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## Evaluating A New Doctoral Nursing Program: A Jordanian Case Study

Manar M. Nabolsi<sup>a \*</sup>, Fathieh A. Abu-Moghli<sup>b</sup>, Inaam A. Khalaf<sup>c</sup>

<sup>a</sup>The University of Jordan, Amman, 11942, Jordan

<sup>b</sup>The University of Jordan, Amman, 11942, Jordan

<sup>c</sup>AlAhliyah Amman University, Amman, 19328, Jordan

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### Abstract

Establishing and maintaining a quality nursing doctoral program in a country with limited resources is a challenge to program managers. Continuous evaluation is essential to pinpoint areas of improvement. This study aims to evaluate a nursing PhD program from the perspective of its first graduate cohort to provide feedback for improvement. Qualitative design using focus group method was used to collect data from a purposive sample of graduates (N=14). Content analysis revealed seven themes: Opportunity to earn a PhD-A dream comes true; A need for peer collaboration and support; Innovative strategies to overcome faculty shortage; A need for improved mentorship; Successfully merging national and international experience; Enhanced professionalism and scholarship; Coping with limited resources. The study findings suggest reviewing program admission criteria and curriculum content to meet student and marketplace needs. Maintaining national and international partnership, innovative teaching-learning strategies, and developing further strategies to meet resources challenges were recommended.

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### 1. Introduction

Doctoral programs are critical forces in developing nurse leaders for education, management, policy and research (Evans & Stevenson, 2011; Kim, Lee, Kim, Ahn, Kim et al., 2010). Doctoral programs worldwide face challenges, with the shortage of doctorally prepared faculty being the primary one (Ketefian et al., 2005, Leners, Wilson &

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\* Corresponding author: Manar Nabolsi. Tel.: +962-776-770-775  
E-mail address: [manarn@ju.edu.jo](mailto:manarn@ju.edu.jo)

Sitzman, 2007). Many qualified candidates wishing to pursue advanced nursing degrees are unable to gain admittance to these programs due to this faculty shortage (AACN, 2005).

Issues relating to the shortage of doctoral prepared nursing faculty are well addressed (Berlin & Sechrist, 2002; Cohen, 2011; Jackson, Peters, Andrew, Salamonson & Halcomb, 2011). Factors contributing to this global shortage include the high proportion of current nurse faculty approaching retirement (Berlin & Sechrist, 2002; American Association of Colleges of Nursing, 2003, 2005), high doctoral program attrition rates (Cohen, 2011, Edwardson, 2004), and salary disparity between academia and the marketplace (Berlin & Sechrist, 2002).

Like all academic programs, doctoral programs need continuous evaluation to monitor and insure quality curriculum content delivery and outcomes. Meaningful examination of a program's outcomes is one of the most challenging tasks facing faculty and administrators in designing and delivering academic graduate programs (Sakalys, Stember & Magilvy, 2001). Graduates' feedback and perceptions of their experiences contributes to program evaluation and directs strategies to promote its improvement (Evans & Stevenson, 2010). Assessing program impact on graduates provides administrators and decision makers information about ongoing and future needs for improvement (Kim, McKenna & Ketefian, 2006). Program evaluation is also essential in determining whether student expectations are met. Perceptions of program utility and relevance, the challenges and opportunities experienced during the course of study provide vital input into this process.

## **2. Background**

The first baccalaureate nursing program in Jordan was established in 1972, followed by its first Master's nursing program in 1986. Currently, 17 schools of nursing exist in the country, with most doctoral faculty either non-Jordanian or Jordanian faculty Masters prepared. While these programs ease an overall national nursing shortage, the shortage of doctoral prepared nursing faculty in Jordan remains a major problem in nursing education, contributing to the cycle of nursing shortages (Al-Maaitah & Shokeh, 2009).

The first strategy used in solving the doctoral shortage was offering baccalaureate graduates scholarships to pursue graduate education abroad. While initially successful, in the long term it was difficult to sustain financially and socially. Women constituted the majority of early nursing graduates in Jordan. Culturally, in Jordan, it is very unusual to allow single women to travel abroad alone. For married women with children, it is difficult to leave the family for three to four years and for most it is financially impossible to have their families accompany them. This made it difficult to find scholarships. These considerations, along with the natural progression of further graduate nursing education in Jordan contributed to developing a national Doctor of Philosophy (PhD) program in nursing. This was a more sustainable solution and continued this natural evolution of advanced nursing education in Jordan. The primary goal of the program was, and remains, producing and sustaining qualified faculty as leaders in developing, evaluating, and disseminating nursing knowledge along with the ability to promote nursing education, practice, and research at the national, regional, and international levels. With the first cohort graduation, it became necessary to evaluate the program quality and goal achievement.

The aim of this study is to explore the nursing PhD graduates' experience in a doctoral program at a Jordanian university. Exploring graduates' experience provides evaluation of the program and identifies challenges, strengths and weakness in the program.

## **3. Methodology**

### *3.1. Design*

A descriptive qualitative design using focus group method was used to collect in-depth information on the graduates' experiences in the program. Focus group techniques are appropriate in collecting information about opinions regarding educational programs (McLafferty, 2004).

### 3.2. Sample and Data collection

A purposive sample including the first PhD program graduates was recruited. The researchers developed a discussion guide based on an extensive review of the literature. The discussion guide included semi-structured, open-ended questions to obtain in-depth data related to the doctoral program from the graduates' perspective. The discussion guide was validated by six expert university faculty members (three nursing and three education). The focus group interviews were initiated with the following open-ended question: Would you like to tell me about your experience in the doctoral program?

All PhD program nursing graduates at the time of the study were approached (N=17) with 14 graduates agreeing to participate. Two focus groups (N=6) and (N=8) formed with each discussion lasting two hours. The discussions were conducted in Arabic, audio-taped, and transcribed by a trained note-recorder. Audiotapes were transcribed and translated into English and then back translated by the researchers and compared to field notes recorded to ensure trustworthiness of the data.

### 3.3. Ethical considerations

Ethical approvals, including institutional review board (IRB) approval, were obtained from the University Ethics Committee. Each participant signed an informed consent prior to the focus group discussion to ensure confidentiality. Identifying information was removed during the transcription process. Audiotapes were erased after transcription.

### 3.4. Data analysis

Qualitative latent analysis was used to analyse the data (Graneheim & Lundman, 2004). Transcripts were read as a whole, then divided into meaning units related to the same central meaning. These meaning units were then condensed to clarify essential content, and labelled with codes, categories and preliminary categories generated and sorted into themes.

## 4. Results

The narratives of the 14 doctoral graduates in the present study unfolded their experience and revealed seven themes: (1) Opportunity to earn a PhD-A dream comes true; (2) A need for peer collaboration and support; (3) A need for improved mentorship; (4) Successfully merging national and international experience; (5) Innovative strategies to overcome faculty shortage; (6) Enhanced professionalism and scholarship and (7) Coping with limited resources.

### 4.1 Opportunity to earn a PhD-A dream comes true

All participants expressed satisfaction and gratitude on being selected and having the opportunity to fulfil their professional goals in their own country. For most of the participants, the possibility to complete doctoral education abroad would be impossible. A participant commented: *"If this doctoral program was not launched I wouldn't have the opportunity to earn a PhD. My family and financial status do not allow me to travel abroad to study. I consider myself lucky to have this opportunity and my dream came true."* They were satisfied with the selection criteria used that determined being chosen: years of professional experience and baccalaureate and Master's degree grade point average (GPA). Eight students were admitted annually and enrolled, a large number for a newly developed program. Admitting this number as participants contributed to several challenges to them in their course of study, yet they agreed it is needed to overcome the nationwide doctoral prepared faculty shortage. While indicating that higher numbers increased program enrolment and eventual completion, participants stressed this rationale should not come as a compromise to quality.

#### 4.2. A need for peer collaboration and support

All participants addressed the difficulties and challenges of returning to academia as students. It was not easy for them. Much discussion centred on the difficulties in writing in English which included course work, dissertation proposal, and dissertation. Overcoming these difficulties came through developing cohesive support networks which enhanced their progress and achievement. Sharing ideas, literature, and discussing assignments with each other contributed to their professional growth and success in fulfilling the program requirements. A participant commented: *"Being away from school for a long time made studying difficult at the beginning but the mutual support we had helped us to overcome the difficulties and stress during our study particularly the qualifying exam."*

#### 4.3. Innovative strategies to overcome faculty shortage

The shortage of eligible faculty available to teach in the program was an issue of discussion. All agreed the administration employed innovative strategies to overcome this shortage. Strategies included recruiting international nursing faculty from the USA, UK, and Sweden. In addition, Jordanian medical, educational, and scientific faculty supplemented program faculty needs.

Most participants agreed that dealing with a variety of Jordanian and non-Jordanian faculty enriched their experience. Foreign faculty improved their English writing skills as well as exposure to broad and different cultural perspectives. A participant said: *"It was a good experience to have visiting professors who taught and supervised us from countries other than Jordan. We gained different perspective and we can say we were exposed to international experiences."*

While most participants positively reflected on exposure to multidisciplinary faculty in terms of broadening perspectives, not all agreed. One participant stated: *"I was not satisfied with the courses taught by faculty members from specialties other than nursing as they were unable to give examples or relate the information to nursing."*

All participants indicated that faculty from different universities and countries enhanced their education by exposing them to innovative teaching strategies. Using "Hybrid courses" replacing the physical presence of international faculty was new and exciting. As explained one participant: *"When we were told that we will have half of the course work online we were afraid that we are not going to succeed. It was a new experience for us even using the computer and search engines were new to most of us but we gained much and this new experience will be reflected on our teaching in the future."*

The lack of faculty specialization was a shortcoming expressed by participants in regard to dissertation supervision. Participants acknowledged the university solved this problem by announcing the program as a national program allowing all qualified nursing faculty in Jordan to supervise and teach in the program. Having an international co-supervisor as a content expert solved this shortage of local expertise. Incorporating communication technology in dissertation defences facilitates international input. However, matching the students' research interest with faculty expertise remained a challenge. A participant commented: *"There is a shortage of faculty members in a variety of specializations so I had a supervisor who did not have expertise in my research area."*

#### 4.4. A need for improved mentorship

Transitioning back to the student role was stressful. Participants expressed their appreciation for faculty members who supported them throughout their course of study. A participant commented: *"The continuous faculty support helped us to move forward in the program and this is highly appreciated by all of us."*

While receiving support, nevertheless, participants addressed the lack of structure in orientation and counselling at the outset of their studies. There were no doctoral student mentors and only one faculty assigned as a program director to monitor all program aspects. Participants deemed this insufficient. Most commented that they were not well informed of available student services such as financial and statistical support. For a few, the lack of academic

counselling negatively affected their progress. An example highlighting this lack of information concerned the role of the Faculty Research Committee and its responsibilities regarding the doctoral students. The graduates suggested the committee be more actively and technically involved with the students' scholarly activities. Many stated that counselling and mentorship could have provided them with better directions to plan their courses and inform them of rules, regulations, and available resources. One participant commented: *"I would prefer to have an academic mentor during my course of study. I had difficulties while planning for the course of the study and dissertation. Not having mentors made our years of study difficult for us."*

#### 4.5. Successfully merging national and international experience

Exposure to national and international faculty resulted in participants encountering a variety of styles in teaching, supervision, and communication. All found it enriching. Few participants required two supervisors, national and international, which helped overcome lack of local faculty expertise but supported student growth. As one participant stated: *"The physical distance having the main supervisor from Jordan and a co-supervisor from the USA, was difficult to deal with, but it had a positive effect on my progress. It also enriched my experience and helped me to publish an article in addition to having socially diverse network of relationships."*

Overall, participants reflected satisfaction with the dissertation defence process. They suggested inviting international external examiners in dissertation defences. Dissertation committees' composition had both nursing and other discipline representation to take advantage of the available national expertise. Some participants viewed having a multidisciplinary dissertation representation as positive. Supporting multidisciplinary composition one participant commented *"A professor from the faculty of education added new ideas to my proposal that I believe it added a different and valuable perspective to my dissertation"*. Opposing it, another said *"I was not pleased with the suggestions and comment from a non- nursing professor. He doesn't know much about nursing .I don't see an advantage of having a committee member from other disciplines. "*

#### 4.6. Enhanced professionalism and scholarliness

All participants concurred that the program philosophy, vision and mission, and the intended learning outcomes guided them in their goal achievement. They valued that the program empowered them which enhanced their intellectual abilities, self-esteem, and confidence. All participants stated each course provided them with social, professional, and intellectual experiences that promoted their scholarship. One participant commented: *"I gained confidence in my intellectual capability as a researcher. I became more involved in the societal issues and was able to implement nursing knowledge, in my area of specialization."*

Participants indicated that the area of research interest developed during their academic and professional experience matured during their course of study. All were satisfied with the process of choosing their dissertation topic. A participant said: *"The first year was important in directing us to further explore our research interest ...The courses we took in the first two years contributed to our selection and preparation for the dissertation that we believe will contribute to the body of knowledge in Nursing and in Jordan."*

Five participants presented papers in an international nursing conference in Jordan and were further motivated to submit abstracts to conferences outside Jordan. Two participants presented posters in conference in the US during their period of study. All indicated this experience helped meet their personal objectives.

#### 4.7. Coping with limited resources

Inadequate resources were universally acknowledged as a challenge such as (computer labs, Internet, meeting room, limited access to full text journals). Sharing these resources with the undergraduate students in crowded computer labs was an unsuitable and non-conducive environment for doctoral students. Group discussion was a crucial means of support among the participants to share ideas, difficulties, fears, and worries. There was no dedicated place available for them to meet and meeting occurred in any available classroom after classes. Another

major challenge was getting access to full text journals for dissertation purposes. Having a co-supervisor from a university abroad, in this instance, facilitated access for this and other electronic library resources.

Most participants were dissatisfied with the lack of available elective course choices. The limited number of elective courses offered during their course of study restricted opportunities to select the course meeting their interests or specialization. This negatively affected fulfilling their professional goals. Explained one participant: *"The faculty administration did not consult with us about the offered elective course we were interested to take to meet our needs, it was imposed on us."*

Offering scholarships and financial aid to students is very important for student retention. Some participants explained that they were not oriented about available national and international opportunities for financial support for PhD students. Although some participants received research support funding from the university, it was insufficient for this purpose. A participant commented: *"The financial support we received during the course of our study was not sufficient and does not cover the expenses of the research study. There was a financial burden on me during the course of my study."*

The lack of research awareness in the different research settings such as schools and hospitals created a challenge for some participants to collect data. A common thread in this theme centred on the prolonged and bureaucratic process for obtaining study approval starting with the IRB and communication with research settings.

## 5. Discussion

The mission of nursing doctoral programs is preparing scholars, scientists and advanced health care providers to advance the discipline through education, research, and service. Smith and Delmore (2007) identified three key components to successfully completing a nursing doctoral program: a curriculum best suited for potential students, a strategic plan specifying resources, and developing a strong support system and a systematic approach for completing the degree requirements. A program's longterm success and ability accomplishing its mission requires commitment to continuous evaluation and involvement of key decision makers (Ketefian & McKenna, 2005; Kim et al., 2006; Minnick, Normam, Donaghey, Fisher, & McKrigan, 2010).

This study evaluated a nursing PhD program from the perspective of its graduates. The findings pinpoint challenges and opportunities experienced during their course of study hence, provide program administration at the university with a realistic depiction of the program. It is a case study for other countries with similar commonalities who are planning to establish their own nursing doctoral programs. In this study, issues related to the International Network for Doctoral Education in Nursing (INDEN, 2004) major component of doctoral education (students, faculty, administration, and resources) were used as a framework for discussion.

### 5.1. Students

Participants appreciated a PhD program in Jordan which allowed pursuing doctoral education in their country as financial, social, and personal constraints prevented study abroad. Financial issues are seen as contributing factors for the shortage of doctoral prepared faculty (Berlin & Sechrist, 2002; Cohen, 2011; Edwardson, 2004), as well as contributing factors to high nursing attrition rates (Cohen, 2011). Participants' experiences reflected similar positive factors in the literature. They viewed their experience as enhancing their professionalism and scholarship. As most were planning careers in academia, possessing the terminal degree in the discipline is essential for a university faculty position (Hinshaw, 2001; Jackson et al., 2011).

The study results are similar to other studies with respect to difficulties doctoral students face at the outset such as role transition, learning new skills, self-directed learning, and professional socialization. Yet, such challenges are also viewed as opportunities to enhance personal and intellectual growth (Cohen, 2011; Evans & Stevenson, 2010; Evans & Stevenson, 2011; Zeilani, Al-Nawafleh & Evans, 2011). Fortunately, the participants developed strong collaborative relationships with one another to overcome the stressors and difficulties which ultimately enhanced program retention, progression, and completion. Kim et al. (2010) found that doctoral student socialization and collegiality facilitates and enhances program retention and research skills.

The role of the program administrators is to facilitate student adaptation through adequate and appropriate

supervision and mentorship in addition to peer support (Evans & Stevenson, 2011). While peer support was a strong contributor to overall success, the participants in this study reported support received from the administration and supervisors was inadequate. This could be attributed to the lack of professional socialization between faculty and students. Physical distance and challenges of internet communication with their international supervisor may have also attributed to their sense of lack of support. Evans & Stevenson (2010) found that physical proximity of students and their supervisors was important in facilitating interaction. The participants also indicated that faculty workload negatively affected supervision and counselling students. Such an issue is a global challenge to doctoral programs (Arimoto, Gregg, Nagata, Miki & Murashima, 2011; Evans & Stevenson, 2010). The lack of an institutional culture and infrastructure supporting research is a common issue in doctoral programs worldwide (Arimoto et al., 2011).

### 5.2. Faculty

The quality and nature of supervision and mentorship is identified in the literature as the most important factor influencing the learning experience of doctoral students (Arimoto et al., 2011; Evans & Stevenson, 2010). Mentorship is central to developing new doctoral-level research scholars in nursing worldwide and enhances student retention in doctoral programs (Jackson, Darbyshire, Luck & Peters, 2009). Yet, study participants explained that they didn't have mentors and supervisors were not assigned for them until their second year of study. The participants agreed on the importance of assigning a mentor upon admission to the program who dedicated time and effort in guiding students throughout their course of study.

The participants' comments on the shortage of eligible faculty to teach in doctoral programs are congruent with other reports indicating that worldwide faculty shortage is a key issue facing doctoral programs in nursing (Jackson et al., 2011; Ketefian et al., 2005; Lewallen & Kohlenberg, 2011). The university in the current study addressed this faculty issue by announcing the program as a national program structured within a global context where national and international experiences merged. Signing memoranda of understanding with several universities abroad as well as collaborating with nursing and other health faculty members in all Jordanian universities throughout Jordan in teaching, supervision and in serving in dissertation defence committees helped overcoming this shortage. However, a continuing challenge remains in matching faculty expertise with students' research interests.

Another strategy employed to overcome faculty shortage was adopting new teaching strategies such as hybrid courses. These were new experiences for the students. Hybrid courses allowed faculty, especially international faculty and visiting professors, to continue their classes after leaving Jordan. Participants felt these strengthened the program. Leners et al. (2007) explained that online PhD programs are a creative way to overcome the shortage in faculty and have resulted in high quality professional socialization, mentoring, and student–faculty interaction. The effectiveness of distance learning, accelerated program and online courses in doctoral nursing programs is also supported by Halstead & Coudret (2000) and Scherzer, Stotts & Fontaine (2010).

Recruiting faculty from other disciplines to serve on dissertation defence committees broadened the participants' exposure beyond nursing. Kim et al. (2010) posit using a multidisciplinary dissertation defence committee as strength since it provides a multifaceted view of the students' work. Study participants were divided on this issue. Smith and Delmore (2007) emphasized the importance of having dissertation committees with professors' expert in students' research subject areas.

### 5.3. Administration

Doctoral programs prepare intellectual research scholars, leaders and academics (Kim et al., 2006; Lewallen & Kohlenberg, 2011). The participants agreed the curriculum did this. They reported active involvement in research, publications, presentations, and professional leadership which enhanced their sense of accomplishment as scholars. All study participants are currently employed in academia, agreeing with the literature citing that while nursing doctoral program graduates embark on diverse career paths, the majority of doctoral graduates are employed in academic institutions (Lewallen & Kohlenberg, 2011; Sakalys et al., 2001). Doctorally qualified nurses are needed globally to meet workforce demands and ensuring a sustainable academic workforce (Berlin & Sechrist, 2002;

Potempa, Redman & Landstrom, 2009). The study findings are consistent with other studies concluding that although new graduates are employed teaching in academia, most doctoral programs are research oriented (Minnick & Halstead, 2002; Sakalys et al., 2001). McKenna (2005) suggests since an aim of doctoral programs is to graduate nursing faculty, programs may need to emphasize teaching in addition to research and scholarship skills. AACN (2002) recommends adding nursing education and mentorship content to doctoral curricula in order to prepare these graduates to assume an educator role.

The current study, along with the literature, provides evidence regarding the importance of designing doctoral programs preparing graduates for future career roles. Participants stated elective course offerings were limited in their scope, either unrelated to their area of interest or do not prepare them for the functional roles they expected to assume after graduation. According to Wood (2005), most US programs are burdened with required courses that may not be relevant to the students' research interests. Ketefian et al. (2005) recommended that doctoral education incorporate experiences preparing graduates for a broader spectrum of skills. A major challenge for faculty and administration is to be more flexible in course offerings for skill-set acquisition pertaining to a variety of expected future roles (Lewallen & Kohlenberg, 2011).

#### *5.4. Resources*

Ensuring sufficient resources is another quality component for a doctoral program. A successful doctoral program is determined by its availability of financial, library, research, and technological resources supporting faculty and doctoral students' research activities (AACN, 2002; Smith & Delmore, 2007). Coping with limited resources was a challenge to the participants in the current study. According to Arimoto et al. (2011), obtaining funding support is an important indicator when evaluating a doctoral program as it also reflects faculty scholarly excellence. In situations where resources in one institution are limited, sharing resources with others throughout the country is one way to overcome such obstacles. Therefore, it is essential to inform enrolled students about the available resources availability and opportunities for financial support, library and technological resources present at the university and other institutions within and outside the country.

Challenges reported by the participants in this study are not unique or specific to this program. Earlier studies reported similar challenges such as insufficient research opportunities for students (Arimoto et al., 2011; Evans & Stevenson, 2010), more focus on research, theory, and statistics rather than on substantive nursing knowledge (Edwardson, 2004), and too few resources to meet students' needs (Arimoto et al., 2011; Evans & Stevenson, 2010). Moreover, several studies evaluating the quality of doctoral programs raised similar challenges such as lack of expertise in supervision, high faculty workload, and faculty shortage (Burton, et al., 2009; Evans & Stevenson, 2010; Kim et al., 2010). Parse (2005) emphasized that to ensure quality nursing doctoral programs, it is essential having a sufficient number of qualified associate and full professors who are actively conducting relevant nursing research and who are willing and able to supervise dissertations. At the personal level, challenges facing doctoral students needing to be addressed by doctoral programs directors include coping with the family, employment, and study demands as well as financial issues (Cohen, 2011; Evans & Stevenson, 2010).

The current study and literature support international partnership, national and global collaboration in doctoral education (Nolan et al., 2011) as models for capacity building in nursing doctoral education. This applies in Jordan as well as other countries.

#### **6. Limitations**

The study limitation acknowledged is using only focus group for data collection. In focus groups not everyone may really express how they feel. However, these study findings may provide information and insight for other doctoral programs and students' experiences. The transferability of these specific findings to other doctoral programs is limited.



## 7. Conclusion

This study evaluated a doctoral program in Jordan from the perspective of its graduates. Through the graduates' experience, we were able to pinpoint the program strengths and challenges, informing decision-makers about aspects needing consideration and improvement. However, factors such as limited resources, funding, and faculty supervision expertise need to be considered when planning a doctoral program. It is important to consider providing a variety of elective courses in the curriculum to prepare graduates for different future roles. International and national collaboration contributes to the success of doctoral programs. This case study provides evidence to doctoral programs directors in guiding decisions regarding admission, course offerings, resources, supervision, and availability of faculty before starting a program.

The findings support a need for curriculum and admission criteria review and suggest requesting applicants to submit their research interests to match faculty members' research expertise as a condition of enrolment. The findings also suggest a need for training faculty involved in the doctoral program to effectively assume mentorship and supervision role. University administrators need to reconsider the faculty workload involved in the doctoral program, recruit faculty with a variety of expertise, and improve its educational resources to support quality program outcomes. The findings also emphasize the importance of global partnership to overcome faculty shortages

The authors recommend further studies using different approaches to review this program and to evaluate it from educator, administrator, and employer perspectives. Future quantitative research linking inputs, process, and outcomes using longitudinal designs is also recommended.

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