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The Case for Revamping New Faculty Orientation: Integrating Case-Based Learning Into Faculty Onboarding

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Abstract

Introduction: New faculty orientation (NFO) for onboarding faculty members is replete with critical information and resources. Most NFO sessions are facilitated through lecture-based slide presentations. We employed a case-based learning (CBL) format to promote learner engagement through active use of the content being taught. We hypothesized that a CBL format would lead to improved learner satisfaction. **Methods:** An inventory of topics presented at NFO was generated by reviewing previous orientation sessions. Cases and discussion questions were developed to link to specific content areas from previously delivered lectures. Participants were assigned cases with discussion questions, followed by a large-group debriefing. In 2014, 105 faculty members participated in NFO. An additional 232 faculty members participated from 2014 to 2017 with the revised format. **Results:** Participants completed evaluations following each session. A specific item gauged the effectiveness of the format on a 9-point Likert scale. Scores were compared to 2014 evaluations using the unpaired Student t test. In 2014, participants rated the program format as 7.17 (mean) out of 9. Faculty orientation sessions in 2015, 2016, and 2017 scored 7.90 ($p < .05$), 8.00 ($p < .05$), and 8.40 ($p < .01$), respectively. **Discussion:** We proposed a new format for NFO using a CBL-based format. Feedback highlighted faculty satisfaction with the new format. Qualitative feedback suggested that this new design in NFO sessions promotes learner engagement, networking, and collegiality. The format also models a pedagogy that faculty can implement directly in their respective teaching environments.

Educational Objectives

By the end of this activity, faculty participants will be able to:

1. Introduce a case-based learning approach to facilitate new faculty orientation and onboarding processes for new faculty.
2. Identify general resources and policies that will assist faculty in their transition as new members within the organization.
3. Discuss challenges most frequently encountered by new faculty members and how they can best address them.
4. Discuss best practices in pedagogy and research that can assist with faculty scholarly productivity.

Introduction

New faculty orientation (NFO) for onboarding new faculty members is replete with critical information and resources. Content is designed to cover essential topics including appointment and promotion, educational resources, policies, and regulations, as well as introductions to key leadership and personnel. Challenges for developing effective NFO programs include time constraints of faculty participants, the vast amount of information discussed, and the haphazard completion of preorientation materials. NFO provides faculty with the opportunity to ask questions and understand policies and procedures at the new institution.

Traditionally, NFO sessions have been facilitated through lecture-based PowerPoint presentations. Although the overarching goals for NFO can be met through this traditional didactic format, there is an opportunity to improve content delivery by leveraging adult learning principles.

To overcome the challenges intrinsic to orienting new, busy faculty members, we aimed to develop an innovative, educationally based format for the program by adopting a case-based learning (CBL) approach. CBL represents a major shift in the educational paradigm from the traditionally teacher-centered approach to a learner-centered approach. CBL aims to enhance collaborative, contextual, integrated, self-directed, and reflective learning. Relevant, authentic scenarios serve as the vehicle for discussing core concepts that are typically presented at orientation to new faculty hired at academic medical centers. Learners (i.e., faculty) are the center of the learning experience, as they are actively seeking knowledge through collaboration and discussion. With a CBL approach, NFO can foster higher-yield teaching and learning for faculty. In 2011, Trief et al.[1] published an exercise in *MedEdPORTAL* utilizing CBL in a faculty development program focused on academic chairs, highlighting the program's overall effectiveness and its promotion of discussion between participants.

Of note, no publications were found that utilized a CBL format in a faculty orientation program. We hypothesized that the integration of this pedagogy in NFO would improve faculty members' satisfaction with the session, engage them through active learning, and foster collegiality among them as they worked together to find solutions to case questions.

Methods

An inventory of topics covered and presented at NFO at the Sidney Kimmel Medical College at Thomas Jefferson University in Philadelphia, Pennsylvania, was generated. Speakers who previously provided hour-long lectures at NFO were asked to distill their respective messages into several major talking points along with identified institutionally and publicly available resources. Presenters captured their talks on PowerPoint slides and Panopto software. The talks were then converted into video modules that were uploaded onto the BlackBoard learning management system and shared with new faculty. Modules were created for each of the following institutional offices: Student Affairs, Faculty Affairs and Professional Development, University Policies and Compliance, Diversity and Inclusion, and the university's Center for Teaching and Learning. Links to modules were shared with faculty for their review prior to attending NFO. Institutions making use of this resource may choose to utilize other modalities of delivering institution-specific content to their new faculty.

The Office for Faculty Development developed case vignettes along with discussion questions provided in Appendix A that linked to specific content areas from the prerecorded video

modules. Answers for each case are provided as a printable document in Appendix B and as a slide deck in Appendix C. Cases were designed to be thought provoking, with multiple possible answers and solutions. Specific topics covered in the cases included patents and institutional policies, conflicts of interest, diversity and inclusion, faculty misconduct, pertinent university policies (e.g., Family Educational Rights and Privacy Act [FERPA]), industry relationships, Title IX, and teaching in the clinical environment.

Cases were written for universal application to academic institutions. Exposure to each of the topics mentioned previously is essential for new faculty in academic institutions; however, detailed rules, regulations, and codes of conduct are specific to each university. Policies common across institutions or based on federal law, including Title IX, the Clery Act, the Sunshine Act, and FERPA, are included in Appendix D.

The revised orientation session began with new faculty members being divided into groups of six; typical orientation sessions were attended by 40-60 new faculty members from various specialties and subspecialties in medicine. Faculty participated in an icebreaker exercise to increase familiarity and establish team dynamics. Each group was then assigned two cases, with two to five follow-up questions per case, for faculty to discuss for 30 minutes. Office of Faculty Development representatives were available to answer questions and offer additional guidance. A binder containing university-specific policies and procedures was provided to each group to assist faculty in navigating each case. It would be beneficial for universities that utilize this proposed NFO to distribute a handbook of policies and procedures as a reference as needed. Groups were asked to identify a member to take notes and serve as a representative to report out answers to the larger group during the later discussion that highlighted the suggested answers to the cases.

Small groups reported their findings to the larger group, with the subsequent discussion being facilitated by the Vice Provost for Faculty Affairs (Karen Novielli) and the Associate Dean for Faculty Development (Dimitrios Papanagnou). Each case was assigned to multiple groups, allowing for several different perspectives to be shared during the discussion.

Results

NFO sessions were offered biannually. Faculty members were trained in a variety of specialties, including cancer biology, emergency medicine, general surgery, internal medicine, neurosurgery, pathology, and radiology. In total, 105 participants took part in NFO in 2014. The CBL format was administered for

NFOs in 2015-2018, during which a total of 232 new faculty members participated in the sessions. Faculty participants completed a paper evaluation form immediately following the session. A specific item was added on the evaluation form to extract perspectives on the effectiveness of the format of the cases on a 9-point Likert scale. Scores of 1-3 indicated that "case discussions were limited, and not much was learned." Scores of 4-6 indicated that "cases sparked interest but were valuable educationally." Scores of 7-9 indicated that "cases were engaging and elicited multiple viewpoints."

Scores were compared to 2014, when content was delivered in an exclusively didactic style, using the unpaired Student t test. The Figure shows the evaluation results from 2014 to 2017. In 2014, participants rated the format of the program as 7.17 out of 9. Sessions conducted in the new CBL format in 2015, 2016, and 2017 received mean rating scores of 7.90 ($p < .05$), 8.00 ($p < .05$), and 8.40 ($p < .01$), respectively. Results from 2018 were collected but have yet to be compiled and analyzed.

Discussion

We proposed a new CBL-based format for NFO that has shown a statistically significant increase in learner satisfaction when covering faculty-related policies and procedures during routine onboarding. Qualitative feedback suggests that this approach to NFO promotes engagement, networking, and collegiality. Survey responses show that the NFO sessions that included the CBL format spurs active discussion and in-session interaction with the materials shared. The format also models a pedagogy that faculty can implement directly in their respective teaching environments. The proposed NFO format can easily be applied to universities using the attached cases without the need for modification, mitigating much of the advance preparation needed by individual facilitators.

Common rules and regulations are included as part of this publication; however, university-specific rules and regulations need to be provided to new faculty members by each individual institution. In anticipation that some faculty will not review presession materials or in the event of a technology-related failure preventing faculty from accessing electronic content, we highly recommend the availability of a hard copy of both university-specific policies and procedures and the common and federally mandated guidelines in Appendix D.

There are several limitations worth noting. Our primary results were qualitative in nature, as they were based on immediate responses of faculty participants. New faculty did not complete postsession assessments to measure any change in new knowledge gained (e.g., comparing posttest scores to a preintervention cohort). Furthermore, faculty were not followed or longitudinally surveyed in the months and years after their
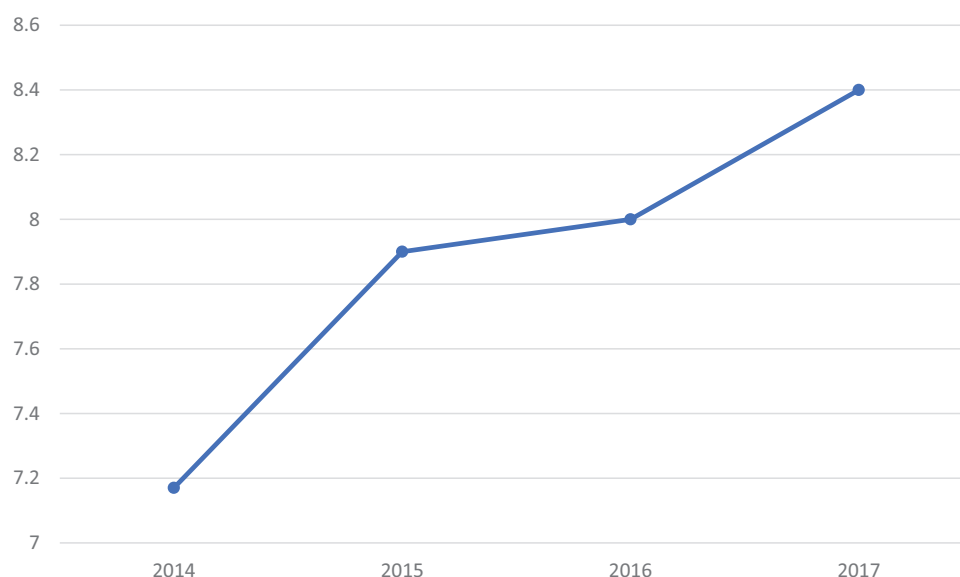

Figure. Effectiveness of new faculty orientation (NFO) format. NFO participants were asked to rate the effectiveness of the NFO format on a 9-point Likert scale. Scores of 1-3 indicated that "case discussions were limited, and not much was learned." Scores of 4-6 indicated that "cases sparked interest but were valuable educationally." Scores of 7-9 indicated that "cases were engaging and elicited multiple viewpoints." The case-based learning format for NFO was first implemented in 2015. The effectiveness score in 2014 was 7.17. Average effectiveness scores for years 2015-2017 with accompanying p values in comparison to 2014 were 7.90 ($p < .05$), 8.00 ($p < .05$), and 8.40 ($p < .01$), respectively.

completion of the NFO session; therefore, any conclusions on knowledge retention and/or continued satisfaction cannot be made. Noncompliance with federal and university-specific rules and regulations, conduct violations, and disciplinary actions against faculty are rare occurrences; consequently, it would be difficult to link any changes in the absolute number of reported events to our educational intervention.

Looking forward, we aim to continuously curate cases that adequately cover the ever-changing academic landscape in which faculty practice. Several possible topics may include, but are not limited to, social media in education, digital scholarship, guided supervision, and generational gaps in learners.

Appendices

A. NFO Cases.docx

B. NFO Case Answers.docx

C. NFO Case Answers.pptx

D. NFO Common Rules.docx

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

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Reference

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