## Envisioning changing role of university teacher in online instructional environments<sup>\*</sup>

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#### **Abstract**

Adoption of online teaching in higher education institutions was initially difficult, but has now seen exponential growth. Still, university teachers often seem reluctant to teach online. This paper discusses three possible underlying reasons for this: university teachers are socialized as content experts; university teachers do not get sufficient training in online teaching; and university teachers are evaluated based on their research, not on their teaching. The paper then proposes activities to address these barriers, including starting formal training for online teaching, reflecting on the own role as online instructor, establishing community of practices of online teachers, developing an online learning strategy at higher education institutions, offering institution rewards and awards for online teaching, and providing support through an e-learning support unit. Technology already redefines teaching, and technology will also redefine the role of the teacher.

**Keywords**: education technology, online teaching, higher education, role change

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#### 1. Introduction

Adoption of online teaching (either as fully online courses or as blended learning courses) in higher education institutions was initially difficult (Baltaci-Goktalay & Ocak, 2006), but has now seen exponential growth (Munoz Carril, Gonzalez Sanmamed, & Hernandes Selles, 2013). Still, university teachers often seem reluctant to teach online, due to reasons such as fear of change, scepticism about student outcomes, or workload issues (Wingo, Ivankova, & Moss, 2017).

This is surprising, considering the possible benefits of online teaching on the process and outcome of students' learning. Online teaching offers new ways of facilitating learning processes. It can support a more student-centred learning approach where learners "become autonomous, active, and responsible for his and her learning" (Arah, 2012, p. 851) and where learners "create shared meanings through collaborative learning activities that integrate new knowledge into their experiences" (Holly, Legg, Mueller, & Adelman, 2008, p. 254).

In online teaching settings, the roles of teachers change and specific "teaching tasks" are required (Munoz Carril et al., 2013, p. 463). Teachers partly have to give up the control over the learning process of their students and adopt a more supporting approach as "designers and facilitators of learning" (Hlynka & Jacobsen, 2009) or as coaches in their students' learning process (Alvarez, Guasch, & Espasa, 2009; ElfEL, 2008). This includes a "transition from 'subject expert' to 'performance coach' in a learning situation" (Alvarez et al., 2009, p. 327).

However, many teachers "still have considerable doubts about the value of current online teaching practices" (Baran, 2011, p. 1) and perceive education technology "as an added complication to their workload and functions" (Alvarez et al., 2009, p. 321). Teachers also express concerns that teaching online may affect their image or prestige at their university (Wingo et al., 2017). They "often rely on their traditional pedagogical approaches that were developed while emulating professors" (Baran, 2011, p. 11). These traditional approaches may not be adequate for online teaching. Taking the Technology, Pedagogy, and Content Knowledge (TPACK) model as an interpretative lens, university teachers seem to be strong in content knowledge and weaker in technology knowledge and pedagogy knowledge (Mishra & Koehler, 2006).

The hypothesis of this paper is that university teachers may not be able to fully take over the new roles that are needed for online teaching. This paper will explore some underlying reasons for this and discuss some options to change this situation.

#### 2. New Roles of University Teachers in Online Teaching

Online teaching demands new competencies of the teachers (Alvarez et al., 2009). "Online teaching is different from traditional teaching and, as such, it requires the development of its own pedagogies" (Baran, 2011, p. 19). Online teaching is often not just a substitution or augmentation of face-to-face teaching, but may modify or even redefine teaching processes (Munoz Carril et al., 2013; Puentedura, 2006) in their transition from "subject expert" to "performance coach" (Alvarez et al., 2009, p. 327).

The influential instructor's role model by Berge (1995) categorizes the instructor's role as pedagogical, social, managerial, and technical (Alvarez et al., 2009; Berge, 1995, 2008). The pedagogical role revolves around the instructor's duties as educational facilitator. The social role demands the creation of a friendly, social environment where learning is encouraged. The managerial role includes defining the content of the course. The technical role, finally, focuses on helping the students to master the technical course environments.

Other researchers have refined these roles, e.g. into social role, evaluator, manager, technologist, advisor, personal role, and researcher (Gonzalez-Sanmamed, Munoz-Carril, & Sangra, 2014). A comprehensive literature review even identifies 27 roles associated with online teaching altogether (Munoz Carril et al., 2013). Detailed competency frameworks for online-based teaching and training have also been proposed (ElfEL, 2008).

The paper now discusses how the socialization of university teachers may hinder them from taking over these new roles and from providing effective online teaching.

# 3. Socialization of University Teachers – Barriers to Effective Online Teaching

This section explores three possible barriers to effective online teaching: university teachers are socialized as content experts; university teachers do not get sufficient training in online teaching; and university teachers are evaluated based on their research, not on their teaching.

When using the term "university teachers", we refer here to academic staff within higher education institutions who are involved both in research and education, such as postdocs, assistant professors, associate professors, and full professors.

#### **3.1** University teachers are socialized as content experts

Academic identity is typically based on both research and teaching activities (Clarke, Hyde, & Drennan, 2013). Yet the primary socialization of university teachers seems to be as researchers and content experts. Their status and promotion is strongly rooted in their scientific merits (Kerres, Euler, Seufert, Hasanbegovic, & Voss, 2005, p. 37). Both self-concept and public image of university teachers seem more based on their content expertise than on their teaching expertise (Kerres et al., 2005, p. 36).

This directly conflicts with the new role of "facilitator" in online teaching, as the facilitator is coach and "guide by the side", and not so much instructor and content expert. The university teacher's socialization as researcher and content expert makes it hard for some of them to leave this role of content expert and to move to the new role of facilitator.

#### **3.2** University teachers do not get sufficient training in online teaching

University teachers often lack systematic preparation for teaching (Baran, 2011; Simon, 2012) and especially lack preparation for online teaching. University teachers are not primarily teachers; instead, they have to divide their time between research, education, and other duties (Simon, 2012). Doctoral and postdoc training is often mostly related to research methods, research organization, research quality, and the publication of research results. This is their preparation for an academic career. Teacher training is typically not the primary part of postdoc training.

Pedagogical training for academic staff thus often is insufficient (Baran, 2011). At the University for Health Sciences, Medical Informatics and Technology (UMIT) in Tyrol, for example, the mandatory training certificate for university teachers comprises around 80 hours of training. A comparable amount of time is requested at the University of Innsbruck.

Thus it is not surprising that university teachers may not possess strong pedagogical competencies in online pedagogy. "Many online learning practices are employed as the replication of traditional classroom environments" (Baran, 2011, p. 50). University teachers seem not well prepared to understand and exploit the benefits of online teaching.

Taking the four roles described by Berge (1995) above, university teachers may not be well prepared for the pedagogical and social role in online courses. However, these roles have tremendous impact on successful online learning processes (Salmon, 2013).

As a consequence, university teachers may feel "uncertain, uneasy, and unprepared for the challenges of teaching online" (Baran, 2011, p. 166). A "pedagogical transformation" (Baran, 2011, p. 178) of teachers is thus not easily taking place.

#### **3.3** University teachers are evaluated based on their research, not on teaching

University teachers pursuing an academic career are evaluated and promoted mostly based on their research outcome. The quality of lecturing usually does not play a major role in the evaluation of university staff, neither during their recruitment nor during their promotion to associate or full professors. Instead, their scientific output (number of papers, number of research grants) plays a major role. Thus they are not motivated to invest time and energy in further developing their pedagogical competencies in online teaching.

This holds especially true as many faculty are sceptic about the image of online education in general, compared to classroom-based education. A review found that teachers expressed concerns that teaching online would negatively affect their promotion and tenure process (Wingo et al., 2017).

### 4. Implications for Pedagogical Training of University Teachers

This section proposes ways to address the described barriers:

- 1. Before starting their first online lectures, university teachers should get extensive and then ongoing formal training in online teaching (Arah, 2012). This formal training must include the planning and design role as well as the pedagogical and social role of online teaching. It must focus on the complex relationship between technology, pedagogy, and content (Mishra & Koehler, 2006).
- Training in online teaching needs to take into account the various roles the teacher has
  to adopt (Gonzalez-Sanmamed et al., 2014). Only in this way can a comprehensive "eteaching competency" (Kerres, 2013, p. 36) be developed.
- 3. Training needs to include a critical reflection on the changing role of the university teacher. This helps to re-consider and re-construct the own role as university teacher. Taking Lewin's change theory (Lewin, 1947), this means that training first needs to

"unfreeze" the old role definition of "sage on the stage" of the teachers, before "moving" and "refreezing" the new role definition as facilitator and "guide on the side".

- 4. Networks and communities of practice should be established for online teachers. This helps to transform their teaching by socially constructing their knowledge and practice (Baran, 2011, p. 39). As part of this networking, all young university teachers should be provided an experienced mentor which whom they can discuss online teaching experiences (Alvarez et al., 2009).
- 5. Teaching competencies must be valued as highly as research competencies when hiring researchers for all academic university positions including full professorships.
- Universities need to adopt an online learning strategy that describes the chances of online learning and the expectations to augment and modify traditional learning through online learning (Kerres, 2013).
- 7. Institutional rewards should support teachers who try to improve their teaching (such as teacher of the year awards) and especially their online teaching (such as e-learning awards). Institutions should recognize and motivate their teachers when they attempt to exploit the benefits of online teaching (Baran, 2011, p. 165).
- 8. Competent and continuous technological and pedagogical support (e.g. through an elearning support unit) need to be provided for all teachers (Wingo et al., 2017).

#### 5. Conclusion

The traditional role of university teachers is changing from "sage on the stage" to "guide on the side". Online teaching is instrumental for this change, but this change also impacts and redefines traditional face-to-face teaching. University teachers do not appear to be well-equipped to respond to the pedagogical and technological challenges of online learning.

The benefits of online learning, such as promoting student-centred, self-paced, cooperative, and social learning, are not exploited to the degree possible. The role of university teachers thus needs to be reconsidered.

This change has to start with addressing younger teachers who may be more flexible to adopt new ways of teaching. Changing teacher's attitudes towards student-centred learning may, however, be a "difficult, long and cumbersome process" (Rienties, Brouwer, & Lygo-Baker, 2013, p. 41).

Resistance to online teaching may come from a fear of losing control: losing control of learning processes, losing the means to monitor and control participation and interaction, or losing the role as content expert in an online learning setting. Dedicated training programs for teachers can help to support the needed role shift (Rienties et al., 2013).

University teachers must understand that losing control and losing the role of an expert is a challenge, but that this "de-centering" of the teacher (Baran, 2011, p. 190) also holds the opportunity to redefine the role of the teacher, to offer a more fulfilling teaching experience for the teacher, and to provide more engaged and competence-oriented learning for the students. Technology is redefining teaching and, in so doing, is also redefining the role of the teacher.

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