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Scholarship of Teaching and Learning: An Overview

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Abstract: The quality of teaching and learning in universities has received much attention over the past two decades and there has been much discussion about what kind of teaching stimulates effective learning. Lately, however, the focus has moved from just teaching to teaching as scholarship. The scholarship of teaching and learning emerged as a fundamental concept to the development of good teaching practices in Higher Education and, consequently, to the enhancement of the quality of student learning. The concept of scholarship of teaching and learning is relatively new and still in its early stages of development. Consequently, there is an enormous variation in the ways scholarship of teaching and learning is understood and represented. The goal of this essay is to present an overview of the scholarship of teaching and learning in Higher Education, as well as to outline a number of suggestions through which the scholarship of teaching and learning may be improved.

Keywords: Higher Education, Scholarship of Teaching, Scholarship of Teaching and Learning, Scholarly Teaching

Introduction

“What is this thing we’re calling ‘the scholarship of teaching’?”
(Hutchings and Shulman, 1999)

THE SCHOLARSHIP OF teaching and learning is a challenging concept in Higher Education. Over the past twenty years a number of definitions and models were suggested. This led to a deviation of Boyer’s initial intention when proposing the concept of the scholarship of teaching, and created some misunderstanding and uncertainty about its definition and relevance. This paper presents an overview of the scholarship of teaching and learning, aiming to clarify the meaning and the implications of this concept. The following features will be explored:

- the origins of the scholarship of teaching and learning;
- the main characteristics of the scholarship of teaching and learning;
- models of scholarship of teaching and learning;
- ways to enhance the scholarship of teaching and learning;
- the distinction between scholarship of teaching and scholarly teaching.

How did the Scholarship of Teaching and Learning Emerge?

Even if the concept of scholarship of teaching is usually attributed to Boyer (1990), other authors have contributed to the arising of this concept. In 1982, Braxton and Toombs considered course contents and teaching and learning materials as forms of scholarship. Two years later, Pellino, Blackburn and Boberg (1984) discussed the importance of the scholarship

of teaching, among other forms of scholarship. In 1987, Shulman introduced the concept of pedagogical content knowledge that is of crucial importance to the definition of the scholarship of teaching and learning, as we will describe later on. Finally, in 1990, Ernest Boyer, at that time president of the Carnegie Foundation for the Advancement of Teaching, published *Scholarship reconsidered: Priorities of the Professoriate*.

In this publication, Boyer's main concern was to put teaching and research at the same level, since universities tend to value research and disregard the importance of teaching. Boyer (1990) also emphasised the idea that scholarship can exist in all features of academic work, namely as a scholarship of discovery, a scholarship of integration, a scholarship of application and a scholarship of teaching.

The scholarship of discovery is close to the old idea of research. According to Boyer (1990, p.17): "*The scholarship of discovery at its best contributes not only to the stock of human knowledge but also to the intellectual climate of a college or university. Not just the outcomes, but the process, and especially the passion, give meaning to the effort.*"

The scholarship of integration involves the interpretation and the establishment of relationships across the disciplines, creating broader patterns and links. As stated by Boyer (1990, p.19), this kind of scholarship implies "*doing research at the boundaries, where fields converge*".

The third type of scholarship involves the application of knowledge to real world problems, but it goes beyond that, it implies an engagement and a constant interaction between practice and theory: "*New intellectual understandings can arise out of the very act of application... In activities such as these, theory and practice vitally interact, and one renews the other.*" (Boyer, 1990, p.23)

Finally, Boyer (1990) proposed the establishment of a scholarship of teaching. As referred earlier, when he came up with this concept, his main goal was to address the unbalanced standing of teaching and research, and to provide teaching with an appropriate status. This way, Boyer also aimed at increasing the quality of student learning, emphasising the importance of student-centred teaching and, ultimately, putting scholars in the role of co-learners:

"(...) faculty, as scholars, are also learners (...) While well prepared lectures surely have a place, teaching, at its best, means not only transmitting knowledge, but transforming and extending it as well. Through reading, through classroom discussion, and surely through comments and questions posed by students, professors themselves will be pushed in creative new directions." (Boyer, 1990, p.24)

Rice (1992) underlines the specificity of each kind of scholarship but also emphasises the inter-correlations between them: "*While we want to treat the four forms of scholarship as individually distinctive, we also want them to be understood as interrelated and often overlapping – an interdependent whole, with each distinctive form encompassing each of the other three*" (p.125).

Actually, all forms of scholarship, including the scholarship of teaching and learning, can be characterised by the same six criteria: clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique (Glassick, Huber and Maeroff, 1997).

But What Exactly is the Scholarship of Teaching and Learning?

In 1996, Menges and Weimer remarked that “*The scholarship of teaching has become an amorphous term, equated more with commitment to teaching than with any concrete, substantive sense of definition or consensus as to how this scholarship can be recognised*” (p. xii). Likewise, Trigwell et al (2000, p.156) also observed that within the academic community existed only a vague notion about the teaching as scholarship. In his survey, Nicholls, (2004, p.40) reported that academics had a clear understanding about the meaning of *scholarship*, but they were unsure about the meaning of the expression *scholarship of teaching*.

Actually, Boyer’s proposal for a scholarship of teaching and learning left open what exactly a scholarship of teaching and learning should be. Consequently, academics around the world have interpreted the concept in various ways and proposed a number of definitions of scholarship of teaching and learning.

Rice (1991) proposed that the scholarship of teaching and learning should be based on the development and application of its several distinct elements: “*content knowledge*” or “*synoptic capacity*”, “*pedagogical knowledge*”, and “*pedagogic content knowledge*” (p.125). In 1986, Shulman had already distinguished three types of teaching knowledge: matter knowledge, pedagogical knowledge, and curricular knowledge.

Content knowledge is essential to the construction of knowledge about teaching and is implied in the understanding of pedagogical knowledge. Pedagogic content knowledge can be viewed as the knowledge that links content and pedagogical knowledge. It is not purely the addition of the two parts; pedagogical content knowledge represents an unique combination of the two. It is one important foundation of a teacher’s capacity to teach. Pedagogic content knowledge enables teachers to take risks, to adapt strategies and approaches that appear not to be working, and to adopt different methods when class dynamics are different.

Moreover, the scholarship of teaching and learning encourages and values the co-construction of knowledge between teachers and students, assuming a learning partnership, instead of a traditional instructional relationship (Trigwell et al, 2000). According to Boyer (1990) and Trigwell and Shale (2004), a concept of scholarship of teaching and learning will be powerful only if, at his heart, it reflects what it is that is valued in teaching and what it is that is worth defending – a student-focused teaching practice. Increasing emphasis upon a learner-centred vision of university teaching demands that student scholarly autonomy be the outcome of well-planned active learning experiences that help all students to develop as independent thinkers (Biggs, 1999; Prosser and Trigwell, 1999; Ramsden, 2003), and promote lifelong learning: “*They [great teachers] stimulate active, not passive, learning and encourage students to be critical, creative thinkers, with the capacity to go on learning after their college days are over*” (Boyer, 1990, p.23-24).

Sharing and disseminating teachers’ experiences and practices is also crucial for the development of the scholarship of teaching and learning. Shulman (1993) describes teaching as community property and sees communication as a key element, and as an antithesis of the old-fashioned “pedagogical solitude”. He also emphasizes that scholars are “*members of active communities: communities of conversation, communities of evaluation, communities in which we gather others in our invisible colleges to exchange our findings, our methods, and our excuses*” (p.6), and that scholarship “*entails and artefact, a product, some form of community property that can be shared, discussed, critiqued, exchanged, built on*” (p.7).

Later, in 1999, Shulman synthesises the characteristics of scholarship, adding a third attribute: *“An act of intelligence or artistic creation becomes scholarship when it possesses at least three attributes: it becomes public, it becomes an object of critical review and evaluation for members of one’s community begin to use, build and develop those acts of mind and creation”* (p.40). Andresen (2000) also underlines the role of peers in the construction of valid knowledge: *“in a scholarship of teaching, each knowledge-claim would be always open to questioning, both privately and publicly. The claims that scholarly teachers make regarding what they know, and the truth/validity of how and why they know it, will always open to scholarly appraisal from the community of peers”* (p.142).

Hutchings and Shulman (1999) added a fourth attribute to the characterisation of the scholarship of teaching and learning: *“A scholarship of teaching requires a kind of ‘going meta’, in which faculty frame and systematically investigate questions related to student learning – the conditions under which it occurs, what looks like, how to deepen it, and so forth – and do so with an eye not only to improving their own classroom but to advancing practice beyond it”* (p.13).

How to Characterise the Scholarship of Teaching and Learning? Models of Scholarship of Teaching and Learning

Some researchers have tried to integrate the several characteristics of the scholarship of teaching and learning and proposed models of scholarship of teaching to facilitate a better understanding of a mushroomed knowledge area.

Kreber and Cranton’s model (2000) considers the scholarship of teaching and learning to be both learning about teaching and the demonstration of that knowledge. These authors suggest a model rooted on the kind of reflection and on the kind of knowledge that academics can experience. Professors can engage in content, process, and premise reflection (Mezirow, 1991) on instructional, pedagogical, and curricular knowledge (Habermas, 1971) as they develop scholarship in teaching. Starting from this premise, Kreber and Cranton (2000) defined nine components of the scholarship of teaching, as presented in Figure 1.

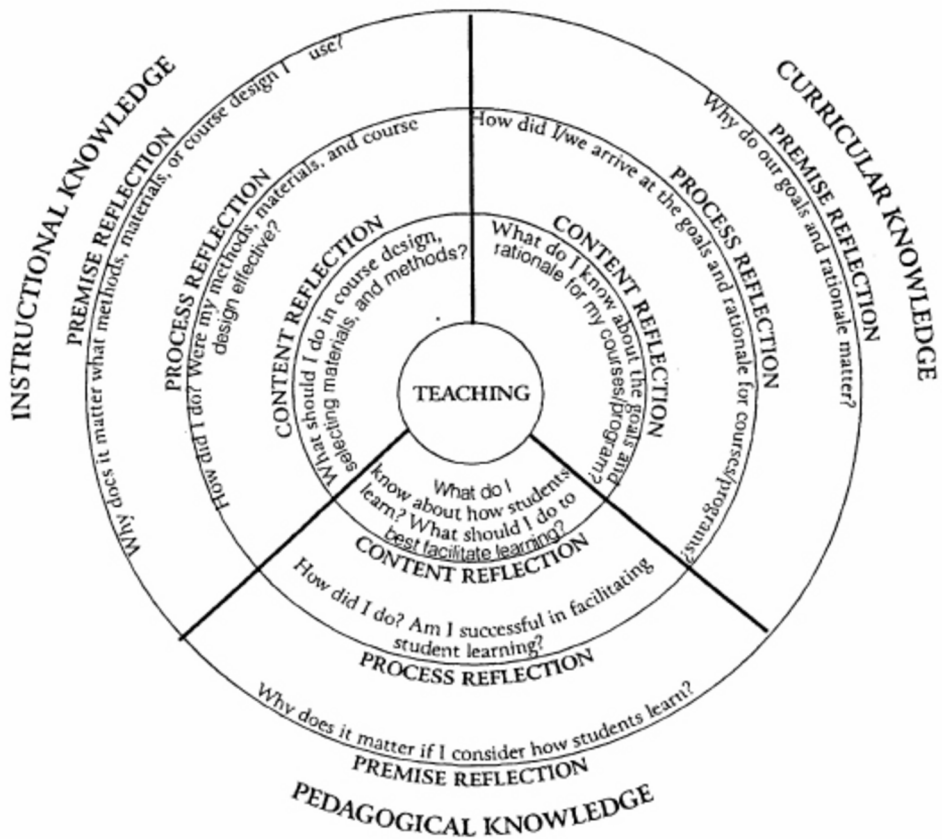


Figure 1: Components of a Model of Scholarship of Teaching and Learning (Kreber and Cranton, 2000, p. 485)

According to this model, it is possible to identify some indicators for each of the nine components of scholarship. For each kind of concept, process, and curricular knowledge, three indicators are suggested, as shown in Table 1.

Table 1: Examples of Indicators of the Scholarship of Teaching (Adapted from Kreber and Cranton, 2000, p.488)

Instructional Knowledge
<p><i>Indicators of Content Reflection:</i></p> <p>Discussing materials and methods with students or colleagues</p> <p>Reading articles on “how to” teach</p> <p>Keeping a journal or log of methods and materials used</p> <p><i>Indicators of Process Reflection:</i></p> <p>Collecting data on students’ perceptions of methods and materials</p> <p>Asking for peer review of course outline</p> <p>Comparing results of research on teaching to results in own classroom</p>

<i>Indicators of Premise Reflection:</i> Experimenting with alternatives and checking out results Writing critiques of methods articles or books Challenging the departmental or institutional norms or values regarding teaching methods
Pedagogical Knowledge
<i>Indicators of Content Reflection:</i> Administering learning styles or other inventories to students Reading articles or books on learning theory, critical thinking, self-directed learning Writing an article on how to facilitate learning in the discipline <i>Indicators of Process Reflection:</i> Gathering feedback from students on their learning the concepts of the discipline Conducting an action research project on student learning Comparing classroom experience to formal research results on student learning <i>Indicators of Premise Reflection:</i> Writing a critique of an article on student learning in the discipline Seeking out literature that questions the importance of learning styles, self-directed learning, etc Participating in philosophical discussions on student learning
Curricular Knowledge
<i>Indicators of Content Reflection:</i> Reviewing goals of the session, course or curriculum Reading articles and books about the goals of higher education Including a rationale and goals in course outlines <i>Indicators of Process Reflection:</i> Conducting a review of curriculum goals including a comparison to current practices Tracing the history of program goals Reading books on the goals of higher education and comparing goals to those underlying the programme offered in the department <i>Indicators of Premise Reflection:</i> Checking with employers, business, industry, etc., to see what their expectations and goals are in hiring graduates from program Writing an article envisioning what higher education without curriculum goals may look like Initiating or joining a committee on program goal review

According to Kreber and Cranton (2000), when teachers engage in learning following these indicators they demonstrate evidences of the scholarship of teaching and learning.

Trigwell and Shale's model (2004) is practice-focused and privileges a conception of scholarship as activity. It assumes learning as a partnership between the teacher and the students, favouring the work of knowledge creation with learners. It is also concerned with the articulation of pedagogical resonance, defined by Trigwell and Shale (2004) as "*the bridge that links teacher knowledge with teacher action*" (p.529) or "*the bridge between teacher knowledge and student learning*" (p.529).

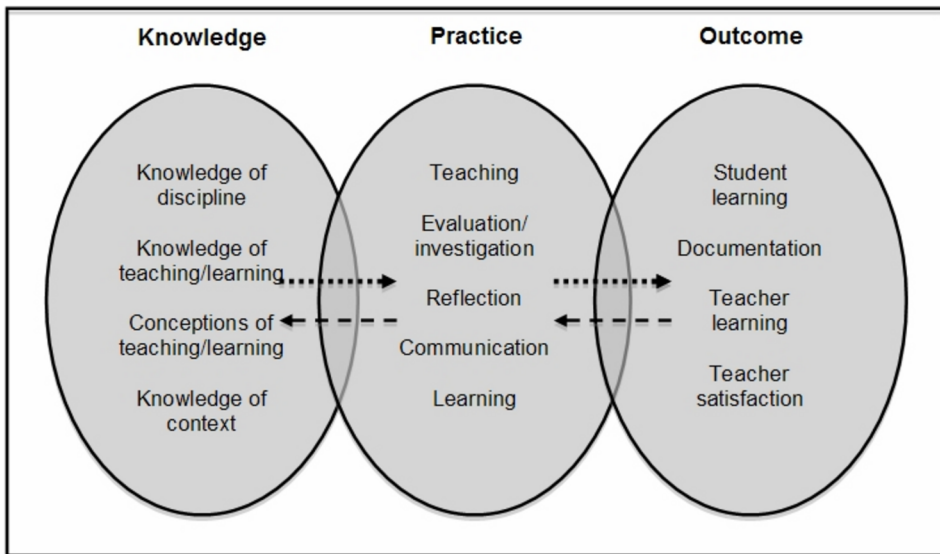


Figure 2: Components of a Model of Scholarship of Teaching and Learning (Adapted from Trigwell and Shale, 2004, p.530)

This model includes three interrelated teaching components - knowledge, practice and outcome – and a separate component of scholarship, as shown in Figure 2. Each of the components of teaching is characterised by a set of elements. These authors consider that there is a scholarship of teaching and learning when the scholarly teaching is made public. Scholarly knowing is never final, but always subject to public scrutiny, discussion, reconsideration, and perhaps change (Andresen, 2000).

How to Enhance the Scholarship of Teaching and Learning?

Prosser (2008) states that the main point of engaging in the scholarship of teaching and learning in higher education is to work towards improving students' learning, through the enhancement of scholars' pedagogical content knowledge. Scholarly contributions to pedagogical content knowledge can arise from the practice of, reflection on, and codification of teaching (Kreber and Cranton, 1997); faculty evaluation and development (Paulsen, 1999); the content and pedagogical training of graduate students as new faculty (Boyer, 1990); and through the conduct of research on teaching and learning, including both traditional research and contextual classroom research:

“We need to systematically reflect upon evidence of our own students' learning within our own classes and disciplines. We need to draw upon the generic research, but carefully situate that within our disciplines. We then need to monitor the success or otherwise of our efforts to improve our students' learning, and then communicate the outcomes of those efforts to our colleagues. The scholarship of teaching and learning from this perspective is not research in the traditional sense. It is a practically oriented activity,

conducted collegially, and increasingly being conducted alongside traditional research within the disciplines.” (Prosser, 2008)

“to be scholarly teachers, academics need to use the same kind of thought processes in their teaching that they apply to their research.” (Elton, 1992)

Paulsen (2001) mentions that conducting classroom research is the most relevant way to integrate content and pedagogical knowledge to create pedagogical content knowledge. Furthermore, the same author underlines that “*the conduct of research on learning and teaching is a substantial component and distinguishing feature of the scholarship of teaching*” (2001, p.26). Kreber (2001) also emphasises the significance of classroom research as a way to engage in the scholarship of teaching and learning. But this author refers specifically to the introduction of collaborative action research programs in which teachers and faculty developers explore teaching and learning in specific disciplines. Zuber-Skerrit (1992) emphasises that at an initial stage, faculty members may need the help of an educational researcher, who knows relevant educational literature and research methods, to get the action research project on learning in the discipline under way.

Schön (1995), also emphasises that the new categories of scholarly must take the form of action research: “*If teaching is to be seen as a form of scholarship, then the practice of teaching must be seen as giving rise to new knowledge*” (p. 31). According to Gray (2004, p. 373), action research symbolizes much of what modern research is about “*analysing the world but also trying to change it*”. It is equally concerned with changing individuals, in the one hand, and, on the other, change “*the culture of the groups, institutions and societies to which they belong*” (Kemmis and McTaggart, 1992, p. 16). Somekh (1995, p. 340) also emphasizes this characteristic, saying that action research is “*designed to bridge the gap between research and practice*”.

Does Scholarship of Teaching Differs from Scholarly Teaching?

In 2000, Andresen observed that “If the notions of scholarship, scholar and scholarly are to avoid emptiness and become useable as descriptors of teaching, as Ernest Boyer hoped, the concept behind these terms needs clarifying” (p.137). Richlin (1993, 1998, 2001) reinforces this idea contending that the concept of scholarship of teaching has become mixed up with the act of teaching itself. Kreber and Cranton (2000) point out that the scholarship of teaching comprises both in progress learning about teaching and the expression of teaching knowledge.

Actually, the scholarship of teaching involves two different, but closely related, activities, *scholarly teaching* and a resulting *scholarship*, which differ in both their intents and products (see Figure 3). Both scholarly teaching and the scholarship of teaching are vital to the life of the academy. The purpose of scholarly teaching is to affect the activity of teaching and the resulting learning, while the scholarship of teaching results in a formal, peer-reviewed communication in appropriate media or venues, which then becomes part of the knowledge base of teaching and learning in higher education (Richlin, 2001).

As shown in Figure 3, the *scholarly process* begins with the recognition of a problem or a situation that the teacher would like to improve. After the identification of this situation, the first step is to study what others have done and already know about the topic, analysing the state of the art of the field. The next stage involves the design and implementation of a classroom intervention. This must be accompanied by the conduction of systematic observa-

tion, that must be well documented. After collecting data through direct or indirect observation, these results must be analysed and later should be made available to peers, in order to obtain feedback and critiques. This is the last step of the scholarly teaching process. According to Paulsen (2001): “*Observing students in the act of learning, reflecting, and discussing observations and data with teaching colleagues, and reading the literature on what is already known about learning is one way teachers can implement the scholarship of teaching*” (p.2). Andresen (2000) describes this whole process as involving personal, but rigorous, intellectual development, inquiry and action built on values such as honesty, integrity, open-mindedness, scepticism and intellectual humility.

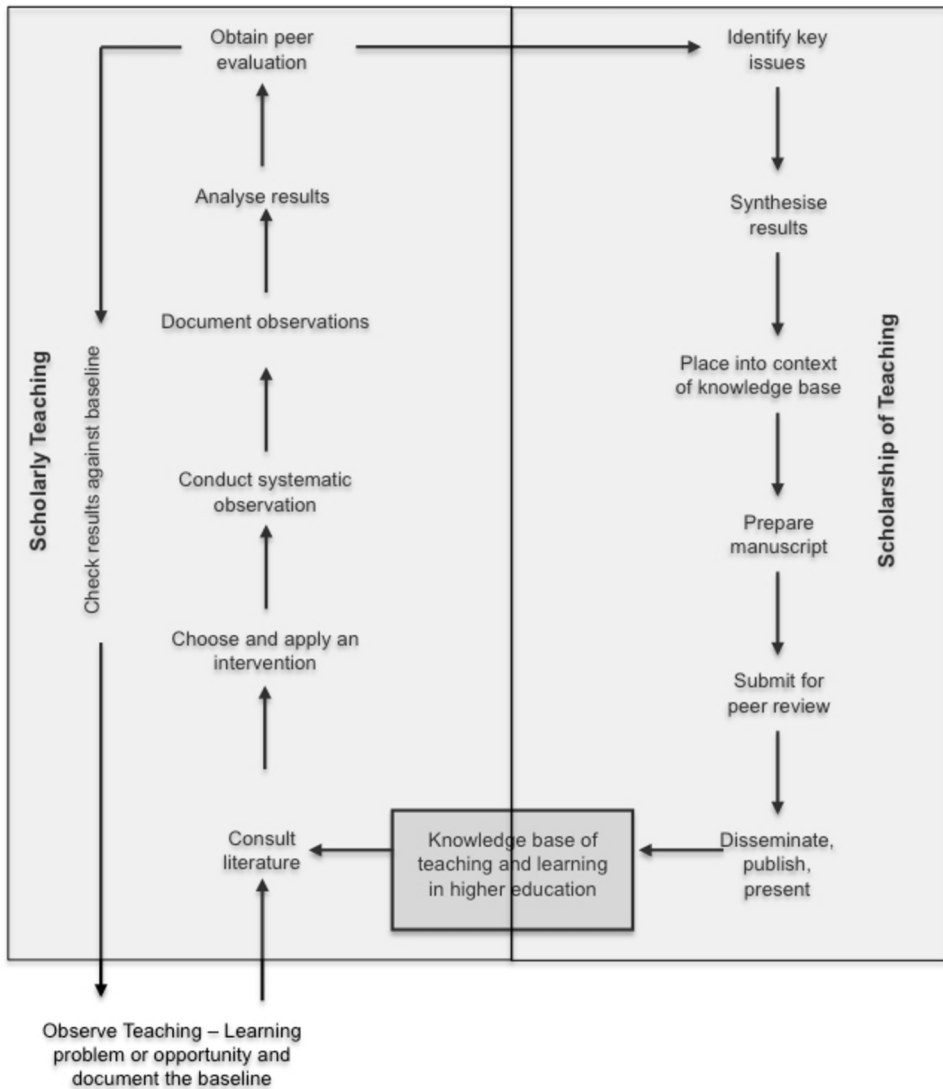


Figure 3: The Cycle of Scholarly Teaching and the Scholarship of Teaching (Adapted from Richlin, 2001, P.59)

The *scholarship of teaching and learning* builds on the end product of scholarly teaching (Richlin, 2001). After completing the scholarly teaching process the teachers can decide whether or not to follow the path of the scholarship of teaching and learning, turning their classroom intervention and consequent findings into scholarship. This decision depends on the quality of the findings and on the teachers' willingness to spend time and effort on the synthesis of the results and on the writing process. Thus, the scholarship of teaching and learning implies selecting parts and findings of the scholarly teaching (and research), integrate and relate them to previous knowledge, reflect and produce an essay that can be submitted to a conference or journal. This constitutes the ultimate stage of the scholarship of teaching and learning: to contribute to the knowledge base of teaching and learning in higher education.

Concluding Remarks

Even if the number of interpretations of the concept of scholarship of teaching and learning has proliferated in the last two decades, three of its characteristics seem to be clear and consensual. They are:

- critical reflectivity expressed as content pedagogical knowledge;
- learning partnership as a result of a student-focused teaching;
- scrutiny and critique by peers, through publication.

The main focus of getting involved in the scholarship of teaching and learning should be the enhancement of students' learning experience, through the development of teacher's pedagogical content knowledge. Conducting classroom research is one of the privileged ways to improve the scholarship of teaching and learning. However, it is important to keep in mind that teaching within the disciplines in higher education is as diverse as the disciplines itself. This implies that the kind of research conducted in each discipline will also possess unique characteristics.

In the last years, the concepts of scholarship of teaching and scholarly teaching were frequently used in an undifferentiated mode. In spite of this, they have diverse meanings. Here, we have tried to explain the close relationship between the two as well as the main features of each one.

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