

Novel Methodology Underscores the Need for Further Institutional Efforts to Support PBL Facilitation in a Post-pandemic Context

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A research study entitled “Health educators’ professional agency in negotiating their PBL facilitator roles: Q study” was published in one of the top journals in Medical and Health Professions Education (Medical Education, impact factor 6.251). This was an interdisciplinary collaborative effort between the QU College of Medicine, College of Dental Medicine, College of Education and Malmö University (Sweden). This study was led by Dr. Xiangyun Du from College of Education, Dr. Michail Nomikos and Dr. Marwan Abu-Hijleh from College of Medicine, Dr. Kamran Ali from College of Dental Medicine, in collaboration with Dr. Adrian Lundberg from Malmö University. The authors used a novel methodology to explore health educators’ perceptions of their enactment of professional agency in Problem-based Learning (PBL) facilitation process in a post-pandemic context. Professional agency refers to the ability of individuals and organizations to influence and transform.

In the post-pandemic context, university teachers are expected to play a critical role in promoting student engagement and sustaining learning outcomes, in addition to their pre-existing teaching, research and service duties. Following the major challenges experienced during COVID-19 pandemic that influenced the effective facilitation of distance learning and collaboration, educators must now manage the challenges related to the even more complex teaching practices during the post-pandemic era and the uncertainties of educational conditions after resumption of onsite (face-to-face) teaching. In such a context, university teachers’ practice using learner-centered methods are influenced by complex factors, including personal factors such as motivation, beliefs about teaching and learning, and institutional aspects such as facilities and policies. Problem-based Learning (PBL) is seen as a learner-centered pedagogy utilizing real life problems to trigger the attainment and incorporation of new knowledge through the problem-solving skills and collaborative learning. In higher education literature, PBL has demonstrated well-established advantages in student learning. Recent literature added new insights regarding strategies for the successful implementation of synchronous online PBL.

Qatar University is a national public institution in the State of Qatar, whereby the Colleges of Medicine and Dentistry were recently established 6 and 3 years ago, respectively. In these two Colleges, PBL has been adopted as the major learning methodology in the early years to support learner-centeredness; year two and three students attend PBL sessions for 12-14 weeks each semester. PBL facilitators, employed from diverse educational and cultural backgrounds, are mostly new to the institution and are unfamiliar with the societal contexts of the University. Moreover, some of them have limited experience in PBL methodology either as learners or as facilitators. Although professional development activities are provided to support new faculty members in their role as PBL facilitators, it is still a challenge to transform their pedagogical beliefs and practices. The recent research in the given institutional setting prior to pandemic showed that successful implementation of PBL demands the readiness of faculty not only to adapt their beliefs about teaching and learning, but more importantly to take agentic actions sustainably in their actual implementation. This study explored how PBL facilitators in the given setting enact their professional agency in a post-pandemic context, through exploring the research question “How do PBL facilitators from medicine and dentistry perceive their professional agency?”

Forty PBL facilitators from medical and dental programs in Qatar University participated in the study during the fall semester of 2021, after resuming in-person PBL sessions. To collect and analyze data both qualitatively and quantitatively, Q methodology was employed. A 33-statement Q-set was established based on a proposed theoretical framework of professional agency in PBL facilitation, which included three dimensions— intrapersonal, action, and environment. Q factor analysis identified five significantly different viewpoints regarding how PBL facilitators perceive their professional agency sources, namely, 1) institutional resources, 2) policy guideline, 3) making efforts to improve support for students, 4) beliefs on PBL effectiveness, and 5) agentic actions. While four of the viewpoints were positive, participants reported negative perceptions regarding the second viewpoint (policy guideline) and described lack of interest in facilitation work.



From left: Prof. Kamran Ali, Dr. Michail Nomikos, and Prof. Marwan Abu-Hijleh.

The results revealed a high variation of participants' perceptions of professional agency enactment throughout the three dimensions, indicating the need for establishing a collective understanding of PBL facilitation work in a given context. It was revealed that further institutional efforts are required to support professional learning for PBL facilitation in a post-pandemic context. Alternative approaches highlighting enforcement of agentic actions in all dimensions of intrapersonal values, stance and action taking, and active interactions with students, colleagues and institutional environments are crucial.

Dr. Michail Nomikos, the corresponding author of this paper and the Head of Research and

Graduate Studies in the College of Medicine at Qatar University said, "Q methodology provides new conceptual and empirical insights to explore the subjectivity of actors in health education. Our study showed that in this post-pandemic era additional institutional efforts are necessary to support professional learning for PBL facilitation." Dr. Marwan Abu-Hijleh, the Acting Dean in the College of Medicine at Qatar University added "this study will contribute to future teaching and learning initiatives and pedagogical development activities at Qatar University and internationally."

The full study is at the link:

<https://pubmed.ncbi.nlm.nih.gov/35253256/>