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Active Learning on Center Stage: Theater as a Tool for Medical Education

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Abstract

Introduction: Knowledge and skill development related to communication must incorporate both affective and behavioral components, which are often difficult to deliver in a learning activity. Using theater techniques and principles can provide medical educators with tools to teach communication concepts.

Methods: This 75-minute faculty development workshop presents a variety of techniques from theater and adapts them for use in medical education. Using examples related to diversity and inclusion, this session addresses general educational and theater principles, role-play, sociodrama, applied improvisation, and practical aspects of involving theater partners. The session materials include a PowerPoint presentation with facilitator notes, interactive activities to demonstrate each modality, and an evaluation. The sessions can be extended to longer formats as needed. **Results:** Forty-five participants at Learn Serve Lead 2016: The AAMC Annual Meeting attended the 75-minute session. We emailed 32 participants 5 months after the conference, and eight responded. Participants reported that their confidence level in using theater techniques as a tool for medical education increased from low-to-medium confidence pre-session to high confidence post-session. All survey respondents who were actively teaching said they had made changes to their teaching based on the workshop. All commented that they appreciated the active learning in the session. Many indicated they would appreciate video or other follow-up resources. **Discussion:** Principles and techniques from theater are effective tools to convey difficult-to-teach concepts related to communication. This workshop presents tools to implement activities in teaching these difficult concepts.

Keywords

Communication, Faculty Development, Active Learning, Theater, Acting, Improv

Educational Objectives

By the end of this session, learners will be able to:

1. Describe methods or techniques for utilizing theater in education.
2. Apply best practices when integrating theater in medical education.

Introduction

Experiential education methods are efficacious when helping learners develop new, complex behaviors. Kolb and Fry's experiential learning theory defines four critical experiences for learning environments in which individuals acquire new skills: doing (having a concrete experience), reviewing (reflective observation of the new experience), concluding (abstract conceptualization or learning from the new experience), and testing (active experimentation with the new information).¹ If students can experience a new concept in all four learning environments, their learning is enhanced.¹ Within each of these environments, learners must first grasp the new concept, which requires concrete interactions with it. Secondly, learners must transform, reflecting on the new concept and incorporating it into their behavior. Modification of behavior based on the new concept and application of the concept in a safe environment can both occur through well-designed learning activities. Theater pedagogy techniques, such as role-play, sociodrama, and applied improvisation, engage learners in the four environments, allowing them an opportunity to explore emotions, test out new communication behaviors in safe environments, and develop the empathy required to deliver culturally competent care.²⁻⁴ Theater techniques are consistent

Appendices

- A. Active Learning Presentation.pptx
- B. Handout 1 - 8 Essentials for Using Theater in Medical Education.pdf
- C. Handout 2 - Role-Plays.pdf
- D. Handout 3 - Sociodrama for Medical Education.pdf
- E. Handout 4 - Applied Improvisation Activities to Consider.pdf
- F. Handout 5 - Theater as a Tool Engaging Actors.pdf
- G. Handout 6 - Potential Activities Grid.pdf
- H. Evaluation.pdf
- I. Background Information for Facilitator.pdf
- J. Coaching Guide.pdf

All appendices are peer reviewed as integral parts of the Original Publication.

with adult learning theory (and adult learning methods and principles) in that they are experiential, allowing learners to build on their own experiences and promote problem solving.^{5,6}

A review of *MedEdPORTAL* for teaching resources referencing theater revealed two publications—one is a verbatim reader's theater,⁷ and the other teaches about conflict resolution.⁸ Further review for publications related to teaching communication for complex topics such as diversity revealed a paucity of materials to teach the affective side of these issues. With this gap in the literature in mind, we designed a workshop to teach faculty three theater-based pedagogy techniques useful for instruction in communication about difficult issues. Each of these techniques is flexible in nature and encourages empathy, promotes active listening, and improves communication skills. Acting in a role may allow learners to build empathy and understand the affective side of an interaction more fully than by using other instructional methods. The activities can be expanded or shortened for time available and can be adapted for a variety of audience sizes. Educators do not need prior theater training to employ role-play, sociodrama, and applied improvisation in medical education. However, prior experience with debriefing in education settings (such as simulation debriefing) can be helpful for facilitators.⁹

More than ever, medical educators must train future physicians to respond to challenging issues in the care environment. One such issue is the delivery of culturally competent care, and we use this issue to ground the work discussed in this publication because of its importance in medical education. Both the Liaison Committee on Medical Education and the Accreditation Council for Graduate Medical Education require curricula and programs to prepare learners to care for patients of diverse cultural backgrounds, socioeconomic statuses, gender identities, and sexual orientations.^{8,9} As Kumagai, Jackson, and Razack explain, this includes “teaching and learning about contentious, complex issues, such as race, gender, sexual orientation, and class, as well as about important interpersonal subjects, such as intimate partner violence, child abuse, and sexual assault.”¹⁰

Communication skills and professionalism are at the core of caring for diverse populations. Simply lecturing about these difficult topics may not be enough to help learners or faculty, regardless of their background, develop the empathy and dynamic communication skills required to provide culturally competent education and care.¹¹ Trainees and faculty members need safe learning environments in which they can be challenged and supported to grow and can try out new behaviors and language.¹⁰ In addition, faculty may witness insensitive or overtly biased remarks by students and/or colleagues. Absent adequate training, they may not know how to intervene or how to address these situations. Because theater-based educational approaches emphasize experiential learning and build on the experience of the learner, participants in these programs are likely to develop a self-awareness of stereotyping and bias and to reflect on how they might change behavior or intervene in witnessed events.

In teaching issues related to communication about complex and emotional topics such as diversity and inclusion, addressing both the affective and behavioral components is often as important for learning as providing content expertise. Communication is at the core of medicine, and communication is inherently affective. This workshop presents a range of options; educators can pick strategies depending on the focus of their educational objectives. For example, if educators desire behavioral change, role-play may be the best-employed modality. For a visceral or affective change, sociodrama may be the most pertinent modality.

Methods

This workshop compiled educational workshops, ideas, and interests from a variety of institutions. The workshop presenters were all participants in the Association of American Medical Colleges (AAMC) Group on Faculty Affairs and had varying degrees of experience with theater. The group coalesced around the topic, and individual members took a role in developing a section of the workshop based on work they had previously done with learners at their home institution.

A peer-review process for Learn Serve Lead 2016: The AAMC Annual Meeting selected this workshop for presentation. We had developed the workshop for a 90-minute period but were allotted only 75 minutes. Therefore, we shortened the session. The [Table](#) outlines the time line and associated materials for a 75-minute session. The PowerPoint presentation and schedule (Appendix A) reflect the 75-minute period. Facilitators can spend more time on any section. Similarly, the session could easily be broken into multiple sessions based on available time and interest. Sections and scenarios may be used directly with learners at multiple levels, not just for faculty development.

Table. Schedule for 75-Minute Session

Time	Event	Slides and Handouts
10 minutes	Act 1: intro, theater principles, and role-play	Appendix A: slides 1-5: intro, 6-9: principles, 10-14: role-play Appendix B: Handout 1 - 8 Essentials for Using Theater in Medical Education Appendix C: Handout 2 – Role-Plays (If there is additional time, practice role-plays.)
30 minutes	Act 2: sociodrama principles and large-group demonstration, small groups, and debrief	Appendix A: slides 15-22, 23-25: scenario for large-group demonstration Appendix D: Handout 3 - Sociodrama for Medical Education Appendix A: slide 26: use scenario from Appendix D
20 minutes	Act 3: applied improv principles and large- and small-group activities	Appendix A: slides 27-32, 33: small groups practice choice from Appendix E: Handout 4 - Applied Improvisation Activities to Consider
15 minutes	Final curtain: wrap-up	Appendix A: slides 34-36 Appendix F: Handout 5 - Theater as a Tool: Engaging Actors Appendix G: Handout 6 - Potential Activities Grid

We presented this workshop in a large meeting room with round tables. A smaller room would be preferable, depending on the group size. An elevated stage is ideal for a demonstration of some of the techniques (i.e., sociodrama). Participants need room to interact with one another during the applied improvisation exercises. An even number of participants makes some of the activities easier. We utilized a cordless handheld microphone for the speaker and for audience questions, as well as microphones for the actors in the demonstrations. In a smaller room, microphones may not be necessary.

Methods are described in the sections that follow and in the PowerPoint presentation. The presentation notes for each slide guide the facilitator or may be used for self-study. Appendix I includes more in-depth background on each section to assist the facilitator. Appendix J provides a brief overview of coaching and debriefing skills.

Act 1: Introduction and Theater Principles

This section uses the following materials: slides 1-5: intro, 6-9: principles, and 10-14: role-play (Appendix A); Handout 1 - 8 Essentials for Using Theater in Medical Education (Appendix B); and Handout 2 - Role-Plays (Appendix C).

The introduction sets the stage for the workshop. Slides 1-5 discuss the importance of active learning as a setup for the workshop. Slides 6-9 highlight eight consistent themes that support the effective use of theater in teaching.¹²⁻¹⁸

- Be clear about learning objectives.
- Create challenging cases.
- Select the right structure.
- Involve the audience.
- Define the ground rules.
- Use a structured coaching guide.
- Allow adequate time to debrief.
- Stimulate reflective thinking.

Handout 1 summarizes these principles. It may be given out at the beginning of, during, or after the workshop. Slides 10-14 discuss various methods of incorporating role-play in medical education. After review of the slides, Handout 2 may be distributed so that participants can role-play a scenario. The best

setup is for two people to role-play (parts A and B) with an observer. Page 2 of Handout 2 gives case-writing guidelines.

Act 2: Sociodrama¹⁹

This section uses the following materials: slides 15-26 (Appendix A) and Handout 3 - Sociodrama for Medical Education (Appendix D). Sociodrama is a technique that facilitates the examination of issues or conflicts that arise from socially defined roles. Slides 15-17 introduce the concept of sociodrama.

Slides 18-22 describe the practical components of sociodrama and the concept of doubles. The following people are involved: actors playing out the scene, doubles standing behind the actors, and a director/facilitator to pause the action and call for someone else to take over. The individual playing the double acts out the inner voice or voice-over of the actor or turns to the audience and discloses the inner thoughts of the actor.

Slides 23-26 give case examples. The first case can be played by the faculty members with doubles or volunteers can be asked for. The facilitator debriefs the group at the end using the questions in the notes for slide 25.

Slide 26 marks the transition to practice time. Groups of four to five can practice the scenario (without or with an observer). Handout 3 contains information about sociodrama and the scenarios for practice. Pages 1-2 of Handout 3 give basic information, while pages 3-4 contain two cases.

Act 3: Applied Improvisation in Medical Education

This section uses the following materials: slides 27-32 (Appendix A) and Handout 4 - Applied Improvisation Activities to Consider (Appendix E). Slide 27 introduces applied improvisation. By definition, improvisational theater is a form in which most of a scene is produced spontaneously by the actors in the scene. The ability to do this does not come naturally, which is why practice is important.

Slide 28 announces the think-of-a-ball exercise, whose concept is outlined in the notes for the slide. Per the description of the exercise in Handout 4, participants are asked to stand, and all participate in a guided demonstration. The handout does not need to be given out prior to this exercise.

Using slides 29-31, the presenter gives more background about applied improvisation and important concepts.

Slide 32 leads into the follow-the-follower exercise, whose concept is outlined in the notes for the slide. Per the description of the exercise in Handout 4, participants are asked to stand, and all participate in a guided demonstration. The handout does not need to be given out prior to this exercise.

Slide 33 allows time to practice additional techniques or to discuss the first guided demonstrations.

Wrap-Up

This section uses the following materials: slides 34-36 (Appendix A) and Handout 5 - Theater as a Tool: Engaging Actors (Appendix F).

Finally, the workshop wraps up by addressing any additional questions. During our session, time ran short, and we were not able to discuss Appendix F, which deals with on how to engage actors. This self-explanatory handout is based on the work done at our institutions to engage and prepare actors for their roles.

Other Appendices

Handout 6 - Potential Activities Grid (Appendix G) is included as a means of assisting faculty with choosing appropriate methods for a given competency. Learners could use this grid during the workshop, during self-study, or for future planning. The postparticipation survey (Appendix H) is included as a means of

evaluating the session, either immediately afterward or when sent later. Appendix I gives in-depth background on role-play, sociodrama, and applied improvisation. It provides information related to the time needed for preparation for role-play and sociodrama, which, depending on the complexity of the situation, may take an hour or 2. Finally, a coaching guide (Appendix J) is included.

Results

As mentioned above, this workshop was selected for presentation at Learn Serve Lead 2016: The AAMC Annual Meeting. Participants at the AAMC annual meeting were from US and Canadian medical colleges and represented faculty, trainees, and administrators. Forty-five conference participants attended the workshop. They chose it from among eight concurrent sessions. A show of hands at the start of the workshop indicated that fewer than five participants had theatrical expertise.

The AAMC was unable to provide us with session evaluations. However, many participants stayed after the session to discuss issues raised and techniques learned. In addition, the majority of session participants ($n = 32$) shared their email addresses with us to keep in contact and receive further information about the use of theater in education. In April 2017, we sent an 11-item electronic survey to the 32 participants who had provided contact information. Of the eight respondents (25% response rate) to our survey, 100% responded that the session met their educational needs and that the information presented provided new ideas/information. We utilized a retrospective pre/post format to ask about confidence in using theater techniques for medical education. Participants reported that prior to the sessions, they had low to medium confidence in using theater techniques as a tool for medical education. After the session, the majority of survey respondents reported high confidence in the use of presented techniques.

All respondents who were actively teaching reported that they had made changes to their teaching based on the workshop. Participants reported the following changes:

- “I have included and encouraged story sharing in my classes, and one-on-one sessions. I am not as afraid of including improv.”
- “I have found courage to add theater elements to my teaching.”
- “I have had conversations with our standardized patients who have familiarity with improv to see what we can do/how we could do it/if we should do something.”

Those who had not yet incorporated changes planned to do so:

- “Plan to use the ‘double-actor/Subconscious’ approach in a future faculty development session with Interprofessional Practice and Education teaching.”
- “I am seeking additional opportunities to learn how to incorporate theater tools in interprofessional education events. I am also a member of a team working on a faculty dev project that will directly use these skills.”
- “I will continue to explore using sociodrama for faculty development. Unsure if I will use it in medical education—not sure if I will be approaching students correctly with such an activity. I take the caveat seriously—don’t let it become a therapeutic encounter.”

When asked about favorite parts of the session, participants responded as follows:

- “We were active participants in the session—I really liked that.”
- “Very interactive.”
- “Discussions regarding role play and self-reflection.”
- “The exercises that made us all laugh and feel silly. :)”
- “Active learning, being able to put what I learned to use right away. Enjoyed getting to know my colleagues taking the class.”

Finally, participants were asked to recommend improvements and suggested the following:

- “I remember having a hard time being able to find a way to incorporate the techniques into my educational strategies. It might be helpful to give participants a little more guidance on how to incorporate the ideas/skills being taught.”
- “Send attendees a YouTube video link to further demonstrate the exercise (enduring learning resource).”
- “I would like to know more about how students respond to sociodrama scenarios.”
- “Possibly video participants for later reflection.”

Prior to participating in this overview workshop, we individually evaluated our sections at our home institutions.

Role-Play

- Workshop title: Difficult Conversations.
- Fifty-one evaluations were completed over three separate sessions using actors. Ratings were on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*).
 - Overall value of session: 4.68.
 - Effectiveness of the facilitator: 4.71.
 - Discussion following learning activity: 4.74.
 - Relevancy of content/subject matter: 4.78.
 - This workshop increased my understanding of how I deal with conflict: 4.64.
 - This workshop increased my understanding of how to achieve positive conflict resolution: 4.64.

Applied Improvisation

- Workshop title: Communicating Science: Making Science Make Sense.
 - This workshop used applied improvisation techniques to teach faculty to communicate complex concepts more effectively with learners and the public.
- One hundred twenty-five evaluations were received from six programs. Ratings were on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*).
 - Engaged in meaningful conversations with colleagues: 4.50.
 - Identified resources to advance my work: 4.53.
 - Developed more effective strategies to communicate my ideas: 4.56.
 - Feel more confident in my ability to listen to audience concerns: 4.60.
 - Know how stories help a speaker to connect with an audience: 4.59.

Discussion

We brought a variety of novel techniques used at multiple institutions together into a unified workshop. Our goal was to use techniques and principles from theater in the delivery of an immersive learning activity focused on building communication skills around difficult topics. While the included examples all focus on issues related to diversity of thought, communication, and professionalism, this workshop can be used in faculty development for any topic that warrants depth of communication. In addition, educators may choose to use this process in medical education settings across the continuum of learners.

The AAMC attendees fully participated in the workshop, which added to its success. As reflected in their comments, the learners enjoyed the interactive nature of the workshop, which provided experiential learning in theater techniques in medical education. The topics relating to microaggressions and discrimination explored during the workshop elicited powerful discussion from participants, unusual for a national conference in our experience. Many participants felt uncomfortable discussing the topics yet remarked that by doing so in a safe and fun environment, they felt a greater appreciation for diversity than they had in the past.

The evaluation data suggest the link to medical education was not as clear as we intended. To address this issue, we created a new handout, Appendix G, as a guide to determining when to use the various methodologies taught in the workshop. This guide should assist educators in the selection of appropriate methods after they have written their learning objectives and desired learning outcomes.

The methodology used to evaluate this national workshop was not ideal. Due to issues with the traditional evaluation system, we utilized a retrospective pre/post format emailed to participants. The respondents (25% response rate) may not be reflective of the entire group of participants, creating a sampling or ascertainment bias. In addition, the educators who attend the AAMC annual meeting inherently may have differences from other faculty.

This learning modality and the tools we provide can be used to design a faculty development session or as a self-study allowing educators to apply the principles contained in the module. Each of us annotated our PowerPoint sections to offer teaching pearls about the given methodology. Details about each methodology are provided in Appendix I. Appendix J is a guide for coaching and debriefing. With these tools, educational learners at any level should be able to gain new skills and incorporate theater principles into their educational activities.

The creators of this workshop have a range of acting and theater experience—from distant middle-school experience to current drama professionals. Many of us were nervous, reluctant actors for the large-group sociodrama demonstration. In the end, this nervousness made the demonstration more real and showed that even those with little theater experience can do it. As a group, we realized that any of us could implement the materials (after clarifying our questions with the main section author) and believe that almost anyone can learn from this module as well.

The workshop participants made very good suggestions about videotaping and having examples available online. Although we were unable to do so in this publication, creating a repository of theater materials for medical education is a future opportunity.

Using theater in faculty development provides a powerful tool for educators. The depth of emotion elicited by acting and the ability to practice difficult conversations make theater an ideal tool for education related to diversity and inclusion. This workshop provides educators a range of theater techniques with which to enhance their educational programs.

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Prior Presentations

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Ethical Approval

Reported as not applicable.

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