



Challenges with Building and Promoting a New Blended-Learning Paradigm for Clinical Education

AACOM/AODME Annual Conference, Washington, DC

Erik Langenau, DO, MS, FAAP, FACOP

Joseph M. Kaczmarczyk, DO, MPH



Disclosures

- None



Learning Objectives

1. Explain the rationale for developing an organized blended learning program for students across training sites.
2. Describe the steps taken to develop a comprehensive blended learning program.
3. Describe how unique challenges were addressed, such as faculty training, student engagement, and integration with clinical training.



Blended Learning

Components

- Face-2-Face
- Online activities

Rationale

- Multiple Sites
- Multiple Students
- Consistency
- Remove Didactic Burden
- Off hours engagement



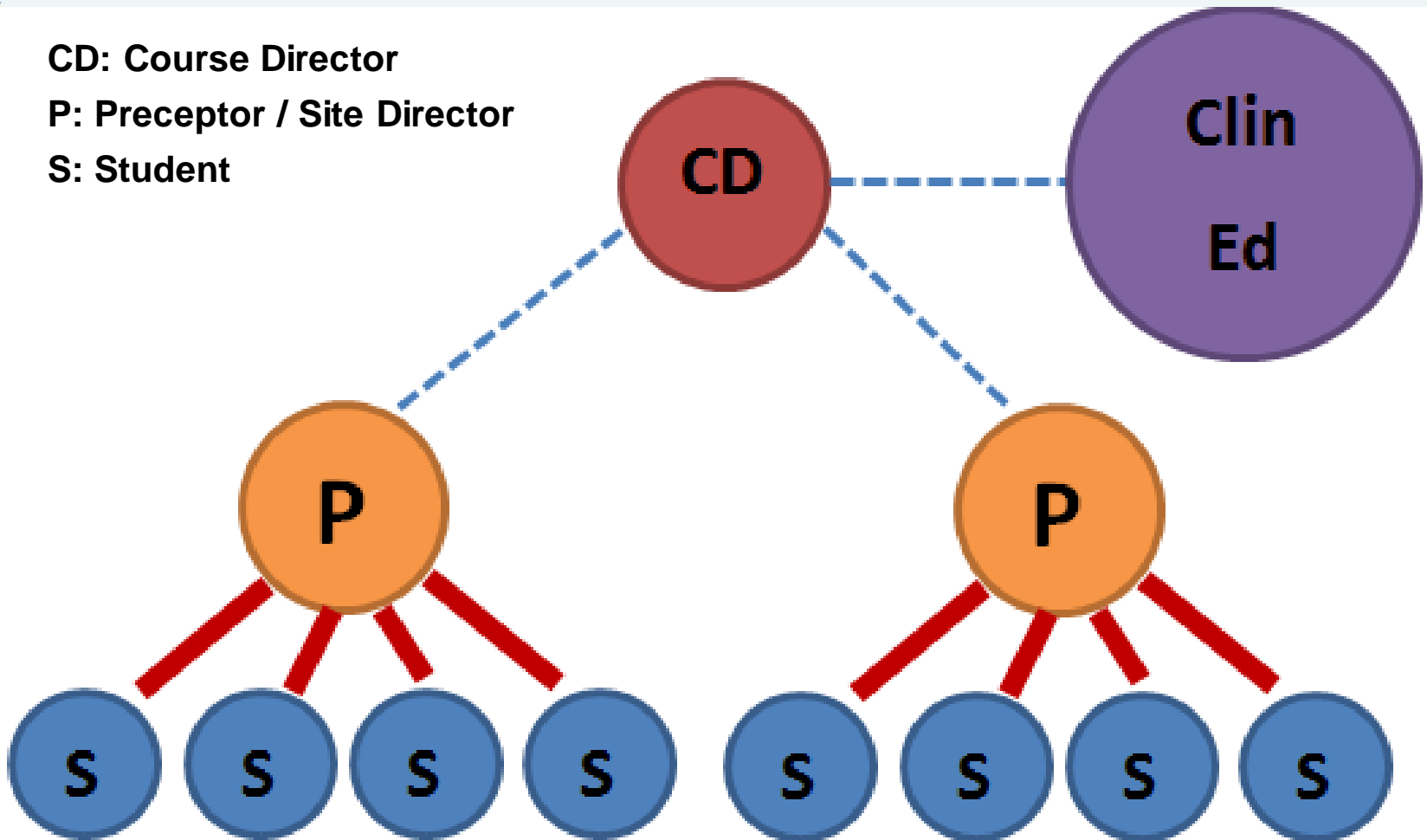


Blended Learning: PCOM Model

CD: Course Director

P: Preceptor / Site Director

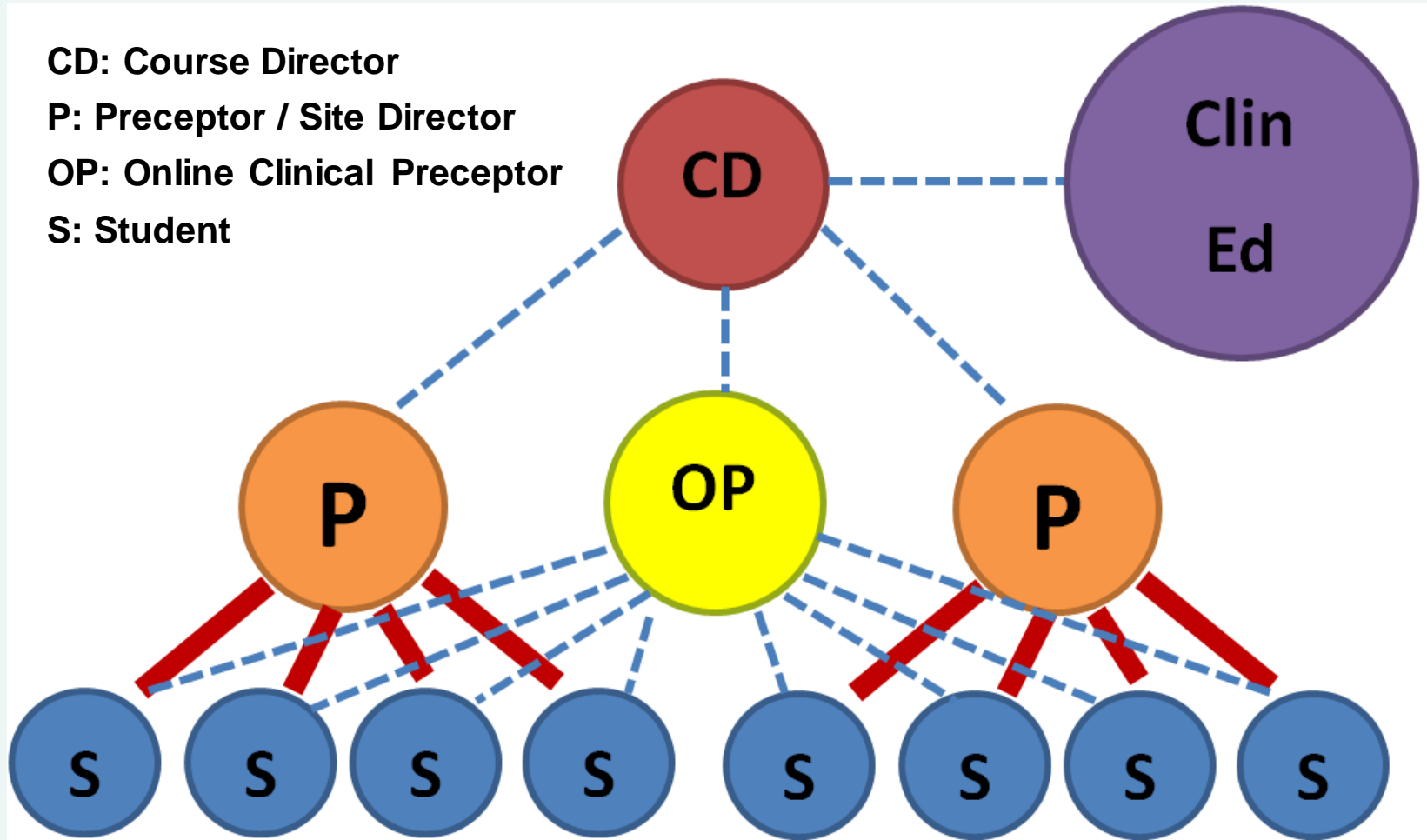
S: Student





Blended Learning: PCOM Model

CD: Course Director
P: Preceptor / Site Director
OP: Online Clinical Preceptor
S: Student





Rationale

- Acute loss 30% OB/GYN Clerkships
- Peds, OB/GYN, and Psychiatry Clerkships
- Relieve didactic burden



Rationale Continued

- Philadelphia campus 2 clerkship models: Rotating J-Group and Core Clinical Campus
 - Comparability across geography and clerkship models
 - Technology to obviate return to campus didactics
- Standardization and centralization



Step 1: Started with Philadelphia OB/GYN Clerkship

- APGO resources informed content
- PCOM Library Guide housed content
 - Orientation voice-over PPT
 - “Topics You Should Know” with hyperlinks
 - uWISE X2 (subscription)
 - APGO The OB/GYN Clerkship: Your Guide to Success
 - EFM online course



Step 2: Hired Online Preceptors Peds, OB/GYN, and Psychiatry

- OB/GYN Clerkship
 - Dedicated Clerkship Blackboard site
 - Orientation video (YouTube) Online Preceptor
 - APGO videos supplanted hyperlinked readings
 - Continued prior content (uWISE x2, EFM, etc)
 - Weekly discussion boards monitored by Online Preceptor
 - Electronic attestation statement
- Peds and Psychiatry Clerkships required development de novo



Step 3: Evolution and Expansion

- Added sequentially Cardiology, Internal Medicine, Surgery, Internal Medicine Sub-I, and Ambulatory Sub-I
- Planned expansion



Unique Challenges





Unique Challenges

- Technology
 - Use and comfort
 - Account access
- Administration
 - Financing
 - Buy-in
 - 2 campuses
 - Different disciplines
- Faculty
 - Online preceptors
 - Course Directors
 - Preceptors
 - Clinical Education
- Student
 - Perception
 - Engagement
 - Accountability
 - Grading
 - Accessibility / ADA
- Culture



Questions?



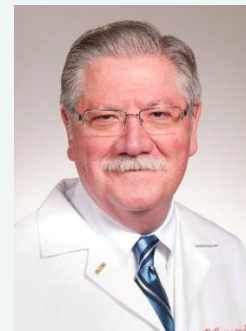


Thank you

- **Erik Langenau, DO, MS, FAAP, FACOP**
- **Chief Academic Technology Officer, PCOM**
- **ErikLa@pcom.edu**



- **Joseph Kaczmarczyk, DO, MPH**
- **Associate Dean of Undergraduate Medical Education, PCOM**
- **Josephkac@pcom.edu**





References

- Allen IE, Seaman J. Making the Grade, Online Education in the United States. Sloan-C. 2006. Available at <http://www.onlinelearningsurvey.com/reports/making-the-grade.pdf>
- Carrington A. The Pedagogy Wheel, V4.1. 2015. Available at <http://designingoutcomes.com/assets/PadWheelV4/PadWheel Poster V4.pdf>
- Harasim L. Learning Theory and Online Technologies. 2012
- Johnson L, Adams Becker S, Cummins M, Estrada V, Freeman A, Hall C. NMC Horizon Report: 2016. Higher Education Edition. Austin, Texas: The New Media Consortium. 2016. Available at <http://cdn.nmc.org/media/2016-nmc-horizon-report-he-EN.pdf>
- Langenau E, Lee R, Fults, M. Third year medical student experience with blended learning educational format for pediatrics clinical rotation.. J Am Osteopath Assoc. 2017; 117(4): 234-243.
- Langenau E, Teter D. Making the Move to Online and Blended Learning. Blended and online. Presented at PCOM Organizational Development & Leadership (ODL) Faculty Retreat. Philadelphia, PA, March 2016. Available at http://prezi.com/09f4e1s1ezpi/?utm_campaign=share&utm_medium=copy&rc=ex0share
- McCoy L, Pettit RK, Lewis JH, Bennett T, Carrasco N, Brysacz S, Makin IR, Hutman R, Schwartz FN. Developing technology-enhanced active learning for medical education: challenges, solutions, and future directions. J Am Osteopath Assoc. 2015 Apr;115(4):202-11. doi: 10.7556/jaoa.2015.042.
- McCoy L, Lewis JH, Dalton D. Gamification and Multimedia for Medical Education: A Landscape Review. J Am Osteopath Assoc. 2016 Jan 1;116(1):22-34. doi: 10.7556/jaoa.2016.003
- Rudestram KE, Schoenhotz-Read J. Handbook of Online Learning, 2nd Edition. 2010.
- Stravredes T, Hereder T. A guide to online course design. 2014