Integration of technology tools to improve education in anesthesiology

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Chris Fox, PhD
Ashley Grantham, PhD

Learning objectives

At the end of this session, participants will be able to:

- List instructional technology tools that can be used to enhance anesthesiology education
- Describe strategies for integrating instructional technology into anesthesiology education
- Name benefits of integrating instructional technology into anesthesiology education

Trends in medical education and instructional technology

1. The explosion of new information
2. The digitization of all information
3. New generations of learners
4. The emergence of new instructional technologies
5. Accelerating change

Robin, B.R., McNeil, S.G., Cook, D.A., Argarwal, K.L. & Singhai, G.R. (2011). Preparing for the changing role of instructional technologies in medical education. *Academic Medicine, 86*(4), 435-439.

Benefits of integrating instructional technology

- Fosters self-directed learning
- Standardizes content and delivery
- Can be more flexible
- Can help hold learners' interest through interactivity

Ruiz, J.G., Mintzer, M.J., & Leipzig, R.M. (2006). The impact of e-learning in medical education. *Academic Medicine, 81*(3), 207-212.

Instructional technology examples

- Learning management systems
  - Moodle, Sakai, Canvas
- Classroom technology
  - SMART boards, clickers
- Social media
  - Twitter, Facebook

Instructional technology examples

- Apps
  - WhatsApp, PollEverywhere
- Residency management systems
  - MedHub, New Innovations
- Media and presentation tools
  - Podcasts, YouTube

What are you using at your institution?

A case study: Medical College of Wisconsin

Recommendations for integrating instructional technology

1. Use technology to support learning
2. Focus on fundamentals
3. Allocate a variety of resources
4. Support and recognize faculty as they adopt new technologies
5. Foster collaboration

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Potential barriers to instructional technology integration

- Interest in integrating instructional technology
- Faculty proficiency with instructional technology
- Resources available to support implementation
  - Faculty and staff time
  - Training
  - Support

Butler, D.L., & Selbom, M. (2002). Barriers to adopting technology. *Educause Quarterly, 2* (1), 22-28.

Activity: Making a plan

Questions?

References

Butler, D.L., & Selbom, M. (2002). Barriers to adopting technology. *Educause Quarterly, 2* (1), 22-28.

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