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Reflective piece**Implementing a Teaching and Learning Enhancement Workshop at Aga Khan University: reflections on the implementation and outcomes of an Instructional Skills Workshop in the context of Pakistan.**

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ABSTRACT

The Teaching and Learning Enhancement Workshop (TLEW) is an indigenous name for the Canadian-based Instructional Skills Workshop (ISW). TLEW is a teaching development workshop aimed at enhancing faculty members' stances towards student-centred teaching and reflective practice at the higher education level. This short paper discusses the initiation, implementation and institutionalisation of the TLEW at Aga Khan University (AKU) across entities in Asia and Africa. In total, 77 faculty members drawn from different entities of AKU participated in the workshop in 2016-2017. Empirical evidence collected from TLEW graduates through a survey and interviews suggests that the intense episode of planning, teaching and receiving peer feedback during TLEW helped participants in sensitising them to effective planning for teaching in order to engage and enrich students' learning. Furthermore, the repertoire of pedagogical strategies has permeated graduates' classrooms. Nevertheless, for sustainability a mechanism needs to be in place for providing faculty with institutional support and recognition for their contribution in teaching and learning. A need is advocated for TLEW to evolve as a mandatory component for all teaching staff at the university to help serve as a fundamental base for initiating and sustaining change through ongoing professional development opportunities and establishing a community of practice.

Introduction

The Aga Khan University, founded almost three decades ago, is a multi-site university with campuses in six countries (Pakistan, Kenya, Tanzania, Uganda, United Kingdom and Afghanistan) across three continents. There are 11 teaching sites offering undergraduate/graduate programmes in three major disciplines – medicine, nursing and education. The university is committed to promoting excellence in teaching, and enriching students' learning. It is a challenging undertaking, considering that not all university faculty have preparation in pedagogical content knowledge (Robinson & Hope 2013; Khamis 2016). To address this challenge the Network of Teaching and Learning was established in 2013 with the intent of working alongside faculty to enhance the quality of teaching and learning in the academic programmes of the Aga Khan University. Various programmes are designed by the network to enhance the teaching skills of faculty members and promote the Scholarship of Teaching and Learning (SOTL) with an aim to engage students and enhance their learning experiences. Programmes include mentoring, seminars, workshops and conferences as well as developing communities of practice. A recent major initiative undertaken by the Network is the Teaching and Learning Enhancement workshop (TLEW) which is based on an internationally certified model of faculty development in higher education – the Instructional Skills Workshop (ISW).

The Instructional Skills Workshop is an extensive 24-hour peer-based practical and interactive workshop that aims at improving the teaching and learning practices of higher education faculty across disciplines. The workshop “is facilitated by people who teach, for people who teach” (Day, Kerr, & Pattison 2006:3). The ISW emerged during the 1970s in British Columbia, Canada, under the academic leadership of Douglas Kerr, in order to orient newly inducted faculty who did not have any formal teaching credentials (Day *et al.* 2006). ISW is a successful international programme that has been offered for the past four decades in more than 100 teaching and learning institutions in North America, Africa, Asia, the Caribbean and Central America, Europe, the Middle East, Russia and South America, and has allowed thousands of teachers to improve their instructional practices (ISW Network 2018). Nevertheless, there is a need to further establish the efficacy of ISW using empirical methods in the Aga Khan University context.

Teaching and Learning Enhancement Workshop

At the Aga Khan University the nomenclature of the Instructional Skills Workshop was changed to the Teaching and Learning Enhancement Workshop (TLEW). This paper refers to TLEW and ISW interchangeably. The underlying purpose of TLEW is to enhance the pedagogical skills of university teachers by providing opportunities to learn from peers in a supportive, informal and relaxed environment (MacPherson 2011; Dawson, Borin, Meadows, Britnell, Olsen & McIntyre 2014). As presented in Table 1, TLEW employs an active, peer-based and experiential learning approach and engages the participants in teaching mini-lessons, using new and innovative teaching and learning strategies, providing peer feedback and engaging in self-reflection in a safe and friendly environment (Day *et al.* 2006). Moreover, participants are engaged in discourse related to lesson-plan structure; writing learning objectives; and active teaching and learning strategies that are rooted in theoretical knowledge (Day *et al.* 2006). The workshop itself offers an intense learning opportunity that demands total commitment from the participants for three full days.

Table 1: Structure of TLEW

| Day 1 | Day 2 | Day 3 |
|---|---|---|
| <input type="checkbox"/> Introduction to effective teaching | <input type="checkbox"/> Exploring participants' teaching perspectives | <input type="checkbox"/> Principles of effective teaching |
| <input type="checkbox"/> Introduction to BOPPPS lesson planning framework | <input type="checkbox"/> Experiential learning theory <input type="checkbox"/> Active teaching and learning strategies | |
| Repeated cycles of mini-lesson based on BOPPPS along with peer feedback and self-reflection | | |

In this learner-centred model for instructors' professional growth, emphasis is placed on the participants' active involvement during the workshop as fellow learners rather than experts (Sullivan, Buckle, Nicky & Atkinson 2012; Tenenberg 2016). This notion is seen to have a more 'liberating' effect on the participants who tend to view each other as equals and, hence, may feel relieved of the pressure of measuring up to the expectations of the expert. Instead, every participant is a learner who experiences the opportunity to actively participate and learn from peers in a structured setting through the processes of teaching, reflection and feedback on specific lessons. As such, there are no casual observers in the TLEW professional development model. Instead, each learner is primarily responsible for orchestrating his/her learning and consequently takes ownership for planning, delivering and receiving critical peer feedback on the lesson for improvement.

Elements of rapport-building, trust, respect and confidence are nurtured through 'daring and baring' one's professional practice in general, and pedagogical skills in particular, before one's peers for their honest and critical feedback. Coupled with this, is the practice of maintaining confidentiality about the experiences that are shared by the participants. For teachers to open their classroom teaching routines to colleagues for review and feedback, there needs to be an element of trust and confidentiality. These aspects are achieved when each participant is required to enter into a verbal contract on the very first day of the TLEW session stating that the professional practices that are observed and discussed between peers are to remain confidential. Within such a supportive atmosphere, where confidentiality is both emphasised and practiced, participants do not feel inhibited to reveal their teaching 'blemishes' as these are seen as areas to be improved upon. Moreover, in an environment of trust, the participants are more inclined towards experimenting with different teaching strategies to receive feedback on how effectively these have been translated into practice. Thus, candid feedback is seen as an integral component in the TLEW as it offers a platform to provide instant information to participants about the strengths and the growth points related to the lesson (Eisen 2001; Thomas, Chie, Abraham, Raj & Beh 2014).

The rigorous processes of planning, teaching, receiving peer feedback, reflecting upon, refining, and ultimately re-implementing lessons help to bolster the confidence of participants in a non-threatening environment where risk-taking is encouraged and seen as an integral pathway to learning. TLEW sessions help to showcase faculty members' pedagogical skills as well as highlight any problematic areas that need to be subsequently addressed. Hence, self-reflection is a fundamental component of TLEW where learners are guided through the processes of self-examining and critiquing their teaching for improvement (Day *et al.* 2006; Clegg, Tan & Saeidi 2002; Jindal-Snape & Holmes 2009).

A unique feature of the TLEW is that it provides a forum where AKU faculty members from diverse fields, and a range of experience, come together with the common intent of revisiting their teaching practices in order to maximise their impact for enriching students' learning. Far from being a deterrent, engagement with multidisciplinary fields adds an element of novelty to the learning experience of the instructors (Darwin & Palmer 2009) and provides a platform for 'shared practices' (Suwaed & Rahouma 2015). For instance, participants from the social sciences interact with their colleagues from the medical field which may help participants gain some understanding of the disciplines being taught/practised by their counterparts. Similarly, diversity in teaching experience is mutually beneficial to faculty members with differing amounts of experience. For example, the less experienced faculty members benefit from networking, deliberating upon and deconstructing their professional teaching practices with their experienced colleagues (Shulman 1993). Similarly, the experienced colleagues are able to informally scaffold and subsequently mentor their less experienced colleagues by offering them quick tips and insights into the effective use of a variety of teaching strategies to make the process of teaching and learning a richer experience for learners (Darwin & Palmer 2009; Lund 2007).

The focus of TLEW is independent of discipline-specific content. The various processes emphasised are teaching, and helping learners to meaningfully understand curriculum content through coherent, contextually appropriate lesson planning. Typically, lessons are planned to be ten minutes in length, which is referred to as a 'mini-lesson'. A mini-lesson cycle comprises four to five of these ten-minute mini-lesson episodes. Although ten minutes seem significantly shorter in comparison to a full-length lesson, it provides a sufficient segment for critique and feedback, cuts down on the overall duration of TLEW and ultimately provides a reasonable time span for the participants to highlight details of the lesson for timely feedback (Day *et al.* 2006).

Various models of planning may be drawn upon to plan a lesson. In the context of TLEW, 'BOPPPS' (Bridge-in, Outcomes, Pre-test, Participatory, Post-test and Summary) serves as a useful template for thinking through and sequentially organising a lesson (Day *et al.* 2006; Giustini 2009). The efficacy of this model in developing students' creativity and synergising learning has been established (Lou, Dzan, Lee & Chung 2014). BOPPPS provides an opportunity to the teacher at the onset (Bridge-in) to 'hook' students to the lesson through 'anticipation'. Secondly, sharing the outcomes helps to indicate to the students what they are expected to attain by the end of the session. The three 'Ps' that follow signify a learner-centred approach to engaging the participants meaningfully throughout the lesson. The Pre-test gauges the learner's current level of understanding, and is followed by a Participatory approach to teaching, and the learning segment finishes by summatively assessing the participants' learning (Post-assessment). Finally, the conclusion (Summary) serves as a quick way to reiterate the key points before wrapping up the session with a sense of accomplishment. In a nutshell, BOPPPS provides a useful framework for faculty members to organise their lessons and employ appropriate pedagogical strategies (Day *et al.* 2006).

Examining the efficacy of TLEW: an example from Aga Khan University

Aga Khan University Network of Teaching and Learning (AKU TLnet) joined the global ISW Network by initiating this faculty development programme to enhance teaching and learning practices in 2016. The process was initiated through Faculty Development Workshop (FDW) for nine facilitators

to develop a workforce who would conduct these workshops for faculty members across the university. These faculty members were trained by ISW certified Faculty Development Workshop (FDW) trainers. Thus far, these AKU facilitators have conducted workshops for three cohorts of faculty: two in Pakistan and one in East Africa. Altogether, 77 participants have completed this training. End-of-workshop evaluations are a regular component of TLEW. Based on these evaluations, a study was undertaken to aid in informed decision making to guide future practices of planning, delivery and follow-up of TLEW. As part of this initiative, a mixed-method study was undertaken to explore TLEW participants' perceptions of their teaching practices after participating in the three-day TLEW during 2016-2017. Data were collected through an online survey and in-depth interviews of the participants who volunteered to take part in the study. Of the 77 participants contacted for the study, three participants consented to be interviewed and 27 (35%) responded to the survey. The response rate was low but comparable with other studies where online modalities have been used to collect data in survey studies (Nulty 2008), and so was considered an acceptable response rate for this study. The TLEW Efficacy Scale (TLEW-ES) was adapted from a study conducted in North America (Macpherson 2011). The survey consists of 41 items which were organised under six distinct yet interlinked categories. Of the six categories, five (*reaction, learning, behaviour, results, and overall evaluation*) focus on faculty members' views after participating in TLEW, while one (*Pre-TLEW views*) elicits their views about teaching and learning practices in general prior to participating in the workshop. Participants indicated their response to each of the items on a five-point Likert scale (Strongly Disagree to Strongly Agree) with Strongly Disagree given a score of 1; Disagree, 2; Neutral, 3; Agree, 4; and Strongly Agree, 5. The internal consistency of the TLEW-ES (Cronbach's Alpha – 0.71 to 0.92) was found to be satisfactory (Field 2009). Figure 1 presents faculty members' average perceptions on six constructs in the TLEW-ES.



Figure 1: Perceptions of Faculty Members about the efficacy of TLEW

Pre-workshop views

This construct was included to reflect faculty members' views about their existing teaching and learning practices, before they enrolled in TLEW. The score on *Pre-TLEW conceptions* ranged from 3.00 to 4.64, with 1 being a negative view of their practices, and 5 being a positive view. The average score on their view of their teaching practices before TLEW was 3.88 (SD=0.45). While reflecting on their teaching practices, faculty members communicated their need to improve various aspects of their practices, including strategies of teaching and learning through self-assessment; evidence-based learning; participating in professional development activities; and engagement with communities of practice. Qualitative data from the interviews of three participants, on the question of how they viewed their teaching prior to taking part in TLEW, were consistent with its quantitative counterpart, as reflected in one participant's comment:

I (usually) plan the workshop, teaching strategy and assessment, so I thought I need to know how should I plan ... I don't know if I am doing right or wrong? Are my practices fine? Do my students understand what I teach? I used to wonder whether I was teaching appropriately or not. That's why I wanted to participate in the workshop (Esha, Interview, March 2018).

Results suggest that the participants' motivation for attending the workshop was to validate their practices and enhance their repertoire of pedagogical skills.

Post-workshop views

This section presents a summary of post-workshop views on five constructs. The mean scale score regarding participants' perceptions of the efficacy of TLEW fell within a 0.29 range (i.e. 4.30 to 4.59), where faculty members' immediate *reaction* of TLEW topped the list while self-reported *results* remained at the bottom end.

Reaction

The score on *Reaction* ranged from 3.86 to 5.00 with an average of 4.59 (SD=0.36). Faculty members commended the processes of the workshop and support from facilitators in enhancing their repertoire of teaching and learning strategies. Furthermore, they felt that participation in the workshop was worth their time and energy (*Reaction*). A thoughtful reflection from the participants during qualitative interviews revealed this positive sentiment: "It [TLEW] was seriously worth my time. I was neither checking my emails nor responding ... I was able to give my full time in the workshop" (Esha, Interview, March 2018). Another participant commented,

Actually I never chose to be in TLEW. It was like an arranged marriage ... I was encouraged by the department chair, to participate in the workshop, to fulfil my role more efficiently ... I thought it was a trivial workshop where I would sit for nine-to-five routine activities, but to my surprise, workshop and facilitators were entirely different from what I had pictured it to be ... By the end of the workshop, I was in love with it (Nadiha, Interview, March 2018).

Evidently, participants seemed to have valued the workshop for its processes, despite its demanding nature. However, institutional support plays an integral part in providing participants the mental and physical space to participate in this rigorous professional development activity.

Learning

The score on *Learning* ranged from 3.57 to 5.00 with an average of 4.34 (SD=0.41). Faculty members were of the view that the workshop enhanced their *Learning* by sensitising them to their own teaching practices, which led them to appreciate learners' diversity, the complexity of the learning environment, and the use of a variety of teaching strategies that are aligned with a particular academic discipline (*Learning*). Qualitative data from the interviews of three participants substantiated this finding, as one of the participants, while appreciating her learning from the TLEW, commented that, "my residents were sick of lecturing sessions ... it [TLEW] was an eye-opener for me that they [residents] can also learn by interacting amongst themselves" (Nadiha, Interview, March, 2018). One of the interviewed participants commented, "I was over-ambitious and used to think that I could cover a lot of content in a few minutes and they [students] will get it, but TLEW helped me realise that all learners do not learn at the same pace" (Esha, Interview, March 2018). Thus, the workshop helped the participants to reflect on their own teaching, to identify the gaps or issues in their practice, and to appreciate the complexity of the learning environment.

Behaviour

The score on *Behaviour* ranged from 3.38 to 5.00 with an average of 4.35 (SD=0.46). According to the self-reported change in *Behaviour*, faculty members indicated an improvement in various aspects of their teaching practices ranging from inculcating enthusiasm for their subject, using strategies for engaged learning, and nurturing academic networks for further enhancement of their teaching practices. Participants learned approaches to organise content in more manageable chunks, deliver abstract concepts using fun and active methods, and introduce a difficult concept in a more engaging way to hook students' interest. Moreover, according to them, it provided a pragmatic framework for structuring the lesson. Use of the Bridge-in was one of the most prominent aspects which was reported to be transferred into their practice. For example, one of the participants explained,

I have always been an interactive teacher. I usually include some pictures and cartoons in my lessons; however, I did not use it consciously as a bridge-in of the lesson. Now I consciously put it in the start of the lesson to capture the attention. For example, while teaching anticoagulants, I started with the cartoon-character who cut his finger while eating food, followed by questions. Through this strategy, I was able to grab their attention (Sameer, Interview, March 2018).

Participants also found BOPPPS framework helpful in organising the content in a manageable fashion by defining realistic outcomes for a particular lesson. Furthermore, they learnt and applied a variety of teaching, learning and assessment strategies including 'questioning', 'Kahoot-based quizzes', 'a sandwiched approach to provide comprehensive feedback for improvement', 'pre-testing to gauge students' current understanding' and 'pacing the lesson according to the level of the learners. It was encouraging to note that the repertoire of strategies mentioned by the faculty members has not

only translated into their classrooms but has also 'permeated to a certain extent in clinical teaching' (Interview, March 2018).

Results

The score on *Results* ranged from 3.20 to 5.00 with an average of 4.30 (SD=0.55). Faculty members' self-reported *Results* of implementing the lessons learnt from TLEW in their classrooms indicate that it seems to have positively influenced students' engagement with content, peer-interaction, learning skills, performance and passion for the subject. For example, one of the three participants commented in her interview,

Post-TLEW, I started to structure my lessons according to BOPPPS while using interactive teaching strategies such as using play-dough to teach concepts of anatomy which is appreciated by students through verbal feedback and student evaluations. Also, they are able to identify structures better in the Operation Room and their performance in clinics has been improved. Our students used to doze off in the classroom; however, using this model [BOPPPS] coupled with innovative strategies led residents to respond actively to the questions, demonstrate confidence, and nurture a bond with the facilitators (Nadiha, Interview, March 2018).

Self-reported results show that the learning from the workshop has started to influence students' learning to some extent. However, more rigorous studies need to be undertaken to capture the transformation in the classroom in terms of the students' learning outcomes.

Overall Evaluation

The score on *Evaluation* ranged from 3.50 to 5.00 with an average of 4.52 (SD=0.49). In the overall evaluation of the programme, the faculty members stated that the workshop has improved their confidence in their teaching abilities. Data obtained from interviews also support the aforementioned findings. One of the faculty members, while sharing her confidence in the innovative approaches to teaching and learning, stated:

Some people of 'old school of thought' think that this [use of innovative method] is a 'Shashka' [show-off], however, as long as students' learning outcomes are achieved, through this approach, you are successful. These students will not learn from the ways that we have been taught. So we have to have an interactive approach to teaching and learning (Nadiha, Interview, March 2018).

It seems that the faculty members have started to advocate using innovative approaches to teaching and learning, despite the perceived 'opposition'. However, the faculty members' passion for these approaches will not take them far without institutional support and appropriate structures. Thus, it would be imperative to engage all the faculty of AKU in TLEW to fulfil the promise of modelling excellence in teaching and learning.

Conclusion

AKU mandates that the university's faculty provides effective instruction to all students across entities. TLnet conducts various professional development activities for enhancing the quality of the teaching and learning process. This reflective paper shares the experience of initiating, implementing, and institutionalising a Canadian higher education professional development model, ISW, in AKU across entities in Asia and Africa. Self-reported data revealed that the model has gained acceptance amongst those who participated in the TLEW and has started to permeate in practice with some evidence of its influence on students. That said, it is not a silver bullet. This implies that it is not a one-shot solution to the problems of teaching and learning. Nonetheless, it helps faculty members to kick-start their thought processes about innovative teaching and learning (Fuxe, Frake-Mistak & Popovic 2017).

Faculty members strongly appreciated the role of TLEW in orienting university faculty with a more organised way of planning for teaching in order to promote engaged learning. Through the experiential learning cycle of TLEW, faculty members – although 'overburdened' during the workshop while planning and teaching mini-lessons to peers and obtaining feedback about them – found this intense professional development episode an important route to receiving feedback on teaching in a non-threatening environment. Peer feedback in an interdisciplinary setting was identified as one of the highlights of TLEW which contributed immensely to participants' learning. Despite this, participants were sceptical about replicating the approach in their own context. Arguably, this peer-feedback approach would be necessitated by the cultural sensitivities, where a peer might expect 'perfect practice' in the classroom and acceptance for 'mistakes' might be limited. Consequently, the trust deficit, lack of openness, fear of being wrong in front of peers, and feeling exposed in public, remain key concerns in creating a peer-learning culture at university (Darwin & Palmer 2009), which is at the heart of TLEW.

Faculty members who have participated in the workshop have advocated for TLEW to be mandatory for all teaching staff, including postgraduate students at the university, in order to have a common teaching and learning language to initiate and sustain change through a community of practice. Furthermore, continuous professional development initiatives are required to sustain the learning gained from TLEW (Guskey 2002). Viable options to follow the TLEW include refresher seminars, developing a community of practice, one-to-one consultations, and formal and informal avenues to discuss issues concerning teaching and learning. Faculty members' willingness to participate in TLEW to improve their pedagogical practices is indeed an important starting point; however, it will not take them far without institutional support and recognition for their contribution in the arena of teaching and learning.

References

- Clegg, S, Tan, J & Saeidi, S. 2002. Reflecting or acting? Reflective practice and continuing professional development in higher education. *Reflective Practice* 3(1): 131-146.
- Darwin, AM & Palmer, E. 2009. Mentoring circles in higher education. *Higher Education Research and Development* 28(2): 125-136. Australia: Routledge.
<http://researchoutputs.unisa.edu.au/1959.8/115599>
Accessed 18 March 2018.
- Dawson, D, Borin, P, Meadows, KN, Britnell, J, Olsen, K & McIntyre, G. 2014. The impact of the instructional skills workshop on faculty approaches to teaching. Higher Education Quality Council of Ontario.
- Day, RWC, Kerr, D & Pattison, P. 2006. *Instructional Skills Workshop (ISW) Handbook for Participants*. Vancouver: ISW.
- Eisen, MJ. 2001. Peer-based professional development viewed through the lens of transformative learning. *Holistic nursing practice* 16(1): 30-42.
- Field, A. 2009. *Discovering Statistics Using SPSS* (4th ed.). London: SAGE.
- Foxe, JP, Frake-Mistak, M & Popovic, C. 2017. The Instructional Skills Workshop: a missed opportunity in the UK? *Innovations in Education and Teaching International* 54(2): 135-142.
- Giustini, D. 2009. Utilizing learning theories in the digital age: from theory to practice. *Journal of the Canadian Health Libraries Association* 30(1): 19-25.
- Guskey, TR. 2002. Professional development and teacher change. *Teachers and Teaching: Theory and Practice* 8(3): 381-391.
- Instructional Skills Workshop (ISW) Network. 2018. [O]. Available:
<https://iswnetwork.ca/>
Accessed 14 March 2018.
- Jindal-Snape, D & Holmes, EA. 2009. A longitudinal study exploring perspectives of participants regarding reflective practice during their transition from higher education to professional practice. *Reflective Practice* 10(2): 219-232.
- Khamis, T. 2016. Networks of Quality, Teaching and Learning. [O]. Available:
<https://www.aku.edu/ctl/Pages/home.aspx>
Accessed 23 March 2018.
- Lou, SJ, Dzan, WY, Lee, CY & Chung, CC. 2014. Learning effectiveness of applying TRIZ-integrated BOPPPS. *International Journal of Engineering Education* 30(5): 1303-1312.
- Lund, JW. 2007. Successful faculty mentoring relationships at evangelical Christian colleges. *Christian Higher Education* 6(5): 371-390.
- Macpherson, A. 2011. The Instructional Skills Workshop as a transformative learning process. Unpublished doctoral dissertation. Simon Fraser University, Burnaby, BC.

- Nulty, DD. 2008. The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education* 33(3): 301-314.
- Robinson, TE & Hope, WC. 2013. Teaching in higher education: is there a need for training in pedagogy in graduate degree programs? *Research in Higher Education Journal* 21.
- Shulman, LS. 1993. Teaching as community property putting an end to pedagogical solitude. *Change: the Magazine of Higher Learning* 25(6): 6-7.
- Sullivan, PB, Buckle, A, Nicky, G & Atkinson, SH. 2012. *Peer observation of teaching as a faculty development tool*. BioMed Central Ltd. BioMed Central Ltd. [O]. Available: <http://www.biomedcentral.com/1472-6920/12/26>
Accessed 23 March 2018.
- Suwaed, H & Rahouma, W. 2015. A new vision of professional development for university teachers in Libya: 'It's not an event, it is a process'. *Universal Journal of Educational Research* 3(10): 691-696.
- Tenenberg, J. 2016. Learning through observing peers in practice. *Studies in Higher Education* 41(4): 756-773.
- Thomas, S, Chie, QT, Abraham, M, Raj, SJ & Beh, LS. 2014. A qualitative review of literature on peer review of teaching in higher education: an application of the SWOT framework. *Review of Educational Research* 84(1): 112-159.



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