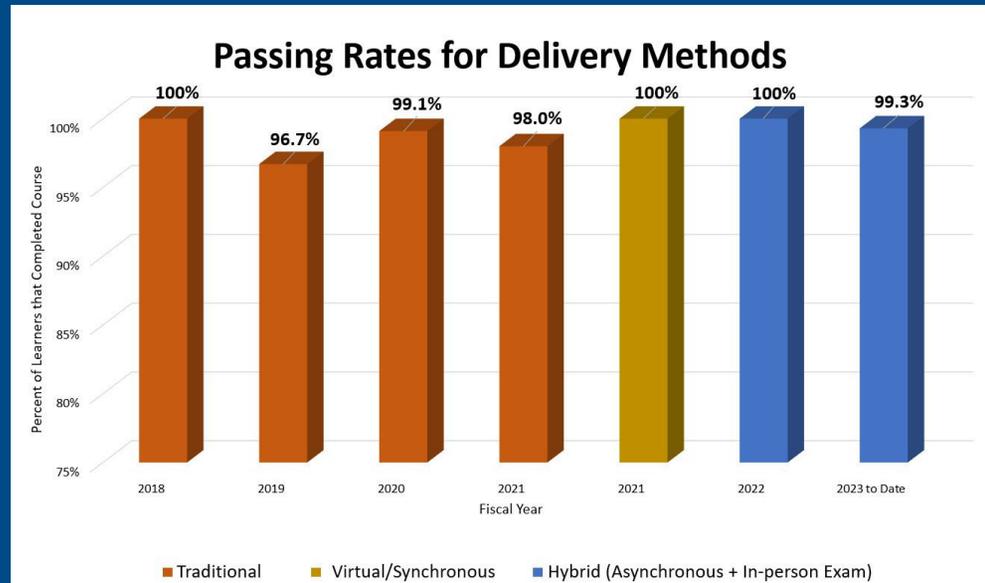
Transformed a 24-hour in-person ECG interpretation course to a 24-hour hybrid self-directed course, covering the following topics:

- Basic Electrophysiology, Sinus Rhythm, Sinus Dysrhythmias, Atrial Dysrhythmias, Junctional Rhythms, Cardiac Conduction Blocks, Ventricular Dysrhythmias, & Pacemakers

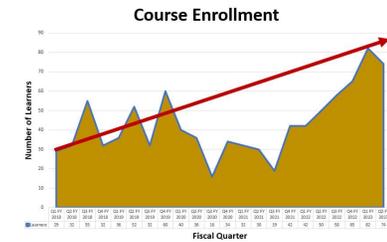
RESULTS:

- Sustained course integrity
- Improved pass rates from 98.6% to 99.5%
- Decreased NPD time
- Decreased overall cost (annual savings of \$30,000)

A self-directed hybrid ECG course is just as effective as a traditional in-person ECG course & saves money.



INCREASE IN DEMAND:



COST SAVINGS:



RETURN ON INVESTMENT:

- 369%

LEARNER TESTIMONIALS:

- "Very well put together class and videos. I really liked I could pause and rewind the videos or go back to them later. Great class! *Best ECG Class I've taken.*"
- "I don't normally like online or hybrid classes, but I actually really enjoyed this one and was glad to self-pace and work at home."
- "I *REALLY* enjoyed the hybrid modules. Allowed me to break up into chunks and rewatch segments. This worked well with my learning style."
- "Enjoyed learning at my own pace."

UPDATES:

- May 2022 - Practice Exam & Review was created and made optional for learners
- January 2023 - Practice Exam & Review added as a required part of the curriculum



UC DAVIS HEALTH

Center for Professional Practice of Nursing

Title: Junction to a New Beat: Development of Self-Directed ECG Course- Abstract

Abstract Summary:

This innovative NPD approach highlights redesigning a traditional classroom ECG interpretation course as a self-paced, engaging hybrid course without compromising outcome metrics.

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ECG Interpretation Hybrid Link:

https://health.ucdavis.edu/cppn/classes/ecg_interpretation_hybrid.html

Abstract Body:

Barriers to adult learning are consistent obstacles for nursing professional development (NPD) practitioners. The diverse experience of adult learners, in conjunction with the disruption to traditional classrooms generated from the pandemic, created a need for modifications to education.

A multifaceted gap analysis of social distancing challenges, varying clinical competencies, organizational needs, learner volume, and summative evaluations presented an opportunity to re-design the ECG program.

Desired outcomes were to accommodate increased numbers of diverse learners in a self-paced program, focused on engaging learners and applying knowledge to real-life situations, while validating competency and maintaining course integrity, pass rates and cost effectiveness.

Stakeholders included NPD specialists, departmental leadership, and management. Barriers included time, functionality of an online platform, adaptability of content, and varied technological needs. The NPD specialists used existing expertise and module-building software to create user-friendly, effective modules for the target audience with planned cost savings due to decreased NPD time in the classroom.

NPD specialists implemented this program by designing a hybrid course focusing on adult learning principles of self-direction, evidence-based learner engagement, and application of acquired knowledge and skill.

This program was evaluated using quantitative and qualitative data, including analyses of test scores, pass rates, and course evaluations. Synthesis of this data demonstrates a successful program with organizational impact, including 76% increased capacity of learners, maintained pass rates, decreased NPD time and overall cost (annual savings of \$30,000).

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