Title: Interdisciplinary Step-Back Mentoring for Education Research

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Focused question: Does an interdisciplinary step-back mentoring model improve educational research quality and productivity?

Background (including brief review of prior research): We propose to adapt the nationally recognized Step-Back Consulting Model to mentor educators at Duke with the goal of improving the feasibility, quality and productivity of their education research projects. The Step-Back Consulting Model was developed by Robert Kegan, PhD, at Harvard as a method to better engage participants in effective small group learning that promotes the exchange of new ideas. The general process proceeds as follows: Participants are placed in small groups with a facilitator. One participant presents their specific project and its current challenges to the group in less than 10 minutes. Then, for approximately 30 minutes, the presenter steps-back and listens as the rest of the group takes on the project as though it is their own. The group members, other than the presenter, discuss ways to resolve the challenges presented. At the end, the presenter rejoins the discussion to clarify learning points and develop an action plan. The process is repeated for the other participants.

Specific aims: We aim to strengthen educational scholarship at Duke through the use of moderated peer-based feedback from interdisciplinary team members. We aim to develop Duke leaders to mentor others in educational scholarship.

Methods: Brief Description - We propose to adapt the Step-Back process at Duke by hosting workshops for Duke educators, including faculty, fellows, residents, students, educators, advanced practice providers, and other allied health professionals. First, we will develop the curriculum for the workshops, based on Dr. Kegan’s Step-Back process. This will include developing materials for the train-the-moderator sessions, pre-workshop preparatory work, and the workshops themselves. We will develop application forms for the participants, as well as short worksheets for participants to complete prior to engaging in the workshops. Second, we will recruit Duke faculty and staff with experience in successfully completing educational projects and research. These faculty and staff members will participate in train-the-moderator sessions where they learn Dr. Kegan’s Step-Back process, including how to moderate the sessions. These train-the-moderator sessions will develop Duke faculty and staff to be effective mentors in educational research. Third, we will work with our interdisciplinary collaborators to recruit participants with strong representation across different disciplines. Potential participants will submit a brief application form to enable us to select those participants who will benefit most from the workshops. Fourth, we will hold the workshops. The workshop will begin with a large group didactic, reviewing the basic principles of the Step-back process and explaining how the session will run. Then, participants will break into pre-selected small groups with varied representation across disciplines vertically across learners. There will be one trained facilitator per group. This adaptation will emphasize the role of interdisciplinary feedback and allow for unique perspectives. The aim is to assist participants in refining their project presentation and identifying current challenges. Fifth, each small group from the workshop will be expected to meet as a small group a couple months after the workshops.
ongoing small group sessions will promote the development of a peer network among those already familiar with one another's projects. The sessions will allow participants to check in regarding progress, discuss challenges, and share successes.

Outcomes and Measures - In order to measure the impact of our program, we will assess feasibility as well as impact on scholarly productivity. We will survey the moderators with pre and post-tests of their knowledge, skills, and attitudes regarding their mentoring skills related to educational scholarship. We will also document other prior trainings in mentoring they may have received. The purpose is to assess if the train-the-moderator sessions and workshop participation increased moderators' knowledge and perceived skills in mentoring educational scholarship. We will also administer a subsequent post-test several months later, asking how many additional mentoring relationships they have entered and how their participation in the program impacted this. Participants will be surveyed immediately before the workshop, immediately after the workshop, and several months after the workshop to determine sustainability of the results. We will ask participants to self-assess regarding their knowledge and skills in educational scholarship in each of these surveys, as well as obtain feedback on the workshops and preparatory work. The purpose of the participation surveys is to assess if the workshops and preparatory work were acceptable, as well as to see if the program impacts their perceived efficacy in participating in educational scholarship. We will also track completion rates of scholarly outputs, including type, number submitted, number accepted, and education project leadership roles both prior to and after the sessions as other measurements of successful educational scholarship.

Data Management and analysis - Data will be managed and analyzed by DOCR, if grant funding supports their involvement. DOCR will assist us in developing confidential, anonymous surveys that we can track by participant identifiers, without breaching confidentiality. Data will be kept confidential and anonymous on Duke servers. DOCR will assist in analysis of the data. Expert data management and analysis will enable us to approach the program evaluation in a scholarly manner with higher likelihood for publication.

IRB status - We will obtain approval from the Duke IRB prior to engaging in the project.

Challenges: One potential challenge is identifying the appropriate number of mentors (moderators) for the selected participants. It is very important to have one moderator per small group. One solution to this is to work closely with our interdisciplinary collaborators to identify the potential number of participants. We will recruit the moderators based on this potential number. We will recruit additional moderators as needed.

Sustainability: It is our hope that the program will be beneficial for the participants and the moderators, thereby leading to buy-in for subsequent programs. Participants will learn skills in educational scholarship as well as develop strong peer networks. We plan for the participants to continue collaborating with one another after the workshops through on-line networks.

Opportunities for subsequent scholarship: The intent of our program is to promote successful educational scholarship across disciplines at Duke. The adapted Step-Back program will help move participants forward in their projects, with an eye towards dissemination through publication, posters, and presentations. Our program will also develop Duke leaders to be effective mentors in educational scholarship. We intend for these leaders to continue in their mentoring efforts, enabling others to be more successful in their educational scholarship.

Broader Impacts: We feel our proposal meets the goals of Duke AHEAD in strengthening interdisciplinary collaboration across levels of learners and across departments and schools. We will strengthen the skills of educators to conduct and complete educational scholarly work, with the potential for increased Duke publication and visibility as leaders in education. The grant funds will enable us to develop an effective process that could be sustained in the future.
Timeline: Months 1-4: Develop curriculum for train-the-moderator, pre workshop participation, workshops. Develop surveys for outcomes assessment. Obtain IRB approval for the project.
Months 4-6: Recruit possible participants and moderators. Complete the train-the-moderator sessions.
Months 6-9: Participants complete pre-participation work. Complete the workshops. Complete workshop small group meetings.
Months 9-12: Complete data analysis and manuscript preparation for publication.

Resource needs and budget:

Funding will be available for a 12-month period. Please fill in the table below and provide justification/description for each item below. Also, where requested, please provide an estimate of the time/effort you will expend on this project.

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