

# ***A paradigm shift rhetoric and theory-practice gap in online higher education: A case study of an open university***

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## **Abstract**

In this paper, I critically examine a theory-practice gap existing in online higher education (HE) with a particular focus on the significant discrepancies between social constructivist learning theories and actual instructional design (ID) practices in an open university context. I perceive theory not as universal or scientific truth but as a historical and discursive product (Foucault, 1970). In this perspective, the theory-practice gap is both *the result* and *the evidence* of the disjunction between the common understandings (or discourses) about online HE and the actual state (or realities) of it. This is, therefore, a much more complex social and educational phenomenon than simply a pedagogical issue of how to apply the legitimate learning theories to appropriate ID practices. To better grasp the complexity, I first describe the evolution of instructional technologies and theories of distance education (DE), a predecessor of online education. Second, I analyze one wide-spread academic discourse that has propagated online education as a new learning paradigm in HE and suggested social constructivist theories-informed instructional practices as a better way of doing online HE. This analysis is followed by a qualitative case study of the actual ID practices and circumstances in an open university in North America. By examining the gap between instructional theories and practices in this particular HE context, this study provides insights about how the gap has come into being and some valuable lessons for future research. At this moment, we are witnessing how the rhetoric of the learning paradigm shift in HE has become the doctrine we pursue to further produce the imperative of providing online education across all HE institutions including residential universities. Unless we challenge the social press of this rhetoric and deconstruct our current perspectives on online education, we can neither slow down this seemingly inexorable shift to online education nor fully grasp the actual state of online HE in which the theory-practice gap may continue to increase. Thus, this study ultimately aims to question our current taken-for-granted assumptions about legitimate online HE practices largely influenced by the rhetorical and come up with a more helpful lens to approach the theory-practice gap.

## **Keywords**

Theory-Practice Gap, Online Higher Education, Learning Paradigm Shift, Open University, Instructional Design, Social Constructivist Learning Theories

## **Background**

Although “it is difficult to arrive at one definition” (Schlosser & Simonson, 2010, p. 34) and the forms of distance education (DE) are varied across diverse educational levels and contexts, there are two shared elements in general DE practices that distinguish DE from conventional face-to-face education. The first component is the separation of teacher and learner, and the second is the use of technological media to unite teacher and learner (Keegan, 1996; Moore, 1973). In DE, teaching and learning are technologically-mediated and pre-planned through an institutional, often industrialized, course production process (Peters, 2007). From the emergence of the early form of DE (i.e., independent correspondence study), this particular nature of ‘learning at a distance’ has enabled students previously underserved by traditional universities (e.g., adults with diverse barriers and responsibilities) to have access to higher education (HE, Moore, 1973; Keegan, 1996; Wedemeyer, 1981). The field of DE, therefore, has long focused on the possibilities of emerging technologies and related ID strategies aiming to enhance these students’ educational experiences. That DE practices are often categorized according to the technological medium that each of them uses (e.g., Swan, 2010) demonstrates the strong technological focus in the field (Pittman, 2013).

In particular, Internet-based DE practices are conceptually well-differentiated from traditional DE ones and new terms such as online education, online learning, e-learning or networked learning have emerged and been used

to refer to the new Internet-based DE practices (e.g., Edwards, 1995; Kanuka & Brooks, 2010; Swan, 2010). Although the distinctions between these terms are unclear and the use of each term is inconsistent throughout literature (Moore, Dickson-Deane, & Galyen, 2011), there is a shared emphasis on its mediation through Internet technologies. In this way of conceptualizing DE practices, the pedagogical differences between the new and the old DE practices are also largely explained by the distinctive features of Internet technologies compared to those of previous DE media. Due to the communicative features of the Internet, online education is often characterized as interactive and collaborative, that is, as an innovative form that could overcome the inherent educational limitations in DE caused by the physical distance from the teacher (Garrison & Kanuka, 2008). Traditional DE, on the other hand, is conceptualized as being limited to individualized learning practices (Schlosser & Simonson, 2010). Consequently, online education has been regarded as superior to traditional DE (Garrison & Kanuka, 2008).

*How people learn* has always been an important question in education because only if we know how people learn, are we able to teach them or effectively design their learning experiences (Bransford, Brown, & Cocking, 2000). Not very long ago, behaviourist learning theories (e.g., Skinner's programmed instruction) and cognitivist learning theories (e.g., Wittrock's generative learning model) dominated educational contexts. Skinner in his article, *The science of learning and the art of teaching* published in 1954, argued that programmed instructional materials should include small steps of desirable behaviour changes, ask frequent questions and offer immediate feedback, and allow for individual self-paced approaches. He also insisted that teaching should utilize scientific methods such as a systematic analysis of learning and optimal arrangements of the contingencies of reinforcement to change and maintain behaviour. Later, Wittrock's (1992) generative learning model defined learning as acquisition of factual information and suggested people learn new knowledge by generating connections between the new information with their prior knowledge already stored in their long-term memory. According to this cognitivist learning approach, effective teaching provides a learning task meaningful to individual learners and carefully organizes and presents materials as proper chunks in a proper order from simple to complex, and building on prior memory.

Early scholars in DE (e.g., Charles A. Wedemeyer and Michael G. Moore in the US, Börje Holmberg in Sweden, Otto Peters in Germany) were exclusively concerned with an instructional model of independent correspondence study augmented by different communication media (e.g., telephone tutoring). Because learning in the correspondence study programs is fundamentally an individual process initiated by knowledge-transmitting or broadcasting activities, it is often associated with behaviourist-cognitivist learning theories (e.g., Anderson & Dron, 2011; Jonassen, et al., 1995). However, the original DE instructional models devised in 1960-70s did not originate from the popular behaviourist paradigm of that time. Instead, many of the critical elements of the early DE models emerged based on the unique and inherent characteristics of DE practices. For example, because in DE, all teaching and learning materials and activities need to be carefully planned, organized, and clearly presented before courses are provided to students, Peters in the mid-1960s developed an industrial production model. Peters (1967) believed that DE production and industrial production are compatible and so he applied the industrial production techniques (e.g., division of labour, mechanization, mass production, economies of scale) into the DE production and delivery process to increase both cost-effectiveness and teaching-effectiveness. This model was perceived as very suitable to DE contexts and so it was taken up as an organizational model of most of the DE institutions including the Open University in the United Kingdom (Garrison, 2000).

In addition, distance learners in the early correspondence study programs were mostly adults with limited access to face-to-face HE. Therefore, many of the critical elements of the early instructional models (e.g., autonomy, dialogue, structure) were borrowed from a more pragmatic approach to learning and instructional design (ID) practices from adult education rather than behaviorist-cognitivist learning theories (Anderson, 2013; Moore, 2013). Different from those learning theories, Wedemeyer's (1981) independent study model emphasized student-centered or self-directed learning and Holmberg's teaching-learning conversations model—originally a guided didactic conversation model—emphasized relational qualities such that “feelings of personal empathy and personal relations between learner and teacher support motivation for learning and tend to improve the results of learning” (Holmberg, 2007, p. 69). Building upon Wedemeyer's independent study model, Moore (1973) developed the theory of transactional distance, which illustrated the relationships between three instructional components: course structure, teacher-learning dialogue and learner autonomy. According to the model, DE can provide both behaviourist-cognitivist learning experiences and constructivist learning experiences according to the degree of transactional distance (Moore, 2013).

Although several technologies (e.g., TV-Radio) had been introduced and utilized to augment the teaching-effectiveness, DE practices remained largely as independent correspondence study based on the industrial production model until the 1990s. During the period of the 1990s-2000s, there was an important pedagogical

change in general education contexts: a move from cognitivism to constructivism (Bruner, 1986; Piaget, 1973, Vygotsky, 1978). This transition is mostly explained with respect to an epistemological or philosophical shift from objectivism to constructivism (Jonassen, 1991; Swan, 2005; Vrasidas, 2000). Whereas objectivists believe that the world is structured and knowledge is objective and external to the knower, constructivists argue that the world is constructed in each individual's mind and knowledge is subjective. Constructivist learning theories are fundamentally based on this epistemological view and so constructivists regard learning as "an active process of constructing rather than acquiring knowledge, and instruction is a process of supporting that construction rather than communicating knowledge" (Duffy & Cunningham, 1996). Social constructivists (e.g., Vygotsky, 1978) and learning theorists on the basis of this epistemological stance (e.g., Wenger, 1997) particularly argue that knowledge is constructed through social interactions so that learning is not an individual but a social practice (Swan, 2005).

The development of ICTs had further facilitated the theorizing of how to design social constructivist learning experiences in online education contexts (Hillman, Willis, & Gunawardena, 1994; Paavola, Lipponen, & Hakkarainen, 2004). According to the authors (Jonassen et al., 1995), social constructivist learning environments "engage learners in knowledge construction through collaborative activities that embed learning in a meaningful context and through reflection on what has been learned through conversation with other learners" (p. 12). Thus, it has been suggested that instructional designers need to focus on developing an interactive and collaborative learning environment rather than controlling learning behaviours and outcomes through prescribed instructional sequence and interventions (Swan, 2005). For example, Garrison and Anderson (2003) proposed a *Community of Inquiry* model including three key factors (i.e., cognitive presence, social presence, teaching presence) that need to be carefully considered when designing online learning. This model does not suggest a prescriptive or procedural approach to ID but identifies particular instructional strategies and teaching behaviours that may foster the development of community among learners.

In this context, researchers began to argue that with new ICTs, it was possible to innovate and transform traditional DE in ways that reflected the social constructivist model of online education (Jonassen et al., 1995, p. 14). Along with the growing expectations about the educational use of ICTs to support connections and collaboration in DE and more broadly, different research communities (e.g., Computer-Supported Collaborative Learning in Stahl, Koschmann, & Suthers, 2006, Networked Learning in McConnell, Hodgson, & Dirckinck-Holmfeld, 2011) have rapidly emerged and developed.

## A Paradigm Shift in Higher Education

In 2000, Linda Harasim, one of the most well-known Canadian scholars in online education proclaimed that a paradigmatic shift had happened in HE using Thomas Kuhn's concept "paradigm shift," which is an important claim to examine more closely. First, Kuhn's understanding of paradigm is closely related to Foucault's (1970) concepts of a regime of truth that decides legitimate knowledge, thoughts, and statements in each society. Kuhn's account of the paradigm shift focuses on the incommensurable differences between the old paradigm and the new paradigm in terms of the "sets of rules and standards about truth—what is to be studied, why, and how" (Popkewitz & Brennan, 1997, p. 300). In other words, a very different doctrine is accepted and advocated within each scientific paradigm. According to Kuhn, a paradigmatic shift in science happens neither by the advent of an individual theory nor under a certain social group's intentional planning to change. Instead, these events emerge from complex social relations and involve a series of phases in which a new paradigm is transformed into the new dominant view of science. Thus, Kuhn denies the absoluteness of a single paradigm but illustrates the multiplicity of paradigms in the field of science at any given moment. Foucault similarly observes that multiple competing discourses co-exist in a particular social regime, among which dominant discourses produce a regime of truth that further produces a set of knowledge, norms, and regulations which come to regulate social practices (Foucault, 1995).

Paradoxically, however, the term paradigm shift has migrated into social sciences and is used here, as in Harasim's work, as a prescriptive notion that implies a volitional change, contrasting with Kuhn's original definition of paradigmatic change. Stickney (2006), for example, observes that paradigm shift, as a discourse in teacher education, is often associated with the global level of societal trends and is used to legitimize authoritarian educational policies or campaigns within the local level of school context. Stickney further argues that the paradigm shift rhetoric is misused in school reform projects where it is utilized as a powerful tool to force teachers to develop a unified identity as change agents who actively and collectively participate to realize top-down reform initiatives in their schools. Interestingly, in this context, the notion of paradigm shift itself, in turn, becomes a dominant discourse leading educational changes and exerting influence upon teachers' beliefs and practices. Juxtaposing the original Kuhnian meaning of paradigm shift with its rhetorical use in the online

education literature may provide useful insights about the current instructional theory-practice gap in online HE. Therefore, utilizing Foucault's (1995) conceptualization of the relationship between discourse and knowledge, I consider this paradigm shift rhetoric as one of the important dominant discourses, which has produced and circulated a set of legitimate knowledge, regulations and rules in the academic field of online education.

Most of the early publications about online education (e.g., Dede, 1996; Palloff & Pratt, 1999; Scardamalia & Bereiter, 1994) enthusiastically propagated it as a new and revolutionary form of education that would bring a social constructivist approach to learning into diverse educational contexts as a central pedagogical paradigm. Particularly, Harasim (2000) in her article *Shift happens: Online education as a new paradigm in learning* (2000) draws a clear conceptual boundary between online education and the other forms of HE through illustrating the pedagogical differences between the two and provides a comprehensive overview of the distinct nature of online education. According to Harasim, online education provides "new modes of educational delivery, new learning domains, new principles of learning, new learning processes and outcomes, and new educational roles and entities" (p. 45). She explains that because innovative networking technologies enable many-to-many communication to happen any time and any place, even using a small degree of online networking (e.g., e-mail and computer conferencing) can enhance the quality of learning in both face-to-face or DE contexts. She specifically points out that asynchronous collaborative online learning is more effective than face-to-face seminars because it provides "24/7 access expanded air time for discussion and reflection, allowing everyone to have a voice, overcoming challenges, and traditional discrimination factors, such as ageism, sexism, and racism" (p. 54).

She fundamentally suggests "the concept of producing knowledge by collaborating in groups" (p. 54) as encapsulating the essence of the new learning paradigm that online educators including designers, researchers, and instructors need to bring into HE context. Then, she calls for a collective effort to "intentionally" shape the paradigmatic shift in HE through designing online courses based on three interrelated principles, which are collaboration in learning, access to lifelong education, and constructivism. However, this call indeed indicates that the paradigm has not yet shifted and it inevitably calls into question the validity of her earlier claim that online education has shifted the learning paradigm in HE. Nevertheless, without clearly addressing these potentially self-contradictory issues in her article, Harasim reinforces her argument by presenting a large set of empirical data collected from her own research project on the Virtual-U, a Web-based learning environment in which over 15,000 students and 220 instructors participated in over 439 courses. For example, she mentions that 100% of Virtual-U courses incorporated some form of networking and collaborative learning activities and students actively participated in those activities and then claims that these courses produce entirely new learning patterns in HE. In this accessible and democratic nature of online learning environments, she continues to argue, students can engage in their learning more actively than the way they engage in similar face-to-face activities.

In her conclusion, she reaffirms that the learning paradigm shift happens as online education matures in HE and as a result, the traditional learning and teaching processes and outcomes are transformed to the new ones based on the new paradigm of collaborative networked learning. More than 490 academic works in online education have cited Harasim's article since 2000 (more than 50 works in 2014 and 2015). Furthermore, many of these works including those recent ones claim that online education is fundamentally different from, as well as more effective than, the other forms of DE or HE not by providing clear evidence to support the claim, but by simply citing Harasim's argument as positive evidence. The increasing number of academic texts that cite her argument demonstrates the dominance of this paradigm shift discourse, and, further through these repeated citations, this taken-for-granted assumption about online education continued to be reinforced. For example, Nachmias (2002) cites Harasim's work when he proposes a research framework for Web-based instruction that includes a research focus on "shifts and paradigmatic changes in pedagogical practice resulting from the implementation of the new technologies" (p. 215). Papastergiou (2006) similarly states the ICT technologies support the implementation of a social constructivist approach to learning by "enabling the creation of online learning communities for construction of shared knowledge across barriers of space and time" (p. 595) and cited Harasim's article with several other online education pioneers.

However, my analysis reveals that her semantic approach to the notion of paradigm shift is rather prescriptive than being descriptive of the actual state of online HE and that her explanations about online education are also rhetorical rather than being well-grounded in the realities of online HE. She also fails to recognize potential barriers to the effective adoption of online education, at the institutional or individual level, in real-life educational situations (e.g., resistance, a lack of resources). In fact, there have been a number of researchers who published research results contradicting Harasim's argument (e.g., Piezon & Ferree, 2008; Zhu, Valcke, & Schellens, 2009). For instance, Njenga and Fourie (2010) criticize simplistic enthusiasm about online education in the field of higher education, a perspective created and reinforced by techno-positivists who put a strong

emphasis on adoption of online education based on particular agendas, rather than on careful examination of the data. Nevertheless, the paradigm shift discourse itself has not been directly questioned up to now and Harasim's work continues to frequently appear as a seminal reference in many online education literatures (e.g., Guasch, Espasa, Alvarez, & Kirschner, 2013; Terras & Ramsay, 2015). In most cases, her argument about online education as a new learning paradigm in HE is cited as if it is a definite fact. In this sense, although Harasim's article is certainly not a single force that produces the rhetoric of the paradigm shift, it can be deemed as one of the influential texts that have facilitated this development and well-reflects the discursive stance in that academic field. Thus, I believe that it is worth spending time on critically analyzing these claims about online education in comparison with the realities of online education in an open university.

## **The Theory-Practice Gap in Online Higher Education**

Despite the rapid development of social constructivism-informed research communities concerning online HE, it is often claimed that many online courses continue to use traditional behaviourist or cognitivist learning approaches, which do not provide learners with collaborative learning opportunities (Herrington, Reeves, & Oliver, 2005). Of course, this theory-practice (often research-practice) gap is neither a new nor exclusively an issue for social constructivist learning theory and online education practice (for examples in other educational fields, see Biesta, 2007; Cheng, Cheng, & Tang, 2010; Nuthall, 2004). However, the claim tends to be more salient in online education contexts than other face-to-face situations because this gap is perceived as a serious failure to make effective use of ICTs (Herrington, Reeves, & Oliver, 2005). In addition, compared to face-to-face classrooms, it may be much easier for researchers to gain access to online courses and then observe instructional activities and analyze learner interactions in the courses (Greener & Perriton, 2005). In this context, the perceived gap has been continuously growing between the reality of online education and the rapidly developing scholarship that focuses on realizing the educational potential of ICTs for collaborative learning.

Most studies with similar concerns in online education have focused on different factors that influence the adoption of online education (e.g., Chen, 2009; Li & Lindner, 2007; Oomen-Early & Murphy, 2009; Tabata & Johnsrud, 2008). Many of these researchers have attempted to identify barriers to effective adoption of online education and provide general suggestions to remove these barriers. One of the most frequently identified barriers is faculty members' unwillingness or resistance to change their pedagogical practices or their lack of technological skills or pedagogical knowledge. So it has been often suggested that institutions provide incentives to those who are willing, and at the same time, offer professional development opportunities and ID assistance to those who are lacking in such abilities or knowledge. However, another group of researchers (e.g., Battalio, 2007; Elloumi, 2004; Kanuka & Brooks, 2010) have discussed the relationship between the pedagogical qualities of effective online instruction (e.g., interactivity or flexibility) and other principles regarding effective online ID and development (e.g., accessibility, efficiency, cost-effectiveness). They have illustrated the possible conflicts between those qualities and principles and concluded that it is difficult to satisfy all of them in a single online program. These research findings, in fact, suggest that the gap between instructional theories and instructional activities applied in actual practice may be unavoidable.

Thus, I argue in this paper that the previous studies, focused on the separate barriers to adoption of effective online education and the individual level of changes on one's pedagogical approach, are limited because this reductionist approach fails to provide a full account of the theory-practice gap in online HE. Although these studies can provide some invaluable perspectives on this issue, they offer little insight to the degree to which the pedagogical potential of online education, claimed to be based on social constructivist learning theory, has been (or can be) fulfilled in the current HE context where non-collaborative online courses and their enrollments have already dramatically increased. Nor do they fully explain how and why it is difficult to implement social constructivist instructional models into actual practices. Furthermore, it is still unclear what happens when different principles (e.g., interactivity, accessibility, and efficiency) conflict with each other in an online education institution and how the conflicts are perceived by its members and resolved through their ID or teaching practices. It can thus be argued that we have not yet developed a comprehensive understanding of the complexity of the disjunction between the rhetoric that propagates online education as a new learning paradigm in HE and the actual realities of its implementation.

## **A Qualitative Case Study**

To develop a better understanding of the realities of online HE, therefore, I conducted a qualitative case study of an open university in North America with a particular focus on ID practices at the university to address the question "Is online education really a new learning paradigm in higher education?" I closely looked at the continuities and discontinuities between the discourse and actual ID practices in the university. I conducted

semi-structured interviews with 7 instructional designers, which was guided by 15 open-ended questions about their perceptions and experiences about online course design and the current status of online HE in the open university context. All participants were recruited by a snowball sampling method. My semantic analysis of the interview transcripts particularly focused on the continuities and discontinuities between designers' statements about online HE and ones in Harasim's text. My analysis of the instructional designers' interview scripts about their practices in 2013, more than decade after the emergence of the paradigm shift discourse, suggests that moving online has not shifted the instructional paradigm in the open university and the currently popular instructional theories are actually conflicting with the actual instructional conditions in the university.

Harasim (2000) emphasizes the accessible and democratic nature of online communication and based on these potential merits of online group communication different from those in face-to-face settings, she argues that online education is also accessible and democratic. All instructional designers that I interviewed similarly recognize the great potential of adopting Internet technologies in DE for providing more accessible educational opportunities to students and enabling equal relationships among participants in online communication. However, they actually point out that the institutional take-up of online education has been more likely related to administrative perceptions of it as a cost-saving method of educational delivery at the university rather than its potential as a pedagogical tool to increase the equality in HE. For instance, Jane, an instructional designer who has been working at the university since 2001, mentions that in early 2000s "It was all about how this online learning business was going to cut the cost. So once that started being a part of discourse well... that was it! I will say it's more the economics of it than pedagogy." As a result, online education has become a main delivery method at the university, however, it has developed in a way as to increase the cost-effectiveness of DE offerings rather than their pedagogical effectiveness. Most online courses in the university, unlike Harasim's claim, focus on the cost-effectiveness and flexible access dimensions while giving up the more costly interactive learning component. Thus, online education has been developed more into an individualized and flexible educational mode with self-paced courses and any group communication in the self-paced online courses has been extremely restricted even though Internet communication technologies have been made available.

In the research field of online HE, there have also been a number of researchers (e.g., Elloumi, 2004; Oslington, 2004; Rabiee, Nazarian, & Gharibshayan, 2013) who are explicitly concerned about improving the institutional profits or market-driven values that online education can bring into higher education institutions. Power and Gould-Morven (2011) observe and report that although administrators generally welcome and support the adoption of online education in their universities, they tend to be unable or unwilling to provide the necessary supports for high-quality online course production and delivery. They conclude that unlike the earlier expectations towards online education to redirect HE, it has developed into a mainstream educational delivery method without overcoming the similar obstacles encountered by traditional DE. As well, the learning paradigm that has guided online education practices tends to still remain the same as that behind traditional DE practices. For example, Alex strongly argued that they have to be more conscious about how to structure communications with students in online courses (e.g., well-structured instruction, guidelines, and scaffolds) because "you can't talk to students online as you do in face-to-face". Jane similarly mentioned "interaction, for me it's not just interaction with peers. That is for traditional and online universities who have a cohort, but in our environment, [it is more important whether] it's easy to navigate, the instruction is clear, the material is clear." Both Alex and Jane stressed the importance of effective communication in online education but they were not necessarily concerned with group communication but rather with issues of information architecture, content presentation, and environment design.

Harasim (2000) also asserts online education is (and should be) designed based on new principles of collaboration and the constructivist learning paradigm. However, in my study, 5 instructional designers out of 7 specifically stated their approach to online course design was pragmatic or eclectic, which seems to refer to an assumed neutral theoretic place lying between constructivism and behaviorism. At least theoretically, all the designers seemed to agree with a social constructivist ID approach, however, most of them simultaneously admitted that they do not (or cannot) design courses based on such an approach. In fact, their actual design practices are largely based on prescriptive ID models, which were often negatively tied to behaviorist learning theories in the literatures. The discrepancy between their understanding of idealized design based on social constructivism and their actual pragmatic design practices that more closely reflected traditional ID models is, therefore, mostly caused by institutional constraints and organizational limitations rather than being caused by individual's choices. The most frequently mentioned constraint is an organizational structure around the course production and teaching process, which is so rigid and standardized that the designers cannot be creative in their ID practices. At the organizational level, designers also seem to feel that their input is minimal as they are situated within a large course team structure including an academic, an editor, and a multimedia designer any or all of whom may not accept social constructivist learning theories.

Unlike Harasim's positive prediction about the rapid transformation from traditional DE to social constructivist online education in DE institutions, at the open university this process continues to be challenging and slow to evolve and involves changing its old course publication culture for correspondence study materials, which mainly focused on providing well-structured knowledge and clear and detailed self-study guidelines. Fixed administrative policies and bureaucratic processes are also suggested as important factors that disrupt more effective and flexible ID practices and consequently prevent the instructional designers from adopting social constructivist ID theories in their practices, which require juggling the complex relationships between different memberships and institutional culture and working processes. What is missing in Harasim's and other online learning researchers' work is a recognition of these institutional constraints and potential resistance to the new method of online course production when it is introduced to members familiar with, or preferring the old ways to the new one. In fact, before the evolution of online education, there was already a large body of knowledge about ID (i.e., theories and models) in DE and the other related fields (e.g., Dick & Carey, 1990; Merrill, Li, & Jones, 1990; Reigeluth, 1989). More specifically in many DE contexts, Peters' (1967) industrial production model and Wedemeyer's (1981) independent study model were (and still are) predominant. In this situation, although instructional designers, who are often perceived as change agents (Campbell, Schwier, & Kenny, 2007), have strived to adopt the social constructivist ID practices, the result has not been very positive.

## Discussion

In this last section, I will briefly present three valuable insights that emerged through my analysis, which may inform our approach to the theory-practice gap in online HE. Firstly, as Koper (2007) argues, online education (e-learning) research exclusively seeks to "change the world as it exists" with little interest in "understanding events [in] the world as it exists" (p. 356 cited in Friesen, 2009, p. 7). As a result, most available theories for online HE are prescriptive in their nature rather than being descriptive of the actual online education situations resulting in us knowing little about organizational, economic-political, and social circumstances of our online education practices as well as the experiences of different groups of participants (or stakeholders) in online HE. It is not surprising that the instructional theories developed in such a vacuum would not work smoothly in a real setting. Secondly, as Parchoma (2011) criticizes in her chapter, e-learning research and practices, despite the increasing diversity of its forms and contexts in HE, has been perceived as a singular enterprise and so controlled by a singular paradigm. Consequently, the paradigm shift rhetoric can be a dominant discourse that controls all the research practices in the field of online HE. In addition, the adoption of social constructivist learning theories and the educational use of Internet technologies have become a single legitimate form of online education while all other forms, including the traditional independent study model, have come under harsh criticism for a misuse of the pedagogical potential of ICTs. However, this case study provides support for the argument for greater diversity of research and instructional paradigms in online HE.

Lastly but probably the most importantly, we may need to reconceptualise the theory-practice gap by deconstructing the taken-for-granted notion about knowledge that often prioritizes theories over practices—specifically, that highly appreciates scientific knowledge (e.g., principles or universals) while undervaluing practical knowledge closely related to the practitioners' "perception or apprehension of concrete particulars" in their practices (Kessels & Korthagen, 1996, p. 19). McArthur (2012), using Adorno's conceptualization of theory and practice, similarly insists that the theory-practice dichotomy (or the academic-vocational divide) in HE needs to be challenged and as thinking and doing are inseparable from one another, theory and practice need to be consolidated into one. In the same vein with accepting the diverse learning paradigms, this new look may also empower instructional designers conducting actual online ID practices in different institutional settings. I argue that compared to the heavy responsibility that they carry in different HE institutions, that of leading a learning paradigm shift in their institutions, the weight of existing research efforts to understand their working contexts and support their practices has been too minimal. Instead, research based on social constructivist learning theories continues to produce authoritative directions about a single way of doing online education with a growing number of best practice examples and the imposition of norms that be not actually working in those contexts. Therefore, rethinking the validity and applicability of social constructivist theories, instead of criticizing the non-social constructivist online education practices, may be a good place to start to actually reduce the theory-practice gap in online HE.

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