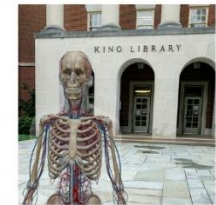# Team teaching anatomy using innovative technology: A case study

Midcontinental/Midwest MLA 2020 Conference

Anna Liss Jacobsen, Social Sciences Librarian
Miami University Libraries, Oxford, OH
Email: jacobsa8@miamioh.edu

HEALTH INFORMATION PROFESSIONAL ROLES

1. Provide information at point of care need
2. Instruction, curriculum design, assessment, reference
3. Informatics collaboration
4. Library management
5. Outreach and engagement
6. Research and publication
7. Patient support / advocacy
8. Web presence, emerging technologies and scholarly communication

LIBRARIAN ROLES IN INSTRUCTION

- Faculty-Librarian teaching collaborations began ~1970s
- Librarian involvement & instruction method varies
- Topics frequently taught include: develop research questions, find & access resources / information, critical appraisal, manage & cite resources
- Newer topics taught include: emerging technologies, scholarly communication, apps (Dynamed), statistical tools, data management

FACULTY-LIBRARY INSTRUCTION & COLLABORATION

- **Curriculum co-development**
  - Librarian co-designed program with instructional design specialist, faculty, program coordinator
    - Librarian provided access to information resources, reference services, & taught critical evaluation (Rodman, 2001)
- **Emerging Technologies**
  - Collaborate as expert beyond the traditional view of information literacy framework. Provide expertise in curating technological resources, including 3DCG tools, & train on the use of tools

TEAM TEACH ANATOMY

Teaching anatomy with prepared specimens or 3DCG tools requires large time commitment and much planning

Anatomy Teach Teach Methods

- Expert with knowledgeable assistants team teach to larger classes
- Students participate as peer-to-peer / near-peer teaching
- Interprofessional Education: faculty from various disciplines team teach

(Blum, 2020; Mayanma, et al., 2016; McDonald, et al., 2020)

CASE STUDY

Class description: Instructional team: Speech Pathology Professor, Graduate Student/near peer & Librarian co-taught undergraduate Anatomy & Physiology class & Lab Activity on pulmonary system
- Faculty provided disciplinary expertise; Student provided disciplinary & technical expertise;
- Librarian provided resource & technical expertise

Pre-class preparation
- Instructional designer, IT, Faculty, & Librarian resolved technology issues from previous attempts of teaching class with tool
- Faculty member & graduate assistant developed lab activity
- Students received instructions to install tool on their phone or bring a computer

CASE STUDY

Classroom Outline

1. Instructional team described the qualities, functions, and value of the 3DCG anatomy tool
   1. Librarian spoke about tool content & functionality
   2. Faculty member spoke about tool's usefulness for Speech Pathology/Audiology
2. Students completed lab activity with instructional team members help as needed
3. Graduate Assistant described value of tool for her graduate work. Example: helped her model anatomy

RESULTS

- Pre-planning & team teaching led to more fluid class than previous attempts. Technology was still a challenge
- Student informal feedback was "overwhelmingly positive"
- Student survey responses to interest in continuing to use the tool?
  - Very or somewhat likely: 33
  - Not sure: 5
  - Unlikely or very unlikely: 0

STUDENT SURVEY SAMPLE

What did you like best about using the tool?
- Dissect tool
- 3D view
- Alternate source for class information
- Quiz feature

What did you find more challenging?
- Dissection
- Overall glitches/slow loading
- Learning curve/navigation of site
- Small size on phone
- Initial set up

CONCLUSION

- This case study of team teaching combined a more traditional model of near peer team teaching with a less common approach of incorporating a librarian as a resource and technology expert to teach a Speech Pathology and Audiology anatomy & physiology class & lab activity
- Librarians participating in team teaching partnerships in classes like anatomy and physiology might be further explored