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## Drawing on the Principles of SoTL to Illuminate a Path Forward for the Scholarship of Educational Development

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# Drawing on the Principles of SoTL to Illuminate a Path Forward for the Scholarship of Educational Development

## **Abstract**

There has been growing discourse related to the importance of the scholarship of educational development (SoED), but less discussion related to clearly defining principles for guiding engagement in SoED or contextualizing SoED within literature related to the scholarship of teaching and learning (SoTL). Expanding upon Felten's (2013) principles for SoTL, as well as evolving discourse related to principles of educational development (e.g., Gibbs, 2013; Taylor & Rege Colet, 2010; Timmermans, 2014), this paper presents seven principles for SoED. Two additional principles (transforming practice and reflective practice) are added to Felten's principles to further contextualize SoED in relation to educational development and SoTL. Three cases are provided to illustrate educational development, SoTL, and SoED within the context of these principles. The interrelationships between educational development, SoTL, and SoED are complex. While SoED offers many opportunities for further legitimizing the individual and collective practices in educational development, it also presents many additional tensions and questions for further research.

On parle de plus en plus de l'importance de l'avancement des connaissances en pédagogie (ACP), mais on parle moins d'une définition claire des principes qui guident l'engagement en ACP ou de la contextualisation de l'ACP dans les publications de la recherche consacrée à l'avancement des connaissances en enseignement et en apprentissage (ACEA). Pour élargir la portée des principes pour l'ACEA présentés par Felten (2013), ainsi que celle du discours évolutif lié aux principes de la pédagogie (voir Gibbs, 2013; Taylor & Rege Colet, 2010; Timmermans, 2014), cet article présente sept principes pour l'ACP. Deux principes supplémentaires (transformation de la pratique et pratique réflexive) sont ajoutés aux principes de Felten afin de contextualiser davantage l'ACP par rapport à la pédagogie et à l'ACEA. Trois cas sont présentés pour illustrer la pédagogie, l'ACEA et l'ACP dans le contexte de ces principes. Les relations entre la pédagogie, l'ACEA et l'ACP sont complexes. Alors que l'ACP offre de nombreuses possibilités pour rendre plus légitimes les pratiques individuelles et collectives en pédagogie, il présente également de nombreuses tensions et des questions supplémentaires qui pourront faire l'objet de davantage de recherche.

## **Keywords**

SoTL, educational development, scholarship of educational development

## **Cover Page Footnote**

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In the pursuit of scholarly and excellent teaching, instructors are supported by colleagues, teaching centres, and others in their development of teaching for the enhancement of student learning (Knight & Wilcox, 1998; Leibowitz, 2014; Taylor & Rege Colet, 2010). Existing as a distinct layer beyond the activity of teaching and student learning itself, “educational development ... describe[s] actions, planned and undertaken, by faculty members themselves or by others working with faculty, aimed at enhancing teaching” (Amundsen & Wilson, 2012, p. 90). Educational development is defined by its specific activities, purpose, and principles and further informed by the institutional, national, and disciplinary contexts where it is situated, as shaped by varying norms, priorities, agendas, and histories (Baume & Popovic, 2016; Knight & Wilcox, 1998; Taylor & Rege Colet, 2010).

Recent literature has called for more scholarship focused on educational development (e.g., Linder & Felten, 2015; Little, 2014; Potter, 2011; Taylor & Rege Colet, 2010; Timmermans, 2014). As explored further in the following sections, the scholarship of educational development (SoED) aligns with the scholarship of teaching and learning (SoTL), though focused on the outcomes and approaches to development of a distinct set of learners. To define good SoED, and identify how it relates to, yet is distinct from, SoTL and educational development practice, we expand on Felten’s (2013) criteria of good SoTL to identify seven principles of quality for SoED. We compare these criteria across SoTL, SoED, and educational development, and provide illustrative cases for applying the criteria and revealing nuanced distinctions among the three. The principles and discussion presented in this paper help further contextualize scholarly inquiry related to educational development and illuminate questions for further research and exploration.

### **Educational Development Practice**

Educational development activities for enhancing teaching and thus improving student learning encompass the “wide range of activities” (p. 5) described by Gibbs (2013) such as developing individuals and groups of teachers, developing learning environments, developing institutions, influencing external environments, developing quality assurance systems, and engaging in evaluation and research. The focus of these activities ranges from teaching strategies, course design, program and curriculum development, and policy and organizational development, with varying delivery methods including workshops, comprehensive programs, postgraduate programs, mentoring programs, individual or departmental consultations, research, evaluation, and providing leadership on governance and policy committees (Dawson, Britnell, & Hitchcock, 2010; Gibbs, 2013; Taylor & Rege Colet, 2010). Nuanced distinctions in educational development activities are further described in multiple studies (Dawson et al., 2010; Gosling, 2009; Lee & McWilliam, 2008; Lewis, 1996; McDonald & Stockley, 2008; Moses, 1987; Rowland, 2007; Sorcinelli, Austin, Eddy, & Beach, 2006; Taylor, 2005).

Educational development takes place at multiple levels. It encompasses working with individuals, departments, institutional committees, and leaders across postsecondary education (Dawson et al., 2010; McDonald, 2010; Taylor & Rege Colet, 2010). Fraser, Gosling, and Sorcinelli (2010) further conceptualize the activities of educational developers across multiple organizational levels with individual instructors and educational leaders, across academic departments and institutions, and throughout the postsecondary sector as a whole. This multiplicity of players, stakeholders, and locations adds complexity to educational development that is not always visible to those who are not directly involved in this work.

Several authors use a micro-meso-macro-mega framework to explain this complexity (Kenny, Watson, & Desmarais, 2016; Poole & Simmons, 2013; Williams et al., 2013; Wuetherick & Yu, 2016). Simmons (2016a) provides a description of these multiple levels as follows, “*Micro* typically refers to the level of the individual instructor, *meso* to the department level, *macro* to what happens at the institutional level, and *mega* to disciplinary or provincial and national levels” (p. 96). These levels are helpful in further situating the varied contexts that the activities of educational development occur (Dawson et al., 2010; Fraser et al., 2010; Gibbs, 2013; Hoessler, Godden, & Hoessler, 2015; Taylor & Rege Colet, 2010).

Educational development has evolved over the last four decades from its focus on the teaching practice of individuals to the collective perspective of programs, departments, and institutions, and from “fine-tuning” through workshops and consultations to “transforming practice” through integrative initiatives and engagement with leadership including policy development, all while becoming more scholarly, professional, and contextually- and disciplinarily-responsive (Gibbs, 2013, p. 9). In the past, teaching was largely considered to be an individual pursuit, where SoTL evolved in response to a desire to use, contribute to, and disseminate research on learning and teaching. We argue that SoED is a similar response to a desire to use, contribute to, and disseminate research on educational development.

### Scholarship of Educational Development

Many authors have advocated for more scholarship on educational development (Badley, 2001; Felten, Kalish, Pingree, & Plank, 2007; Linder & Felten, 2015; Little, 2014; Potter, 2011; Taylor & Rege Colet, 2010; Timmermans, 2014), with educational development increasingly recognized as a field of practice-based scholarship (Geertsema, 2016), and the vast majority of educational developers conducting research as part of, or in addition to, their roles (Green & Little, 2015). As a rationale for scholarship, Taylor and Rege Colet (2010) state:

To grow as a field of practice and scholarship, educational development initiatives must provide a public account of the activities and outcomes and a rigorous analysis of field research conducted according to academic standards. The results of this research will demonstrate accountability, promote the roles of educational development, gain recognition for work carried out, and contribute to expert knowledge about building learning and teaching capacity in academic communities. (p. 159)

Felten et al. (2007) propose that educational developers adopt a *scholarship of teaching and learning in educational development*, which involves, “systematic, evidence-based study and publication by practitioners of the outcomes of their practice” (p. 95). With a focus on the *scholarship of faculty development* produced by “practitioners...studying aspects of higher education relevant to their day-to-day work” (p. 290), Potter’s (2011) analysis and characterization of over 150 articles concluded that most of these works were pragmatic in nature. More holistically, Timmermans (2014) notes:

We must also adopt the same scholarly and evidence-based approach that we promote in others by drawing on research to inform practice, conducting research and collaborating with colleagues to create and share new knowledge. Underpinning the collaborative and scholarly work of educational developers is a deep reflective spirit which prompts us to

question assumptions, think critically about our work, and question the effectiveness of practice. (p. 313-314)

Across these descriptions of SoED, we see many similarities with past discourse regarding the systematic, evidence-based, collaborative, and reflective nature of SoTL, which inherently draws upon one's local experience and context to strengthen their wisdom of practice, and is also disseminated for the broader benefit of others (Felten, 2013; Hutchings & Shulman, 1999; Killen & Gallagher, 2013; Trigwell, Martin, Benjamin, & Prosser, 2000; Weimer, 2001).

Building upon Felten et al. (2007), SoED can be seen as the process of engaging in systematic, scholarly inquiry related to educational development practices and approaches, with the ultimate goal of enhancing postsecondary education. SoED provides a means for critically examining and communicating the influence and impact of educational development practices, and further defining, legitimizing, and building our individual and collective credibility (Badley, 2001; Bamber & Stefani, 2015). SoED also, as suggested by Timmermans (2014), encompasses inquiry that questions assumptions, and generates new knowledge and theories that evolve from and inform educational development practice. Thus, SoED offers a new approach for understanding educational development: “the way we frame our work, the way we measure and account for it, the research questions we ask of and with it – has implications not only for our field but also for higher education more broadly” (Little, 2014, p. 2). The relationship between SoTL and SoED, however, remains complex and evolving, and deserves clarification.

### **SoTL and SoED**

To understand the relationship of SoTL and SoED, it is essential to consider the qualities and nature of SoTL, which have been richly debated since Boyer (1990) introduced the scholarship of teaching. SoTL continues to evolve as systematic inquiry into the processes of teaching and student learning, including expectations for appropriate dissemination (Felten, 2013; Huber & Hutchings, 2005; Hutchings & Shulman, 1999; Kreber, 2005; McKinney, 2013; Richlin, 2001). Despite critiques questioning SoTL as a scholarly contribution (Kanuka, 2011), SoTL is described as “equal to all forms of research endeavor, [with] interpretations of SoTL research require[ing] a healthy skepticism, analysis of methodological rigour, and an openness to alternative perspectives and analysis” (Hubball & Clarke, 2010, p. 1). In their seminal work, Kreber and Cranton (2000) note “drawing on their personally constructed wisdom of practice and research findings are integral to construction of valid knowledge about teaching” (p. 486), echoing how SoTL “involves a dialectic between research and practice” (Poole, 2013, p. 136). Reflective and scholarly inquiry are fundamental to SoTL, where learning spaces become sites of inquiry and instructors critically examine student learning to improve teaching, and commit to sharing their findings publicly for others to build on (Huber, 2013).

The core focus for SoTL is “improving our students’ learning” (Prosser, 2008, p. 4), and as Felten (2013) says, “good practice in SoTL requires focused, critical inquiry into a well-defined aspect of student learning” (p. 122). SoED, like SoTL, is also fundamentally focused on understanding and improving the conditions which best support student learning in a postsecondary context. Within SoED, however, the direct focus of inquiry is on the outcomes and impact of educational development practices and approaches, whether that be their impact on the teaching beliefs, practices and approaches of instructors, or their influence on larger departmental, institutional, or organizational policies, structures, and processes. In SoED, the learners and sites

of inquiry are re-conceptualized within an educational development framework, where instructors, graduate students, educational leaders, post-doctoral students, and other participants become the learners, and educational development initiatives and contexts become sites of inquiry. Like SoTL, reflective and scholarly inquiry form the foundation for SoED. As such, SoED is grounded in systematic inquiry and the wisdom of experience individuals bring to their educational development practice.

Although past discourse has focused on the need for further engagement in SoED, we argue for the need for principles of quality for SoED. Similar to how the pursuit of criteria for good SoTL may be even more important than its definition to the ongoing “evolution of SoTL” (Felten, 2013, p. 122). The growing area of SoED deserves principles akin to Felten's principles of quality SoTL that “make distinctions about quality,” “reflect the essential characteristics of exemplary work” (p. 122), and “clarify and demystify” (p. 124) evaluation.

In the section below, we identify principles of quality SoED in the context of educational development practice by expanding on Felten's (2013, p. 122) five principles of practice for SoTL:

1. Inquiry focused on student learning
2. Grounded in context
3. Methodologically sound
4. Conducted in partnership with students
5. Appropriately public

These five principles are extended to seven to include two indicators of purpose: transforming of practice and reflective practice. Together the extended principles offer nuanced distinctions across SoTL, SoED, and educational development.

### **Mapping Principles of Educational Development, SoTL, and SoED**

To develop a common language (Little, 2014) and provide guiding principles for scholarly inquiry in educational development, we draw upon the principles of research and the profession of educational development (akin to Felten et al., 2007). The resulting extended set of seven principles informing SoED, SoTL, and educational development are presented in Table 1. Extending the foundation of Felten's (2013) five principles of SoTL, we add two indicators of purpose (transforming practice and reflective practice), which are consistently emphasized in scholarly literature related to the broad intentions of SoTL, educational development practice, and SoED (Felten et al. 2007; Gibbs, 2013; Hoessler, Britnell, & Stockley, 2010; Hubball & Clarke, 2010; Hutchings & Shulman, 1999; Kreber & Cranton, 2000; Timmermans, 2014; Weimer, 2001).

The sixth principle, the intent to transform practice, is a guiding principle for educational developers, with its focus on transforming practice through evidence-informed and systematic change (Gibbs, 2013). Timmermans (2014) also identifies “to influence positive change and transformation in perspectives regarding teaching and learning” as a threshold concept for educational developers (p. 312). Hubball and Clarke (2010) speak to SoTL's “explicit transformational agenda” (p. 1). Research has confirmed that engagement in SoTL does transform individual practices and approaches (Brew & Ginns, 2008; Trigwell, 2013). Gilpin and Liston (2009) also describe SoTL's larger agenda of transforming the academy as a whole. These transformations are often conceptualized as a move towards student-focused approaches to teaching (Trigwell, 2013).

Likewise, past educational development research has emphasized the importance of developing a reflective practice, both for continuously improving the effectiveness of educational development work, and as a fundamental component of educational development programs and initiatives (Dawson et al., 2014; Timmermans, 2014; University of Manchester, 2006). Core to SoTL's very foundation is its inherently reflective nature, where researchers draw upon and contextualize evidence of inquiry and their experience of practice to improve teaching and student learning (Hutchings & Shulman, 1999; Kreber & Cranton, 2000; Weimer, 2001).

Table 1  
*Mapping and Aligning Principles of Educational Development, SoTL, and SoED*

Principles	Educational Development	SoTL	SoED
Focus	Maintaining a focus on learning (Leibowitz, 2014; Taylor & Rege Colet, 2010)	Inquiry focused on student learning (Felten, 2013)	Inquiry focused on educational development practices and the theories that inform or evolve from ED practices (Felten et al., 2007; Little, 2014; Timmermans, 2014)
Context	Working in the local context (Taylor & Rege Colet, 2010)	Grounded in context (Felten, 2013)	Grounded in a specific context (but this context may be different than SoTL) (Felten et al., 2007)
Evidence-based & Methodologically Sound	Using and generating evidence-based knowledge (Taylor & Rege Colet, 2010; Timmermans, 2014)	Methodologically sound (Felten, 2013)	Methodologically sound, drawing on a range of disciplines including SoTL (Felten et al., 2007)
Partnership & Collegiality	Respecting collegiality (Taylor & Rege Colet, 2010)	Conducted in partnership with students (Felten, 2013)	Conducted in partnership with faculty, students, staff, and/or administrators
Scholarly Community & Dissemination	Contributing and belonging to a scholarly field (McDonald, 2010; Timmermans, 2014)	Appropriately public (Felten, 2013)	Scholarly findings shared with and critiqued by ED community and broader academic community (Felten et al., 2007; Hoessler et al., 2010)
Transforming Practice	Transforming practice (Gibbs, 2013)	Informed by a transformational agenda including increase in student focused practices (Hubball & Clarke, 2010)	Transformational agenda to improve practice across multiple levels (micro, meso, macro, mega)
Reflective Practice	Based on reflective practice (Timmermans, 2014; University of Manchester, 2006)	SoTL researchers reflect upon teaching and student learning to inform practice (Hutchings & Shulman, 1999; Kreber & Cranton, 2000; Weimer, 2001)	SoED researchers reflect upon their practice to inform practice (Hoessler et al., 2010) and enhance teaching and learning across multiple levels (micro, meso, macro, mega) of development, both of themselves and others

## **Illustrating the Relationship between SoED, SoTL, and Educational Development**

To illustrate the application of the principles in Table 1, we present the following cases, which are situated in the context of the Instructional Skills Workshop (ISW), an educational development program, typically offered over three or four days, by many teaching and learning centres in Canada and beyond (Dawson et al., 2014). Through the ISW, instructors take part in a highly structured process whereby they teach micro lessons to a group of peers, receiving and giving feedback on their lessons. The ISW is believed to be transformational in engendering a student-focused (rather than instructor-focused) approach to teaching, while also fostering the development of skills related to giving and receiving feedback, and developing a critically reflective teaching practice (Dawson et al., 2014).

### **Case 1: The ISW as an Example of Educational Development**

A teaching and learning centre facilitates an ISW for a group of 12 new and experienced instructors, to engage them in an intentional activity to improve their individual teaching practice. The instructors participate in the ISW with the goal of enhancing their teaching skills and developing confidence in their teaching abilities.

The practice of facilitating an ISW is contextualized by the seven principles of educational development as follows:

1. **Maintaining a focus on learning:** The ISW is wholly concerned with supporting faculty to become more effective instructors. The nature of the peer-based feedback and self-reflection ensures a constant focus on learning, both in terms of the learning for the instructors taking part in the ISW, and the learning of their future students.
2. **Working in the local context:** The ISW is comprised of a small group of participants who focus on instructing their peers. They may draw on their expertise within a particular department, discipline, or institution, but each person gives and receives feedback based on their personal experience of the micro lesson.
3. **Using and generating evidence-based knowledge:** While there is not a great deal of literature on the ISW, there is evidence that it is transformational (Dawson et al., 2014), and the development of the ISW is informed by research on postsecondary education and adult learning.
4. **Respecting collegiality:** The ISW is rooted in collegiality as facilitators and participants enter into a relationship based on trust and respect for the duration of the workshop.
5. **Contributing and belonging to a scholarly field:** Facilitators who have been trained by and are members of a community of ISW facilitators lead the ISW. Instructors participating in the ISW belong to the scholarly academic community.
6. **Transforming practice:** The intent of the ISW is to encourage instructors to adapt their teaching practice in response to peer feedback. The underlying expectation is that instructors will shift towards student-centred approaches to teaching.
7. **Based on reflective practice:** The ISW's core principle is one of self-reflection and reflection on the practice of others. The process of reflection is intentionally embedded throughout the ISW, and is shared and discussed, in order to inform future practice.



A typical ISW embeds reflective practice both for the participants and the facilitators; however, there is no systematic research inquiry built into this instance of this educational development initiative. Neither facilitators nor participants gather data, analyze findings, or share their work with others. Thus, this case is best conceptualized as an example of educational development. While not involved in the creation of scholarship, facilitating an ISW is an educational development practice that is based on existing scholarly and researched principles of educational development practice in its focus and delivery. Building upon Richlin's (2001) work describing scholarly teaching and SoTL, this example, therefore, can be further contextualized as scholarly educational development practice.

## **Case 2: The ISW as an Example of SoTL**

Instructors who took part in an ISW decide to make changes to their teaching and to study if the changes in their teaching impact student learning in their classrooms. Three of the instructors devise a study that measures student performance and attitudes before and after a change in their teaching. Their study is contextualized by the seven principles of SoTL as follows:

1. Inquiry based on student learning: The small research project is wholly focused on whether or not student learning is improved as a result of the change in practice.
2. Grounded in context: The study begins with a literature review of research into student-centred learning. The research questions build on previous work, and acknowledgement is made of the different disciplinary norms and approaches of the instructors involved in the study. One might also consider the institutional or cultural contexts.
3. Methodologically sound: The study is designed according to good research practice; ethics approval is secured before the study begins. Appropriate research methodologies are used to collect, analyze and situate the data, which answer the specific research questions.
4. Conducted in partnership with students: Students are the “subjects” of the research, but they are also partners in the inquiry, as the three instructors engage graduate students and two undergraduate students from other classes to collect and analyze the data.
5. Appropriately public: Findings are shared with the broader student body and with colleagues in the institution at the annual teaching and learning conference. They are also published in a peer-reviewed journal.
6. Transformational agenda: The intention behind making the change in practice is to improve student learning. The research project is a means to evaluate the effectiveness of this intent to transform learning.
7. Faculty reflect upon teaching to inform practice: As a result of conducting the research, the instructors intentionally reflect upon the impact of the changes made to their practice, and they continue to evolve their teaching approaches accordingly.

This activity is located in the teaching activities of the instructors who participated in the ISW and who are conducting a systematic investigation to evaluate the impact of a change in their teaching practice on their students' learning. As advocated by Felten (2013), the focus of inquiry is on whether a change in the instructors' teaching practice has impacted a specific aspect of their students learning (as measured through students' performance and attitudes pre- and post-intervention). Thus, this is best conceptualized as an example of SoTL.

### **Case 3: The ISW as an Example of SoED**

Educational developers and instructor participants in an ISW decide to collaborate on a research project to explore how participation in the ISW can lead to a change in their teaching practices. Before the ISW begins, the research team (including both the educational developers facilitating the ISW and the faculty participants) agrees to take an autoethnographic approach to capture qualitative research data through prepared reflective writing prompts. For instance, after each day of the ISW, the participants may write short reflective responses to prompts, such as, “Based on my experiences in today’s ISW, two changes I would like to make to my teaching practice include...,” and “My plan for enacting these teaching changes is to...” Additionally, the participants may agree to complete similar reflections on a monthly basis for six months following the completion of the ISW to explore how these shifts in teaching practice occur over time, if at all. The collaborative research group seeks institutional research ethics approval to conduct this project involving human participants (i.e., themselves). The writing reflections are submitted to the educational developers who are co-conducting this research, so they can begin to organize the data. All research participants (educational developers and instructors, alike) are involved in the formal qualitative analysis of the data. Ultimately, the findings and outcomes of the research study are shared with the broader educational development community through a conference presentation and the submission of a journal manuscript.

The example presented here describes a SoED project that is further contextualized by the seven principles of SoED as described in Table 1.

1. Inquiry focused on educational development practices: The research is focused on exploring changed teaching practices as a result of participation in an ISW, which is an educational development program.
2. Grounded in a specific context: The research is situated in the context of an educational development initiative, the ISW, which educational developers facilitate for instructors in a specific institutional context. The instructors’ experiences of this local context are clearly reflected in the qualitative data collected.
3. Methodologically sound: Because this research focuses on capturing the stories of individuals and their shifts in teaching practices over time as a result of participation in an ISW, a reflective autoethnographic approach is determined to be the most appropriate choice for data collection.
4. Conducted in partnership with faculty, students, staff and/or administrators: Importantly, this research project is conducted in partnership between educational developers and faculty members, such that the perspectives of each role can be noted and valued throughout the research process.
5. Scholarly findings are shared with and critiqued by the broader academic community: Findings and outcomes of the research study are shared with the broader educational development community through a conference presentation and critiqued via the submission of a peer-reviewed journal manuscript.
6. Transformational agenda to improve practice: Through this type of research project, educational developers have the opportunity to determine whether their work through the ISW is having an impact on teaching practices at the institution. Likewise, the instructors can articulate how participating in the ISW has transformed their own teaching practices.

They are able to clearly articulate these changes in their tenure and promotion documentation as a result of this study.

7. Educational developers reflect upon their practice to inform practice and enhance teaching and learning: The results of this research are used to improve the ISW facilitation practice of the educational developers who participate in the study and may be used by other educational developers to improve the ISW within other institutional contexts as a direct result of their scholarly dissemination.

This example is best conceptualized as SoED because the focus of inquiry is on exploring the impact of an educational development practice. The researchers have moved beyond implementing or facilitating the workshop (educational development practice) into engaging in systematic inquiry to explore its impact (SoED). In contrast to the second example of SoTL, where the focus of inquiry was on how a specific aspect of student learning was directly impacted by changes in the instructors' teaching practice, the phenomenon under inquiry in this third example is the impact of an educational development intervention, and how it specifically led to a change in the instructors' teaching practice, rather than a specific aspect of student learning.

These three cases have the same starting point—an ISW conducted by educational developers with instructors who themselves work with students. The intent in all three situations is ultimately to improve the student experience. All three illustrate elements of scholarship; however, they differ in terms of their reach, their locus of inquiry, and their methodology.

These three cases represent hypothetical studies, yet the nuanced distinctions between SoTL, SoED, and educational development practice represented here also occur within published SoTL and SoED literature. As one example of SoTL, Pachai, DiBattista, and Kim (2015) investigated the use of “none of the above” options on multiple-choice exams. A systematic investigation was performed in a large introductory course to assess the impact of a specific teaching intervention (the placement of “none of the above” options on multiple choice questions) on student learning (as measured by difficulty and discrimination within the context of their performance on multiple choice exams). A study that could be classified as SoED is Dawson and colleagues' (2014) investigation of the impact of the ISW on faculty approaches to teaching. Here, a systematic investigation was performed to assess the impact of an educational development practice offered across four different Ontario postsecondary institutions on faculty's approach to teaching.

Across the three hypothetical cases, and the two published studies, our seven principles articulate and reveal nuanced distinctions between SoTL and SoED. We will now consider the more common situations where the boundaries between educational development, SoTL, and SoED intersect.

### **Integration of Approaches**

Educational development practice, SoTL, and SoED can intersect when in-practice inquiry extends from studying educational development practice into studying impacts of specific teaching and learning strategies on student learning. An example to further illuminate this intersection is Leger and Fostaty Young's (2014) investigation into the effects of a teaching and learning in higher education course on graduate teaching assistants' conceptions of teaching. Here, a systematic investigation was performed to assess the impact of teaching and learning interventions used in a course on university teaching (which is also an educational development program) on student

learning (as measured by changes in conceptions of teaching and learning by graduate teaching assistants enrolled in the course). In this example, not only was the site of inquiry both a university course and an educational development program, the study's participants were also both instructors (graduate teaching assistants) and students enrolled in the course.

Figure 1 seeks to illustrate the distinction and intersection of areas discussed in the above sections with teaching and learning shown as the backdrop for SoTL, educational development, and SoED, since in the broadest sense this is the context where instructors and educational developers operate. While we might argue that educational development is ultimately about teaching and learning, teaching and learning activities may occur without any input from educational development. Similarly, while many of us may advocate for all teaching to be informed by and adhere to SoTL, this is not necessarily the case. In the same way, SoED may not be directly involved in SoTL, nor directly in teaching and learning. It is, however, possible for all four areas, namely teaching and learning, educational development, SoTL, and SoED, to overlap. Educational development may also support the SoTL activities of instructors where educational developers play a key role in helping instructors access, interpret, and apply SoTL literature, as well as engage in SoTL inquiry (Geertsema, 2016; Gibbs, 2013; Hoessler et al., 2010; Taylor & Rege Colet, 2010; Timmermans, 2014).

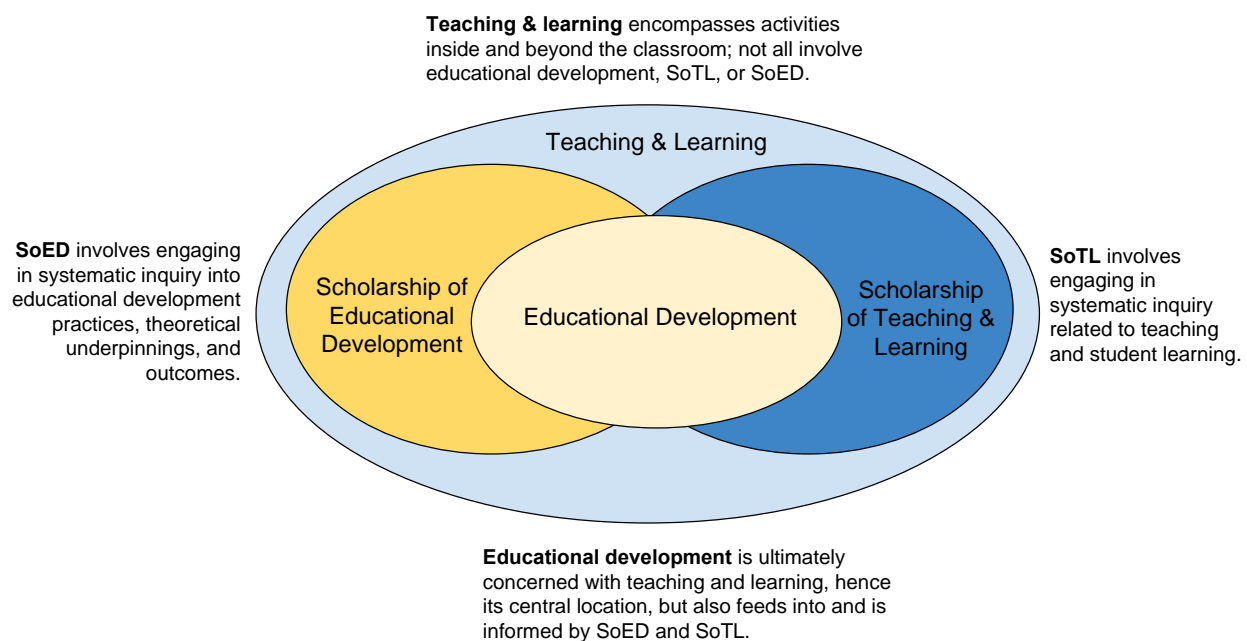


Figure 1. Integration framework of teaching and learning, educational development, SoTL, and SoED.

## Revealing Opportunities and Tensions

Developing a SoED framework to highlight principles for good SoED further raises the profile and legitimacy of SoED and of educational development, but it also presents tensions. SoED may be viewed as a means of creating awareness and identity for those engaging in educational development by providing an opportunity for reflection on our individual and collective practices. Given the growing case for educational development to produce demonstrable and measurable outcomes, it becomes critical for educational developers' credibility and

accountability to produce accurate understandings of our indirect and direct impacts on teaching and learning, as well as how we frame and conceptualize our work (Bamber & Stefani, 2015; Little, 2014; Taylor & Rege Colet, 2010).

SoED exemplifies shifts in educational development from a focus on supporting individuals to enabling change in broader program and institutional practices, and from practice to providing scholarly evidence that supports educational development work (Baume & Popovic, 2016; Debowski, 2011; Gibbs, 2013; Sorcinelli et al., 2006). While some applaud the move towards larger-scale program and institutional transformations (Golding, 2014; Schroeder et al., 2011), others question the shift away from a focus on individual, holistic relationships (Clegg, 2009; Gibbs, 2013). Echoing these concerns, Healey (2012) observed the tension between meeting individual practices and institutional needs in SoED. While Gibbs (2013) cautions against educational development “rush[ing] to scholasticism” (p. 12), Badley (2001) advocates for the field to embrace its role in developing scholars and reflective practitioners, within the broader context of the academic community.

The growth in SoED brings to the forefront questions warranting further investigation including development and support of SoED, and the inherent dual roles. Questions of how individuals develop SoED expertise, how institutions, units, and departments support engagement in SoED, and how SoED could influence change in postsecondary education may find answers in Canada's postsecondary landscape for SoTL explored by scholars, as illustrated in a recent special issue of *New Directions for Teaching and Learning* (Simmons, 2016b). As educational developers have often been central to engaging in, advocating for, and supporting others' engagement in SoTL, there is opportunity beyond this paper to draw upon past practice to support engagement in and to build a culture for this growing field of scholarly inquiry (Geertsema, 2016; Gibbs, 2013; Kenny et al., 2016; Taylor & Rege Colet, 2010; Williams et al., 2013).

In positioning educational developers as both practitioners and researchers within the academic culture (Gibbs, 2013), SoED brings a tension of dual roles. In SoTL, dual roles exist for instructors, for they become both teachers and researchers, and their students become learners, subjects, and/or partners in inquiry (Felten, 2013; MacLean & Poole, 2010; Stockley & Balkwill, 2013). Similar questions of the partnerships in SoED are important, but even more so is the question of how SoED will impact the way educational developers engage with instructors through this practice. Hanson (2013) cautions that the pressure for educational developers to critically examine the outcomes of their work may

drive a wedge between themselves and the academic colleagues they seek to support...This position may restrict the ability of educational developers to lead change and challenge the status quo, place them in danger of becoming pawns rather than a player on the higher education game board. (p. 389)

SoED highlights the complexity of educational development practice including the identities and roles of educational developers, in facilitating change across multiple organizational levels, and in advocating for the quality of postsecondary education within and across institutional contexts (Fraser et al., 2010; Gibbs, 2013; Timmermans, 2014). SoED evolves from and informs educational development practice.

SoED's relationship to SoTL is equally complex. In Felten's (2013) argument, SoTL focuses on a specific aspect of student learning, distinguishing the focus of SoED and SoTL. In contrast, scholars such as Hubball and Clarke (2010) suggest a broader view of SoTL

encompassing a wider range of practice-driven research into critical issues across more diverse settings in postsecondary education, potentially including the outcomes of educational development practice. SoED could be conceptualized as a form of SoTL based on a more holistic approach to defining SoTL that includes systematic inquiry related to improving both the practices of and *the conditions that support* teaching and learning in postsecondary education across multiple levels (Chick, 2016; Hubball, Pearson, & Clarke, 2013). Through this more inclusive approach, the specific aspect of inquiry could include not only student learning, but also the myriad of processes and practices that support the development of a strong culture for teaching and learning across multiple institutional levels and contexts (Hubball et al., 2013). This argument is consistent with past SoTL discourse that warns against narrowly defining and operationalizing SoTL (Boshier, 2009; Kenny & Evers, 2010). Whether SoED is conceptualized within SoTL, or seen as related yet distinct, the seven principles and cases outlined in this paper provide criteria for good SoED, and identify nuanced distinctions for future discussions of SoTL and SoED.

### Conclusion

Just as agreed upon criteria and standards for quality help confer the credibility of SoTL (Killen & Gallagher, 2013), similar scholarly pursuits will develop expertise, enhance practice, and further legitimize the field of educational development (Felten et al., 2007; Potter, 2011; Taylor & Rege Colet, 2010; Timmermans, 2014). The development of this seven-principle framework for SoED adds to recent conversations urging for a means to critically examine and communicate the influence and impact of educational development practices (Badley, 2001; Bamber & Stefani, 2015), and provides a lens to further contextualize the complexities of scholarly inquiry related to educational development, which may otherwise not be explicitly captured through the principles of good SoTL practice (Felten, 2013). This extended framework also offers an opportunity for SoED and SoTL researchers to further expand upon Felten's (2013) principles of good practice to help inform their scholarly inquiry.

Through the identification of what makes quality SoED, and discussions related to its interrelations with SoTL and educational development, there is rich potential for enlightening growth and collaboration. While this paper suggests a framework for those wishing to engage in scholarship about educational development work, we recognize that, like SoTL, the evolving nature of educational development and the unique contexts of the institutions that we work within and those with whom we work will require continual discussions and adaptations. Building upon Felten and colleagues (2007), the following questions provide a guide for further scholarly discourse stemming from this paper:

- How might SoED map onto other SoTL frameworks? And does this change the purpose, process, and/or outcomes of SoED or SoTL?
- Where do those supporting postsecondary education view themselves and their scholarly inquiry within a framework of SoED and SoTL?
- How has/will SoTL and SoED continue to shape the practice of educational development?
- How is SoTL and SoED valued and recognized in various postsecondary recruitment and reward structures (e.g., for instructors, faculty, staff, and/or educational developers)?

These questions are intended to inspire further discourse related to the criteria, opportunities, tensions, and possibilities associated with SoED and its relationship to SoTL.

## References

- Amundsen, C., & Wilson, M. (2012). Are we asking the right questions? A conceptual review of the educational development literature in higher education. *Review of Educational Research*, 82(1), 90-126. <http://dx.doi.org/10.3102/0034654312438409>
- Badley, G. (2001). Towards a pragmatic scholarship of academic development. *Quality Assurance in Education*, 9(3), 162-170. <http://dx.doi.org/10.1108/09684880110399167>
- Bamber, V., & Stefani, L. (2015). Taking up the challenge of evidencing value in educational development: From theory to practice. *International Journal for Academic Development*, 21(3), 242-254. <http://dx.doi.org/10.1080/1360144X.2015.1100112>
- Baume, D., & Popovic, C. (2016). Futures for academic development. In D. Baume & C. Popovic (Eds.), *Advancing practice in educational development* (pp. 293-314). London: Routledge.
- Brew, A., & Ginns, P. (2008). The relationship between engagement in the scholarship of teaching and learning and students' course experiences. *Assessment and Evaluation in Higher Education*, 33(5), 535-545. <http://dx.doi.org/10.1080/02602930701698959>
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.
- Boshier, R. (2009). Why is the scholarship of teaching and learning such a hard sell? *Higher Education Research & Development*, 28(1), 1-15. <http://dx.doi.org/10.1080/07294360802444321>
- Clegg, S. (2009). Forms of knowing and academic development practice. *Studies in Higher Education*, 34(4), 403-416. <http://dx.doi.org/10.1080/03075070902771937>
- Chick, N. (2016). *Taylor Institute for Teaching and Learning: Scholarship of teaching and learning strategic plan (2016-2019)*. Calgary, AB: University of Calgary Taylor Institute for Teaching and Learning. Retrieved from: <https://dl.dropboxusercontent.com/u/57580440/TI%20SoTL%20Strategic%20Plan%202016-19.pdf>
- Dawson, D., Borin, P., Meadows, K., Britnell, J., Olsen, K., & McIntyre, G. (2014). *The impact of the Instructional Skills Workshop on faculty approaches to teaching*. Toronto, ON: Higher Education Quality Council of Ontario.
- Dawson, D., Britnell, J., & Hitchcock, A. (2010). Developing competency models of faculty developers. In L. Nilson & J. Miller (Eds.), *To improve the academy: Resources for faculty, instructional, and organizational development* (Vol. 28, pp. 3-24). Stillwater, OK: New Forums Press.
- Debowski, S. (2011). Emergent shifts in faculty development: A reflective review. In J. M. Miller & J. Groccia, (Eds.), *To Improve the Academy: Resources for Faculty, Instructional, and Organizational Development* (Vol. 30, pp. 306-322). San Francisco, CA: Jossey-Bass.
- Felten, P. (2013). Principles of good practice in SoTL. *Teaching and Learning Inquiry*, 1(1), 121-125. <http://dx.doi.org/10.2979/teachlearningqu.1.1.121>
- Felten, P., Kalish, A., Pingree, A., & Plank, K. M. (2007). Toward a scholarship of teaching and learning in educational development. In L. Nilson & J. Miller (Eds.), *To improve the academy: Resources for faculty, instructional, and organizational development* (Vol. 25, pp. 93-108). Stillwater, OK: New Forums Press.

- Fraser, K., Gosling, D., & Sorcinelli, M. D. (2010). Conceptualizing evolving models of educational development. *New Directions for Teaching and Learning*, 122, 49-58. <http://dx.doi.org/10.1002/tl.397>
- Geertsema, J. (2016). Academic development, SoTL and educational research. *International Journal for Academic Development*, 21(2), 122-134. <http://dx.doi.org/10.1080/1360144X.2016.1175144>
- Gibbs, G. (2013). Reflections on the changing nature of educational development. *International Journal for Academic Development* 18(1), 4-14. <http://dx.doi.org/10.1080/1360144X.2013.751691>
- Gilpin, L. S., & Liston, D. (2009). Transformative education in the scholarship of teaching and learning: an analysis of SoTL literature. *International Journal for the Scholarship of Teaching and Learning*, 3(2), Article 11. <http://dx.doi.org/10.20429/ijstl.2009.030211>
- Golding, C. (2014). Blinkered conceptions of academic development. *International Journal for Academic Development*, 19(2), 150-152. <http://dx.doi.org/10.1080/1360144X.2013.855935>
- Green, D. A., & Little, D. (2015). Family portrait: A profile of educational developers around the world. *International Journal for Academic Development*, 21(2), 135-150. <http://dx.doi.org/10.1080/1360144X.2015.1046875>
- Gosling, D. (2009). Educational development in the UK: A complex and contradictory reality. *International Journal for Academic Development*, 14(1), 5-18. <http://dx.doi.org/10.1080/13601440802659122>
- Hanson, J. (2013). Educational developers as researchers: The contribution of insider research to enhancing understanding of role, identity and practice. *Innovations in Education and Teaching International*, 50(4), 388-398. <http://dx.doi.org/10.1080/14703297.2013.806220>
- Healey, M. (2012). Promoting the scholarship of academic development: Tensions between institutional needs and individual practices. *International Journal for Academic Development*, 17(1), 1-3. <http://dx.doi.org/10.1080/1360144X.2012.646519>
- Hoessler, C., Britnell, J., & Stockley, D. (2010). Assessing the impact of educational development through the lens of the scholarship of teaching and learning. *New Directions for Teaching and Learning*, 122, 81-89. <http://dx.doi.org/10.1002/tl.4>
- Hoessler, C., Godden, L., & Hoessler, B. (2015). Widening our evaluative lenses of formal, facilitated, and spontaneous academic development. *International Journal for Academic Development*, 20(3), 224-237. <http://dx.doi.org/10.1080/1360144X.2015.1048515>
- Hubball, H., & Clarke, A. (2010). Diverse methodological approaches and considerations for SoTL in higher education. *The Canadian Journal for the Scholarship of Teaching and Learning*, 1(1). <http://dx.doi.org/10.5206/cjsotl-rcacea.2010.1.2>
- Hubball, H., Pearson, M. L. & Clarke, A. (2013). SoTL inquiry in broader curricular contexts: Theoretical underpinnings and emerging trends. *Teaching & Learning Inquiry: The ISSOTL Journal*, 1(1), 41-57. <http://dx.doi.org/10.20343/teachlearningqu.1.1.41>
- Huber, M. (2013, April 26). What is the scholarship of teaching and learning? With Mary Huber. Retrieved from <https://teachingcommons.stanford.edu/teaching-talk/what-scholarship-teaching-and-learning-mary-huber>
- Huber, M. T., & Hutchings, P. (2005). *The advancement of learning: Building the teaching commons. A Carnegie Foundation report on the scholarship of teaching and learning in higher education*. San Francisco, CA: Jossey Bass.



- Hutchings, P., & Shulman, L. S. (1999). The scholarship of teaching: New elaborations, new developments. *Change: The Magazine of Higher Learning*, 31(5), 10-15. <http://dx.doi.org/10.2307/40165542>
- Kanuka, H. (2011). Keeping the scholarship in the scholarship of teaching and learning. *International Journal for the Scholarship of Teaching and Learning*, 5(1), Article 3. <http://dx.doi.org/10.20429/ijstl.2011.050103>
- Kenny, N., & Evers, F. (2010). Responding to the challenging dilemma of faculty engagement in research on teaching and learning and disciplinary research. *Collected Essays on Learning and Teaching*, 3, 21-26. Retrieved from <http://link.springer.com/journal/10755>
- Kenny, N., Watson, G. P. L., & Desmarais, S. (2016). Building sustained action: Supporting an institutional practice of SoTL at the University of Guelph. *New Directions for Teaching and Learning*, 146, 87-94. <http://dx.doi.org/10.1002/tl.20191>
- Killen, P. O. C., & Gallagher, E. V. (2013). Sketching the contours of the scholarship of teaching and learning in theology and religion. *Teaching Theology and Religion*, 16(2), 107-124. <http://dx.doi.org/10.1111/teth.12020>
- Knight, P. T., & Wilcox, S. (1998). Effectiveness and ethics in educational development: Changing contexts, changing notions. *The International Journal of Academic Development*, 3(2), 97-106. <http://dx.doi.org/10.1080/1360144980030202>
- Kreber, C. (2005). Reflection on teaching and scholarship of teaching: Focus on science instructors. *Higher Education: The International Journal of Higher Education and Educational Planning*, 50(2), 323-359. <http://dx.doi.org/10.1007/s10734-004-6360-2>
- Kreber, C., & Cranton, P. A. (2000). Exploring the scholarship of teaching. *Journal of Higher Education*, 71(4), 476-495. <http://dx.doi.org/10.2307/2649149>
- Leger, A. B., & Fostaty Young, S. (2014). A graduate course on teaching and learning in higher education: Influences on conceptions of teaching and learning. *The Canadian Journal for the Scholarship of Teaching and Learning*, 5(1), Article 3. <http://dx.doi.org/10.5206/cjsotl-rcacea.2014.1.3>
- Lee, A., & McWilliam, E. (2008). What game are we in? Living with academic development. *International Journal for Academic Development*, 13(1), 67-77. <http://dx.doi.org/10.1080/13601440701860284>
- Leibowitz, B. (2014). Reflections on academic development: What is in a name? *International Journal for Academic Development*, 19(4), 357-360. <http://dx.doi.org/10.1080/1360144X.2014.969978>
- Lewis, K. G. (1996). Faculty development in the United States: A brief history. *The International Journal for Academic Development*, 1(2), 26-33. <http://dx.doi.org/10.1080/1360144960010204>
- Linder, K. E., & Felten, P. (2015). Understanding the work of academic development. *International Journal for Academic Development*, 20(1), 1-3. <http://dx.doi.org/10.1080/1360144X.2014.98875>
- Little, D. (2014). Reflections on the state of the scholarship of educational development. *To Improve the Academy* 33(1), 1-13. <http://dx.doi.org/10.1002/tia2.20005>
- MacLean, M., & Poole, G. (2010). An introduction to ethical considerations for novices to research in teaching and learning in Canada. *The Canadian Journal for the Scholarship of Teaching and Learning*, 1(2), Article 7. <http://dx.doi.org/10.5206/cjsotl-rcacea.2010.2.7>
- McDonald, J. (2010). Charting pathways into the field of educational development. *New Directions for Teaching and Learning*, 122, 37-45. <http://dx.doi.org/10.1002/tl.397>

- McDonald, J., & Stockley, D. (2008). Pathways to the profession of educational development: An international perspective. *International Journal for Academic Development*, 13(3), 213-218. <http://dx.doi.org/10.1080/13601440802242622>
- McKinney, K. (Ed.). (2013). *The scholarship of teaching and learning in and across the disciplines*. Bloomington: Indiana University Press.
- Moses, I. (1987). Educational development units: A cross-cultural perspective. *Higher Education*, 16, 449-479. <http://dx.doi.org/10.1007/BF00129116>
- Pachai, M. V., DiBattista, D., & Kim, J. A. (2015). A systematic assessment of 'None of the Above' on multiple choice tests in a first year psychology classroom. *The Canadian Journal for the Scholarship of Teaching and Learning*, 6(3), Article 2. <http://dx.doi.org/10.5206/cjsotl-rcacea.2015.3.2>
- Poole, G. (2013). Square one: What is research? In K. McKinney (Ed.), *The scholarship of teaching and learning in and across the disciplines* (pp. 135-151). Bloomington: Indiana University Press.
- Poole, G., & Simmons, N. (2013). The contributions of the scholarship of teaching and learning to quality enhancement in Canada. In G. Gordon & R. Land (Eds.), *Quality enhancement in higher education: International perspectives* (pp. 118-128). London: Routledge.
- Potter, M. (2011). Toward a scholarship of faculty development. In J. Miller & J. Groccia (Eds.), *To Improve the academy: Resources for faculty, instructional and organizational development* (Vol. 29, pp. 288-301). San Francisco, CA: Jossey-Bass.
- Prosser, M. (2008). The scholarship of teaching and learning: What is it? A personal view. *International Journal for the Scholarship of Teaching and Learning*, 2(2), Article 2. <http://dx.doi.org/10.20429/ijstl.2008.020202>
- Richlin, L. (2001). Scholarly teaching and the scholarship of teaching. *New Directions for Teaching and Learning*, 86, 57-68. <http://dx.doi.org/10.1002/tl.16>
- Rowland, S. (2007). Academic development: A site of creative doubt and contestation. *International Journal for Academic Development*, 12, 9-14. <http://dx.doi.org/10.1080/136014407012172>
- Schroeder, C., Blumberg, P., Chism, N. V., Frerichs, C. E., Gano-Phillips, S., Lieberman, D., Pace, D. G., & Rosier, T. (2011). *Coming in from the margins: Faculty development's emerging organizational development role in institutional change*. Sterling, VA: Stylus.
- Simmons, N. (2016a). Synthesizing SoTL institutional initiatives toward national impact. *New Directions for Teaching and Learning*, 146, 95-102. <http://dx.doi.org/10.1002/tl.20192>
- Simmons, N. (Ed.). (2016b). The scholarship of teaching and learning in Canada: Institutional impact [Special issue]. *New Directions for Teaching and Learning*, 146, 7-10. <http://dx.doi.org/10.1002/tl.20146>
- Sorcinelli, M. D., Austin, A. E., Eddy, P. L., & Beach, A. L. (2006). *Creating the future of faculty development: Learning from the past, understanding the present*. San Francisco, CA: Jossey-Bass.
- Stockley, D., & Balkwill, L. L. (2013). Raising awareness of research ethics in SoTL: The role of educational developers. *The Canadian Journal for the Scholarship of Teaching and Learning*, 4(1), Article 7. <http://dx.doi.org/10.5206/cjsotl-rcacea.2013.1.7>
- Taylor, K. L. (2005). Academic development as institutional leadership: An interplay of person, role, strategy, and institution. *International Journal for Academic Development*, 10(1), 31-46. <http://dx.doi.org/10.1080/13601440500099985>

- Taylor K. L., & Rege Colet N. (2010). Making the shift from faculty development to educational development: A conceptual framework grounded in practice. In A. Saroyan & M. Frenay (Eds.), *Building teaching capacities in higher education: A comprehensive international model* (pp. 139-167). Sterling, VA: Stylus.
- Timmermans, J. A. (2014). Identifying threshold concepts in the careers of educational developers. *International Journal for Academic Development*, 19(4), 305-317. <http://dx.doi.org/10.1080/1360144X.2014.895731>
- Trigwell, K. (2013). Evidence of the impact of scholarship of teaching and learning purposes. *Teaching and Learning Inquiry: The ISSOTL Journal*, 1(1), 95-105. <http://dx.doi.org/10.2979/teachlearninqu.1.1.9d>
- Trigwell, K., Martin, E., Benjamin, J., & Prosser, M. (2000). Scholarship of teaching: A model. *Higher Education Research & Development*, 19(2), 155-168. <http://dx.doi.org/10.1080/072943600445628>
- University of Manchester. (2006). The role and effectiveness of reflective practices in programmes for new academic staff: A grounded practitioner review of the research literature. Report for the Higher Education Academy. Retrieved from [https://www.heacademy.ac.uk/system/files/reflective\\_practice\\_full\\_report.pdf](https://www.heacademy.ac.uk/system/files/reflective_practice_full_report.pdf)
- Weimer, M. (2001). Learning more from the wisdom of practice. *New Directions for Teaching and Learning*, 86, 45-56. <http://dx.doi.org/10.1002/tl.15>
- Williams, A., Verwoord, R., Beery, T.A., Dalton, H., McKinnon, J., Strickland, K., Pace, J., & Poole, G. (2013). The power of social networks: A model for weaving the scholarship of teaching and learning into institutional culture. *Teaching and Learning Inquiry*, 1(2), 49-62. <http://dx.doi.org/10.2979/teachlearninqu.1.2.49>
- Wuetherick, B., & Yu, S. (2016). The Canadian teaching commons: The scholarship of teaching and learning in Canadian higher education. *New Directions for Teaching and Learning*, 146, 23-30. <http://dx.doi.org/10.1002/tl.20183>