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The Art of Critical Thinking in Nursing: a Novel Multi-modal Humanities Curriculum

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Abstract

This paper aims to describe a multi-modal, humanities-based set of workshops designed to improve nursing students' critical thinking skills, perspective taking, and appreciation of the humanities. This workshop expands the Visual Thinking Strategies curriculum to a multi-modal, arts-based program. Twenty-two nursing students participated in four, three-hour arts-based workshops. Program reactions were qualitatively analyzed. Following completion of the course, participants reported an appreciation for the multi-modal arts-based program and recognized ways in which it might influence their performance on the job. The curriculum was perceived as beneficial by nursing students, with themes of metacognition and awareness/appreciation of others being particularly salient.

Keywords Education · Humanities · Students · Training · Critical thinking

Background

A shift toward emphasizing humanities in healthcare training resulted in the incorporation of art observation courses in many programs of study [1]. Among these courses is Visual Thinking Strategy (VTS; [3]), which relies upon semi-guided observation and open-ended discussion among inter-professional participants. VTS allows students to practice analyzing information in novel ways without fear of being “wrong” [3]. Discussing ambiguous healthcare-related imagery in inter-professional groups has a number of reported beneficial results including improved observation of emotion,

empathy, and compassion [3]. We adapted this educational program for our nursing students to improve critical thinking. Our novel workshop addresses calls to reintroduce the arts and humanities into nursing education by incorporating a variety of art modalities (i.e., music, visual art, dance, and art creation) based upon the principles of VTS. On behalf of all authors, the corresponding author states that there is no conflict of interest.

Activity

The Multi-modal Innovation

We designed and implemented a program that expanded the content of VTS from viewing art, to a series of workshops targeting different aspects of art. By providing opportunities to practice critical thinking in varied, novel contexts, we aimed to improve students' observation completeness, open mindedness, and logical thought processes. Within each workshop, facilitators provided students with lessons to be learned and how lessons could transfer to the job. Facilitators also demonstrated targeted behaviors and provided learners with varied opportunities to practice skills within each workshop. Throughout the workshops, facilitators provided feedback regarding students' critical thinking. Our training included four,

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three-hour workshops: a classic VTS workshop in a contemporary art museum, one focused on creation of visual art through drawing, one focused on dance and movement analysis, and one focused on listening and sound analysis.

Traditional VTS Museum Module

Our museum workshop was an adaptation of traditional VTS [3]. The cohort of 22 nursing students came to a contemporary art museum and examined images including some with public health applications (e.g., an image of an impoverished family, or an image of a potential sex worker). An internal faculty member, trained in VTS facilitation by the VTS organization (<https://vtshome.org/training/>), asked students questions designed to encourage exploration and justification of observation. Questions included “What is going on in this picture?,” “What do you see that makes you say that?,” and “What more can we find?.” Students were then given digital cameras and were asked to take self-portraits or pictures of something that represented them. Upon completion of this task, the group then used the VTS method of analysis on the images of their peers. This experience was designed to help solidify the notion that the principles of VTS not only apply to art in museums, but also daily interactions on the job with patients, patients’ families, one’s self, and one’s colleagues. The final 30 minutes of the module included a debrief with the VTS facilitator who guided the students through a discussion of how the principles of VTS could directly transfer to the practice of nursing to improve quality of care.

Visual Art Creation Workshop

Our novel visual art creation workshop combined principles of VTS with aspects of visual arts practice. Participants worked through a variety of exercises (e.g., examining optical illusions, creating color collage illusions, using white wax pencils to draw fruit on white paper without lifting the pencil from the page, drawing different qualities of vegetables). Following each activity, facilitators highlighted specific lessons to be learned and then translated these to the workplace. For example, students were led to the understanding that they had a preconceived idea of what a drawing of a vegetable should look like which prevented them from drawing their unique vegetable. Parallels were drawn between the idea of a vegetable versus the actual unique vegetable and the idea of a patient and the actual unique patient. Lastly, the group debriefed with a physician, walking through the steps of VTS, but this time, on images of dermatological conditions. The focus was first to observe various aspects of the image without trying to diagnose and then to create the patient’s backstory based solely on the snapshot of the dermatological complaint by drawing upon their newfound understanding of visual qualities and vocabulary.

Movement Workshop

The third workshop focused on dance and movement, combining the VTS process with principles of Laban Movement Analysis (e.g., [2]). This segment emphasized body movement as a source of information, communication, and sense-making. The intent was to heighten knowledge of body movement through kinesthetic exercises that highlighted the organization of the body and other practically relevant issues (e.g., kinetic chains) through visual observation and self-reflection. These formed the basis of a discussion regarding the holistic influences and various physical manifestations of stress or disease on the body. Students participated in varied activities (e.g., modified version of charades, mirroring peers’ movements, walking with various gaits and postures). Following each activity, the facilitator highlighted lessons to be learned and led discussions on topics such as self-reflection and patient interaction. Key points that were conveyed include viewing the body as a primary source of knowledge and experience, how movement is linked to one’s perceptions, and how psychological concepts can, and often do, manifest in individuals’ movement or deportment. In the final portion of the workshop, students debriefed, linked the concepts of critical thinking, self-reflection, and cultural competence to movement and posture.

Listening Workshop

In the final workshop, students were introduced to various dimensions of sound (e.g., timbre, pitch, tempo). To target critical thinking skills, students listened to sound clips such as modern experimental music or noise from an emergency room and discussed the individual sounds, what they thought they were, and why they thought that (harkening back to the VTS principles). Students discussed their overall impressions, discussing why they differed on what they thought they heard and linking their inferences to objective details. Following this activity, students were led through the building, blindfolded, and were asked to experience the soundscape. A similar discussion followed, although students were encouraged to link their auditory observations with other sensations they noticed while walking. While blindfolded, participants were able to overcome their biases about what *should* be attended to and notice sounds that are often neglected, like an air conditioning unit. This experience was translated into the critical thinking in nursing, including a discussion about how sounds, like alarms, can become background noise that is easily ignored.

Pilot Evaluation

Following the final workshop, 22 nursing students (100% female, 11 White, 4 Hispanic, 2 Asian, 1 Black; $M_{\text{age}} = 24.52$, $SD_{\text{age}} = 6.35$) students were asked to respond to two

open-ended training evaluation questions: “What did you learn from these workshops?” and “Do you have any feedback or other comments?”. Content from these responses was coded by one of the authors and two assistants. Themes were extracted and patterns of responses were evaluated. Any disagreements regarding thematic coding were resolved through discussion.

Results and Discussion

Qualitative Results

Results revealed two main categories of responses (i.e., workshop feedback and transferable skills/outcomes) that consisted of five (one subdomain per specific workshop and one general logistics/workshop subdomain) and five (metacognition, awareness of others, influence on patients, influence on work/career/courses, and sensory awareness) subdomains. Here, we focus on comments regarding transferable skills/outcomes.

Comments focused on metacognition, career relevance, and changes in sensory awareness. Students suggested they “learned how to think critically about different situations” or how “training has strongly impacted how [they] view things, [and their] thought process[es].” Students saw relevance between the workshop content and their career performance (e.g., “I already find myself using techniques that influence my clinical judgement.”). Comments also focused on improved interaction with others (e.g., “I think more about how my patients must feel towards their situation...my patients will benefit positively from all my new skills.”). Students reported being more aware of other individuals’ perspectives (e.g., “I will be more open/aware of others and their thoughts”). We must note that despite overwhelmingly positive feedback on all workshops, the value of the traditional VTS and art creation workshops was more apparent to participants than that of the movement or music workshops (e.g., “performing art and visual art were more applicable ... I did not get much from the dance or music sessions”). However, several participants commented on the importance of these other workshops (e.g., “I am now very conscious of the

position of my body” and “You can get an idea of your patient based on what you see them doing, wearing, and how they say certain words.”).

This paper outlines the curriculum of a novel, multi-modal humanities-based workshop designed to improve critical thinking in nursing students, while stimulating an interest in the humanities. We found that participants in our workshop did feel they had improved critical thinking skills and that our workshop curriculum worked to improve students’ awareness of their own cognition and their patients’ and others’ experiences. It was also clear that participants found the workshops to be relevant to their clinical careers and coursework. Future iterations of the workshops need to take care to clearly explain the value of each workshop to ensure all participants grasp the transferrable skills being taught. By drawing upon the principles of VTS, and a variety of other disciplines, our set of workshops was ideally designed to result in changes in nursing students’ knowledge, skills, and attitudes regarding critical thinking in their profession.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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