2023

Transforming teaching & learning in higher education: Stories of impact from the Aga Khan University

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Transforming Teaching & Learning in Higher Education: Stories of Impact from the Aga Khan University

QTL_net
CELEBRATING 10 YEARS

Editors:
Jane Rarieya, Tashmin Khamis, Lucy Spowart

Transforming Teaching & Learning in Higher Education

Transforming Teaching & Learning in Higher Education: Stories of Impact from The Aga Khan University

Celebrating 10 years of The Aga Khan University, Network of Quality Teaching & Learning

"I am delighted to welcome this series of case studies which has been drawn together by Aga Khan University's integrated Network of Quality, Teaching and Learning (QTL_net). Sharing and learning from good practice is the bedrock of continuous professional development and the relentless pursuit of teaching excellence – and there's an abundance of quality work in these studies. I am also very pleased to see the positive footprint of the Professional Standards Framework and Advance HE Fellowship throughout this work. Combined, the PSF and Fellowship motivate, recognise and reward good teaching and underpin confidence in teaching practice such as in these case studies." **Revd. Prof. Will Foster PFHEA, Assistant Director – Professional Recognition, Advance HE (UK)**

'QTL_net is making a significant impact at AKU through the building of a dedicated and highly accomplished community focused on innovative teaching and learning methods, and teaching and learning scholarship which are put into practice. The results of this work are directly contributing to student learning and engagement as well as the quality of the overall educational experience at AKU.' **Trustee Elizabeth Cannon, AKU Board of Trustees and President Emerita of the University of Calgary.**

"It has been my pleasure to work with the Network of Quality, Teaching and Learning to establish the Haile T Debas Teachers Academy, a sister now to UCSF's Haile T Debas Academy of Medical Educators. The Teachers' Academy was developed in order to increase the importance of education and teaching on the campus by rewarding and recognizing teaching excellence. Ten years after the establishment of QTL_net and with the support of the Deans academic excellence at AKU is visible. The quality of teaching and training and learning is excellent, and AKU's Network of Quality, Teaching and Learning has now been recognized internationally for its impact, and with the advent of online teaching, they've really excelled!" **Professor Haile Debas, Former Chair, AKU Board of Trustees and Chancellor Emeritus, UCSF.**

'As AKU's Network of Quality, Teaching and Learning (QTL) celebrates its 10th Anniversary, I marvel at the demand for its programmes and the buy-in it has from faculty. At AKU there is a level of support across the Academy for QTL that is broader and deeper than I have seen elsewhere. QTL_net services are voluntary, but irresistible, and form a cornerstone to the high-quality education programmes AKU offers.' **Professor Carl Amrhein, Provost, The Aga Khan University.**

'QTL_net has been remarkably successful in raising the profile of the importance of teaching and learning within AKU in a very short amount of time. The number of faculty who have taken advantage of the programs offered through QTL_net and who have very positive outcomes based on their experience is exceptional.' **Dr. Debra Dawson, Director, The Centre for Research on Teaching and Learning in Higher Education, Director Emeritus, Teaching Support Centre, Western University.**

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Acknowledgements

Mutile Kimeu and Aamir Dharani for all their editorial and administrative support in putting this collection together.

We are grateful to Advance HE for their support in co-publishing this collection and for their Professional Standards Framework (PSF) that has been transformative to teaching at AKU.

To the 10,000 faculty and students who have engaged with us in the last 10 years, we dedicate this book to you.

Editors Profiles

Jane Rarieya (SFHEA) is a Professor and Dean at the Institute for Educational Development, East Africa. Her specialisation is in gender and leadership in education as well as faculty development with a strong research background, she has published extensively, including conference presentations, journal articles, book chapters, and reports. In addition, she has been a guest editor for journals as well as co-edited books and authored a book on her own. Jane is a Senior Fellow of the Higher Education Academy, UK. Contact her at **jane.rarieya@aku.edu.**	
Tashmin Khamis (PFHEA) is the Vice Provost (Quality, Teaching and Learning). She established the Network of Quality, Teaching and Learning at Aga Khan University ten years ago, which today is internationally recognised for its work on faculty education development, blended and digital learning and academic development. She is a Principal Fellow of the Higher Education Academy and a Professor with AKU-IED having recently received an Award of Distinction for her contribution to Teaching and Learning at AKU. Her areas of scholarship include higher education management, professionalising teaching and the impact of educational development. Contact her at **tashmin.khamis@aku.edu**	
Lucy Spowart (PFHEA) is a Professor of Educational Enhancement and HE Consultant. Lucy has been supporting the development of educators for 25 years and is committed to raising professional standards and promoting the interests of marginalised groups. Lucy was awarded Principal Fellowship in 2018 and a National Teaching Fellowship in 2020. She is a Certified coach and draws on coaching and mentoring techniques to deliver a step change for participants. Lucy has published widely, including on the topics of: accreditation, impact evaluation, online pedagogies, reflective practice, student-parents, students as partners and global health leadership. Contact her at **lucy.spowart@plymouth.ac.uk**	

<u>**Opening Chapter**</u>

Transforming Teaching & Learning in Higher Education: A Collection of Stories

Tashmin Khamis, Lucy Spowart and Jane Rarieya

Introduction & Background

In this collection of short case studies, we aim to capture and share the impact and reach of the work of the Aga Khan University's integrated Network of Quality, Teaching and Learning (QTL_net) over the past ten years since its inception. Situated in the developing world with a remit for transforming teaching, such that teaching must be student-centred and research-led, QTL_net shares many of the challenges of other academic development units, such as how to engage busy academics in practices of reflective pedagogy when their (continuing professional development) CPD focus lies typically with their discipline (Becher & Trowler, 2001; Spowart & Turner, 2020), and how to demonstrate the impact of its work (Bamber & Stefani, 2016; Charlier & Lambert, 2020; Smart, Cleaver & Robinson, 2020; Spowart et al., 2017; Winter et al., 2017). Moreover, it also faces additional challenges such as poor

internet connectivity, diverse cultural settings, and unprecedented geographic spread. Despite these added complexities, according to external review, QTL_net has been remarkably successful in raising the profile of the importance of teaching and learning in a very short timeframe (Dawson, Quinney & Welch, 2019).

The success of QTL_net has not been coincidental, but as a result of: clear strategic leadership; an unprecedented amount of support from the wider academic development community, including time and expertise from volunteer mentors from around the globe; a cohesive committed educational development team; faculty champions who offer support and see the network as their 'second home'; and consultation, consultation, consultation… across all levels of the Academy and beyond. Like many worthwhile journeys, it has neither been linear nor straightforward. There have been detours, rest-breaks and times where progress has been slower than anticipated. Whilst QTL_net's journey is unique, there will be elements that are meaningful and relevant to others, particularly given the dearth of literature that considers the impact of educational development units as a whole (MacCormack et al., 2018; Winter et al., 2017). The tapestry of stories, in their various forms, should have relevance for: senior educational leaders; educational developers; educational technologists; teaching-focused academics; those with an interest in the scholarship of teaching and learning; CPD scheme leaders; and anyone with responsibility for impact evaluation in educational development work.

By sharing our stories, it is our intention to stimulate further dialogue, both internally, amongst AKU staff, and externally, via the

global Advance HE network, on the successes, complexities and nuances of educational development work, including the thorny issue of impact evaluation. We offer up these stories and render ourselves vulnerable in the spirit of 'sharing' and 'giving back' to those that have so generously supported us. Like any story, the case studies can be read and understood in multiple ways, and we recognise that as researchers and authors we have influenced how these stories are told. In this chapter we set the scene for the case studies that follow beginning with a brief introduction to the Aga Khan University and the establishment of QTL_net. AKU's engagement with Advance HE and the significant role the Professional Standards Framework (PSF) has played in raising the profile of teaching and learning across the institution is then discussed. Finally, this chapter outlines the scope and organisation of the collection, directing the reader to areas of potential interest, though of course, we hope that you are tempted to dive into it all.

Introduction to the Aga Khan University

Established in 1983 the Aga Khan University (AKU) positions itself as 'a university of and for the developing world'. Operating across three continents, six countries and eleven teaching sites there is no University in the world that functions quite like AKU. Guided by its core principles of Quality, Access, Relevance and Impact it functions as one single, global university with integrated campuses distributed across Pakistan, Kenya, Tanzania, Uganda and the United Kingdom. Thus, whilst meeting the regulatory requirements of each national context, AKU is governed by one Chancellor (His Highness the Aga Khan), one Board of Trustees, one President and one Provost.

As stated in its mission, AKU aims to "offer programmes of international quality; prioritizing teaching and research that underpin intellectual innovation and change; and developing leaders through its educational programmes" (www.aku.edu). Despite its wide geographical spread, it remains a small private not-for-profit autonomous university with a merit-based, needs-blind admission process. Its student body numbers approximately 3000, with alumni of 15,000 and a teaching faculty size of around 500. The large staff complement of 13,000 supports 7 university hospitals with core current disciplines in Nursing, Medicine, Teacher Education, Muslim Cultures, Media and Communications, and more recently a Faculty of Arts and Sciences, at both undergraduate and graduate levels (www.aku.edu).

The University is part of the Aga Khan Development Network (AKDN), one of the world's foremost development organizations whose scope encompasses health, education, community development, revenue generating economic enterprise, and culture (www.akdn.org), thus the university serves as one of the key human resource engines for the AKDN impacting some 7 million beneficiaries in the areas of health and education alone (Khamis and Salim, 2021).

Background to the Network of Quality, Teaching and Learning:

In line with AKU's strategic imperatives of promoting excellence in teaching, in 2013 AKU established the integrated Network of Quality, Teaching and Learning (QTL_net). QTL_net interconnects Quality Assurance and Improvement with Teaching and Learning including Blended and Digital Learning at AKU. Rather than a 'Centre' of Teaching

and Learning, the centrally led but globally distributed academic support unit, QTL_net, was created to respond to the large geographic spread of AKU. As a 'network' it collaborates with academic units/departments and existing educational development, library, IT and student support units to promote improvement in the learning environment and strengthen the student experience. The integrated networks have a university-wide role across all geographic locations.

QTL_net, aims to promote a quality culture across the Academy, by supporting excellence across AKU's academic programmes, to ensure a strong student learning experience that enables AKU graduates to meet competencies of becoming: ethical global leaders, critical and creative thinkers, reflective practitioners, effective communicators, socially and environmentally aware citizens and lifelong learners, as stated in AKU's common graduate attributes (AKU TLF, 2015).

From Resistance to Ownership:
The tradition or models of Quality Assurance (QA) or Education Development units did not exist in the regions AKU serves in Pakistan or East Africa in 2013. Using literature both on change management (Kotter, 2014) and learning from the lessons of established educational development centres elsewhere (Randall et al, 2013; Scott and Scott, 2013); as well as study-visits in Canada to Teaching Learning Centres at Universities of Waterloo, Western; Uuniversity of Calgary; University of Alberta; University of British Colombia) and QA units in Alberta and Ontario and the UK, a conscious effort was made to:

● Ensure contextual relevance.

- Be evidence based to ensure the use of best/good practices.
- Create safe, non-judgmental spaces for faculty through being inclusive and 'the Switzerland of AKU' (Dawson, 2019).
- Create ownership of the Networks through extensive consultation.
- Create a shared strategic vision to enhance academic practice.
- Create a quality focused culture.
- Use interdisciplinary-peer groups and practice-based approaches to educational development.

With an initial staff of only two members in the first year, the integration of QA with Teaching & Learning enabled the focus to be on quality improvement and teaching enhancement rather than on quality control. Once Academic units realized that the Networks within the Provost office were truly a support service, rather than a centralized control structure, buy-in was established as the Network began to be viewed as an enabler to meeting AKU's agreed and stated lofty graduate attributes. Mentorship by partner institutions (Western, UoA), engagement with Academics without Borders (AWB) and partner university volunteers, and the establishment of advisory and governance bodies, ensured the Network did not reinvent wheels. Today QTL_net is made up of fourteen people across AKU's various sites, reaching 95% of AKU's academic staff and unable by itself to meet the Academy's demands. Figure 1 provides a timeline of QTL_net's activities over the past ten years.

Figure 1: QTL_net's 10-year timeline

2013

QTL_net established (2 People) with a Blended Learning Faculty Development Programme (BLFDP)

2014

Mentors identified through Academics without Border (AWB) and Partner

2015

Development of AKU Graduate Attributes; University wide Student Evaluation of Teaching (SET); Academic Quality Framework (AQF) established; Teaching & Learning Framework and QTL_net outcome based strategic plan.

2016

Academic Council approves first flagship pedagogical skills course, Teaching, Learning Enhancement Workshop (TLEW) with support from University of Western Ontario

2017

Embedding course redesign workshop 'Re-Thinking Teaching' with support from Simon Fraser University, as a second flagship course; Developing a pool of HEA fellows to benchmark to best practice. Guest edition of *SoTL in the South*

2018

Received accreditation from Advance HE for D1 and D2-first of its kind in the developing world. All CPD courses aligned

2019

QTL_net self-initiated Unit review; Teaching Dossiers as a requirement aligned to PSF for academic promotion

2020

Rapid transition to online learning; digital boot camps and Ed tech lounges; second outcome based strategic plan; Haile T Debas Teachers Academy launched, aligned to PSF

2021

Winner of Zairi Award; open Source Blended ad Digital manual and Online in Teaching in HE course; Outreach through University Improvement Programme (UIP)

2022

Reaccreditation by Advance HE; AWB outreach

2023

10 years; Case studies of impact; Shortlisted for TL strategy of the year Asia THE awards (June 2021).

Embedding the Professional Standards Framework to enhance teaching and learning.

Whilst the accreditation of university teachers is not a new phenomenon dating back over thirty years in the UK (Spowart et al., 2016), AKU was the first university in Pakistan and East Africa to establish a teaching and learning unit and QTL_net therefore sought a way to benchmark to best practice internationally. With the UK having the only international Professional Standards Framework (PSF), gaining accreditation from Advance HE to offer Higher Education Academy (HEA) fellowships was important, providing credibility to QTL_net's work and incentivizing teaching in a 'voluntary but irresistible' way.

Through engagement with and mentorship by Advance HE, an initial cohort of 13 HEA Fellows at all categories of fellowship was created in 2017/18. This cohort facilitated the establishment of AKU's accredited CPD scheme, the 'Teaching Enhancement Accredited Certification of the HEA' (TEACH), the first and still only Advance HE accredited scheme in Pakistan and East Africa (since 2018). Today some 83 faculties have gained HEA fellowships. The unintended outcome that resulted from this partnership was the embedding of the PSF at an institutional level. All three editors of this collection have also subsequently served on expert advisory groups of Advance HE, advocating for the internationalization of the PSF that has now moved from the UKPSF to the new 2023 PSF.

A Sustained and Sustainable Approach to Academic Development:

In safe, inclusive spaces, QTL_net now offers a range of services, resources and programmes to faculty and academic entities on

effective teaching, teaching with technology, scholarly teaching and the scholarship of teaching and learning (SoTL), as well as programme reviews. The way faculty members teach makes a difference to how students learn and is a key predictor of student satisfaction at university (Langan and Harris 2019). QTL_net aims to provide faculty members the support and an enabling environment to promote an engaging learning experience for their students.

Using a 'life cycle' approach that is 'voluntary but irresistible' faculty are provided opportunities to engage with QTL_net through:

I. Onboarding orientation (Faculty Orientation to Teaching and Learning see Chapter 3), and participation in cyclical QA programme reviews.

II. Ongoing support for faculty through CPD using peer-led practice-based models on effective pedagogies; course design; instructional design; programme alignment; teaching with technology (Chapter 1); effective assessment (Chapter 12). The focus is on engaging students as partners in the learning process.

III. Scholarship and innovation opportunities such as SOTL seed grants; a biennial SOTL conference and SOTL awards (Chapters 6-10).

IV. Reward and Recognition of effective practice to incentivize and raise the profile of teaching via the Advance HE Accredited TEACH CPD scheme (Chapter 2); teaching dossier development for Academic Promotion aligned to the UK Professional Standards

Framework (2011); and membership of those recognized by peers as excellent teachers into the Haile T Debas Teacher's Academy.

V. This in turn creates a pool of empowered 'teaching champions' (Chapter 4) for QTL_net who engage as peer-mentors and facilitators creating a sustainability model for QTL_net.

The QTL_net unit review (2019) confirmed that faculty were highly satisfied with the peer-led practice oriented workshops and support received that has led to change in conceptions around teaching, and built confidence in faculty to experiment with innovative and engaging teaching methods that has promoted change in practice.

Reward and recognition and the embedding of the PSF

Among inaugural members admitted into the prestigious Haile T Debas Teachers' Academy, the vast majority (88%) are Fellows of the HEA. Members have been active in promoting and contributing to teaching effectiveness through mentorship both within their entities and the wider university.

The most important opportunity that this recognition gave me is the increased opportunity of mentorship of faculty members towards developing excellence in teaching… that is something I am proud of. [Teachers' Academy member].

Faculty nominated for the University Teaching Leadership Excellence Awards as well as the Pakistan National Teaching Awards all hold HEA fellowships and are members of the Haile T Debas Teachers Academy, recognizing their teaching excellence. Since 2023 Faculty are rewarded at the AKU convocation ceremonies for their excellence in teaching

receiving their certificates for Teachers' Academy membership as well as HEA Fellowships, further elevating the status of teaching across the organization.

Institutional Recognition and Outreach:

Ten years on QTL_net's work in educational development has gained international recognition that acknowledges pioneering Advance HE accreditation and the PSF in Asia and Africa as well as the institutional impacts made. This includes receiving the UNESCO supported inaugural international Zairi Higher Education Excellence Award, 'Award of Excellence in Disruptive Education', competing against 90 applicants from 31 countries globally, in 2022, and being shortlisted as one of 8 out of 700 Universities by the Asia THE Awards for 'Teaching and Learning Strategy for 2023'.

QTL_net is now supporting universities in the remote mountains of Northern Pakistan through an AKDN University Improvement initiative and across the AKDN (University of Central Asia) to build capacity in academic development, including extending the TEACH CPD scheme to the Institute of Ismaili Studies. The impact of QTL_net beyond AKU's small size is being made globally through now supporting those who had initially mentored us, Academics Without Borders (AWB), on good online and blended teaching practice.

Scope and organization of the collection

The purpose of this collection then is to capture the impact and reach of the work of QTL_net. We wish to engage readers in a reflective dialogue regarding the complexities of evaluating the impact of

educational development work at various levels. We do not pretend to be experts in impact evaluation, however due to the relatively short history of QTL_net an impact evaluation culture and evaluation processes and practices have been embedded from the outset. Guskey (2000) identifies five critical levels to assess the impact of professional development culminating in changes to student learning. We have found it useful to consider these various levels of impact as we reflect upon our educational development work.

Figure 2: Guskey's model of change for educational development
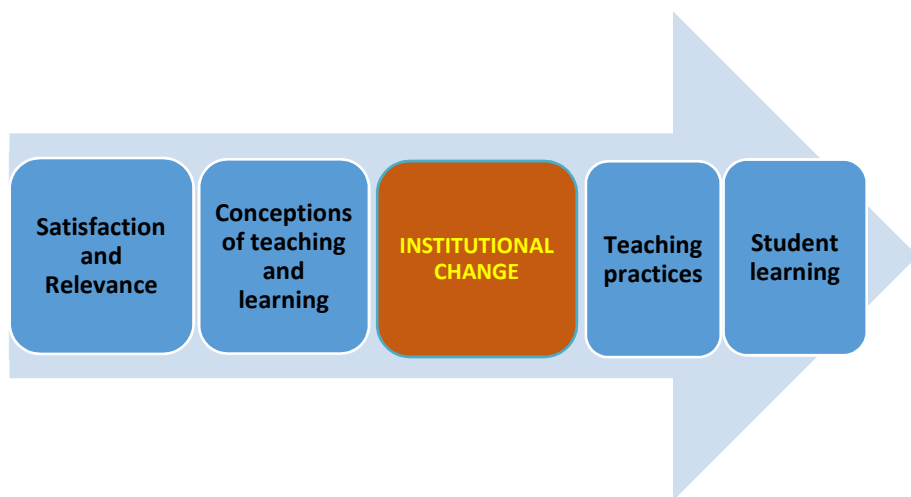
The collection is organized in three sections adopting the case study approach developed by Lawrence et al. (2022). Chapters in section one showcases the core work of QTL_net including the work of the Blended and Digital Learning team (Chapter 1) and the Advance HE Accredited CPD scheme (Chapter 2), critical to the institutional impact through embedding the PSF in programmes, practice and institutional policy. This section ends with an example from East Africa of 'Partnership in Action' (Chapter 5), where lessons learned from QTL_net's flagship

programmes have created space for critically reflecting on teaching-related activities. Collectively these chapters illustrate how an institutional approach has enabled a 'university improvement' model.

In section two, the focus shifts to the scholarship of teaching and learning (SOTL). Beginning with a bibliometric analysis of AKU's SOTL contribution (Chapter 6), the ensuing case studies (Chapters 7-10) illustrate the diversity of practice-based research arising from the institutional grants and highlight how impact has shifted beyond conceptions of teaching practice to changes in teaching behaviors and impacts on students.

Section three showcases a range of localized Faculty-led interventions that have resulted from engagement with QTL_net. These include the implementation of simulation-based learning in Community Health Nursing (Chapter 11); the redesign of online assessment for an undergraduate nursing course (Chapter 12); research capacity strengthening in the Medical School (Chapter 13); and the development of an outreach faculty development course involving five different Higher education institutions across Pakistan (Chapter 14). Collectively, these final case studies demonstrate how the knowledge and skills acquired through teaching related CPD has raised the confidence of faculty to change their conceptions around teaching and learning. The resulting impact is evident through innovations in teaching practices, both within their own disciplines and across curricula that impacts on their students and the wider communities with which they engage. From this *Tapestry of Stories* emerges a more interwoven approach

than the linear Model Guskey proposes, a point we return to in the concluding chapter.

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SECTION 1

CORE WORK OF THE NETWORK OF QUALITY, TEACHING & LEARNING AND PARTNERSHIPS IN ACTION

Chapter 1

From a Pilot Project to Strategy: Transformational Journey of Blended and Digital Learning

Azra Naseem, Eman Rashwan, Khurram Iqbal, Abeer Hammadi and Kevin Pitts

Situation

In 2010, the Aga Khan University (AKU) reviewed its education strategy with the goal of connecting faculty and students across six countries (Pakistan, Kenya, Uganda, Tanzania, UK, and Afghanistan) on multiple continents and creating a one-university model. The review showed that the distributed university faced dis-economies of scale and that distance-bridging teaching, supported by technology, was needed to allow faculty and students from any campus to offer and take courses. The development of faculty expertise in blended pedagogies and technologies was identified as the priority, and a pilot project was initiated in May 2011 to enable faculty members to acquire the necessary knowledge and skills for designing, teaching, and evaluating

courses using a blended learning approach in their respective areas of expertise.

The pilot project led to the creation of a university-wide Blended and Digital Learning (BDL) Network, situated within the Network of Teaching and Learning which aimed to build on the lessons learned and enrich AKU's teaching and learning programmes through technology integration, innovation, and faculty development. This case study shares our transformation journey of change and growth from a small pilot project to a strategy over the past ten years, and the lessons learned along the way.

Task

Drawing on the continuum of technology-based teaching by Bates and Poole (2003), the scope of BDL is to support the use of technology in teaching and learning, across various pedagogical contexts, including technology-enhanced face-to-face (F2F) teaching, mixed/hybrid learning, and distance teaching (online learning). The goal is to lead, share, and develop innovations in technology-enabled pedagogy to support student-centered learning at AKU. This includes applying digital learning software and a Virtual Learning Environment (VLE) to on-campus courses, through mixed digital and face-to-face teaching, to purely online distance courses. The core functions include faculty professional development, course design support, technology integration support, and research and innovation, grounded in the reality of the developing world served by AKU.

During the global pandemic, the BDL team was challenged to support AKU's rapid transition to online and remote teaching (see Khamis, et al., 2022). Subsequently, the BDL team was tasked with the development of AKU's first Digital Learning Strategy (DLS).

Action

Faculty Development

BDL's core function is to enhance the capacity of faculty members to design, develop, and offer courses through blended and digital approaches. To achieve this, various programmes have been offered, including a nine-month work-based Blended Learning Faculty Development programme (Naseem & Handley, 2014), shorter duration sessions on using the VLE, and synchronous online teaching via Zoom. Group workshops-on-demand or one-on-one hands-on consultations are offered on blended pedagogical issues, and technology-enhanced pedagogy to address specific teaching/learning concerns.

Online and Blended Course Design

When academic entities started looking for support to design and offer courses in blended and online modalities, the BDL team responded by providing support in blended curriculum and content design, the development of digital learning resources, and establishing quality assurance guidelines and procedures (Chauhan, et al., 2016). Some examples of course or programme level support included the Post-RN to BScN programme offered by School of Nursing and Midwifery in Pakistan, Pakistan's first (Massive Open Online Course) MOOC (Abidi, et al., 2016), the Developmental Anatomy course (Jamil, et.al., 2019), the Psychiatry rotation (Mian, et al., 2018) in the Undergraduate Medical

Education programme in Pakistan, Post-graduate Chemical Pathology training (Jafri, et al., 2021), and FamMed Essentials, a WHO approved course by the Family Medicine department Pakistan.

Research and Innovation

Recognizing the importance of knowledge generation through research and innovation in the Global South, BDL supports faculty members in conducting and disseminating research on their BDL teaching and learning experiences, and innovative pedagogy.

Support During the Global Pandemic

During the pandemic, the BDL team took charge and supported the university and its stakeholders in rapidly transitioning to online and remote learning. The efforts included providing resources for the rapid digital transition, coordinating digital learning through the Rapid Online and Remote Teaching Coordinating Group (RORTCG), supporting faculty development through online workshops and Digital Bootcamps, identifying faculty champions and skilled technical assistants to migrate courses onto the University's VLE, and building communities of practice through the EdTech Lounge sessions. A self-learning open access manual was designed focusing on good practices of online course design and facilitation (Pitts & Naseem, 2021). Support for students was provided in the form of online student orientation programmes. A survey was conducted to assess faculty and students' experiences during the pandemic to measure the impact of the actions.

Results

Faculty, Staff and Students scope reached: Over the last decade, the BDL team has supported faculty, staff and students from all AKU campuses. The reach scores are shown in table 1 below

Table 1: Number of Faculty and Students Supported by BDL

	Dates	Number of times offered	Participants benefitted
FDP: BL	2011-2015	4	60
OTHE programme	2021-2023	3	94
Digital Bootcamps	2020-2023	38	713
EdTech Lounge	2020-2023	52	2267
Synchronous online teaching via Zoom	2018-2021	27	358
VLE Workshops	2016-2023	38	916
Consultations & entity-specific sessions	2020-2023	77	225
Student Orientation	2021-2023	22	1704
Total		**261**	**6337**

Student Experience During COVID-19

In the survey conducted in order to understand student experiences during the pandemic (Figure 1, shown below labelled Student Experience During COVID-19 Pandemic), most students (70%) responded to having studied a full course completely synchronously, while 46% also studied asynchronously on the VLE. A small proportion of students (12%) were taught remotely with content sent to them via

a USB due to connectivity issues. In terms of activity types, students were largely involved in synchronous lectures (65%) that were reinforced with asynchronous assignments (70%). Less than half of the respondents were involved in group work (46.18%) and breakout rooms (40.73%).

Students had also experienced the use of online quizzes (63%), and 70.5% engaged in Q&A sessions with faculty. Regarding the preferred mode of learning, most students (over 60%) showed a preference for a blend of synchronous and asynchronous learning, providing an opportunity to flip teaching. 22% of student respondents preferred synchronous sessions only. The students reported that access to devices and internet connectivity were major concerns. Didactic long synchronous lectures and asynchronous courses without faculty interaction were found to be ineffective. Clinical sessions were difficult to conduct remotely. Finally, 76.36% of students reported that they had access to technology-use support enabled by BDL.

Figure 1: Student Experience During COVID-19 Pandemic
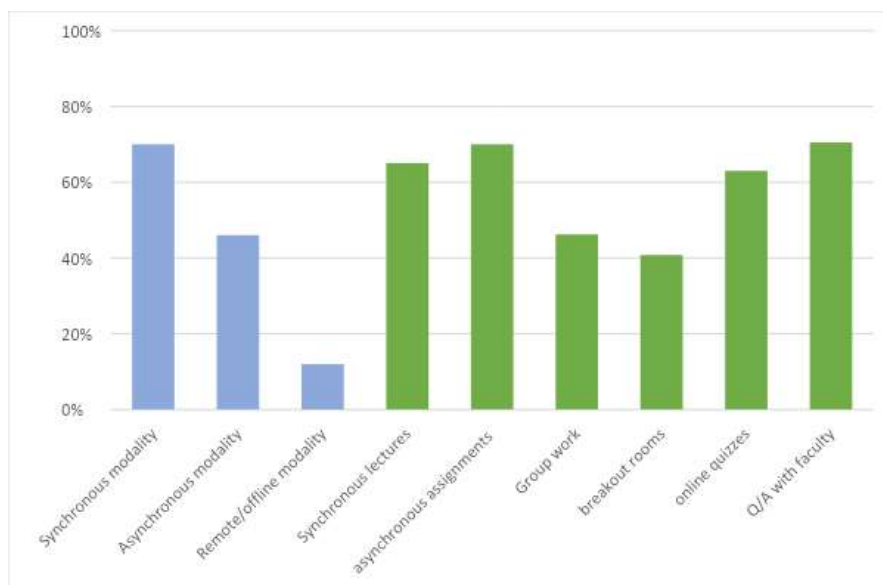
Widening the Impact

Building on the lessons learned, the BDL team designed the Online Teaching in Higher Education Programme (OTHE), mapped to the UK PSF, to enable faculty and academic support staff to enhance their asynchronous and synchronous online teaching skills. A unified online student orientation has been developed where all new AKU students can learn asynchronously. AKU's first DLS (Digital Learning Strategy) has been developed to build an enabling environment for the use of technology in teaching and learning. A letter of understanding has been signed with Academics Without Borders to offer the OTHE programme to universities and institutions in the global south. Additionally, BDL has been requested to support other universities in the region, such as University of Central Asia, Karakoram International University, and the University of Chitral. By expanding the reach beyond AKU, BDL hopes to

amplify the impact and contribute to the advancement of higher education in the region and beyond.

Reflection

The inception of the BDL journey was spurred by a desire to enhance collaboration and foster closer ties among the AKU campuses, through the implementation of a pilot project on blended learning. Over the course of ten years, as outlined above, this initiative blossomed into a comprehensive DLS, propelling AKU into a new era of digital and online education. The DLS comprises five distinct themes that were identified through rigorous evaluation and extensive consultations: Access, Curriculum Review and Renewal, Governance, Capacity Building, and Research and Innovation. Access to devices, software, and connectivity continues to challenge AKU because of the local infrastructure, costs, country policies, and regulations, as well as prioritization and resource allocation mechanisms. The DLS is likely to address some of the organizational concerns and allow for the development of a mechanism to enhance access. Moreover, the effective incorporation of technology in education relies on the digital literacy and readiness of both faculty and students and these remain critical focus areas for QTL_net in the upcoming years.

In addition, more work needs to be done to expand flexible options by building institutional competency based on the technological pedagogical content knowledge (TPACK) framework (Koehler & Mishra, 2009). While faculty members can update their course sites with minimal assistance by using user-friendly web and multimedia

authoring tools, many see this as an additional burden on their time, resulting in a heavy reliance on e-learning support staff to update their course websites, creating a dependency on said support staff. Also, faculty members who are new to blended and online teaching encounter difficulties in balancing various responsibilities and require significant assistance throughout the blended learning course design process. Through the DLS, BDL's efforts to provide support in these areas will continue to expand. Finally, BDL's transformational journey highlights that, as e-learning designers and educational technologists, the team operate at the intersection of "overlapping cultures" (Little & Green, 2012) and institutional power dynamics, which requires innovation, effective change management, and interdisciplinary collaboration. BDL's success and sustainability lies in moving beyond the technical support and adopting a strategic approach towards higher education transformation through the DLS.

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Chapter 2

Higher Education Academy Fellowships and their Role in Creating an Institutional Culture of Reward and Recognition for Teaching and Leadership

Sahreen Chauhan, Kiran Qasim Ali, Eileen Hyder

Situation

Rewarding and recognizing excellence in teaching and supporting learning has grown in importance within the Higher Education sector (e.g., UCSF Excellence in Teaching Awards 2015 & 2017; Society for Teaching and Learning in Higher Education; HEA UK National Teaching Fellowship Scheme, 2000). A key mechanism for reward and recognition is HEA Fellowship, an award made by Advance HE (previously the Higher Education Academy - HEA) to those who can demonstrate that their practice meets the expectations of the Professional Standards Framework (PSF) - an internationally recognized benchmark, used within the sector, and a key tool for raising the profile of teaching and learning (Spowart, Turner & Dismore, 2020). The three Dimensions of the PSF represent a holistic approach to practice, signposting that key professional values and a base of subject and

pedagogic knowledge are necessary for effectively carrying out activities such as designing/planning learning or assessment and feedback, and claims for effectiveness are only meaningful when underpinned by an evidence-base of scholarship and critical evaluation.

Advance HE's Fellowship scheme was attractive to Aga Khan University (AKU) as a mechanism for realizing the institutional vision of creating a culture of reward and recognition for teaching/supporting learning. An in-house Continuous Professional Development (CPD) Scheme was developed, the Teaching Accredited Enhancement of the Higher Education Academy (TEACH), to award Associate Fellow (AFHEA) and Fellow (FHEA). AKU became the first HE institution in South Asia and East Africa to be accredited by Advance HE in 2018, an honour which came with the responsibility of developing a high-quality scheme.

Task:

The Network of Quality, Teaching and Learning's (QTL_net) Strategic Plan 2020-25 prioritizes the TEACH CPD Scheme (run by the network, Office of the Provost) for its role in enabling faculty members and staff supporting teaching and learning to gain recognition for their teaching effectiveness through HEA Fellowships. The goal is "to promote a culture of Reward and Recognition of teaching scholarship and excellence thereby raising the profile of teaching at AKU." As well as joining a pool of teaching champions at AKU, those awarded Fellowship through TEACH also become part of the global pool of HEA Fellows, providing access to an extensive community of like-minded people.

The task was to embed the TEACH Scheme institutionally at AKU as a benchmark for teaching effectiveness. The Scheme needed to be viewed externally as high quality and meeting Advance HE's expectations, and internally as a 'voluntary but irresistible' (Khamis et al, 2022) opportunity for academic staff at the University and as transformative to teaching and learning. Launching any new initiative is complex and challenging. This was certainly the case with the TEACH Scheme. As the first of its kind in South Asia and East Africa, the PSF needed to be contextualized for AKU whilst maintaining the integrity of the Framework.

The ultimate task of embedding the Scheme at AKU required a number of sub-tasks – for example, developing institutional knowledge of the PSF, recruiting mentors/critical friends and assessors who could support applicants, and developing resources to support the Scheme.

Actions:

The process of implementing the TEACH scheme required a spiral approach starting from a small point from which we could keep expanding through a process of continuous evaluation, reflection and development.

- *First step:* Developing a critical mass of colleagues who understood Fellowship and could act as advocates, mentors, and assessors when the TEACH scheme was launched. 12 AKU staff, including faculty members and educational developers of the QTL_net team, gained Fellowship (D1-D4) through the

direct route in 2017 including the Provost Teaching and Learning gaining a Principal Fellow (PFHEA) award.

- *Introducing the scheme:* We utilized various platforms of QTL_net to disseminate how the programmes and professional development activity offered by QTL_net aligned with international standards and the PSF. This built a solid and shared understanding of the PSF.

- *Quality assurance:* Good quality assurance processes are required for accreditation. To meet Advance, HE's expectations the scheme's leaders joined Advance HE's Strategic Advisory Group to ensure currency of understanding of PSF developments; a dedicated staff member (FHEA) was appointed to be responsible for the overall execution and support of the scheme; an external moderator (PFHEA) was appointed.

- *Recruiting/training critical friends and assessors:* Success depended on developing an active and engaged community of Fellows to act as critical friends and assessors. New Fellows were invited to take on these roles and initial and ongoing training was provided.

Results:

The TEACH scheme has achieved impressive results in supporting culture change and raising the profile of teaching at AKU by using the PSF to create pathways for reward and recognition. Impact can be observed at both individual and institutional levels (Guskey, 2000).

Examples of impact on individuals is that Fellows who become critical friends and assessors have the opportunity to peer-mentor colleagues in attaining a teaching qualification (i.e. HEA fellowship) and also remain in good standing in relation to Advance HE's Fellowship Code of Practice. Additionally, opportunities for discussion of pedagogic practice benefits both mentor and mentee. By 2022, approximately 45% (n=32) of Fellows at AKU were trained as scheme mentors.

The introduction of the Haile T. Debas Academy (HTDTA) demonstrates impact at both individual and institutional levels. Creating the first interdisciplinary Academy of its sort in the developing world sends a powerful message about the value placed on excellence in teaching and leadership at AKU. For individuals, applying for HTDTA membership allows applicants who are already HEA Fellows to further draw on the reflective approach they developed when applying for Fellowship.

Evidence of the PSF being strongly embedded within the institution is seen through how it underpins academic promotion, institutional teaching-related awards and the teaching dossier required for membership of the HTDTA. Holding a Fellowship, demonstrating that practice has been benchmarked against an internationally recognized Framework, is required for one of the most prestigious awards at AKU, the "Award of Excellence in Teaching and Teaching Leadership''. Both in 2022 and 2023, one of the SFHEAs and an inaugural member of the HTDTA was honoured with this award at the AKU's annual convocation ceremony.

The success of the TEACH scheme has also resulted in raising the profile of AKU in the international teaching and learning community. AKU was selected as one of eight case studies (and the only one from outside the UK) in Advance HE's case studies publication (Khamis, 2022). It was selected as an example of good practice in professionalizing teaching and influencing strategic teaching transformation. Moreover, AKU received one of 17 Global Impact grants on Academic Development to feature innovation that has directly impacted students or staff. Leaders of the TEACH Scheme have also been involved in collaborations with Advance HE (e.g., as members of Advisory Committees). Through this work they continue to disseminate practice at AKU but also bring their knowledge of Advance HE priorities to AKU (Khamis, Chauhan, Ali, Jafferani, 2022).

In 2022 AKU emerged as winner from among 90 applications from 31 countries in one of the most prestigious and competitive international awards - the 'Award of Excellence for Disruptive Education' - at the inaugural Zairi International Award in Higher Education 2022, supported by UNESCO and Advance HE. AKU showed how the PSF has been used by the TEACH scheme as a catalyst for change to support excellence in teaching and ensure a meaningful student learning experience.

These accomplishments reflect culture change in raising the profile of teaching and learning across AKU, which was previously portrayed as a predominantly research-focused institution. Teaching is now viewed as both a learning-centred and research-led activity as evidenced from

Advance HE's case study publications (Khamis, 2022; Khamis, Chauhan, Ali, Jafferani, 2022), bibliometric analysis of AKU's SoTL publications (Khamis & Gatiti, 2019), and supporting SoTL through annual grants and biennial SoTL conference.

Reflection:

Advance HE requires schemes to be re-accredited every four years. The process provides a developmental opportunity by prompting reflection on what is working and next steps. The re-accreditation process (in May 2022) helped us to identify successes and impact. The accreditation panel's feedback applauded how AKU retains a practice-orientated approach to the development of staff to promote high-quality outcomes-based education for students.

Applicants and those supporting the scheme (critical friends and assessors) report impact on their teaching practices and student learning outcomes. Moreover, mentoring their peers enhances their teaching, and they become ambassadors for quality teaching and learning at the institution.

Participating in the TEACH scheme has been an incredibly enriching experience for me as an educator-researcher. Through the programme, I was able to enhance my reflective writing and critical appraisal skills which has positively impacted my practice. The programme also provided me with a platform to connect with fellow educators and exchange ideas, leading to a more collaborative and supportive learning environment. Overall, the TEACH scheme has helped

me become a more effective and confident educator-researcher. (Dr Sadia Fatima, FHEA- TEACH critical friend & assessor)

The external moderator submits a report after every cycle. These regularly comment on how applications demonstrate the student-centred, inclusive approach that underpins practice at AKU. The external moderator has noted that the application process prompts staff to critically reflect on practice and to engage with pedagogic scholarship in order to understand how and why their practice is effective in providing high quality learning experiences for students. On completing her term as external moderator, she reported:

Over my years as external moderator for the TEACH scheme I have been impressed by the wide-reaching impact it has had. It has prompted discussion and deep reflection on teaching and learning by participants, critical friends and assessors and helped to raise the profile of T&L within the institution. It is a true exemplar of the value of Fellowship schemes. (Dr Eileen Hyder – External Moderator 2018-2022)

At the time of publication, AKU remains the only institution accredited by Advance HE in East Africa and Pakistan. We continue working to embed TEACH across the institution through promoting it at various forums and by recognizing Fellows at the annual convocation event. Moreover, QTL_net's professional development activities now explicitly mention how the PSF Dimensions align with each PD activity. Since 2020, 34% (n=161) faculty members have benefitted from participating in these workshops. The academic promotions policy requires submission of a teaching dossier based on the PSF dimensions.

The scheme continues to provide the opportunity for Fellows to engage in professional development activities (including applying for SFHEA) post-award. A new development indicating institutional commitment to the professional development of HE individuals is engaging the staff from the Institute of Ismaili Studies (as a special collaborative partner) in the TEACH scheme.

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Chapter 3

Insights on Developing and Implementing a Faculty Orientation on Teaching and Learning Programme

Kiran Qasim Ali, Edward Misava and Jane Rarieya

Introduction

Preparing new faculty in higher education has become an increasingly important feature of initiation into faculty life. University faculty members are expected to not only be competent researchers and active contributors in academia but also demonstrate teaching practices that are internationally benchmarked (Puri et al, 2012; McAlpine & Åkerlind, 2010). This expectation creates significant challenges for new faculty members who must navigate the demands of balancing research and teaching responsibilities. However, most universities do not formally prepare faculty for their roles as academics, thereby inhibiting them from being well-positioned to effectively deal with the unique challenges of their academic career (Rudnitsky, Ellis, DiBartolo, & Shea, 2013). This lack of structured induction often leads to frustration and

struggles to balance competing demands, which can hinder professional growth.

The foregoing was also the case at the Aga Khan University (AKU). In 2014, a survey was conducted to explore faculty needs across AKU (Khamis, 2014). It revealed that the majority of AKU faculty (66%) did not possess a teaching qualification and had experienced varied challenges related to teaching, scholarship, and service. The University only offered a General Employee Orientation Programme (GEOP), which provided basic information on the University facility management and safety. It fell short of addressing the unique needs and challenges of faculty members around teaching, learning, service and research.

Purpose of the FOTL Programme

In light of the gaps identified above, in 2018, the University leadership recommended the provision of an 'Academic Orientation' in addition to the GEOP. The goal was to create inclusive and dynamic spaces that foster ongoing professional development of faculty at AKU. It would provide access to high-quality orientation programmes, resources, and support services that enhance faculty members' pedagogical competencies, research skills, and ability to promote equitable and student-centred teaching and learning across all AKU campuses. In light of this, our task was to design an orientation programme that develops shared understanding of faculty roles and orients faculty on the support services and resources available to enhance their teaching practices.

Being the first of its kind at AKU, it was imperative to design an orientation programme that was tailored to the needs of a global, multi-site, multidisciplinary university that AKU is.

Establishing the FOTL Programme

The process of designing and implementing the FOTL programme was complex and required multiple actions and steps.

Step 1: Understanding the needs of the new faculty

We gathered insights into the needs of newly hired faculty at AKU through informal conversations with faculty members from various campuses during the Network of Quality and Teaching (QTL_net) activities and a literature review of best practices for designing orientation programs in multidisciplinary universities with geographically diverse faculty. By combining these approaches, we obtained a comprehensive understanding of new faculty members' expectations, challenges, and opportunities, which informed the design of a customised orientation program.

Step 2: Designing a university-wide orientation programme

The FOTL design process began with one of the authors attending the "Re-thinking Teaching (RTT) - A Course (Re)Design" workshop, resulting in the development of a comprehensive program concept map. This was refined over four days following feedback from peers and facilitators. The RTT workshop played a significant role as FOTL, which was initially centred on classroom teaching and learning, expanded to include other areas crucial for faculty to conduct their roles effectively. This included the scholarship of teaching and learning, teaching with technology,

clinical teaching, language support, engaging in research and academic support available to students. FOTL emerged as a collaborative effort among various academic departments at AKU, nullifying the perception that it was solely managed by QTL_net. The collaboration between these academic units allowed for a holistic faculty orientation programme that effectively supported faculty members in their teaching and research efforts.

FOTL was designed as an online and self-paced programme on Moodle-VLE to provide faculty with flexible access to the orientation at their own pace and convenience. It would ensure a standardised orientation experience for all faculty members regardless of their location at AKU. The programme was piloted by inviting faculty members from different entities and campuses to review and provide suggestions for improvement. The feedback was then used to refine the programme and improve its overall effectiveness.

Step 3: Institutionalising FOTL through HR

The next step was institutionalising FOTL through a strategic partnership between QTL_net and the Human Resource department. To ensure that all newly hired faculty members are enrolled in the FOTL programme, the Human Resource department registered the members through the One AKU Connect portal. The use of the portal ensures that every new faculty member is introduced to the FOTL programme early on in their tenure at AKU, providing them with the necessary tools and resources to excel in their teaching and learning practices.

Results

The success of FOTL can be viewed at three levels:

i. Faculty Reach

Since its inception in 2020, the FOTL programme has seen a positive trajectory in the number of faculty members who have successfully completed it. The programme encountered challenges during its initial phase, with only 25% of newly hired faculty members completing it in 2020. Subsequent years have shown significant improvement. In 2021 and 2022, 39% and 60% of newly hired faculty members completed the programme, respectively. Further, 2023 data indicates a completion rate of 95%, reflecting the growing success and popularity of the FOTL initiative among the faculty community at AKU. This increasing trend of faculty members completing the FOTL programme highlights its importance as a crucial aspect of faculty professional development at AKU.

ii. Faculty Satisfaction

FOTL has garnered noteworthy approval ratings among faculty members. The average satisfaction rate stands at 89%, underscoring a strong level of endorsement for the programme's goals and structure. In 2020, the satisfaction rate was 86%, followed by a modest increase to 88% in 2021. The highest level of satisfaction was recorded in 2022, with a remarkable rate of 95%. This signifies that the FOTL programme has lived up to faculty's expectations.

iii.   Paving the Way for Continuous Professional Development

Faculty members who attended FOTL have shown a greater willingness to engage in additional professional development activities. From 2020 to 2022, 56 faculty members who had previously completed FOTL expressed interest in and subsequently participated in other QTL programmes. For example, 17 of these faculty members attended the Teaching Dossier workshop, 15 participated in the Ed Tech Lounge, and 11 participated in Teaching and Learning Enhancement Workshop (TLEW). Moreover, several faculty members joined other programmes such as Re-thinking Teaching-A Course (Re)Design Workshop (RTT) (8), Digital Bootcamp (7), and Online Teaching in Higher Education (5). The foregoing demonstrates how FOTL has effectively cultivated a culture of continuous learning and professional development among faculty members.

Reflection

FOTL has been instrumental in integrating newly appointed faculty members into the academic fabric of the University. It has provided a comprehensive support system that fosters a sense of community and belonging among participants, enabling a smooth transition into their academic roles. Moreover, the program has equipped faculty members with the necessary skill sets and competencies to excel in their teaching roles. By doing so, it has also fostered the one-university model, promoting a cohesive and interdisciplinary approach to education, research, and service provision. As one participant stated:

"It was an excellent and relevant programme. It clarified the role of faculty and the various resources available to improve my duty in enhancing the experience of our learners as every single aspect is necessary and invaluable to a holistic approach to teaching." [Participant, MC – Pakistan].

Another participant said, *"FOTL training was beneficial and enriching for me as a new faculty. I learnt a lot about the programmes and services that are available to support me as a new faculty to improve my teaching"* [Participant, SONAM – Kenya].

The programme has provided us with three key valuable insights that will be used to inform future initiatives aimed at enhancing the teaching and learning experiences at the institution.

Whilst FOTL provides a generic orientation programme designed to address the broad needs of faculty members across different campuses of AKU, a more detailed and comprehensive orientation programme specific to each country's context would be even more beneficial. This is because academic cultures, expectations, and support systems can vary significantly between different AKU campuses, and therefore require a targeted approach. Such a campus-specific programme would offer a deeper understanding of the faculty members' roles, the resources available to them, and the academic and institutional expectations they need to meet, resulting in a more comprehensive orientation experience

The implementation of the FOTL program encountered challenges due to inconsistent on boarding processes across different AKU

campuses. Despite being mandatory, the lack of a formal compulsion resulted in a lower completion rate. Further, the bi-annual offering meant that some faculty members only accessed FOTL six months after joining AKU, potentially undermining its perceived importance. Consequently, we worked with the Human Resources department to revamp the FOTL delivery model to ensure that faculty members have access to the programme as soon as they are hired. Hence, institutional processes and structures are critical to the success of university-wide online learning programmes across multiple campuses. Stakeholder engagement, programme adaptation to their needs, and continuous evaluation and improvement are essential to the effective implementation of these programmes.

Conclusion

FOTL was offered as an online self-paced module. However, it was observed that the uptake on this modality was less than anticipated. This resonates with literature that argues that self-paced modules may have lower engagement rates (Rizzuto, 2017). It was observed that faculty members would log in to the course website, complete one task, and then abandon the site for several weeks. To address this, several reminders were sent to faculty to ensure they complete the programme within the required timeframe. This experience has underscored the importance of considering numerous aspects that may affect the effectiveness of online learning, including how to better engage faculty in self-paced learning environments. It is clear that a one-size-fits-all approach may not be suitable for all participants, and alternate strategies, such as interactive features or individualised guidance, may

be required to promote engagement and motivation. Moreover, the importance of ongoing monitoring and evaluation of online learning programmes to maintain its efficacy and relevance in meeting participants' needs cannot be ignored.

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Chapter 4

From Educators to Teaching Champions – A Sustainable Model for Faculty Development

Aly Jafferani, Kiran Qasim Ali, Sahreen Chauhan, Edward Misava & Tashmin Khamis

Situation

In higher education, it is common for faculty members to hold a PhD in their area of subject expertise but lack a teaching qualification. At the Aga Khan University (AKU), this is the case for 70% of faculty members (Khamis, 2014). A needs assessment conducted in 2014 (Khamis, 2014) revealed that less than half of AKU's faculty members received support for their teaching, and about one-third of faculty members received no support at all, whilst 70% of faculty reporting that their main method of teaching was using power-point lectures. The aforementioned background provided the impetus for the establishment of the Network of Quality, Teaching & Learning (QTL_net) in 2014. Unlike a traditional centre, QTL_net is a university-wide global support network that was created to respond to the university's geographic spread. Its goal is to promote the highest quality of teaching to enhance student learning

experience within AKU's academic programmes. QTL_net strives to transform teaching into a learning-centred and research-led approach, with teaching excellence recognised and rewarded across the university.

Task

To support 800 faculty members, QTL_net adopted a sustainable approach by having faculty members support each other, based on the concept of developing teaching champions (Stigmar, 2016). According to the literature, a teaching champion is someone who both supports and personally implements pedagogic innovation and who seeks to influence others to innovate (Holtham, 2005). Additionally, they also advocate for promoting innovative teaching (Howell & Higgins, 1990), and act as idea generators, sponsors, and orchestrators (Galbraith, 1984). For this case study, we defined a Teaching Champion as:

Someone who demonstrates excellence in their teaching, seeks continuous improvement in their teaching, and takes on a mentoring role to inspire and support others in enhancing their practices, while also engaging in the scholarship of teaching and learning. They also serve as advocates for good teaching in the university.

To develop these necessary skills, QTL adopted a holistic approach that spanned several months to enhance faculty members' capacity, instead of offering a one-off professional development programme. Thus, a life-cycle approach was adopted in taking faculty members on a transformative journey, starting from their initial joining at AKU until they emerge as Teaching Champions (Khamis et al., 2022).

Action

The lifecycle approach (Figure 1. *Model for Sustainable Faculty Development (Adapted from Khamis et al., 2022*) has been guided by Guskey's (2002) model of change in educational development. Guskey's model plays a significant role in guiding faculty support and incentivizing staff to enhance their teaching (Guskey, 2002). This model emphasises the importance of addressing the individual needs of faculty members, ensuring that the programmes and initiatives implemented are relevant and meaningful to their professional development.

Figure 1. Model for Sustainable Faculty Development (Adapted from Khamis et al., 2022)

04 **Empowering Others**
 • Facilitator Development Workshop (FDW)

03 **Reward & Recoginition**
 • Higher Education Academy (HEA) Fellowships
 • Scholarship of Teaching & Learning (SoTL) Grants

02 **Continuous Professional Development**
 • The Teaching and Learning Enhancement Workshop (TLEW)
 • Rethinking Teaching (RTT) Workshop
 • Online Teaching in Higher Education (OTHE)
 • Other Programmes (Teaching Dossiers, Bootcamps, EdTech Lounges)

01 **Institutional Orientation**
 • Faculty Orientation on Teaching and Learning (FOTL)

Model for Sustainable Faculty Development
Adapted from Khamis et al., 2022

The four distinct stages of the life-cycle approach are delineated below:

i. *Stage 1 – Institutional Orientation*

The Network supports new faculty members through the Faculty Orientation on Teaching and Learning (FOTL), which equips them with necessary teaching skills and introduces available support services.

ii. *Stage 2 - Continuous Professional Development*

The Network provides a range of flagship programmes tailored to meet unique teaching and learning needs, including designing courses, pedagogical support and assessment in both face-to-face and online modalities. Guided by the philosophy that faculty learn best from their colleagues who may be from other disciplines, these programmes are, therefore, peer-led, and interdisciplinary in nature. These programmes include:

- The Teaching and Learning Enhancement Workshop (TLEW): A 24-hour Canadian-certified instructional skills workshop to enhance pedagogical skills (Instructional Skills Workshop, 2021).

- Rethinking Teaching: A Course (Re)Design Workshop (RTT): A 32-hour course redesign workshop adapted from Simon Fraser University (Saroyan & Amundsen, 2004).

- Online Teaching in Higher Education (OTHE): A programme with four certificate courses, 25-hours each, to support faculty members in designing, facilitating and assessing online learning (Naseem & Pitts, 2021).

- Other Programmes: The Network offers workshops to create effective teaching dossiers, online teaching boot camps for hands-on skill development, and manages the EdTech Lounge, a virtual community for faculty collaboration on teaching and learning.

The programmes are based on peer-based learning and self-reflection, empowering faculty to challenge their preconceptions on teaching and learning, experiment with new approaches, and receive feedback from colleagues in a supportive environment. This continuous learning journey aims to achieve teaching excellence.

iii.   Stage 3 – Reward & Recognition

Literature shows that good teaching needs to be celebrated and rewarded in order to raise the teaching profile of an academic institution (HEA & GENIE CETL, 2009). The TEACH CPD scheme, accredited by Advance HE, recognises teaching learning and student support, and provides a valuable opportunity for faculty and staff to benchmark their practices against international standards (TEACH Participant Handbook, 2022).

Scholarship of Teaching and Learning (SoTL) is a signature pedagogy of higher education, leading to innovative teaching practices and transformation (Felten & Chick, 2018; Adams 2009). Therefore, the Network offers annual SoTL grants and Award for Collaborative Practices in SoTL (ACPSoTL) award to incentivize faculty for evidence-based approaches to improve teaching quality.

iv.   Stage 4 - Empowering Others

The Network believes in working 'with' and 'for'' faculty, and hence, faculty members are often invited to collaborate with the Network to enhance their capacity to become effective facilitators and mentors to their colleagues. This happens through various training programmes, such as the Facilitator Development Workshop (FDW), enhancing their

capacity to mentor others in areas such as curriculum development, assessment, and SoTL, inspiring and guiding colleagues to develop professionally and promote teaching excellence institution wide.

Result

The Network's broad range of activities and programmes has resulted in a significant impact which can be observed on multiple fronts:

i.   *Engaging Teaching Champions in Educational Development*

The champions who were developed through the above activities supported QTL_net in building the capacity of other faculty. To date, 22 teaching champions have facilitated 16 TLEWs, 15 facilitated 7 RTT workshops, 6 led 2 OTHE programmes, 6 led 28 bootcamps, and 39 led 52 Edtech lounges. This enables the network to work with and for faculty to offer the programmes and services at a larger scale. Their respective schools benefit from the contribution they make to the creation of a culture of quality teaching and learning. An excellent example of a QTL_net champion is a faculty member from School of Nursing and Midwifery (SONAM), Pakistan, who first participated in TLEW and RTT workshops and later joined QTL_net team as a co-facilitator to develop other faculty members' capacity.

Subsequently, as a champion, she played a critical role in reviewing the nursing curriculum at her school and was instrumental in developing Teaching Squares[1]. These Champions also advocate

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[1] A teaching square is a group of four instructors who agree to observe each other a few times during a semester, using an agreed upon set of observation norms. It is designed to be a non-

QTL_net services and programmes by encouraging colleagues to attend professional development events.

Faculty champions have demonstrated their impact through active engagement in various SoTL activities such as participating in SoTL conferences, securing SoTL grants, and applying for the Award for Collaborative Practices in SoTL (ACPSoTL). As a result, AKU faculty's SoTL publication citations have significantly increased from approximately 300 in 2015 to 1800 in 2020, as indicated by bibliometric analysis (Gatiti & Khamis, 2019).

ii. *Teaching Champions as inaugural members of Haile T. Debas Teachers' Academy (HTDTA)*

Teaching champions at AKU were recognized for their excellence and became the first members of the Haile T. Debas Teachers' Academy established in 2020, providing an interdisciplinary academy for teaching and leadership at AKU. With only 5% of AKU faculty members currently in the Academy, they serve as mentors and support their peers in achieving teaching excellence at the university. According to a Teachers' Academy member, *"The most important opportunity that this recognition gave me is the increased opportunity [for] mentorship of faculty members towards developing excellence in teaching… that is something I am proud of."* [TA member, MC, P].

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evaluative, supportive and growth-based process. Participants are coached in setting a personal teaching goal and then observe others to give feedback and reflect on their own practice.

iii.   Recognition at National and International Levels

The teaching champions have received national and international recognition for teaching excellence, including the Pakistan Higher Education Commission's Best University Teacher Award (BUTA). Two of them received awards for Excellence in Teaching and Teaching Leadership at AKU's annual convocation ceremony for two consecutive years (2021, 2022). This award is one of the most prestigious at AKU.

Reflection

i.   Change of teaching culture

Whilst Guskey's educational change model states that institutionalising a teaching culture is the last stage reached in terms of impact, in the last three years this is already evident at AKU, as noted by an external unit review of QTL_net (Dawson Quinney & Welch, 2019)

"The QTL_network has been remarkably successful in raising the profile of the importance of teaching and learning within AKU in a very short time. The number of faculty who have taken advantage of the programs offered through QTL_net and who have very positive outcomes based on their experience is exceptional. They have exceeded the expectations of most educational development units in any country."

Teaching champions have created communities of practice and provided peer mentoring, resulting in improved teaching quality.

ii.   Building Collaborative Partnerships

AKU's interdisciplinary teaching champions have transformed the university by breaking down silos between disciplines and geographical

boundaries which fosters cross-disciplinary and cross-geographical connections (Gibbs cited in Knapper, 2016). This is exemplified by the applications received for the SoTL Grants, where faculty members from the nursing and education departments collaborated (Pradhan, 2019). Such collaboration not only enhances the quality of education provided to students across different locations but also empowers the small Network's team to make a substantial impact that extends well beyond its size.

iii. *Going beyond AKU*

In 2022, AKU's sustainable faculty development model received the prestigious 'Award of Excellence for Disruptive Education' at the Zairi International Award in Higher Education. AKU has since expanded its support for faculty development initiatives to other institutions such as the Karakoram International University (KIU), University of Chitral (UoC), University of Central Asia (UCA), and the Institute of Ismaili Studies (IIS). AKU is sharing its model of sustainable faculty development and collaborating with other institutions to advance education and create a brighter future. A participant of TLEW at KIU shared, *"The workshop encouraged me to revisit some of my deeply entrenched perceptions about teaching and student learning…I am trying my best to make my teaching more effective and relevant for students by applying the models and techniques I learned from TLEW."*

This is a familiar predisposition adopted by those who later develop into teaching champions, as they possess a strong passion for education and

a genuine commitment to enhancing the learning experiences of their students.

Conclusion

Engaging faculty champions in faculty development programmes through a life-cycle approach has been a key lever for promoting quality teaching. This has fostered buy-in and ownership, resulting in a greater commitment to high-quality teaching practices at AKU. We strongly believe that faculty champions are well-positioned to advocate for quality teaching and its impact on student learning outcomes due to their expertise, experience, and first-hand knowledge of effective instructional practices. Additionally, their role as leaders and mentors allows them to influence and inspire their colleagues to prioritise teaching excellence. This approach reinforces the value and impact of quality teaching as a key component of the academic mission of the university.

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Chapter 5

Partnership in Action: A Case Study of SONAM East Africa and the Network of Quality, Teaching and Learning (QTL_net)

Gladys Mbuthia, Dinah Kassaman, Beth Waweru, Eunice Ndirangu-Mugo, Sheila Shaibu

Situation

The Aga Khan University, School of Nursing & Midwifery, East Africa (AKU-SONAM, EA) has been in operation for over twenty years. Since its inception, SONAM EA has been a pacesetter in EA in transforming nursing and midwifery education for working nurses and midwives (Brownie et al., 2016). SONAM, EA is committed to providing quality teaching and learning as demonstrated by one of its strategic pillars "Transforming through Education (SONAM EA Strategic plan 2022-2026; pg. 20)." To operationalize this strategy, SONAM set out to design and implement an outcome-based curriculum; advance scholarship of teaching and learning; while integrating technology and investing in a transformative inter-professional learner-centered environment. In order to develop appropriate strategies for professional development

programming, it was important to identify the capacity gaps in order to know what skills faculty already had. Faculty members commenced with understanding the value of personal experiences and how this informs their own teaching.

They also engaged in understanding how reflection, particularly on their experience as learners and current experience as teachers, aid in enhancing their practice. This understanding was achieved through a customized training conducted by The Network of Quality of Teaching and Learning (QTL_net) on the development of teaching dossiers (e-portfolio) aligned to the Professional Standards Framework (PSF) as promoted through the AKU TEACH CPD scheme. The training was followed by individual or group support as needed after the training. Each faculty was expected to develop and maintain an e-portfolio to aid them in continuously reflecting on their teaching experiences as well as strengths and areas of improvement. The next step involved capacity building activities on outcome-based curriculum by QTL_net, including a hands-on workshop on how to write learning outcomes. Each faculty was required to revise their course learning outcomes.

Task

To move forward, we needed to be aware of the past experiences of faculty and students as well as what was considered the 'norm' in the contexts of the regions where SONAM, EA runs its programs. The reality was that both faculty and students came from a teaching and learning background that emphasized rote learning and from which learning and teaching was centered around cramming and passing exams to one

where the focus was on the student engagement, deep, significant learning (Fink, 2003) and a learning centered approach. Engaging students as equal partners in the learning process has the potential of encouraging them to take responsibility for their learning as well as breaking the barriers that they bring to the classroom (Bovill, Cook-Sather, Felten, Millard, and Moore-Cherry 2015; Lewis & Bryan, 2021).

A reflection from one of the authors (ENM), summarizes the shift in student learning clearly: "Imagine you live in a world where you get water from a tap that is conveniently located within your house. The tap provides you with clean water, when you need it and how you need it. Suddenly you wake up one day and the tap is gone! You now have to fetch water from a stream or river: a process that will entail identifying a container to use, getting directions to the river, fetching water as the river gushes along and then making the water safe for use. This analogy paints a picture of the situation that students coming into my 'advanced concepts in nursing' class which is taught using problem based learning find themselves in. One day they are passive learners being spoon fed through lectures and the next day they are being asked to become active learners who are co-creators of the knowledge being generated."

In addition to the changes in conceptualization of teaching for self and peers and a transformation in students' experiences with teaching and learning, we observed an evolution at the school and institutional level. Firstly, there was a growing appreciation of the role of peer review and student feedback (formal and informal) in shaping subsequent teaching and learning activities as a means of SONAM

continuously improving the quality of its programs. Secondly, SONAM has made headway towards transforming its curriculum from content to an Outcome Based (OB) one in keeping with the wider AKU goal of curriculum transformation. For instance, course outlines for the new BScN direct entry program are being developed with a view of operationalizing an OB curriculum for this new program. Finally, a focus on the scholarship of teaching and learning (SOTL) as a key requirement for academic progression within SONAM has seen all faculty undertake QTL_net trainings such as: the Teaching and Learning Enhancement Workshop (TLEW), the Rethinking Teaching (RTT) course design workshop, as well as an increase in acquisition of fellowships with Higher Education Academy (HEA) as an integral part of SONAM's functions.

Action

Attending the RTT workshop enabled SONAM faculty to redesign their courses in a manner that would enable their students to experience significant learning through pedagogies that used active learning strategies (Fink, 2003; Roehl, Reddy & Shannon, 2013). It also enabled SONAM faculty to review their curriculum. Consequently, the course outlines included learning outcomes, assessment for learning strategies such as return demonstrations in the simulation laboratory and learning-centered instructional strategies, for example, role plays and problem-based learning. Employing active learning strategies that promote student engagement resulted in positive students' feedback as evidenced by students' evaluation of teaching (SET) reports. Faculty, through TLEW training, are equipped with teaching strategies that

enhance student engagement (Barnacle & Dall'Alba, 2017). The practical sessions in TLEW enabled faculty to develop lesson plans and present them to their peers for peer evaluation.

A framework for developing lesson plans using Bridge-in, Objectives, Pre-assessment, participatory learning, post-assessment and summary (BOPPPS) was discussed and utilized (Fujii, 2019). The BOPPPS framework enabled faculty to build on students' prior learning and hence enhance their engagement in the learning process. Although the Covid 19 pandemic moved teaching to an online platform (Hofer, Nistor, & Scheibenzuber, 2021), university educators still rarely adopt digital technology necessary for online learning as they lack competencies (Englund et al., 2019; Lamon, Knowles, Hendy, Story, & Currey, 2020).

Other opportunities offered by QTL_net include the Online Teaching in Higher Education (OTHE) courses and the Teaching Enhancement Accredited Certification of the Higher Education Academy (TEACH) CPD scheme. Whereas OTHE provides faculty with online teaching skills, TEACH empowers faculty to reflect on their teaching/learning practices and the impact on student learning (Horton-Deutsch & Sherwood, 2017; Leshem & Trafford, 2006). Through TEACH faculty reflect on their teaching philosophy and how they execute it in their everyday teaching and learning activities, whilst providing a recognition of teaching effectiveness through benchmarking with the PSF. These are a few testimonials from some of the faculty members: "*QTL net has made me be the teacher I am today. I am able to engage my students in class and*

use innovative teaching strategies. I am a reflective teacher and I have

a teaching dossier. Where could I be without QTL net?" (DK, October

2022). *I have never seen a university that supports teaching and*

learning like this one" (SS, April 2019).

In AKUSONAM-Kenya, more than 80 % faculty have attended various
courses offered by QTL_net as seen in the table 1 below labelled
Various courses offered by QTL_net as seen in the table below:

Table 1: AKUSONAM Faculty Attendance of QTL_net Programmes

Courses	Number of faculty
TLEW	14
RTT	12
TEACH	7
OTHE	16
A/FHEA	5
HEA	0

After the training by QTL_net on developing a Teaching Dossier (TD),

the need to have a TD was integrated into the annual key performance

indicators (KPIs). Consequently, all faculty have developed their TDs

that allow them to track their teaching experiences and provide

evidence for the annual performance appraisal. With TDs, faculty have

become reflective about their teaching practices and are always on the

lookout for innovative approaches to improve students' learning

experiences. In addition, faculty have taken a scholarly approach to

teaching which is strongly grounded in evidence. They search

appropriate literature and select relevant information to guide teaching

and learning activities (Tulbure, 2012; Tulbure, 2011).

Faculty have created metaphors to depict their teaching philosophies. Some examples of the metaphors are:

Faculty A…*One size does not fit all*

Faculty B…*I am like a construction site foreman*

Faculty C… *Learning resides within the learner*

Faculty have evidently encouraged and supported students to reflect on their clinical learning experiences and use them to engage in continuous learning. This way our students learn by reflecting on their professional experiences. This is supported by John Dewey who states that knowledge is acquired by the conscious act of reflecting on experiences (Dewey,2019).

Result

Students who go through the SONAM programs achieve the Program Learning Outcomes (PLO) and are evidently lifelong learners, critical thinkers, and environmentally aware citizens among others. This has been reflected in the Alumni surveys where SONAM graduates have been promoted and hold senior leadership positions in their organizations and nationally. For example, one alumnus noted: *"The AKU education has opened up an opportunity for me to be recruited and given an opportunity to work with an international health corporation as the Nurse case manager and senior analyst."* (JM). Additionally, SONAM graduates have participated in conferences and research symposia and won awards in AKU's Early Career Research Symposium (2020).

Student Evaluation of Teaching (SET) has revealed that students appreciate the change in delivery of their courses by faculty. Excerpts from SET reflect student's satisfaction with the program delivery, design and outcome. "*I just love lecturers in SONAM, they know their stuff and they deliver it very well. I can't compare with other institutions of learning. They stand out...*" (JM, April 2019). *Mine is during the COVID 19 period...other institutions of learning went into lockdown but we continued learning through zoom classes. We had interactive classes and life went on...'' (*SA, December, 2021).

All applications that were submitted to the Appointments and Promotions committee for promotions since 2020 included an e-portfolio dossier. This demonstrates uptake of the TD and evidences how the PSF has been embedded as a criteria for promotions and appointments.

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SECTION 2

SCHOLARSHIP OF TEACHING AND LEARNING

Chapter 6

A Bibliometric Analysis of The Aga Khan University Contribution to the Scholarship of Teaching and Learning

Anil Khamis, Peter Gatiti, Tashmin Khamis

Introduction

The Aga Khan University-Network of Quality, Teaching and Learning (QTL_net) was established in 2013 to address matters of quality in teaching and learning across the University's six campuses. One of the strategic priorities of QTL_net was to promote the Scholarship of Teaching and Learning (SoTL) *to 'inform the discourse and practice of teaching and learning at AKU'* as stated in the Strategic Plans noted on the QTL_net website (2015-2020; 2020-2025). QTL_net did this thoroughly promoting scholarly teaching in all its programmes; establishing grants and awards for SoTL; hosting biennial SoTL conferences and publishing their proceedings (Khamis et al 2019). A bibliometric analysis identifies the impact of these efforts and how they have contributed to an increase in SoTL publications by AKU authors.

McKinney (2007) notes the importance of aligning teaching, learning and SoTL as a valid form of faculty development. Colleagues' participation in research informs their disciplinary instructional practices, what is termed 'signature pedagogies' (Shulman, 2005), as well as providing opportunities to learn from peers across subject disciplines. SoTL has become an embedded and expansive area of the academy in the past decade in the health, education, Research, scholarship, and application of SoTL now inform curriculum development, faculty engagement, and organizational development in higher education (Bailey et al., 2022; King et al., 2019; Li et al., 2020) and it is becoming more established in the global south (Khamis et al., 2019).

Research questions

The Aga Khan University Quality of Teaching and Learning Network has now been in existence for ten years, 2013-2023. To judge its SoTL impact and to inform its next decade, a bibliometric analysis has been prepared to consider the following:

i. Has QTL met its strategic objectives, primarily faculty engagement in SoTL?
ii. What is the SoTL influence of QTL on evidence-based faculty teaching practice, including faculty and peer reflective practice?
iii. What is the evidence of faculty and peer learning collaboration across disciplines?

Purpose

This paper seeks to map AKU research on SoTL by analyzing publications

from authors with Aga Khan University institutional affiliation that are indexed in Scopus, a citation database of peer-reviewed literature. Researchers rely on data from Web of Science, Scopus and Google Scholar to assess scholarly communication. However, this study chose Scopus as it covers more than 25,000 titles in comparison to Web of Science which covers approximately 21,000 peer reviewed journals.

This paper is unique as it provides a holistic view of AKU's SoTL research by using scientometrics methods to demonstrate trends, top effective articles, journals, and collaborations between institutions.

Methodology

Scopus was used to extract relevant papers published from January 2013 to December 2022 and referencing SoTL with the Aga Khan University being the affiliation name of the author(s). For the purpose of this study, the category chosen for analysis was "scholarship of teaching and learning". Results of advanced search analysis were copied and transferred to Microsoft excel.

This paper presents the key bibliometric indicators such as trends of annual publications, citation analysis of articles, publication counts, h-index, journal rank, and impact factor.

The paper adopts 12 specific SoTL search terms developed by the Association of College and Research Libraries (ACRL). ACRL is a division of the American Library Association whose mandate includes developing programs, products, and services to help those working in

academic and research libraries learn, innovate, and lead within the academic community.

Analysis

AKU contributions towards scholarship of teaching and learning (SoTL)

A total of 432 publications were retrieved but only 120 publications met the selection criteria. The publications included 97 articles (81%), 17 reviews (14%), 2 conference papers (2%), 2 book chapters (2%), and 1 editorial (1%). The research time span was papers published from January 2013 to December 2022.

Figure 1: Types of Publications
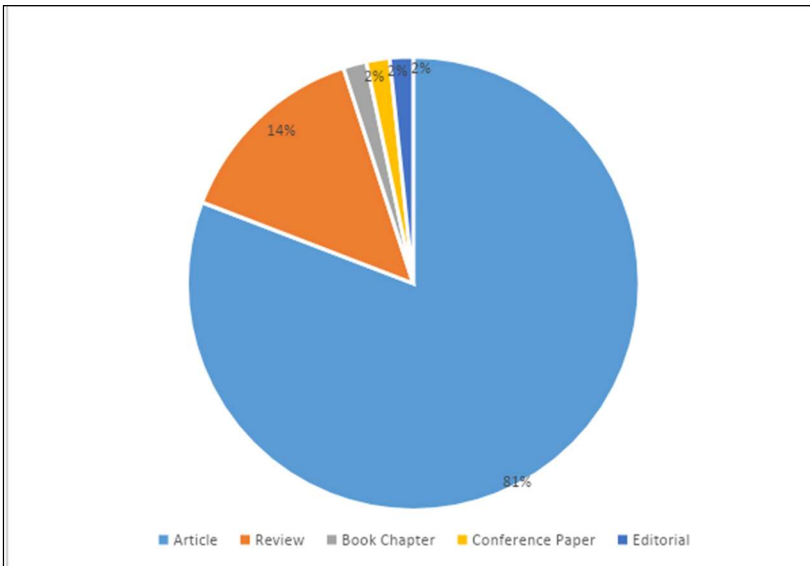
Annual distribution of publications

The annual distribution of SoTL publications reveals that there is an increasing interest in research in SoTL. Of the 120 publications published during the 10-year period, 84 articles (70%) were published in the last five years (2018 – 2023) compared to 36 articles (30%) which

were published in the first five years (2013 and 2017). The average number of SoTL research output was 12 publications. This demonstrates a steady increase as demonstrated below.

Table 1: Annual distribution of publications on SOTL

Year	Documents
2022	15
2021	28
2020	12
2019	19
2018	10
2017	9
2016	9
2015	4
2014	9
2013	5

The average number of SoTL research output was 12 publications. This demonstrates a steady increase as demonstrated in figure 2.

Figure 2: Annual distribution of SoTL research
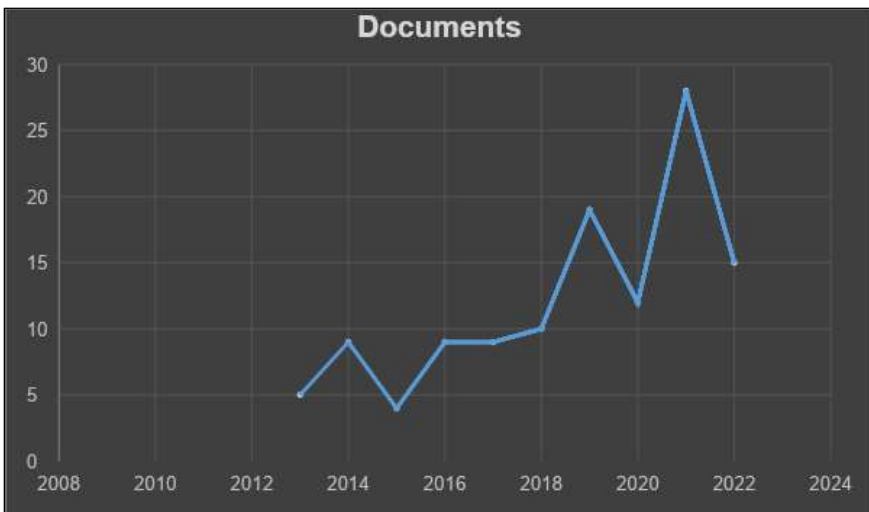
Analysis of the journals

The table below lists the first 5 journals ranked by the number of SoTL publications by AKU affiliated authors.

Table 2: Top 5 journals of AKU SoTL publications

#	Journal Title	Country	No. of articles	Impact Factor
1	Journal of the Pakistan Medical Association	Pakistan	30	0.781
2	SoTL in the South	South Africa	8	0.754
3	Journal of the College of Physicians and Surgeons Pakistan	Pakistan	6	0.73
4	Pakistan Journal of Medical Sciences	Pakistan	4	0.22
5	BMC Medical Education	UK	3	3.263

AKU affiliated authors publish in a wide range of journals and Pakistan was the most significant country of publication (40), followed by South Africa (8), and the United Kingdom (6). BMC Medical Education had the highest impact factor (3.263), a measure of the frequency with which the average article in a journal has been cited in a particular year or period (Glänzel and Moed, 2002).

AKU-affiliated researchers collaborate with scholars from various countries. The main countries of affiliation were Pakistan, the United States of America, Kenya, Canada, United Kingdom, Australia, and South Africa.
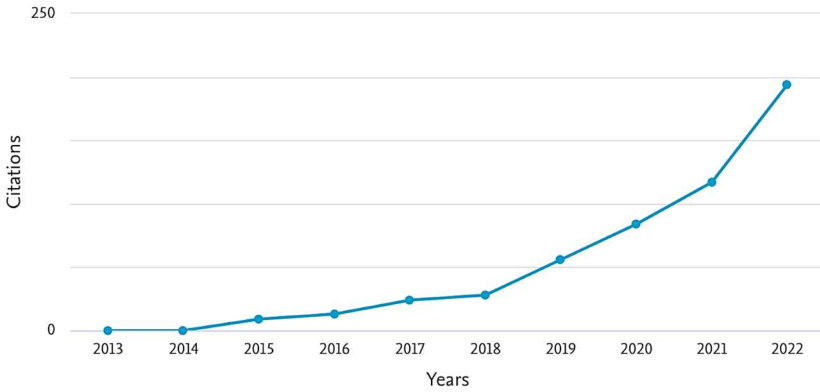
Citation analysis

AKU affiliated SOTL publications were cited 525 times from 2013 to 2022 as shown on table 3 labelled Citation analysis of SoTL publications 2013-2022.The total number of times that SoTL research was cited in 2022 was 194 times. However, SoTL research was not cited in 2013 and 2014 since this was the period that the discipline was being established at AKU. These results demonstrate an exponential increase in the visibility of AKU SoTL research

Table 3: Citation analysis of AKU SoTL publications.

#	Year	No. of times cited
1	2022	194
2	2021	117
3	2020	84
4	2019	56
5	2018	28
6	2017	24
7	2016	13
8	2015	9
9	2014	0
10	2013	0
TOTAL		525

The total number of times that SoTL research was cited in 2022 was 194 times. However, SoTL research was not cited in 2013 and 2014 since this was the period that the discipline was being established at AKU. These results demonstrate an exponential increase in the visibility of AKU SoTL research as shown in figure 3.

Figure 3: Citation analysis of AKU SoTL publications

Conclusion

This research focused on analyzing SoTL publications by authors affiliated with Aga Khan University. The analysis reveals that AKU has made significant progress in research on the Scholarship of Teaching and Learning, with an average of 12 publications per year. The depth and breadth of the research have also grown significantly over the past ten years, which suggests that AKU's SoTL research is becoming more impactful.

AKU authors collaborate with scholars from leading institutions worldwide. This collaboration can lead to new perspectives, innovative research ideas, and a broader impact on research findings. The United States of America, Canada, the United Kingdom, Australia, and South Africa have strong research traditions. Collaborating with scholars from these countries can bring valuable contributions to research projects.

Despite its contributions, the study had limitations as data were gathered from a single database, Scopus. In addition, research metrics are only one way to measure research impact, and they should not be

used as the sole indicator of the value and quality of research. Further research can be undertaken to establish the influence of AKU SoTL research on policy and practice.

In summary, this analysis has shown that there has been an increase in SoTL publications from AKU in the last ten years. Whilst direct correlations cannot be made, we see a significant increase in citations from SoTL generated publications from AKU academic staff. As faculty engage in SoTL, their teaching will likely be more evidence-based and reflective, enabling better student engagement.

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Chapter 7

Initiating Outcome Based Education Reform in Nursing – Experience from The Aga Khan University School of Nursing & Midwifery, Pakistan

Naghma Rizvi, Kiran Mubeen, Khairulnissa Ajani, Rubina Barolia, Pammla Petrucka

Situation

The Aga Khan University School of Nursing & Midwifery, Pakistan (AKUSONAM-P) was established in 1980, committed to raising the standards and image of the nursing profession in the country. AKUSONAM-P was the first academic entity of the university to introduce the diploma in nursing programme, followed with the first national two-year and four-year undergraduate programmes in nursing in 1997, known as Post RN-Bachelor of Science in Nursing (BScN) and Four-Year BScN respectively, and a Master of Science in Nursing (MScN) programme in 2001. After the launch of the Bachelor of Science in Midwifery (BScM) programme in 2013, AKUSONAM-P became the first School of Nursing and Midwifery in Pakistan. The programme grew with

the Faculty of Health Sciences (2015) offering a PhD Programme with a specialty in nursing.

During programme development, AKUSONAM-P played a major role in developing the first national curriculum palette i.e., BScN (Higher Education Commission [HEC], 2011), Post-RN BScN (Pakistan Nursing Council [PNC], 2011) and Post-RM BScN (PNC, 2021), emerging as national benchmarks. Beyond individual programmes, AKUSONAM-P has led innovation in curriculum, teaching models, and digital learning opportunities creating evidence-informed environments and developing lifelong learning cultures. Beyond educating and employing quality students and faculty, the university has graduated over 5000 individuals who are providers, educators, and leaders contributing to the outcomes and sustainability of health systems in Pakistan and beyond (Gul et al., 2009; Lakhani et al., 2018).

Tasks

In 2016, QTL_net undertook a major external Peer Assessment Review of nursing curricula (Aga Khan University, 2017) at AKUSONAM that identified the need for transforming a content saturated, time and rotation-based curriculum model into an Outcome Based Education (OBE). In nursing and medical education OBE has received significant attention over the past few decades (Frank et al., 2010) as it is premised on a series of predefined graduate abilities/attributes and learner competencies aligned to the outcomes of the curriculum (Frank et al., 2017; Tan et al., 2018). OBE adopts a learner-centric approach to support learners' progression towards competence through active

engagement and continuous (as opposed to incremental) assessments. In health professional's education, OBE potentiates graduates demonstrating essential abilities to effectively serve patients and populations for the optimum healthcare delivery (Fukada, 2018). The opportunities for AKUSONAM to lead through outlining and implementing an outcome-based curricula for nursing in Pakistan discipline were internally identified.

AKU QTL_net has established the AKU Teaching and Learning Framework to ensure best practices in teaching and learning across the university (Aga Khan University, 2018). The framework is guided by an institutional vision and mission and predefined set of 'Graduate Attributes'. These graduate attributes, derived from societal needs identified from stakeholders' input, enable benchmarking at multiple levels. However, an external peer review report of AKUSONAM identified lack of input from nursing stakeholders (Aga Khan University, 2017), leading to a curricular reform that included nursing stakeholders' engagement and analysis, reformation of the programme learning outcomes, and alignment of the outcomes with the instructional design and assessments.

Action

As a first step the AKUSONAM curriculum committee, utilizing a QTL_net's Scholarship of Teaching and Learning (SoTL) grant, initiated an exploratory study to understand the imperative of stakeholders informing nursing curriculum to reflect contextual and societal needs for nursing in Pakistan (Virgolesi, 2020; Belita et al., 2020; Lepre et al,

2021). Over two years the study sought to identify desired competencies for AKUSONAM graduates, while formalizing a database of national and international stakeholders which will serve as a resource for their continuous engagement in the evolving outcome-based curriculum.

The next step was to redefine program learning outcomes based on stakeholders identified desired nursing competencies and the predefined AKU Graduate Attributes. To launch this redefining process, the 'Rethinking Teaching: A Course Redesign Workshop' popularly known as RTT, the flagship program of QTL_net, based on Dee Fink's Taxonomy of Significant Learning (Fink, 2003) was adopted by AKUSONAM's curriculum committee. This step included ensuring all faculty members received RTT certification as a first step in transforming their understanding of OBE and the learner-centric imperative. Individual course   alignment with Program Learning Outcomes (PLOs) and re-framing Course Learning Outcomes (CLOs) with alignment to OBE-informed pedagogy and assessment methods were undertaken. Furthermore, a QTL_net led workshop at AKUSONAM engaged faculty to redefine and reconcile PLOs with stakeholders preferred graduate competencies, those of national and international nursing regulatory bodies, and AKU's articulated graduate attributes.

To improve the teaching and learning practices of higher education faculty across disciplines, QTL_net offers Teaching Learning Enhancement Workshops (TLEW), enriching faculty's teaching repertoire for implementing OBE. These sessions enabled a critique of

traditional didactic in class teaching/learning methods and clinical rote return demonstrations. TLEW supported faculty to explore emergent strategies and to 'safely' increase competence and confidence in modalities that are requisite in an OBE environment.

Results

As a result of a stakeholder scan, a robust database of relevant stakeholders was developed by AKUSONAM faculty using a participatory diagrammatic approach (Shirey, 2012). The following One Matrix Model (Table 1) served in prioritizing the stakeholders. The database of stakeholders was expanded to include their contact information and their willingness to participate in the study and their interest in future collaboration with AKUSONAM.

Table 1: One Matrix Model for curriculum stakeholders

| Influential Observers (Keep Satisfied)	Key Players (Engage closely)
1. Patients 2. Donors/funders	Senior leadership of the following: 1. Nursing Regulatory Body 2. Nursing & Midwifery Associations 3. Nurse Managers from Aga Khan University Hospital (AKUH) 4. AKUH Chief Executive Officer 5. AKUH Chief Nursing Officer 6. Members from National Taskforce 7. Board of Trustees 8. SONAM Faculty 9. Auditors and QTL_network 10. Simulation Center Head 11. Registrar Working Group

Influential Observers (Keep Satisfied)	Key Players (Engage closely)	
Spectators (Monitors)	Active Players (Keep Informed)	
1. Parents	1. Alumni 2. Students 3. Non-Governmental Organizations 4. Staff nurses/clinical preceptors 5. Competitors 6. Heads of clinical sites 7. Registrar office	

The stakeholders' study informed conceptualization of the inaugural SONAM curriculum framework (Fig 1) serving as a roadmap for implementation of OBE. According to stakeholders, the curriculum outcomes must be based on the University's mission and vision. AKU's mission is based on the four principles of IQRA: Impact, Quality, Relevance and Access, which are foundational for AKUSONAM curriculum framework.

Stakeholders identified core values of the nursing profession represented as 6 C's (Baillie, 2017): Care, Compassion, Competence, Communication, Courage and Commitment. These form the roof of the framework. At the center, the nursing competency framework is supported by the three pillars: a) sustainable development goals b) stakeholder input, and c) rethinking teaching. These three pillars are dynamic and constantly influence the learning outcomes of the curriculum. The left side of the framework represents four important processes that enrich students' experience at SONAM including competence acquisitions through self directed learning, problem based

learning, and applying evidence based practices in patient care. The right side of the framework represents the ultimate desired product (the graduate) possessing the AKU graduate attributes ensuring that all the elements (both implicit and explicit) of the curriculum framework are effectively delivered to the students.

Figure 1: *SONAM* Curriculum Framework
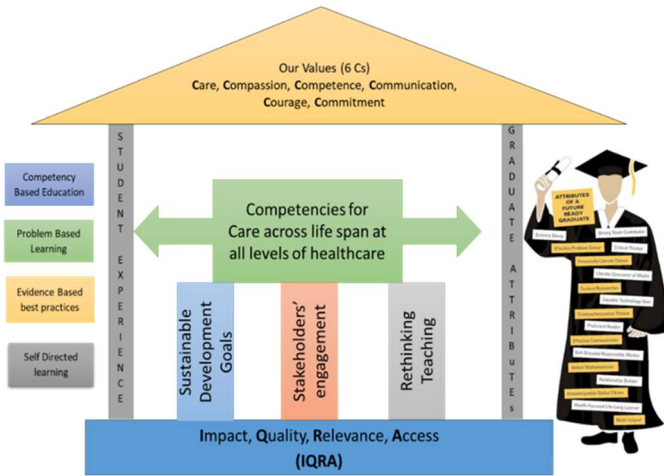
The in-depth understanding of the Dee-Fink Taxonomy of Significant Learning has impacted the teaching culture by moving to a learner-centric approach both in the classroom and in clinical settings at AKUSONAM. Revamping the course grids by aligning course outcomes with strategies and assessments enabled faculty to make conscious decisions regarding teaching assessments. This alignment has impacted students' learning as relevant and, applied, and assessments have become more apparent and transparent.

TLEW led to expansion of the repertoire of teaching and learning pedagogies to engage both faculty and learners The teaching learning

strategies included simulations, case-based learning, student led seminars, journal clubs, roleplays and active learning strategies, ensuring students' engagement across OBE curriculum delivery. Furthermore, TLEW enhanced faculty members' reflective skills, with many becoming fellows of Advance HE and of the Haile T. Debas Teachers' Academy, as indicators of teaching excellence. Table 2 shows the status of the process indicators of OBE implementation at AKUSONAM.

Table 2: Process Indicators of Curriculum Transformation to OBE

Milestones	Status
% of faculty completed TLEW	90%
% of faculty completed RTT	90%
Number of HEA Fellowships	11
Number Teachers' Academy Members	3
Learning outcomes redefined	All courses
Alignment of course assessments and strategies with course outcomes	All courses
Course grids redesigned	All course grids
Transformation of course assessments using blended modality	All courses

Reflection

The stakeholder study findings revealed reflections and expectations from SONAM graduates regarding expectations for contextually relevant content and competencies required by the nursing graduates to positively influence the healthcare system of Pakistan. For example, the stakeholders identified gaps related to the representation and

influence of AKUSONAM graduates at the policy level. OBE can catalyze development of nursing leaders who can, in turn, influence the health system not only at the grassroot levels as frontline providers of care, but also as change agents involving decisions by and for nurses at the policy levels.

However, two major challenges encountered during the stakeholder study were prioritizing the stakeholders and being able to reach-out for data collection. The One-matrix model facilitated prioritizing or positioning them along a continuum. The data collection process was hampered with the unexpected advent of COVID-19. This challenge was mitigated through using virtual modalities for reaching out to the stakeholders both nationally and internationally. The intent is for stakeholder interactions to be embedded as a continuous aspect of our curricular design and evaluation processes.

For the implementation of OBE at AKUSONAM, faculty members were required to transform their existing repertoire of pedagogies. The faculty instituted more active and engaging strategies learned during TLEW and RTT, both in classrooms and clinical settings. The advent of COVID-19 served as a blessing in disguise when all faculty and students were mandated to adapt technology-driven pedagogies. QTL_net played an important role in developing faculty capacity to adapt various virtual tools of teaching and learning for online students' engagement (Rizvi et al., 2022). This was a paradigm shift in teaching and required a change in mind-set. To cater to the needs of Generation-Z students (Tan et al., 2018), the faculty utilized multiple technology-driven teaching

modalities to enhance the student experience. Simulation-based clinical teaching was made an essential part of the clinical courses to enrich students' hands-on experience thereby reducing anxiety in their transition to direct care. TLEW and RTT not only helped in transforming the curriculum but also helped change the mindsets of students and faculty to adopt teaching and learning in a modern and competence-based environment where application of concepts is considered superior to retention and regurgitation of knowledge (Freire, 1996).

At the student level, OBE influenced their approach towards learning, enabling them to gradually take charge of their own learning journeys. For example, content-saturated curriculum expects students to complete time-bound hours of clinical rotations. Irrespective of achieving clinical competence, they used to leave the clinical area once their clinical credit hours were completed. Whereas, in an OBE, outcomes are tied with assessments, hence, we no longer use the clock to determine completion, but ensure the required outcomes are achieved.

AKU continues pioneering reforms for Pakistan's nursing profession, as the introduction of OBE is intended to bring in changes to the national curriculum. This innovation is a step towards international accreditation and benchmarking. SONAM continues to champion change through evidence-informed, impactful and transformative approaches in nursing education.

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Chapter 8

Revolutionizing Nursing Education: The Power of Simulation Based Education

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Situation

The concept of simulation-based education in nursing education emerged in the late 1800s through the introduction of anatomical models, task trainers and demonstration rooms for nurse trainees to practice psychomotor nursing skills such as bandaging, bathing, and mobility needs. Later in 1911, the concept of computerized mannequins emerged. The first adult mannequin appeared and was named "Mrs Chase" and subsequently "Baby Chase" was manufactured for obstetrics and infant care demonstrations. By the 1920s and 1930s, practice equipment, mannequins, and demonstration rooms became the mainstay of nursing schools. However, computerized mannequins remained unaffordable until 1968, when a life-like simulator called

Harvey was produced which can make realistic heart and lung sounds (Singleton, 2020).

This full-scale computerized patient simulator provides a high level of interactivity and realism for the learner. In Pakistan, Aga Khan University introduced this technology in November 2015 with the commissioning of the Centre for Innovation in Medical Education CIME (The Express Tribune, 2015, 2020). In 2020, the Centre became the first institute in South Asia to have been accredited by the Society for Simulation in Healthcare. This began the era of revolutionizing nursing education from low-fidelity to high-fidelity simulation. Hence, the need arose for faculty development, tailor-made curriculum, and pedagogic research. In fulfilling this need, the Network of Quality, Teaching and Learning (QTL_net) played a pivotal role. Subsequently, the AKU- School of Nursing and Midwifery (AKU-SONAM) initiated Simulation-Based Education as a mandatory component of all clinical nursing courses.

Task

This case study primarily focuses on the role of QTL_net in pedagogic research through Scholarship of Teaching and Learning (SoTL) grants (OneAKU, 2023). The process of SoTL involves six steps: frame an investigation question; identify a relevant teaching-learning framework; devise an intervention; conduct an investigation; produce a result with some form of public artifact; and invite peer review (Trigwell, 2021). Invitation through an open and competitive process for grant application motivated nursing faculty at AKU-SONAM to write a research proposal and submit it to the human ethics and grant review

committee. This process also instigated a need for exploring collaborative research opportunities with the International Nursing Association for Clinical Simulation & Learning (INACSL). Hence, the target to meet the best practices for simulation-based education according to the international standards of simulation in healthcare became our goal.

Action

In 2016, four nurse educators from the Aga Khan University were trained at Boston University, USA. The training was funded through the university and some self-financed. Upon their return, these master trainers, trained the other educators. The University's concrete efforts and investment in faculty development, with the QTL_net supportive role via the SoTL grant, revitalized contemporary teaching-learning pedagogies through capacity-building workshops. These, in turn, impacted faculty teaching practices.

In 2020, one of the master trainers received Certification as a Healthcare Simulation Educator from Society for Simulation in Healthcare, and in 2021, enhanced it to advance level certification. The plan is for more faculty to be certified in the future. In 2021, the simulation champion collaborated with the INACSL, which is an association dedicated to advancing the science of healthcare simulation. INACSL trained more nursing faculty, to enhance their knowledge of simulation standards and pedagogies to assist AKU-SONAM in attaining best practices in simulation standards and initiating a simulation-based curriculum.

Simulation-based education has now become an integral and embedded part of clinical courses in nursing. Simulated patient scenarios were developed to hone the skills of providing end-of-life care, which is an emotionally taxing challenge for the care providers (Rattani et al., 2020). The near-to-real experience of end-of-life care skills in the high-fidelity simulation caused few students to become uncomfortable and display an array of emotions. One student was so emotionally charged that the simulation had to be discontinued. Such an outburst of emotions surely certifies realism in high-fidelity simulation. As this pedagogic research received the approval of the university human ethics committee, the participating students entered the research without any coercion; it legally and ethically protected the researchers.

Faculty competency in facilitating and successfully implementing high-fidelity simulation provides learners with a greater emphasis on clinical decision-making and critical thinking skills, allowing them to gain the theoretical and practical experience needed to become competent, confident, and compassionate nurses. It also provided a safe and risk-free environment for learners to practice their skills, so that they can make mistakes, correct those mistakes in real-time, and learn from them, without fear of compromising patient safety. The role of simulation is to enhance cognitive, affective, and psychomotor domains (Hanif & Saleem, 2023). It also provides an opportunity for students to rehearse the clinical management of rare, complex, crisis situations in a risk-free zone, thus, preventing patients from harm (Hanshaw, & Dickerson, 2020). Hence, the QTL_net activities of faculty's professional

learning opportunities engage faculty, generate new learning, and influence faculty practice.

Results:

Aforementioned actions aimed to prepare faculty transform curriculum including the teaching learning pedagogies. The outcome of these preparations is evident through faculty attaining various certifications presented in table 1.

Professional certifications	Number of faculty
Fellows of Higher Education – United Kingdom	13
Members of Haile T. Debas Academy	3
Re-Thinking Teaching (RTT)	36
Teaching and Enhancement Workshop (TLEW)	33
Online Teaching (OTHE)	6
Virtual Reality Simulation (VRS)	35

Number of faculty from Aga Khan University School of Nursing and Midwifery Pakistan, certified in various educational in house and Quality Teaching Learning activities.

New simulation-based pedagogies such as telesimulation, and virtual reality simulation (VRS) were introduced and piloted on approximately 2000 + learners, including nursing students of undergraduate and graduate programs, trainee nurse interns who transit from being graduates to becoming novice nurses, experienced registered nurses in the hospital, and multi-disciplinary teams of home healthcare services. These processes produced the contextually relevant evidence-based

research outputs which are published and presented at different national and international scientific forums (Kurji et al., 2021, & Kurji et al. 2022).

Myriads of studies were conducted to evaluate the Simulation-Based Education integration in clinical education. A study on the impact of high-fidelity simulation on the End of Life positively changed the attitudes of undergraduate nursing students and there was a significant improvement in the negative attitudes of students' post-intervention ($P < 0.05$) (Rattani et al., 2020).

A qualitative descriptive study was conducted to explore the perceptions and experiences of student nurses about palliative care for patients and their families based on a well-developed course with theory, simulation, and clinical training (Kurji et al., 2019). The anecdote from this study affirms students' reflections. Participants shared a lack of comprehensive training in dealing with patients and families undergoing palliation. One student said, "We feel helpless. I mean we do not have that much skill [to give them comfort]". (FGD 1). Another student appreciated the learnings through the palliative nursing course in skill development and stated, "This course was effective to prepare us to deal with end-of-life patients and we haven't had a course in palliative care before this." (FGD 2) (Kurji et al., 2019). Thus, the study reiterated the inclusion of simulation-based education as the impetus to create a paradigm shift with reference to student skills development.

Coronavirus disease (COVID-19) affected face-to-face teaching-learning practices and required a shift towards remote and online

course instruction, and introduced telesimulation (TS), and virtual reality simulation (VRS) (Foronda & Armstrong, 2020). Telesimulation was used to teach 'breaking bad news' in a palliative care module. Participants in this project included simulated patients (SPs), and trainee nurse interns (TNIs). Describing their experiences, SPs shared that they felt sad relating to themselves as a patient with terminal illnesses, and even shared that they were crying in real life and not acting at certain times. Most TNIs shared that TS provided them with an opportunity to learn in a controllable, secure, respectful learning environment (Kurji et al, 2021). Describing their experience of VRS, some of the students (participants) shared that in a real clinical setting, they are buddied with clinical staff, but in VRS they have to manage the total patient independently. These findings implicate building their competency differently. Describing realism, students asserted that in VRS the real-life pressure is missed which they often observe in clinical settings having patients, their attendants, and the overall ward setting (Kurji et al., 2022).

Reflection:

Since 1983, when the Aga Khan University received a charter as the first private university, anatomical models, task trainers and dummy mannequins, were available as low-fidelity simulators in the skills lab, to help learners practice nursing skills before performing on real patients (Rattani, 2020). The transition to high-fidelity simulation in nursing education was through the commissioning of CIME. However, QTL_network's Scholarship of Teaching and Learning Activities (Rodrigues, Bhutta, Salim, Chauhan, & Rizvi, 2019) and pedagogic

research transformed simulation-based education in the university including nursing education.

INACSL's Healthcare Simulation Standards Endorsement is designed to recognize healthcare institutions and practices that have demonstrated excellence in applying all four simulation standards from the Healthcare Simulation Standards of Best PracticeTM (HSSOBPTM) in their educational simulation programs. These are (1) Prebriefing: Preparation and Briefing, (2) Facilitation, (3) Professional Integrity, and (4) Debriefing. The Aga Khan University School of Nursing and Midwifery is amongst the nine nursing institutions globally to have received this prestigious endorsement for 2022 – 2025 (INACLS, nd.). The then Dean, AKUSONAM represented AKU at the INACSL Conference 2022, and stated, "This endorsement by INACSL comes as an important recognition and celebration of the school's commitment to excellence in clinical education, and efforts in maintaining an internationally benchmarked curriculum pertaining to INACSL's Core Four simulation standards," (Aga Khan University, 2023). For renewal of the endorsement, it is required that these four simulation standards be maintained.

This case study presents the process of transforming nursing education with the integration of simulation-based learning. It is an iterative process to strive for continual excellence in nursing education. Expanding on developing contextual case-based scenarios and Virtual Reality Simulations (VRS) are the goals that the faculty are working on.

For that purpose, the faculty is exploring opportunities for grants and research collaborations.

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Chapter 9

Peer Assisted Learning for Student Engagement at The Aga Khan University Medical College

Hasan Salman Siddiqi, Rehana Rehman, Faiza Alam

Situation

A spiral curriculum refers to a curriculum design in which core material is re-visited at periodic intervals for reinforcement of previously learned concepts (Densen, 2011). At Aga Khan University Medical College (AKU), a spiral curriculum was adopted in 2001 where Problem-Based Learning (PBL) became the primary teaching mode. During the first two years at the AKU Medical College, slow-releasing PBLs twice a week are complemented by interactive lectures, tutorials, and laboratory sessions in the system-based modules. PBL is student-led activity in contrast to the other teaching modalities, whereas faculty members lead other sessions. Likewise, laboratory sessions held at the Multidisciplinary Laboratory of AKU, are also faculty-led. The basic information is imparted by the faculty members which is followed by

division of students into small groups for hands-on practice under the supervision of well-trained staff. Pharmacology and Physiology lab sessions were conducted in the same manner but some faculty members of respective disciplines were enthusiastic to introduce innovations in the mundane lab sessions to address lack of interest observed among students. Student-led active learning techniques were required for better student engagement and for achievement of learning outcomes.

Task

After attending the "Teaching and Learning Enhancement Workshop" (TLEW) of AKU's Network of Quality, Teaching and Learning (QTL_net), professional development achieved by teachers was evident with modifications in teacher classroom practices leading to a positive change in student learning outcomes enhancing the teacher's beliefs and attitude. The importance of innovative teaching methods was recognized to enhance student engagement and ensure the conveyance of pertinent concepts in a clear manner.

A lack of student engagement in Undergraduate Medical Education (UGME) lab sessions was noticed. Some students did not take much interest in the practical and hence remained deficient in the underlying theoretical concepts of experimentation. This deficiency was to be addressed to enhance student attention and provide an encouraging environment for learning concepts. Peer Assisted Learning (PAL) was identified as an effective method to address this need.

PAL was intended to promote student engagement for active experiential learning and a better understanding of knowledge, by creating an informal student-friendly learning environment (Capstick, 2004). PAL's effectiveness as a teaching method is based on the idea that cognitive congruence between same-level PLs and Pls fosters greater assimilation of material being taught (Ten Cate & Durning, 2007). The model was also expected to inculcate professional attitude and leadership potential in the Peer Leaders (PLs) and at the same time augment the psychomotor proficiencies and intellectual growth not only in PLs but also in Peer learners (Pls). Thus it aimed to revive students' engagement in lab sessions and the underlying theoretical concept.

Action

To put learning into practice after what we learned from faculty training workshops organized by the Network of Quality Teaching and Learning (QTL_net) about learner engagement, we selected the PAL experiential learning model for basic sciences teaching in undergraduate medical education. Our goal was to improve student engagement along with reasoning, critical thinking, leadership abilities and psychomotor skills of undergraduate medical students. To achieve these objectives, we were fortunate to obtain a grant through a competitive process from the QTL_net Scholarship of Teaching and Learning Award (2016).

We designed a mixed method study protocol for introducing PAL in selected Physiology and Pharmacology laboratory sessions of Gastrointestinal Tract (GIT) module of Year 1 Bachelor of Medicine

Bachelor of Surgery (MBBS) class. Subsequently, we selected 14 PLs through open invitation, then shortlisted 10 PLs through a criterion based on merit. Prior written consent was taken from students for participating in PAL. In the developmental phase, these 10 PLs were trained through a workshop that comprised of pre-test, initial orientation, demonstration by faculty members (Physiology/ pharmacology) and performance assessment in a group activity followed by posttest (Rehman et al., 2018). In the implementation phase, during all laboratory sessions, a batch of 50 students was divided into two groups; A and B. Those who consented were placed in group A (Pls), taught by PLs while other students were allotted group B and were taught by medical technologists. At the end of each lab session, the knowledge gained by students of both groups was assessed by using "Kahoot" a digital learning platform that incorporates games-based quizzes. Previously designed and validated feedback questionnaires were filled by PLs and Pls. In addition, three focus group discussions (FGDs) were conducted separately with the facilitators, PLs and Pls, with participation of three, ten and nine participants respectively.

Results:

The attributes gained by various stakeholders in this project can be classified as under:

 Students Achievements:

*(a) Peer learners***:** High level of student engagement was attained as they were very interested to see how their class fellows (PLs) will teach them. They were not reluctant to ask questions, rather they came

prepared to ask a lot of questions! This led to better learning and clarity of concepts which was evident from the "Kahoot" scores. Group A (Pls) performed much better than group B. Quantitative data was analysed using SPSS 23 while in qualitative evaluation, themes were derived from FGDs. Pls (74.2%) agreed that PLs were chosen appropriately for the PAL session, while 62.9% agreed that the topics taught, and the activities carried out in the PAL session were appropriately selected. In FGDs they expressed their satisfaction with this method of teaching, and some said that it was fun to learn in this way. Pls echoed; *"We didn't have to hesitate to contact them (PLs) at all. As a result, there was a sense of comfort in the group". "We were not afraid of asking questions without the fear of sounding stupid." "We're in the same age group, we can understand each other and that is how we can communicate and become more accessible to one another".* Thus, our model correlated with Guskey's Critical Levels 1 and 2 of Professional Development Evaluation (Guskey, 2002).

(b) Peer leaders: PLs developed deeper understanding of the concept and cognitive gain as they thoroughly prepared theoretical and practical aspects of the topic allocated to them. They experienced a flavor of how to teach, communicate, develop their creative and critical thinking and refine their psychomotor skills. These attributes are in line with the set of attributes that AKU seeks to see in all of its graduates. Some PLs participated in data analysis, presentation in conferences and co-authored manuscripts (Alam et al., 2020; Siddiqi et al., 2020).

Faculty achievements:

Critically reflecting on this teaching innovation and developing their teaching dossiers aligned to the PSF (Professional Standards Framework) assisted some faculty members to acquire Fellowship of Higher Education Academy (FHEA-UK) and membership of AKU Haile T. Debas Teachers' Academy. This enabled faculty to gain academic promotions.

Peer leaders' long-term achievements:

The teaching experience gained through PAL helped some PLs in starting their career with a teaching job. The confidence gained, communication and presentation skills learnt in PAL were helpful in effective teaching; and correlates with Guskey's Critical Levels 4 and 5 of Professional Development Evaluation (Guskey, 2002).

Reflection

Faculty: The facilitators recognized the importance of the PAL model of teaching in establishing a conducive learning environment with active engagement and participation between PLs and Pls for critical thinking and better understanding of knowledge. PLs worked hard to utilize their full potential and Pls got engaged in learning with their class mates. The model developed professionalism and leadership traits in the PLs that will be very useful if they wish to take up teaching careers. One facilitator remarked; *"The training sessions, workshop, pre-run and actual session taught and reinforced time management"*.

Peer learners (Pls): Pls exhibited their excitement and engagement to participate and indulge in discussion with the PLs who were their

classmates. They were curious to see how their classmates will perform as teachers! Some had even prepared questions to see how the PLs would explain different concepts.

Peer Leaders (PLs): PLs considered the PAL model as a unique opportunity to act as teachers which helped in understanding the perspective of teachers. They mentioned that the training provided by the faculty covered both theoretical and practical aspects of the topic with provision of learning resources. They were able to polish presentation and communications skills so as to face the students (Pls). They reflected; "*PAL was a very interesting and unique experience of medical college, it helped me think as a teacher, master the content, and appreciate the extensive effort that goes in every single didactic*".

" *I feel like we need more modern ideas like this in teaching and education to bridge the gap between the teacher and the student.*"

"*Peer Assisted Learning was my first exposure to teaching. Its positive effects and experience led me to start my career with an academic position, I am working as a Teaching Associate for MBBS students at Biological and Biomedical Sciences department, Aga Khan University. The experience helped me in getting this job. I see myself applying the techniques I learnt as a PL. My students seem to appreciate me discussing the confusing topics in more detail*".

Introduction of PAL in the medical curriculum was a novel change to the teaching culture of AKU because for the first-time students (PLs) taught their class fellows (Pls). It was a step forward in the direction of student-

based learning where they took responsibility for their own learning. It promoted active engaged learning, better understanding of knowledge and active participation between both groups of students.

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Chapter 10

Enhancing Clinical Learning during COVID-19 with Virtual Simulation

Shanaz Cassum & Nasreen Rafiq

Situation:

The COVID-19 pandemic had a significant impact on both healthcare and education sectors worldwide. The closure of schools, colleges, and universities forced educators to quickly shift to remote teaching, posing challenges for both teachers and students who were unprepared, and lacked resources for online education (Adnan & Anwar, 2020). At the Aga Khan University, School of Nursing and Midwifery, Pakistan (SONAM), the faculty swiftly transitioned to an online teaching platform to complete the nursing curriculum for the semester. They adopted various online platforms such as MOODLE, Zoom, and Microsoft Teams to refocus the lecture-based theoretical outcomes through synchronous and asynchronous modes of education. However, the biggest concern for nurse educators was to prepare nursing students for actual clinical practice, as lockdowns made it difficult to provide hands-on training at the university's Centre of Innovative Medical

Education. Although simulation-based education, using high fidelity simulators and standardized human patient had been in use at SONAM since 2015 to prepare nursing students for clinical practice, the lockdown situation called for a different approach.

To tackle this challenge, the Quality Teaching and Learning Network (QTL_ Net) conducted various capacity building online workshops on 'Rethinking Teaching,' 'Virtual Teaching' 'Online assessment,' and 'Teaching and Learning Enhancement Workshop' for faculty. These workshops inspired us to search for some alternative software that is relevant for clinical education and enable nursing students to continue their learning safely without risking the safety of patients. Use of CyberPatient software to improve healthcare professionals' knowledge and skills of history taking, and client assessment and management skills is not a new phenomenon in developed countries. However, in Pakistan, it became the most sought-after alternative simulation-based technique for learning clinical skills amidst the pandemic, owing to its free access amid university campus closure.

Task:

Taking a patient's history or conducting a physical examination is the first challenging clinical encounter with patients which contributes to stress and apprehension among health professionals (Weaver, 2011). Using simulation-based training including role playing, videos, human simulators, and standardized patients, is commonly used to prepare students for patient engagement (Brewer, 2011). In nursing education, use of human standardized patients (SPs) for learning history taking

skills and physical examination, are most common, which was not possible amid Covid – 19, with the campus and facility closure and faculty, staff, Standardized patients, and students being in lockdown (Brewer, 2011; Plackett, et al. 2020). Thus, the evolution in digital education expanded possibilities to explore this virtual simulation strategy to promote students' clinical skills learning (Weaver, 2011).

CyberPatient is a virtual hospital that allows students to practice history taking, physical examination, diagnosis, treatment, and follow-up with patients anytime. Students can practice these skills multiple times, without any risk, at their own pace, receive feedback and enhance their proficiency and self-confidence before dealing with live patients, whether standardized or real, filling the gap between theory and practice (Qayumi, 2020). Research shows that CyberPatient is a cost-effective tool compared to standardized patients for learning history taking, examination and delivery of care for health care professionals (Farahmand, et al. 2020).

Second year students enrolled in Health Assessment and Adult Health Nursing courses need to learn and practice their history taking and examination skills, before stepping into the hospital environment. Amid the pandemic, virtual simulation became the most demanded for and expensive teaching and learning method to help nursing students improve their clinical knowledge and reduce errors. Fortunately, CyberPatient became a globally accessible, open software, during COVID era, allowing free access to a library of over 120 virtual patients' cases to practice and learn from. These virtual patients presented with

complaints from various body systems, allowing the learners to engage with cases that matched their desired skill sets.

Action:

Using the Analysis, Design, Development, Implementation, Evaluation (ADDIE) () model of instructional design (Robinson & Dearmon, 2013), we piloted CyberPatient virtual simulation with virtual case discussion with second year nursing students to facilitate their clinical skills learning. We *analyzed* the problem that prior to the pandemic, students had already completed the theory-based course objectives and were looking forward to going to skills lab and hospitals for clinical based experiences when lock down ensued. We considered the benefits of virtual CyberPatient software for enhancing students' clinical knowledge, preparedness and confidence, instead of feeling constrained and waiting for a face-to-face encounter with real standardized patients. It seemed an ideal time to try out CyberPatient virtual simulation to help students learn and practice clinical skills, while being at home.

We *designed* specific learning outcomes from the two nursing courses and aligned them with available CyberPatient cases from its library and identified the relevant level of skill set for second year students. Level 2 seemed suitable for undergraduate students as it was based on moving from simple to complex assessment with increasing level of complexity in terms of decision making and clinical reasoning. To *develop* a contextual understanding of the virtual software, we used the software and engaged ourselves as students. We identified that the

available software is designed for medical students and uses a universal disease model and medical diagnosis. Thus, to make it relevant for nursing students, we redesigned a template for nursing students, where a list of nursing diagnoses for identifying a client's problem was added.

For *implementation,* 112 students were instructed to enroll in the CyberPatient software and engage with 4 assigned case studies, to practice and improve their clinical skills independently, while being at home. The idea of repetitive learning was reinforced so students understand how effective the tool is to help improve their clinical skills, critical thinking, clinical judgment, and decision making. To e*valuate* the learning, students submitted a client documentation record and nursing care plan for a virtual client. They then had a virtual discussion with a clinical faculty to receive feedback and identify their learning needs. The faculty graded the report and the care plan and gave follow-up assignments to help students apply learned knowledge and skills to patient situations. assignments for practical applications. For example, in a case study on pancreatitis, a student drew 9 quadrants of the abdomen on the whiteboard and explained the association of pancreas to other abdominal structures along with the passage of pancreatic juice to different organs.
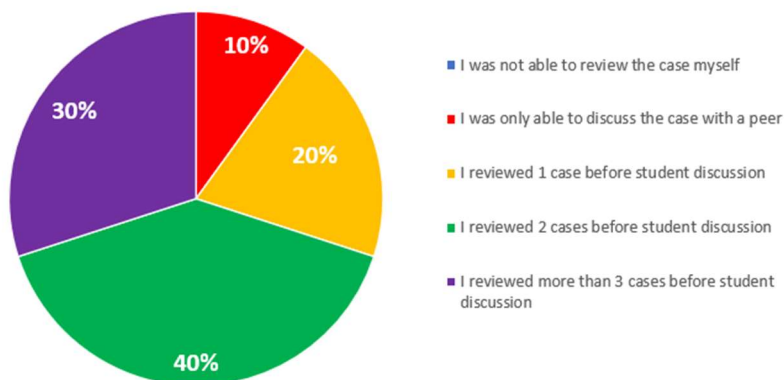
Result:
Combining the CyberPatient virtual simulation software with virtual case discussions proved to be an effective educational strategy for nursing students. They reported improvement in conducting nursing histories and examinations, making nursing diagnosis and planning

interventions for various clients. Students found the approach interesting and engaging and it contributed to improving their clinical reasoning, critical thinking, confidence, and motivation towards clinical practice. Students recommended integrating this virtual approach as a regular part of clinical teaching even post pandemic as well. For example, one student stated, "Please continue this! It was helpful. Even when things go back to normal this should be incorporated as a practice, as not only we can perform but also get feedback and grades on how to improve." Another student added, "This is a good alternative strategy and discussion with faculty is like cherry on the top."

Faculty members also appreciated this virtual teaching strategy, as it seemed a good way to enhance student engagement and teach critical thinking and decision-making skills before interacting with real patients. One faculty stated that "it was a student-directed approach which connected the students with the patients virtually. It gave them the feel of clinical discussions and gave us the idea about the standing of our students prior to the clinical rotations." This strategy can also be used to evaluate students' knowledge and skills in nursing assessment, care planning and documentation. Most faculty members believed that this was a good alternative for clinical discussion and conceptual learning during the pandemic. A faculty recommended that "For future, this strategy can be converted into a blended activity for students to interact with virtual patients while sitting at home, and then have face to face discussions with faculty, to understand learner's assessment and care planning skills". Most faculty were enthusiastic to use this strategy

post pandemic to prepare their students for clinical practice. 70% of faculty members reviewed more than 2 case studies to get an idea of the virtual patient scenario, and none of them were unable to review the case studies (see Figure 1)

Figure 1: Faculty Engagement with Case study

- I was not able to review the case myself
- I was only able to discuss the case with a peer
- I reviewed 1 case before student discussion
- I reviewed 2 cases before student discussion
- I reviewed more than 3 cases before student discussion

Reflections:

The CyberPatient virtual simulation strategy combined with case discussion was effective in improving nursing students' preparedness for clinical learning, including patient assessment, diagnostic reasoning, critical thinking, and planning nursing care. However, technical, and educational glitches, such as poor internet bandwidth, and limited time for faculty and student training, were experienced due to impromptu implementation of the strategy. This resulted in a lengthy completion time, of 4-6 hours per case study and required several reconnections for retake.

As both faculty and students were new to the case studies, queries often took longer to be answered by the faculty, and the faculty and students both learnt through trial and error. The case studies focused

more on the medical science and pharmacological management of patients, which made it challenging for students to redirect their thoughts towards nursing problems and interventions. Additionally, nurse patient communication in English seemed out of context, thus creating another cultural challenge for students to match it to the reality of taking history from a client in Urdu language in most Pakistani hospitals.

Our gratitude is to QTL_net, as through their workshops, we learnt how to redesign teaching and ensure constructive alignment between learning outcomes, teaching learning activities and assessment. We created specific case studies that focused on contextual nursing data, and nursing diagnosis to align the course learning outcomes with learning activities. The faculty guide with probing questions was prepared to assist clinical faculty in case discussions. In addition, collaboration with CyberPatient to tailor the virtual software and include specific case studies for nursing and allied health disciplines was also suggested to the founder of CyberPatient.

To summarize, the pandemic has highlighted the need for evolution in pedagogical modalities and use of virtual simulation has opened various avenues to improve student learning outcomes using evidenced based best practices in simulation-based nursing education in Pakistan. We recommend incorporating CyberPatient virtual simulation strategy as an asynchronous activity in clinical courses, in post pandemic times as well. Sharing lessons learned and challenges faced during implementation will guide other nursing schools in utilizing the

software effectively post-COVID-19 to improve clinical learning and enhance nursing student engagement.

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SECTION 3

FACULTY- LED LOCALISED INTERVENTIONS

Chapter 11

Transforming Community Health Nursing Curriculum through Simulation

Saleema Gulzar, Yasmin Nadeem Parpio, Salima Farooq and Sohail Nasir

Situation:

The Aga Khan University School of Nursing and Midwifery (AKUSONAM) envisions preparing nursing graduates to address the healthcare needs of the nation and the mass population. Healthcare has undergone a paradigm shift in healthcare provision from hospital to community settings (Gray, Grist, & Race, 2016). It is expected that learners will work with individuals, families, and communities across the continuum of health care. They respond to specific health needs utilizing a planning cycle including community assessment, planning and intervention, and evaluation in diverse cultures. While doing so, they face major challenges such as safety issues, language barriers, uncertainties, political conflicts, lack of human and funding resources, and limited opportunity to deal with real-life situations (Farooq et al, 2020; Johnson et al., 2023).

A systematic review of simulation in community health nursing courses depicted active learning, collaboration, critical thinking, teamwork, and communication skills. (Aslan et al, 2021). Thus, it is essential to adopt innovative teaching strategies to equip learners to work in communities or situations including disasters and pandemics. On the contrary, all the learners do not get the required exposure to dealing with such scenarios during their course of study or if they do, they are not fully prepared. Considering the current educational system, simulation-based learning was introduced for the very first time in community health nursing curricula of undergraduate programs as a solution to provide learners with a variety of exposures, which will be a challenge to achieve in real life.

Task

The Aga Khan University (AKU) nursing education aims to enhance the quality of life in low and middle-income countries by providing quality education within the healthcare delivery system. The goal of the CHN course is to equip learners with lifelong learning opportunities that enable them to address the population's health needs. For that, they must possess adequate clinical skills and competencies to manage diverse population health care requirements (Murray et al., 2019; Hosseinnejad et al., 2022). Keeping in mind the goal of community health nursing, the group of experts at AKUSONAM proposed a novel idea of simulation-based learning. This innovative strategy enabled students and empowered them to cope with challenges in the community health nursing curriculum (Hoffman & Argeros, 2021).

Although simulation has been implemented in many other courses at AKU it has not yet been tested in the CHN curriculum. The Network of Quality Teaching and Learning (QTLnet) has played a significant role in building the capacity of educators in experiential learning. After attending their flagship courses of the Teaching and Learning Enhancement Workshop (TLEW) and Rethinking Teaching (RTT) course redesign workshop, both part of the Advance HE accredited CPD scheme, faculty members were determined to incorporate the principles of experiential learning through simulation pedagogy.

Action

Simulation-based teaching provides vigorous clinical exposure via the systemic steps of pre-briefing, exposure, and debriefing. In (**pre-briefing phase**) **phase I**, the contextual case scenarios were developed by expert faculty members who have been teaching the course for a decade now.Establishing a community setup was one of the prerequisites to implementing this initiative. Hence, a simulated village set-up was created after careful selection of physical space within AKU-SONAM. Based on the scenarios, key people were recruited as simulated clients and trained as per the requirement of the scenarios including community leaders, (Vadairas) Community Health Nurse (CHN), government officials, and Religious Leaders (Molvi), etc. They were briefed before the actual simulation with the learners. The script was provided to the simulated clients and a mock simulation was carried out as a rehearsal. The learners were briefed about the session explaining the process and purpose of the simulation activity.

In (exposure phase) phase II, the actual simulation sessions were implemented with the learners. A systematic approach and process were carried out comprising a simulative session of 45 minutes. In this phase, conflicting situations were created to expose the learners to deal with real community problems. As an example, the deliberation between key stakeholders such as a religious leader (Molvi) and a health community leader about family planning made them learn about negotiation skills and conflict resolution. The learners were grouped into smaller groups of five students per session for the simulation session.

The (debriefing phase) phase II allowed students to self-reflect deeply upon their performances and gain meaningful insight into the key concept and ways of addressing them while working with various stakeholders in the community settings. The faculty members watched the live video identifying teaching moments to be utilized in the debriefing session. The selected video clip was revisited during the debrief session to reflect on and self-assess performance. The debriefing session encouraged learners to reflect and share their perspectives on what worked and what did not and how they can act differently if a similar situation arises in the future. This was followed by participants' evaluation of the entire simulation exercise.

Results

The integration of simulation in the community health course proved to be a vital intervention to enhance learning. The performance of students in the real priority setting with the community stakeholders

significantly improved. The three significant areas that had substantial improvements through the simulation-integrated course delivery were the organization of activities, critical thinking, and confidence in real community engagement situations.

It was noted by all the course facilitators that the students were more organized than before in real community engagement scenarios. The presentation of the problem list, taking stakeholders' views, and allowing the stakeholders to discuss and reach a consensus on a single need-based project, all became substantially smoother and easier than before. These sorts of situations make students think 'outside of the box', to communicate in a way that brings them to a consensus, while simultaneously respecting the stakeholders and clarifying societal myths. As a result of this activity, the timid learners also came to the forefront with confidence and enthusiasm.

Participants' views are as follows:

"The use of simulation is an innovative teaching strategy which created student-centered learning and endorsed students to learn in a setting similar to the real world before their clinical exposure and bridge the theory-practice gap" [Participant, 01]

Another learner verbalized that:

"Simulated learning in CHN course has ultimately provided the students with an experience to practice their skills and gain confidence before being subjected to the actual environment". [Participant, 02]

Reflection

The simulation exercise received promising results in the CHN course. The learners and facilitators recognized this as an impactful innovation that led them to participate in the real environment and improve their understanding of CHN key concepts. Most learners found simulation a very useful and helpful experience. Most importantly, they were content to integrate the learned theoretical concepts into practice. The learners were actively engaged in learning through a reflective process and acknowledged that this activity enhanced their confidence level to be able to work in a unique and complex community setting. Furthermore, it augmented their analytical thinking to address the challenges of community and working efficiently in diverse cultural contexts.

The course team also adapted and brought the whole simulation exercise online during the pandemic. Although the online experience was worthwhile, technological glitches caused disturbance as well. These technological glitches were because the simulated community stakeholders were connected from a distance and some of them did not have adequate internet connectivity. The CHN course team also found that the delivery of teaching has improved to a great extent via simulation. As an example, in a debriefing session of simulation, facilitators were able to engage course participants by posing reflective questions. The simulated village set-up, formulation of practical scenarios, and capacity building of course team members, all have enhanced the rigor of teaching and upgraded the curriculum. A huge

impact is that this strategy is now an integral part of the CHN undergraduate curriculum and hence it is sustainable.

The professional development preparation by QTLnet assisted faculty members to achieve the highest standards of teaching and learning through inclusive teaching pedagogy, and critical thinking, It is equipped to exercise the best teaching and learning, and scholarship. The team of faculty members involved in this innovative experience were recognized for their contribution to prestigious academic achievements/honors such as Haile T. Debas Teachers' Academy and HEA fellowship, both aligned to the Professional Standards Framework (PSF). This is just the beginning and experiences gained from this will pave the way forward for the community health nursing curriculum.

Conclusion:

The integration of simulation-based learning in the CHN curriculum has transformed the teaching and learning experience for students. This chapter highlights the positive outcomes of simulation, including improved critical thinking, confidence, and the ability to address community challenges. The success of this initiative has paved the way for further enhancements in the community health nursing curriculum, setting a precedent for future innovation in nursing education. The simulation exercise proved to be a valuable and impactful innovation in the CHN curriculum. Learners and facilitators recognized its potential to enhance understanding and application of key CHN concepts. The simulation exercise was adapted to an online format during the pandemic, presenting additional challenges. However, the delivery of

teaching improved, and the simulation strategy has become an integral part of the undergraduate CHN curriculum, ensuring its sustainability.

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Chapter 12

Authentic, Humanistic and Remote Assessment in a Nursing Course at The Aga Khan University, Pakistan

Shanaz Cassum & Zeenar Salim

This case study describes the experience of redesigning online assessment for an undergraduate lab-based nursing course when the instruction shifted to online during COVID - 19 pandemic.

Situation

The Aga Khan University (AKU) is celebrating its 40th anniversary in 2023, becoming the first private university to receive a charter from the Pakistan Government in 1983 (website). The School of Nursing and Midwifery (SONAM) currently offers three undergraduate programs, a master's, and a PhD program in nursing. In 2013, the Network of Quality, Teaching and Learning (QTL_net) was instituted to support faculty development and promote a quality student learning experience. QTL_net provides an enabling environment and support to AKU faculty in an inclusive manner through a range of workshops,

seminars and bootcamps on teaching, learning and academic quality enhancement (website).

In March 2020, the Higher Education Commission of Pakistan directed all universities to move online for public safety in response to COVID – 19. While faculty members' prior training in blended learning helped them pivot theoretical courses to online, teaching and assessment of clinical and lab-based courses was a continuing challenge due to COVID -19 imposed social distancing protocols, campus closure, lack of technological devices, and unsteady internet connections at students' and faculty's homes (Cassum, et al, 2020). Limited access to information technology resources, power outages, and poor internet connectivity continued to impact remote teaching, especially for students from low and middle income and/or living in remote areas of Pakistan. Implementing online assessments was an even greater challenge. While students in big cities had better internet access, around half of the undergraduate students, returning to their homes in remote northern regions of Pakistan, struggled.

Task

Faculty development in higher education in low- and middle-income countries is evolving, and there is an ongoing need for updating technological infrastructure (e.g., poor internet connectivity) and pedagogical skills to teach online (Al-Taweel, et al. 2020). During covid, issues related to access and quality faculty development were more prominent, particularly in the global south (Kakepoto, et. Al., 2021).

Although SONAM faculty had prior experience in blended instruction, they needed support to teach fully online. QTL_net responded by offering capacity-building workshops on online teaching and assessment to equip faculty with e-learning tools and managing online instruction.

SONAM undergraduate nursing curriculum committee identified the need for designing authentic and humanistic assessments and jointly conducted a workshop with QTL_net. Authentic assessments are performance tasks that engage students in demonstrating their professional skills (Wiggins, 1990). Humanistic assessments take into consideration the students as a "whole being" with their personal traits, goals, culture, challenges, and contexts to humanize the instruction (Dahlan, et al, 2023). The workshop used Walker's nine principles (2007) coded with the acronym ACT-FAIREST to help faculty design authentic, humanistic, and remote assessments for diverse and distanced students enrolled in undergraduate nursing programs (Rizvi, et al, 2022). Faculty worked in their teaching teams to explore how to design assessments that provide flexibility to students with low or high-internet bandwidth situations.

Action

The Health Assessment course is an undergraduate nursing course focusing on developing history taking and physical examination skills of adult clients. Specific skills include history taking, and performing physical examination using appropriate examination techniques, differentiating normal from abnormal findings, and documenting

findings. Pre-pandemic, the course used simulation-based education using standardized patients in lab settings for developing students' history-taking and physical examination skills. Theoretical concepts were covered in a blended mode, with face-to-face class discussions following asynchronous activities in a virtual learning environment. Students practiced history taking and client systematic examination (heart, lungs, eyes, and ears) in a skills lab and performed assessment on standardized patients using a checklist.

Additionally, preparation for end-of-course performance exams were facilitated through demonstration videos and mock-exams. For summative exams students were evaluated in a performance-based exam, where trained standardized patients acted as real clients, and students demonstrated how to gather history and perform systematic examination for a specific complaint. A checklist was used to evaluate students' performance and the written account of their findings. Individual feedback and grades were shared with the student on the course site.

Learning from the workshop and reflecting on the unfolding covid situation, the faculty redesigned the instruction and assessment pedagogy in the Health Assessment course to address social distancing requirements posed by the pandemic.

A vodcast / podcast-based performance exam was used to assess and evaluate student learning outcomes. Faculty redesigned instruction and assessment to suit the circumstances (Guskey's level 1 and 2), implemented revised instructional and assessment strategies (Guskey's

level 3), and engaged students with the content and assessed them as they demonstrated achievement of learning outcomes (Guskey's level 4 and 5) (MacCormack, et.al, 2018). The ACT-FAIREST[2] principles guided faculty to design authentic, humanistic, and remote assessments for distressed, distanced, and disconnected students enrolled in the Health Assessment course.

Results

With the onset of COVID pandemic, the theoretical component of the Health Assessment course was quickly adapted to a synchronous online mode using MS Teams. However, for practical and skill-based learning, the faculty created virtual learning labs that allowed students to learn and practice body examination in breakout rooms. Students interacted with their teacher and peers, where they were shown a video demonstrating physical examination of a body system. Subsequently, students were engaged in practicing assessment techniques (such as thorax examination) on a family member, or a simulator developed at home (shown in Fig 1). Then, the peers and teacher provided feedback to the students on their performance using a checklist. These weekly lab sessions prepared students for the summative performance examination.
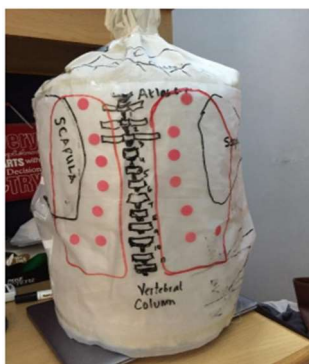
With continued pandemic-forced lockdown situations, the summative exam could not be held on campus. Instead, faculty designed online assessments and 114 second-year nursing students achieved the learning outcomes, despite all the challenges posed by the COVID-19 pandemic. Faculty assessed students' competencies in conducting client assessments and assisted students through providing constructive feedback, despite being in lockdown with campus facilities closed.

Four specific accommodations were made to enhance the flexibility and authenticity of the performance exams such as choice in body system for assessment, use of alternate equipment, submitting via various methods, and type of submission. First, students were given the choice of body systems to be assessed. For example, students could

select any one system from either sensory-neuro, heart and lungs, and eyes and ears for the performance-based assessment. Second, they were given the choice to exhibit performance through a vodcast of 5 minutes, or a podcast with 25 pictures using the assessment guidelines. Flexibility in assessment modes was provided to accommodate students who did not have access to technology or steady internet. Third, students were encouraged to use alternate equipment in the absence of medical equipment (such as penlight, stethoscope, tuning fork, tongue blade, and reflex hammer).

Students created substitute items to depict the required equipment. For example: students alternated stethoscope with earphone strings glued with a bottle cap; for an ophthalmoscope; used a slim deodorant bottle and taped a spoon on it; for a tuning fork, use a face massager or use a pen and a fork taped on it; for tongue blade, use the backside of a disposable wooden spoon. Lastly, based on poor connectivity and low internet bandwidth circumstances, students were given multiple options to choose a client (from home, neighbor, community setting), conduct their performance exam, and submit either by (a) uploading the video on the virtual learning system, (b) sharing via We Transfer or WhatsApp, or (c) mailing the USB to the campus (Fig 2).
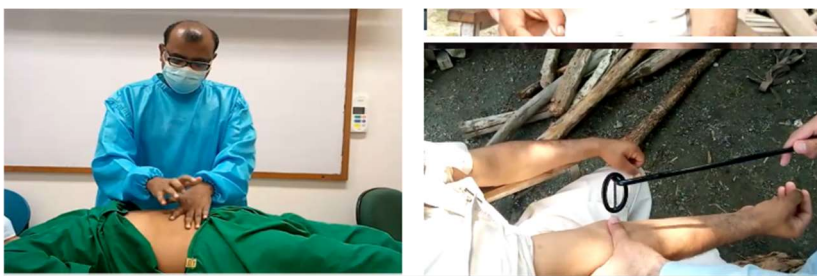
Reflection

Reflecting on our experience of redesigning assessment for the Health Assessment course, we take pride in using humanizing and authentic approaches to accommodate students' needs and provide them with opportunities to demonstrate their learning. While we cherish the flexibility that we provided to the students in distressing times, we faced multiple challenges in accommodating and managing students' submissions across multiple platforms. Faculty members had to connect with individual students to identify the platform where they submitted their assignments as they were scattered across different platforms. Although providing choices was challenging, it was satisfying to see students' resilience and creativity in pursuing alternate learning spaces and resources to complete the assessment.

We learned that flexibility is essential in accommodating students' needs and circumstances, particularly in situations like a pandemic that requires rapid changes in instructional mediums. Institutional support is essential to enable faculty to make quick yet effective changes. This includes providing sustainable technological resources and infrastructure, instructional design support, on-the-job training to make adaptations, and flexibility to work-from-home, where needed.

We assessed students' virtual performance exams via vodcasts or podcasts, encouraging the use of alternative resources, humanizing the assessment tasks, considering students' context and at-home resources. We provided four accommodation choices to ensure authenticity and humanism. While some may question the authenticity of flexible modes of assessment, it is clear from multiple studies that student-centered and flexible assessment assists students' in sharing their voice and empowers students to regulate their learning and assessment process (Wanner, Palmer, & Palmer, 2021). Moreover, adapting flexible and low-bandwidth assessment options are central to accommodate differentiated needs of the learners and social and financial inequities students may encounter due to living in resource constrained environments (Jankowski, 2020). We also found that gathering feedback from students helped us design assessments that were both flexible and effective. Implying that deep student-teacher relationships are crucial for success; a faculty member shared her sense of pride.

This remote teaching and assessment endeavor, being our first time, was very challenging with many hiccups, but on seeing students' vodcast of performance exam, we can confidently say that virtual lab strategy was successful strategy to teach assessment skills and we achieved that learning outcome. The valuable remote teaching experience has given us more insight into how we can do it better next time, if we continue virtual teaching and assessment, and cannot meet face to face on campus. Bravo to our resilient students. (Faculty Reflection, August 23, 2020)

Despite initial doubts from faculty colleagues, we demonstrated the possibility of conducting authentic and humanistic assessments in a lab-based course during challenging times. Our success inspired other faculty members to adopt similar strategies. For example, the Adult Health Nursing team used virtual viva using CyberPatient case studies to ask oral questions via Zoom. Another example is from the Teaching and learning principles course, whereby faculty used a vodcast presentation to collect evidence for conducting a teaching session. The online assessment workshop helped us design fair, authentic, innovative, and virtual assessments relevant to course learning outcomes, using the ACTFAIREST[2] principles. We revised existing guidelines and rubrics to assess students' performance virtually. These creative instructional approaches are a living evidence of student, faculty, and faculty developers' partnership, resilience, and devotion.

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Chapter 13

Healthcare Research Workshops in Developing Countries: A Peer-led Model.

Russell Seth Martins, Huma Shoukat Ali, Syeda Sadia Fatima

Situation

In Pakistan, as in other lower-middle-income countries (LMICs), both the quantity and quality of healthcare research leaves a lot to be desired (Ghaffar, Zaidi, Qureshi, & Hafeez, 2013). This anomaly arises from a host of factors, ranging from a lack of financial support to a shortage of physician-scientists and inadequate research training and mentorship (Khan, Khan, & Iqbal, 2009). While junior faculty and students frequently have ideas for potential research, they are often intimidated by the process of conducting research, minimal guidance, and the struggle to find mentors. To address this the authors set out to introduce research capacity building workshops, courses, and mentorship to medical/nursing students and junior faculty from the Society for Promoting Innovation in Education (SPIE) platform. Since the inception of the training series in 2017, SPIE has offered more than 10

workshops and mentored more than 600 students across medical institutes in Pakistan. Our trainees have presented award-winning oral and poster presentations both at national and international avenues and are actively involved in numerous scholarly activities. The design of these research mentorship workshops (RMWs) was based on the experiential learning the senior author acquired from her interaction with QTL_net in terms of how to develop communities of practice around teaching excellence and scholarship of teaching and learning.

Task:

Peer facilitation is modeled in all workshops/ courses offered by the QTL_net such as the Teaching Learning and Enhancement Workshop, Rethinking Teaching– A Course (Re)Design Workshop, Online Teaching in Higher Education and digital bootcamps. Experiences from these sessions enabled the authors to design and offer research capacity building workshops to enhance cooperative learning and peer tutoring (Topping, Buchs, Duran, & Van Keer, 2017). Research capacity strengthening (RCS) is a vital component of the World Health Organization strategy on research for global health (Organization, 2012; Ward et al., 2018)**.** Developing countries are particularly in need of RCS, with it being recognized worldwide as a key prerequisite in the achievement of the Millennium Development Goals (Lansang & Dennis, 2004). Yet, this area remains unaddressed especially for medical/nursing students. The authors sought to find a solution while keeping the student at the centre of experiential learning. A Research-Mentorship Workshop (RMW) series was offered based upon similar principles as learned from QTL_net interactions. The RMWs were

accredited by the American Association of Continuing Medical Education (AACME) and approved by the Aga Khan University Ethics Review Board. The aim of the RMWs was to empower students as skilled peer mentors to help fellow students in conceptualizing, implementing, and publishing high quality ethical research.

Action

Designing the Research-Mentorship Workshop (RMW)

We developed a faculty-student pedagogical partnership and started a RMW series that was offered in-person initially and later tailored to fit an online mode of teaching in 2021 during the COVID era. This was based on the learnings from co-designing the Online Teaching in Higher Education Course where we learned to convert content to fit the online mode by adapting a blend of asynchronous and synchronous elements to enhance both real-time and time-delayed learning. The content and structure of RMWs was centered on six essential research skills blocks a) Protocol and manuscript writing; b) Writing ethical approval applications c) Software for referencing and plagiarism detection; d) Data collection, entry and analysis; e) Manuscript publication and journal search; f) Creating and delivering presentations; g) Improving networking skills for research.

Training student mentors and piloting the RMWs

Initially, seven students were trained as student research mentors, which has now expanded to more than 25 student mentors. These training sessions were designed using the strategies learnt in the instructional skills development workshops (ISW) offered by QTL_net to enhance professional development, teachers' classroom practice and

student learning. One such emulated practice from ISW is the delivery of mock sessions by the newly trained student mentors under observation of a faculty followed by detailed self-reflection and peer feedback. These mock sessions helped us in identifying any issues, such as the level of interactivity, achievement of learning outcomes, hardware and software checks, and time management. To cater to the multiple learning styles, the RMWs employed a variety of teaching pedagogies, including lectures, interactive discussions, hands-on activities, student presentations with peer and facilitator feedback, reading resources, podcasts, and formative assessments via Kahoot and Mentimeter. A two-hour "Breakfast with Mentors" session provided participants an avenue to practice their newly learned networking skills with university faculty. More than 10 workshops have been conducted to date and we have mentored more than 600 students and junior faculty across medical institutes in Pakistan.

 Results

Impact of RMWs on enhancing professional development and student experience

Peer led RMW's proved to be a success in enhancing professional development and the student experience. So far, we are proud to report that eleven projects supervised by student mentors have successfully attained ethical approvals and are currently underway. Twenty mentees have successfully published and received best presentation awards for their research work at national and international avenues. The mean impact factor of these publications was 1.393 [range: 0.409-2.642]., which is commendable for research at

the undergraduate medical student level. The RMW findings received international recognition when the work entitled '*Peer Mentorship to RE-ignite the SEARCH in Students for Research*' was presented at the Canadian Conference on Medical Education in 2021. (Hickey, 2021).

In recognition as a faculty mentor for the RMWs one of the authors of this chapter was able to demonstrate the requirements for Fellowship of Advance HE (FHEA) and the International FAIMER institute by showcasing the success of RMWs in improving capacity building, student learning and peer mentoring skills. Moreover, she was appointed the inaugural member and Chair of the Membership Committee of the Haile T Debas Teachers Academy at the Aga Khan University. Two student mentors were awarded Best Student Researcher in the Health Research Sciences Assembly (AKU), two student mentors were selected for research associate positions in a highly competitive Deans Clinical Research Fund Scholarship program (AKU), and one student mentor secured admission in the master in public health program at Johns Hopkins University. A couple of manuscripts about the intervention published by student mentors are freely available online so the process can be adapted by other institutes. Furthermore, this initiative by SPIE was recognized at the University Assembly in August 2020 by the Provost.

The anonymised quotes below are from the trainees from this workshop, who shared how the RMW's have helped them in learning new lifelong skills.

"I loved the peer-teaching aspect of it. The mentors were very well versed in their content. I was able to understand quite a lot of the content because of them. They were approachable and responded to the queries immediately."

"These are transferable skills; they apply in a lot of fields. Moving forward, I think this course will help me immensely in allowing me to understand and interpret research."

"I never had a research background and had no idea how to conduct a study. This workshop enabled me to see beyond that and realize the importance research plays in the medical field."

Reflections

Our experience highlights the potential of a student-faculty led initiative to be an effective, innovative, and grassroots-based sustainable medical education development model in Pakistan and other LMICs. We also faced a few challenges in terms of logistics, arranging the workshops to fit with all other academic schedules of our audience and mentors, limited availability of small-scale grants and finding motivated mentors etc. Going forward, we would like to develop a self-paced module that can be accessed online, which will allow us to reach a wider audience of students and faculty members who are interested in participating in our initiative but may have difficulty attending in-person workshops. This will also enable students to work at their own pace and provide greater flexibility in scheduling workshops and other activities.

The following reflections are by our student-mentors who were trained by the RMWs.

Dr Muhammad Ali,
AKU Alum (Class of 2020); Wilmer Eye Institute, Johns Hopkins University

As a medical student who was eager to pursue a career in research, SPIE's research mentorship program had exactly what I needed.

SPIE's mentorship program created a supportive community of fellow student researchers who were also seeking to develop their skills. We regularly met as part of research workshops, where we had the opportunity to discuss our projects, brainstorm new ideas, and provide feedback to one another. Moreover, as we progressed through the program, we had the opportunity to mentor fellow students who were just starting.

Thanks to SPIE's mentorship program, I was able to develop my research skills and gain confidence in my abilities as a researcher. The experience

Dr Asma Ladak,
AKU Alum (Class of 2021); Dean's Scholar Master of Public Health'23, Johns Hopkins University

I have really been fortunate in terms of the mentors I had throughout medical school who not only guided me academically but also taught me how to do research. Dr Sadia was one such mentor who I met very early on and continue to learn from even today. Mentors like her guided medical students even before SPIE came into being and continued to do so in a more structured manner under the banner of SPIE. Under such mentors, I not only got to learn the process of research but also published and presented my findings internationally. SPIE gave me the opportunity to not only continue growing as a researcher but also transition into providing mentorship to my juniors in the capacity of a student research mentor. I believe that it was through opportunities such as SPIE workshops that I found my passion for research which led me to pursuing

Acknowledgement:

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Chapter 14

Transfer of Learning: Lessons Learnt from the Design, Facilitation, and Evaluation of a Faculty Development Course

Tasneem Anwar and Syeda Sadia Fatima

Situation

The fast-paced expectations of academia to balance the teacher, instructional designer and a researcher role is a continuous challenge for the Higher Education (HE) faculty. This challenge was exacerbated further during the COVID-19 pandemic. During uncertain times the Aga Khan University (AKU), through its Quality Teaching and Learning Network (QTL_net), provided the authors with unlimited professional development opportunities for a smooth transition into the online teaching realm. The learning empowerment that the authors gained stimulated them to spread it to the wider HE community as an outreach activity through a faculty development course in the form of '*Teaching and Learning Transformation*' This case study aims to showcase the

transfer of best practices to the HE faculty and share lessons learnt for ensuring the active learner presence in digital teaching and learning.

Task

Teaching and learning in HE faces issues due to the lack of understanding among practitioners and researchers regarding the variations in learning and teaching. This lack of understanding is often compounded by a failure to reference explicit theoretical models or research evidence to inform the design of teaching and learning practices (Price & Krickwood, 2014). Resultantly, practitioners face a significant challenge in designing learning experiences that effectively leverage digital technologies (Hrastinski, 2020). To address this problem the authors modeled evidence-based practices in this faculty development while using the Community of Inquiry (CoI) as theoretical framework coined by Garrison et al. 2000. The CoI framework focuses primarily on the individual's interaction with other members of the community, with the pedagogical material, and their active participation in the learning process. Using this pedagogical model, faculty from five different Higher Education Institutions across Pakistan were engaged in digital teaching and learning spread over a week using an online learning environment. The course directors (authors) modeled active learning (Bonwell & Eisen, 1991) from QTL_net's Teaching and Learning Enhancement Workshops (TLEW) to design this faculty development course. TLEW, certified by the Instructional Skills Workshop (ISW), is a peer-based workshop that aims to strengthen the faculty's instructional competence by experimenting with a variety of

active learning instructional strategies through micro-teaching at the AKU.

Action

A Faculty Development Course

This five-day faculty development course conducted via Zoom, engaged 14 participants across multidisciplinary HE programmes. Within active learning two approaches, flipped learning and team-based learning were explored. Padlet was used as a learning management system (LMS) cum asynchronous interaction space for this course. Throughout the course, participants were engaged in discussion, quick response tasks, and reflections to challenge the ways of choosing and applying digital teaching and learning to meet the goals of Higher Education. Some instructional skills that the authors learned from TLEW like; use of common resources, end of the session reflections, planning practical lesson plans and peer-feedback (ISW, 2006) became the core design feature of this course. Participants also designed plans for flipped learning and team-based learning. Moreover, participants were engaged in group tasks to create learning and assessment tasks. This was followed by participants' presentations of their lesson plan in the main meeting room followed by giving and receiving constructive feedback. In-session assessment of learning took place with either Kahoot quizzes or quick responses using the chat feature of Zoom. Finally, each session concluded with reflective tasks like 'muddiest and mightiest points', '1-minute paper' using Mentimeter.

Leveraging Change in Practice

This faculty development course allowed authors to examine the participants' satisfaction, learning and use of new knowledge and skills which according to Guskey's (2000) framework of evaluating professional development falls under level 1,2 and 4. The course directors maintained a high social presence that was evidenced through active engagement during the sessions while the participants' cognitive presence was seen through their interaction with the course content on the Padlet. Finally, the teaching presence facilitated to tie together the social and cognitive presence and in turn supported participants to achieve the course outcome of applying the best practices of digital teaching and learning to design learning and assessment tasks.

Results

Opportunities of Active Learning

The case study highlights the significance of institutional support that the authors received through QTL_net, which later allowed the authors to add a multiplier effect in spreading the knowledge and skills gained.

Figure 1: Participants' satisfaction on interactive synchronous sessions.
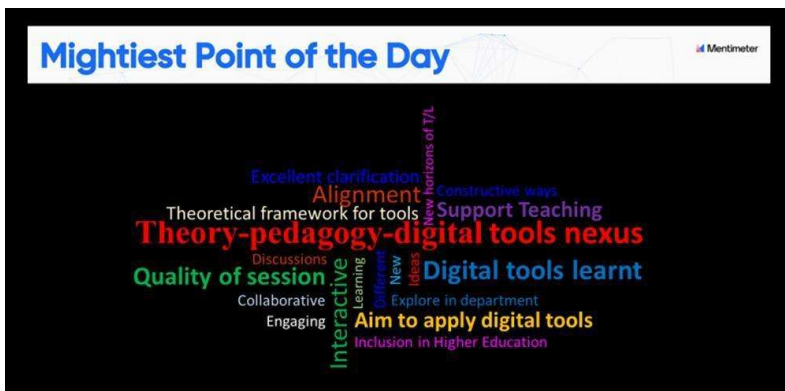
**Figure 2: The Padlet showing asynchronous Community of Inquiry**

The case study showed various opportunities of active learning that were made part of the blended course design featuring interactive synchronous sessions (Figure 01) and asynchronous Padlet (Figure 02) were found as the most useful feature of the course. This was further validated through participants' responses at the end of the course where 10 out of 14 (71%) rated their learning in this course as of 'high cognitive impact'.

Teaching, Social and Cognitive Presence for Meaningful Learning

Participants commented on the design considerations that allowed for establishing teaching, cognitive and social presence in the faculty development course explicitly highlighting the occurrence of meaningful learning happening at the intersection of the three presences. One of the participants stated, "*I could see application of connectivism as well as constructivism. Theoretical underpinnings were not only discussed; I could see the application also.*" Another participant highlighted "the *interactive pedagogy used in the course as its core*

strength". Moreover, the CoI proved to be a valuable pedagogical framework for achieving the goals of both for the course designers and the participants of faculty development (Figure 03).

Figure 3: Participants' rating of Community of Inquiry in the course.
**Participants' Rating of CoI in the Course**
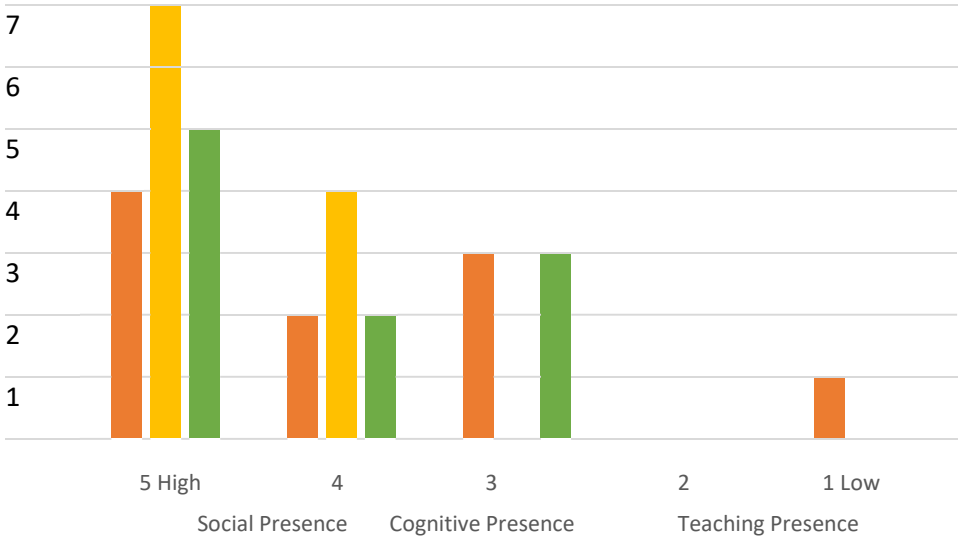
Cognitive presence was rated highest, 60% of the participants found the course highly engaging cognitively while another 40% rated the course cognitively engaging. Whereas social presence was found as the promising feature of the course as 40% of the participants ranked the course highly collaborative while another 20% found the course collaborative and 30% were indifferent. Similarly, teaching presence was highly rated by 50% participants, another 20% rated it as satisfactory and while 30% of the participants were indifferent. This offers implications for HE academics especially the faculty and instructional designers to consider CoI as a pedagogical framework.

Assessment of Learning as an Evidence of Some Change in Practice

Assessment of learning (formative assessment) provided evidence of some change at level 1 (participants' reactions) 2 (participants' learning) and 4 (participants' use of new knowledge and skills) of Guskey's framework. Participants' reactions showed satisfaction towards the pace, content and application tasks. Some evidence of relevant course content could be seen as participants' comments in figure 04 where participants have shared their appreciation for active learning strategies.

Figure 4: The Padlet – Ah ha wall.
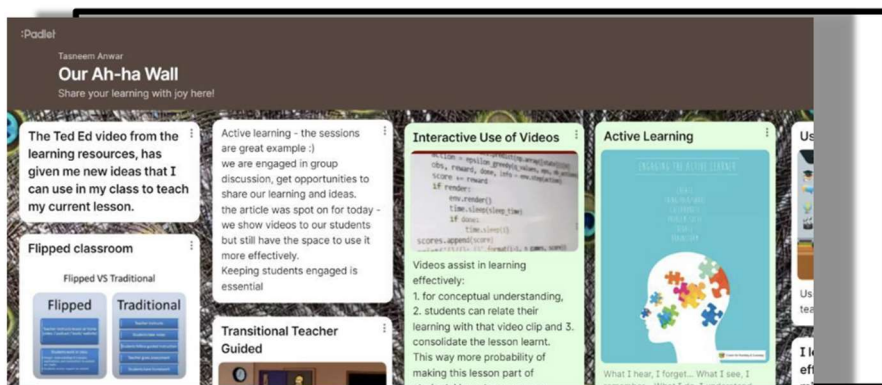
Most participants found the hands-on application of digital teaching and learning practical yet well-connected with research. One of the participants wrote in one- minute paper that *"[I found the following worth practicing;] gradual shift from simple to complex [ideas]; learnt multiple new things; and fruitful interaction with mentors."* Another participant showed confidence in her learning by commenting in one-minute paper that, *"I found no questions that were left unanswered."* Similarly, in another formative assessment task, another participant

appreciated the hands-on flipped classroom experience and felt confident to try it in her classroom.

Finally, the participants mentioned key takeaways and their aspirations for classroom implementation by recognizing 1). the need of purposeful planning for digital

teaching and learning by ensuring alignment between curriculum, pedagogy and digital tools, 2). the constructivist theory guiding active learning while integrating digital tools, 3). The use of videos and flipped classroom for active learning and, 4). Applicability of team-based learning in their classroom. Last but not the least, the participants raised some critical questions related to implementing digital teaching and learning and dealing with the challenges of classroom. This generated discussion within peers and allowed them to unpack their unique teaching and learning contexts in detail.

Reflection

Reflection – Inspiration for Change in Practice

Along with participants' assessment of learning during the course, various other evidence of participants' learning was found. Participants found the learning tasks of the course practical and doable in their classroom settings which is indicative from their intentional aspiration for classroom implementation of digital teaching and learning.

One of the participants of this faculty development course was enrolled in AKU- IED's MPhil programme at the time of this course. This participant (Pseudonym) Sania Imtiaz, reflected on her experience in this course as, "*This course provided me with confidence and supported*

me in designing my MPhil research oTPD [online Teacher Professional Development] to design, explore and analyze the iSTEM-oTPD, an online Teacher Professional Development for interdisciplinary STEM teaching and learning." Moreover, Sania Imtiaz attributed the successful defense of her dissertation partly to this course.

In her dissertation Sania while describing her background mentioned, "I [the researcher] also participated in an online continuing professional education programme titled, Digital Teaching and Learning in Higher Education. These collective experiences are equally important for this tripart role to design, explore and analyze the iSTEM-oTPD. I used oTPD for this study as an agency to educate teachers and engage them in the design of contextually relevant resources in the form of iSTEMQuests [Web Quests for interdisciplinary STEM]. Moreover, I purposefully selected an online modality for freeing participants from coming to a traditional workshop site." (Imtiaz,2022 p. 34)

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Closing Chapter

Reflections and the Way Forward

Jane Rarieya, Lucy Spowart and Tashmin Khamis

Who dares to teach must never cease to learn[2]

Introduction

As the 'narration' of our ten-year journey draws to an end, the collection of stories lays open the transformation of teaching and learning that has happened at Aga Khan University (AKU). It is apparent from the stories shared in this collection that a strategically coordinated educational development approach can have enduring effects on the wider university as well as individual faculty practices. This tapestry of stories provides us with several points for reflection as we continue to engage in educational development and in enhancing teaching and learning practices. However, as we present the reflections we draw from the

[2] Originally attributed to Joao Guimaraes Rosa (1908-1967) and adapted by John Cotton Dana (2019).

stories shared in this collection, we recognize that an assessment based largely on self-reporting mechanisms has certain limitations. Also, it is impossible to separate the effects of the Network of Quality, Teaching and Learning (QTL_net) activities from the many other sources of increased teaching and learning awareness that may have influenced faculty practices. The foregoing notwithstanding, the following are our reflections:

University improvement model

As mentioned in the introductory chapter, the pedagogy of engagement (Smith et al, 2013) employed by QTL_net and illustrated by the foregoing stories demonstrates that impact does not occur in a linear fashion as explicated in Guskey's model of professional development (Guskey, 2000) and which we have adopted on several occasions in the past to evaluate our work. Instead, what we note, in reflection, is that the process of faculty engagement and change in practice as presented by these stories adopted a snowballing approach as one programme led to another. For example, the start of a teaching and learning enhancement programme led to the adoption of a fellowship programme which subsequently led to a Professional Standards Framework (PSF)-guided application process for membership into the Haile T. Debas Teachers' Academy.

Further, the downstream effects of the impact of QTL_net are reflected in the way faculty who attended QTL_net activities, particularly the teaching champions (ref to Chapter 4), seemed to impact their immediate department/school environments: transferring their knowledge to their peers, fostering collaboration and leading positive culture change within their departments/units and beyond.

Hence, QTL_net's impact on the teaching and learning culture at AKU can best be described as a bottom-up approach as illustrated in Figure 1.

Figure 1: Institutional Change Approach at AKU
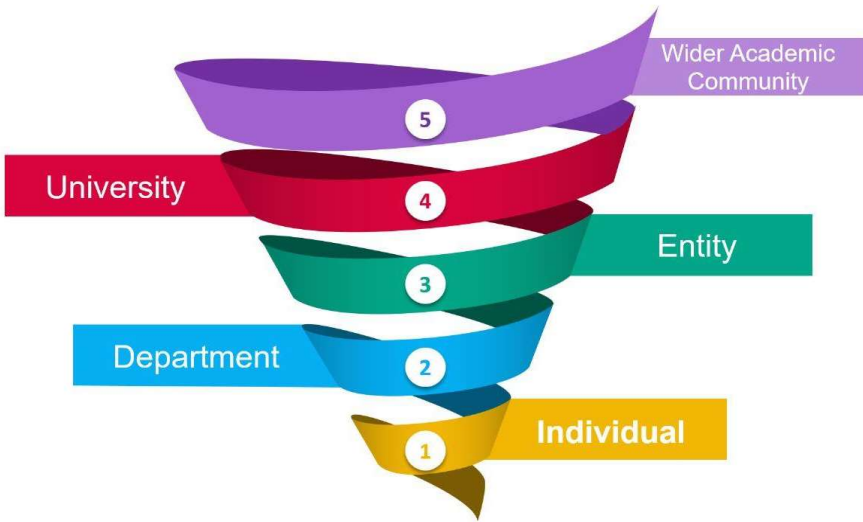
A framework underpinning practice

As mentioned in the introduction of this collection, a number of stories demonstrate that the use of the PSF, a unified teaching standards framework by Advance HE, as the foundation upon which all QTL_net activities are structured, has helped to ensure fidelity to QTL_net goals as well as faculty needs (Bilal et al, 2019). This has resulted in improved teaching and learning practices as suggested in the stories shared across the university without requiring faculty to immerse themselves in another area of study to be effective educators.

Contextual and cultural sensitivity

This collection of stories emphasizes the use of contextually and culturally sensitive approaches in educational development. Culture

affects any educational context (Nijhuis, 2019) as values, structures and processes may differ from one context to another. Whilst advice and guidance were sought from a variety of sources, including from the international volunteer network 'Academics Without Borders', the unique nature of AKU as a multi-continental, multi-campus university distributed across Kenya, Tanzania, Uganda, Pakistan and the UK, meant that any interventions, scholarship or leadership approaches were cognisant of the localised cultural context (Patel and Lynch, 2013) and involved local faculty and educational development staff in applying contextually and culturally relevant solutions (Khamis, Naseem, Khamis & Petrucka, 2021). One significant barrier for higher education institutions (HEIs) in contexts where AKU is situated, for example, is the lack of infrastructure to support online education. Solutions from the developed world do not always 'fit' and there is often a lack of understanding of the implications of technological and resource barriers. Hence, to ensure acceptability and for faculty to see the possibilities presented by the programmes/models introduced by QTL_net, there was a need to adapt the programmes to those that faculty could relate to.

Building safe and supportive communities

The very nature of educational development work involves working across communities and disciplinary boundaries, building trust, and creating shared goals to ultimately enhance teaching practices. In the context of the dispersed nature of AKU, the building of trust takes on a heightened significance as beyond the institutions' flagship programmes, interactions are typically online (often with poor connectivity in some geographical locations and hence conducted with audio only). Building on the seminal work of Etienne-Wenger (1998) who highlighted 'communities of practice' and their associated shared values, goals and

cultural markers, Wenger-Trayner and Wenger-Trayner (2015) emphasise the complexity of professional communities.

Our experience has shown us that by both reaching out externally (for example to voluntary organisations such as 'Academics without Borders' and more established educational development units worldwide) and internally (to faculty across AKU), an extensive professional network can be developed with enormous transformative potential for individuals, academic entities, and the organisation at large.

QTL_net programmes emphasized peer learning as a means of enabling knowledge transfer among faculty. However, it is the emphasis on safe communities that allowed faculty to take risks as they learnt and not feel judged. This has resulted in a high uptake of QTL_net activities. In addition, creating opportunities for faculty to share their knowledge and experiences brought about high levels of learning. This collegial sense of learning together fostered by QTL_net programmes to address teaching concerns strengthened the sense of community across the diverse units of the university. This has enabled learning to happen close to practice as well as create a sustainable system (Baker & Beames, 2016).

Developing a culture of evidence-based reflective practice

Ensuring that reflective practice is embedded within QTL_net programmes provided faculty with opportunities to relearn about teaching as it enabled them to develop a critical understanding of their own practice as well as develop ways of coping with the dynamic and complex world of teaching. Applying for a fellowship or engaging in the

scholarship of teaching and learning activities are some examples of activities shared in this collection that engendered reflection.

Embedding evaluation from the outset

The significance of continuous evaluation of a programme cannot be underscored as it ensures that programmes maintain their relevancy and efficiency (Charlier & Lambert, 2019). However, establishing a framework for evaluation right from the commencement of a programme or a teaching and learning unit is equally important. This helps to clearly establish the effects of a programme at the individual and institutional levels (ibid).

The foregoing may seem to imply contentment on our part with the stories as told in this collection. On the contrary, a review of the stories suggests three key things to take forward as we continue on our journey of educational development:

Moving Forward

Mentorship

As faculty development continues to be entrenched within the academic culture at AKU and the demands for faculty support increase, the lean team at QTL_net will require more teaching champions to galvanize the wider university academic community in improving their teaching practices. Also, the ever-dynamic world of teaching requires a versatile, knowledgeable and skilful team of education developers. Hence, stepping outside of discipline boundaries can enhance learning opportunities and help develop individual teaching expertise by designing, sharing, and reflecting upon teaching-related activities with more experienced others. King (2022, p.3) conceptualises expertise as a 'dynamic journey that is travelled…throughout [a] career' (p.3).

Supporting the development of local teaching champions has enormous benefits at the individual and organisational levels and, in our experience, can open doors to scholarship and promotion opportunities.

Mentorship will continue to play a vital role in the continued development of QTL_net. It will not only lead to the development of 'teacher leaders' but also an academic staff that is committed to continuous learning in a collaborative environment that allows the transfer of knowledge and skills learnt (Cordie et al, 2020).

Students as partners

Whilst QTL_net has made strides in building a robust teaching culture which has resulted in improved student outcomes in the classroom as shared in the stories in this collection, QTL_net now needs to move into the arena of helping faculty identify ways of working with students as partners (Mathew, 2016; Cook-Sather & Felten, 2017). Whilst this has commenced with students as co-researchers in SoTL studies and in planning some curriculum-related activities (ref to Chapter 13), there are opportunities for a more intentional and reciprocal partnership "where students and staff may engage as partners to further learning, teaching and research, and teaching enhancement efforts" (Mercer-Capstone et al, p. 2; Healey et al, 2014). This will also give students a voice as crucial partners in the teaching and learning process.

Measure, measure, measure...

Chalmers & Gardiner (2015) argue that whilst there is an agreement that educational development programmes have a positive impact on the longevity and impact on faculty and students as well as on the teaching and learning culture in higher education, this type of impact is less well-researched and evidenced. As we indicated in the introduction of this

collection, right from the outset of its activities, QTL_net always engaged in evaluating faculty satisfaction with its programmes. However, in the last 10 years, its activities have expanded calling for a more nuanced evaluation. For QTL_net's impact and effectiveness to be ascertained, continually and robustly engaging in the ongoing evaluation of its activities will have to become the norm. This will not only help to keep our eyes on the goals of the unit but will also ensure programmes are effective. Doing so will enable QTL_net members to "ask more complex questions [such as] on whom the programmes have an impact, and where and why they have an impact" (ibid, p. 89).

Conclusion

It is our hope that this tapestry of stories has provided you with insights into what has contributed to our achievements in educational development. Whilst the stories provide a glimpse into the impact of QTL_net's educational development activities, they also show how educational development can pay significant dividends over time. As implied by the quote at the start of this chapter, the stories highlight the criticality of faculty being able to continuously adapt and evolve to realize the opportunities for change and growth presented by educational development, and, in turn, facilitate the growth and prosperity of their institutions. As we stated in the introduction of this collection, the stories also emphasise the important contribution made by partners like Advance HE, Academics Without Borders, established Teaching and Learning units as well as experienced education developers in QTL_net's institutional development in the last 10 years.

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Ten years ago, the Aga Khan University (AKU), an intercontinental higher education institution with campuses in East Africa, Pakistan and the UK, established its Educational Development and Quality Enhancement Unit, The Network of Quality, Teaching and Learning (QTL_net). This volume captures reflective stories of impact told by academic staff who have been on a journey to educational development. The stories are case studies that cover common challenges faced by academic development units the world over – how to engage busy academics in reflective pedagogy when their dominant professional interest is with their subject area, how to demonstrably improve student learning outcomes, and how to create an institutional teaching culture.

Given the dearth of literature that considers the impact of educational development units, this account from faculty of the benefits gained from engaging with a 'teaching learning centre' (QTL_net) will have relevance for senior educational leaders, educational developers, educational technologists, teaching-focused academics, and those with an interest in educational research. By sharing these stories we aim to stimulate dialogue on the successes, complexities and nuances of educational development work, particularly tricky issues of impact evaluation.

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