

Visual Art, the Health Sciences, and Interprofessional Development

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PRESENTED FOR:

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Presentation Outline

1. Examples of visual arts-based education programs incorporated into professional education.
2. Outcomes associated with implementing visual arts programs.
3. Proposal and considerations for an interprofessional arts education course in the health sciences.

Introduction

- Traditional pedagogy based on biomedical explanation of disease + time constraints leaves little room for exploration of the humanitarian aspects of healthcare
- Visual arts activities are being increasingly incorporated into medical curricula to help counter the absence of the humanities in medical curricula
- Generally, these programs are designed to:
 1. Sharpen observation and interpretive skills
 2. Enhance awareness of humanitarian aspects of healthcare
 3. Improve self-reflection abilities

J Gen Intern Med. 2006;21 Suppl 1:S16-20.
Acad Med. 2011;86(7):799-800.
Acad Med. 2011;86(7):877-82.

Example Programs

Drawing for Seeing and Understanding

Institution: University of Pittsburgh School of Medicine (in conjunction with the Carnegie Museum of Art and the Andy Warhol Museum)

Audience: First-year medical students

Duration: Four to five 2-hour sessions (“mini-elective”)

Example Goals/Objectives:

- Enhance life-drawing skills
- Gain an awareness and understanding of conscious and unconscious factors that influence observation and interpretation of visual information and its implications on decision-making

Example Activities:

- Students re-create museum paintings and drawings to study proportion and distortions and begin to consider interpretation.

The Art of Observation

Institution: Weill Medical College of Cornell University and the Frick Collection

Audience: First-, second- and fourth-year medical students

Duration: Three 2-hour sessions

Example Goals/Objectives:

- “To make doctors better observers”
- “Re-emphasize the human aspects” of medicine

Example Activities:

- Guided observation of works of art followed by observation of color photographs of patients in which students try to glean details without a medical history

“Sticky Questions” Workshop

Institution: University of Calgary, Dept. of Medicine, Dept. of Classics and Religion Faculty of the Arts

Audience: “A group of health care professionals, health research scholars, and health care students” attending a symposium on humanities in health care, repeated with family physicians

Duration: 90 minutes

Example Goals/Objectives:

- “Explore issues around vulnerable persons”

Example Activities:

- Attend lecture from a Classicist trained in Art History, view a painting independently, then gather in facilitated groups for discussion

Interpretive Project

Institution: University of Michigan Medical School

Audience: Pre-clinical (first- and second-year) medical students

Duration: 2-year longitudinal experience

Example Goals/Objectives:

- Enhancing reflection on the human dimensions of illness/healthcare
- Enhancing development of skills in teamwork and collaboration

Example Activities:

- Students made home visits to the same family over a 2-year period, with periodic meetings with 2-4 other students to reflect upon the experience.
- Students then reflected upon the experience through creation of art using any medium

Some other programs

- University of California Irvine School of Medicine
- Yale Center for British Art
- University of Texas Medical Branch Institute for the Medical Humanities
- Metropolitan Museum of Art and the Frick Collection
 - Educating NYPD officers to attach narratives to visual information

Med Educ. 2006;40(3)263-8.

JAMA. 2001;286(9):1020-1.

The University of Texas Medical Branch Health Institute for the Medical Humanities. <http://imh.utmb.edu/about-us>.

The New York Times. April 26, 2016.

https://www.nytimes.com/2016/04/27/arts/design/art-helps-police-officers-learn-to-look.html?_r=0.

Outcomes

- Well-designed studies are limited
 - None measure behavior effects or clinical skills besides observation
- Dolev *et al.* - Yale Center for British Art
 - RCT - museum intervention improved ability to describe physical features necessary for diagnosis of dermatologic conditions
 - Better objective observational skills of photographs of patients with medical conditions
- Naghshineh *et al.* and Bardes *et al.* found similar results

JAMA. 2001;286(9):1020-1.
J Gen Intern Med. 2008;23:991-7.
Med Educ. 2001;35:1157-61.
Med Educ. 2001;45(2):141-8.

Outcomes (cont)

- Through qualitative study, Shapiro *et al.* found that, compared to standard clinical photograph/case training, arts intervention students at UC Irvine:
 - Recognized more complex and subtle patterns
 - Showed greater cultivation of empathy, awareness of different perspectives, narrative development skills
 - More skepticism about initial impressions
 - Subtle body-language clues

Outcomes (cont)

- University of Calgary (Kidd *et al.*) – pre-post survey design for participants
 - Participants had significantly more positive attitudes in the post survey
 - More agreed there is an increase in observational skills, narrative skills, empathy with patients
 - Should be a requirement **for health sciences students**
- University of Michigan (Jones *et al.*) – interviews, grounded theory approach
 - Themes derived from participants
 - Personal growth and development through the process of creation
 - Sense of community among peers and development of **collaboration skills**
 - Awareness of humanistic values in medicine

What do we notice?

- Wide variety of activities
- Mostly medical student curricula and observational skills
 - BUT some expansion into other audiences
 - Some programs observed positive **teamwork and collaboration** themes
 - Others showed that participants thought the programs are **useful for all health sciences students**
- Studies suggest positive effects on some clinical abilities and overall attitudes
 - None behavioral or patient-centered

Expanding the audience

- To our knowledge, no interdisciplinary visual arts program for health sciences students exists
- We propose that an interprofessional arts education course be implemented at the University of Pittsburgh
- Possible benefits
 - Observational skill, empathy development, improved self-reflection
 - Exposure and collaboration between students of different disciplines with different training and backgrounds
 - Address many interprofessional accreditation standards
 - Center for Interprofessional Practice and Education Core Competencies for Interprofessional Collaborative Care

Why Pitt?

- Many health sciences programs and common experiential learning sites on one campus
- Strong history of interprofessional education efforts
 - Many committees and working groups spanning Pitt and UPMC dedicated to advancing the interprofessional healthcare model
- Existing infrastructure
 - “Drawing for Seeing and Understanding” elective for medical students
 - Interprofessional experiential rotation (medical, pharmacy, nursing, social work)
- An optimal place to start an innovative program!

What could this look like?

- Options for Structure
 - Incorporated into interprofessional rotation
 - Revision of “Drawing for Seeing and Understanding” SOM Elective
 - Creation of entire new course
- Size
 - Pilot of 2 students from each profession
- Considerations
 - Pre-clinical versus “clinical” students – most beneficial?
 - Focus on observation/empathy/reflection vs. interprofessional work vs. both?

Example Course Objectives

1. Identify and discuss conscious and unconscious factors (such as profession-specific training) that influence observation of phenomena, interpretation of visual information, and decision-making in HMO and non-HMO environments.
2. Compare and contrast observational/practice styles among health care professionals and discuss contributions to patient care that each variation may provide.
3. Collaborate with students of other health professions to formulate comprehensive interpretations of visual works of art and explain connections to patient-centered care.
4. Discuss the ethical and humanitarian foundations of a high-functioning interprofessional team.
5. Explore themes related to vulnerable and diverse persons, such as patients, and discuss the role that the interprofessional team can play in the power dynamic and empowerment of these persons.

Possible Activities

- Lecture from art historian/museum staff giving a primer on interpreting visual art.
- Individual and group interpretation of various works of art.
- Practice drawing a work of visual art followed by facilitated small group discussion and comparison of interpretation.
- Discussion of chronological progression of an artist's work correlated with life events/physical health (e.g., Andy Warhol).
- Paired artwork interpretation + interprofessional patient case.
- Creation of a work of art to reflect on a patient or provider experience followed by small group discussion sessions and exhibition.

Assessment

- **Quantitative**

- Pre-post visual interpretation exams (direct)
- Pre-post or control group interprofessional simulation (direct)

- **Qualitative**

- Perceived value, benefits, efficacy survey (indirect)
 - Likert, preparation response scales
- Course, facilitator/instructor evaluation
- Focus groups (course development and post-course), participant interviews
- Longitudinal – portfolio, with projects/assignments and reflections

- **Reporting**

- Modification, funding, expansion, publication

Limitations

- Logistics
- Limited resources
 - Funding
 - Multiple arts classes – museum staff?
 - Detracting from medical student focus of observation for diagnosis and interpretation of the human form?
 - Finding faculty champions
- Student availability/interest

Conclusions

- Visual arts courses have been shown to improve observational and pattern recognition skills and may improve capacity for empathy, self-reflection abilities, and teamwork/collaboration capabilities
- A course for students of various health sciences programs could provide these benefits to all health profession students
 - In addition to possibly improving interprofessional team building and communication skills
- The University of Pittsburgh is an ideal institution to pilot and study this type of program

Thank you

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