Building Faculty Relationships to Enrich the Educator and the Educated

Katie Twist
University of Kentucky

April Hatcher
University of Kentucky

Follow this and additional works at: https://encompass.eku.edu/pedagogicon

Part of the Educational Methods Commons, and the Scholarship of Teaching and Learning Commons

Author Biography

Dr. Katie Twist is a clinician-educator with a clinical focus on outpatient women's health. She directs several pre-clinical courses at the University of Kentucky College of Medicine and is Director for Classroom Teaching Faculty Development.

Dr. April Hatcher is a medical educator in the Department of Neuroscience at the University of Kentucky. She teaches gross anatomy, embryology, and histology to graduate and professional healthcare students, including medical, dental, and health science students. She is the Director for the Graduate Certificate in Anatomical Sciences Instruction.

Building Faculty Relationships to Enrich the Educator and the Educated

Katie Twist and April Hatcher
University of Kentucky

At the University of Kentucky College of Medicine, we implemented a longitudinal faculty development program for interested educators to practice applying foundational teaching concepts and to provide space to discuss sensitive and challenging teaching experiences. The program was created to help develop and maintain a community of medical educators and assist with their teaching portfolio for promotion. Here we describe the thematic organization of the faculty development program organized into pre-work, in-session, and post-work components.

Introduction

The regular exchange of ideas and discourse over information is a necessary part of the learning process as we consider new ideas, challenge our own thinking, and arrive at a more nuanced understanding of our views and approaches. This tedious process is as essential for the educator as it is for those they educate, the students in their classrooms. Good teaching practice involves careful attention to the effective alignment of course delivery, learning outcomes, and student progress, in addition to the less quantifiable aspects of rapport and contributions to a healthy learning environment (Harden and Crosby, 2000). For these reasons, faculty development programs are essential to the continual growth of the educator as they prompt reflection and refinement of the teaching approach. Some benefits of faculty development programs have been reported as high participant satisfaction, positive attitudes toward faculty development and teaching, and increased knowledge of educational principles, using informal and formal methods of assessment (Steinert et al., 2009). Such programs are advantageous for many reasons, including spaces for dialogue regarding the strengths/weaknesses of teaching approaches, an outlet for processing classroom difficulties and solutions, and as documentation for the professional development efforts of a faculty member for the purposes of promotion/tenure. In a review of faculty development programs from 1989-2010, the primary goals of such programs was to improve teaching effectiveness, followed by development of

curriculum and research skills, acquisition of skills to become faculty developers at their own institution, and professional development (Leslie et al., 2013). In a similar fashion, here we describe a longitudinal faculty development program for educators in the College of Medicine at the University of Kentucky. The faculty enrolled in this program brought classroom experiences from diverse subjects and backgrounds, such as basic science traditional classrooms and clinical small groups, and this enriched the overall exchange of ideas among colleagues.

Institutional and Program Context

The University of Kentucky College of Medicine (UKCOM) is a four-year integrated curriculum divided into three phases. During the initial Core Principles phase in year one and two, all students are enrolled in the same course sequence and the curriculum covers foundational science integrated with clinical application in both large group, lecture-style classes as well as small group, discussion-based classes. In year three, the Application phase, students apply their core knowledge and skills to a variety of medical disciplines on their clerkship rotations. These clinical experiences are hands-on learning opportunities with real patients, interspersed with occasional large and small group teaching didactics and discussions. In the Advanced Development phase, year four, students choose electives to tailor their education to their career plans with a variety of hands-on clinical experiences.

Classroom teaching occurs in both large and small group settings throughout the entire curriculum, but a majority occurs in the first two years. Both basic scientists and physicians from all disciplines educate students in these settings. The UK College of Medicine Classroom Teaching Development (CTD) series is a faculty development program created for faculty who teach in the classroom setting at any point in the medical school curriculum. A foundational teaching series ("Classroom Teaching Development 1.0" or CTD1) invites educators to participate in five separate workshops covering introductory aspects of classroom teaching like writing effective learning objectives, strategies for large and small group teaching, slide design and interactive learning approaches, and writing multiple choice questions. This introductory program has been in place since 2017 and over 80 faculty members, including basic scientists and physicians, have completed the series. These educators are involved in the medical school curriculum as lecturers, small group discussion facilitators, and clinical educators who give didactics and instruction outside of their usual clinical activities.

We wanted to develop a more intensive program for interested medical educators to cultivate a sense of community and provide space to discuss teaching

experiences and challenges. The "Classroom Teaching Development Program 2.0" (CTD2) took a small group of interested faculty, paired them with a peer coach, and provided opportunities to improve and reflect on teaching skills.

Overview of Strategy

We invited prior participants in classroom teaching faculty development sessions to apply for the CTD2 program. Application materials requested information on current teaching roles, prior faculty development, goals for participation in the program, self-reported teaching strengths and weaknesses, and a commitment to participate in all components of the program. Nine faculty members completed the application, and all were selected as appropriate candidates for the program.

Participants attended six, two-hour in-person workshops between October 2021 and March 2022. They also participated in monthly online discussion boards covering various topics related to classroom teaching. Additionally, participants were recommended to undergo four direct observations of teaching in small or large group settings. To complete the program, participants planned, implemented, and presented a capstone project of an innovative teaching practice.

Each workshop included prework videos or articles, an in-person component usually consisting of both discussion and hands-on activities, and a post-session follow-up assignment (Table 1). Topics included composing a teaching philosophy, educational theory and instructional design, innovation and engagement in the classroom, learning climate and inclusivity, and giving and receiving feedback. Individual components of each workshop are summarized in the table below.

In addition to the workshops, participants were assigned to faculty coaches. Coaches were individuals that were selected based on their history of prior teaching excellence and devotion to medical student education. Coaches assisted participants in the development and implementation of their capstone project and provided feedback during direct observation of teaching.

Table 1. Organization of Classroom Teaching Development Program Sessions

Session # and Topic	Pre-work	In-person session	Post-session
1-Introduction and Teaching Philosophy	-Personal introduction on Padlet™ online bulletin board -Excerpt from "The Courage to Teach" (Palmer, 1997)	-Introductions -Reflection on teaching experiences -Article discussion -Introduction to Teaching philosophy (didactic)	-Post personal teaching philosophy on a shared drive and comment on peers' philosophy
2-Educational Theory/ Instructional design	"Words of Advice: Preparing to Teach" (Silverthorn et al., 2020) "The Cognitive Science of Learning" (Weidman & Baker, 2015)	-Discussion of the science of learning: metacognition, cognitive load, backwards course design "Troika" consulting activity from liberatingstructures.com	TED talk on "deliberate practice" (Briceno, 2017) with online discussion using Canvas™

Session # and Topic	Pre-work	In-person session	Post-session
3-Innovation and Engagement	-"Menu" of articles, participants chose at least two articles on: problem based learning (Davis & Harden, 1999), reflection (Sanders, 2009) , visual art (Mukunda et al., 2019), facilitating millennial learning (Roberts et al., 2012), flipped classroom (Moffett, 2015) , team based learning (Parmelee & Michaelsen, 2010), gamification (McDougall, 2017)

-Reflection on article takeaways using a shared Google doc | -Introduction to innovation in education based on menu readings

-Experiences with classroom innovation, followed by discussion

-Small group work on problem identification and brainstorm solution ideas, barriers, stakeholders, resources, and evaluation for capstone project

(see Personal Development Project Planning worksheet in supplemental materials) | -Upload worksheet used for capstone project brainstorming |

Session # and Topic	Pre-work	In-person session	Post-session
4-learning climate and inclusivity	-Articles: "Building an Inclusive Classroom" (Penner, 2018) "Pedagogy of Kindness" (Denial, 2019) "Hot Moments in the Classroom" (Lee, 2007)	-Guided discussion questions -Considerations for inclusive teaching using Crucial Conversations (Patterson et al., 2002) and Interrupting Bias: Calling Out vs. Calling In (Tufts Diversity & Inclusion, 2022)	Optional reading on digital accessibility (Digital Access, 2022) and guidelines for discussing difficult or high-stakes topics (Center for Research on Teaching and Learning, 2021)
5-Giving and Receiving Feedback	-Harvard Business Review "Finding Coaching in Criticism" (Helia & Stone, 2014) -Participants brought student evaluations to class	-Presentation included TED talk on giving feedback (Renninger, 2020) and summary of Alliance for Academic Internal Medicine (2022) Workshop	-Prepare for capstone project
6-Capstone		-Participants had 10 minutes to present project, and 10 minutes for discussion	

Assessment

For the 2021 to 2022 cohort, there were nine participants and five volunteer coaches for the program. These mentor/mentee pairs were evenly distributed with a total of seven PhD and seven MD participants. All academic ranks were represented in both the participant group and the coaching group. General feedback from the participants highlighted the community-building aspect and

outlet for the discussion of teaching successes/challenges as positive aspects of the project. Areas for improvement included more opportunities to discuss feedback and assessment.

Overall, informal feedback from the program from both coaches and participants was overwhelmingly positive. All participants completed a capstone project and presented during the last session. There were multiple unique innovations and updates to the participants classroom teaching experiences. Projects included new flipped classroom session using Slido™ technology, a proposal for gamification of a musculoskeletal talk for first year medical students, a review of consensus methodology for updating physiology learning objectives, and updates to PowerPoints with interactive teaching strategies like storytelling, to name a few.

Implications

The CTD2 faculty development program offered at the University of Kentucky was considered a success measured by the participant feedback and enthusiasm to continue meeting even after the program ended. Indeed, the "MedEd Lunch Bunch" was born out of this desire to carry on the discussion on best practices for teaching. Since the conclusion of the CTD2 program, participants (ranging from three to seven people) have gathered over the lunch hour on three separate occasions to discuss articles or timely education topics specific to the medical student curriculum. The discussion has been fruitful, even if teaching problems haven't been solved during the lunch hour. One of the more intangible benefits of regular meetings for the express purpose to hear and support each other, is an increased sense of community among the educators. This support in turn fuels the next set of ideas for the classroom or in some instances, offers encouragement to continue innovating, adapting, and responding to student needs.

A second iteration of the CTD2 is planned for the fall 2022. In keeping with the principle of creating a community of practice, we expect that some enrollees from the 2021 group will return as mentors to the new mentees. We also plan to increase the opportunities for one-on-one mentorship for participants so that more specific coaching is available. Additionally, the mentee-returning-as-mentor approach highlights the long-term impact of the program by providing an update on the changes in teaching practices and scholarly activity accomplished over the year of their participation in the program. Overall, the CTD2 faculty development program provided multiple occasions for faculty teaching diverse topics in various learning environments to share successes, setbacks, and ways forward in their own teaching journey.

References

Alliance for Academic Internal Medicine (2022). *Faculty Development Resources.* https://www.im.org/resources/ume-gme-program-resources/faculty-development-resources

Briceno, E. (2017). *How to get better at the things you care about.* TED Talk. https://www.ted.com/talks/eduardo_briceno_how_to_get_better_at_the_things_you_care_about?language=en

Center for Research on Teaching and Learning. (2021). *Guidelines for Teaching Difficult or High-stakes Topics.* https://crlt.umich.edu/publinks/generalguidelines

Davis, M. & Harden, R. (1999). AMEE Medical education guide No 15. problem-based learning: a practical guide. *Medical Teacher*, *21*(2), pp. 130-140. https://doi.org/10.1080/01421599979743

Denial, C.,= (2019). *Pedagogy of kindness.* Hybrid Pedagogy. https://hybridpedagogy.org/pedagogy-of-kindness/

Digital Access. (2022). *University of Missouri.* https://digitalaccess.missouri.edu/

Harden R, Crosby J. (2000). AMEE Guide No 20: The good teacher is more than a lecturer - the twelve roles of a teacher. *Medical Teacher*, 22:334-47.

Helia, S. & Stone, D. (2014). *Finding the coaching in criticism*. https://hbr.org/2014/01/find-the-coaching-in-criticism

Lee, W. 2007. *Hot moments in the classroom.* https://www.cmu.edu/teaching/resources/Teaching/CourseDesign/InstructionalStrategies/HotMomentsClassroom.pdf

Leslie, K., Baker, L., Egan-Lee, E., Esdaile, M., & Reeves, S. (2013). Advancing faculty development in medical education. *Academic Medicine*, *88*(7), pp. 1038-1045. doi: 10.1097/ACM.0b013e318294fd29

Liberating Structures. (2022). *Troika consulting*. https://www.liberatingstructures.com/8-troika-consulting/

McDougall, A. (2017). When I say…gamification. *Medical Education*, 52, pp. 469-570. https://doi.org/10.1111/medu.13481

Moffett, J. (2015). Twelve tips for "flipping" the classroom. *Medical Teacher*, 37:4, 331-336. https://doi.org/10.3109/0142159X.2014.943710

Mukunda, N., Moghbeli, N., Rizzo, A., Niepold, S., Bassett, B., & Horace, D. (2019). Visual art instruction in medical education: a narrative review. *Medical Education Online, 24*. https://doi.org/10.1080/10872981.2018.1558657

Palmer, P. (1997). The heart of a teacher: Identity and integrity in teaching. Change Magazine, *29*(6), pp. 14-21.

Parmelee, D. & Michaelsen, L. (2010). Twelve tips for doing effective Team-Based Learning (TBL). *Medical Teacher*, *32*(2), pp. 118-122. https://doi.org/10.3109/01421590903548562

Patterson, K., Grenny, J., McMillan, R., & Switzler, A. (2002). *Crucial conversations.* McGraw-Hill Contemporary.

Penner, M. (2018). Building an inclusive classroom. *The Journal of Undergraduate Neuroscience Education*, *16*(3), A268-A272. Renninger, L. (2020). *The secret to giving great feedback*. TED Talk. https://www.youtube.com/watch?v=wtl5UrrgU8c

Roberts, D. Newman, L., & Schwartzstein, R. (2012). Twelve tips for facilitating Millennials' learning, *Medical Teacher*, 34:4, 274-278, https://doi.org/10.3109/0142159X.2011.613498

Sanders, J. (2009). The use of reflection in medical education: AMEE guide No. 44. *Medical Teacher*, 31, pp. 685-695. DOI: 10.1080/01421590903050374

Silverthorn, D., Lee, M., Corliss, S., Nelson, E., & Bergemann, A. (2020). Words of advice: preparing to teach. *The Federation of European Biochemical Societies Journal*, 287, pp. 443-451. https://doi.org/10.1111/febs.15184

Steinert, Y., Mann, K., Centeno, A., Dolmans, D., Spencer, J., Gelula, M., & Prideaux, D. (2009). A systematic review of development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Medical Teacher*, *28*(6), pp. 597-526. https://doi.org/10.1080/01421590600902976

Tufts Diversity and Inclusion (2022). Interrupting bias: calling out vs. calling in. https://diversity.tufts.edu/resources/interrupting-bias-calling-out-vs-calling-in/

Weidman, J. & Baker, K. (2015). The cognitive science of learning: concepts and strategies for the educator and learner. *Neuroscience in Anesthesiology and Perioperative Medicine*, *121*(6), pp. 1586-1599. doi: 10.1213/ANE.0000000000000890

Supplemental

CTD 2.0 Personal Development Project Planning

Name:

Teaching session:

Problem identification/summary:
Solution that is novel, new, or innovative:

Rationale for the proposed solution:

What steps are needed to develop/implement the solution?

Anticipated barriers? Stakeholders to involve? Resources needed?

Define success. How will you evaluate the innovation? Any data/outcomes to measure?