Developing Self-Reflective Practices to Improve Teaching Effectiveness

Nicole Kirpalani
LIM College

This article examines self-reflective practices for faculty members in higher education. Self-reflection may be useful for both junior faculty and seasoned faculty members; it can complement formal professional development initiatives. The article provides a conceptual background on self-reflection in the context of pedagogical intelligence development. Based on previous research (Mezirow, 1991), three areas of reflection (content reflection, process reflection, and premise reflection) are examined. Specific practical suggestions for self-reflective practices are presented to help higher education faculty improve their instructional knowledge, pedagogical knowledge, and curricular knowledge to ultimately improve teaching effectiveness.

INTRODUCTION

Research has shown that only a small number of higher education faculty members have taken education coursework for credit (Fernandez-Balboa & Stiehl, 1995). Many doctoral programs are incorporating higher education teaching seminars as part of their required doctoral coursework; nevertheless, faculty members' formal training in pedagogy is often limited (Kugel, 1993). Knowledge in a particular area of expertise may be extensive (Fernandez-Balboa & Stiehl, 1989), but faculty members may have room for improvements in their *pedagogical knowledge* (or what Rubin [1989] calls "pedagogical intelligence"). Given the increased focus on teaching effectiveness in higher education, in part due to accreditation requirements, the topic of furthering pedagogical intelligence in faculty is relevant for many higher education institutions. The issue is particularly relevant for junior faculty or adjunct instructors who are new to teaching. Pedagogical intelligence is especially relevant for disciplines that continuously need updated content such as business education.

Recent research on professional development of higher education faculty suggests that the topic is increasingly important for both educators and higher education administrators. Master teacher initiatives have been proposed (e.g., Athey & Hoffman, 2007; Hoffman, 2009) and best practices in higher education teaching have been formulated (e.g., Cariaga-Lo et al., 2010; Mundy et al., 2011). However, many unanswered questions related to professional development in higher education remain, for example in regards to innovation in the classroom (Brown & Albertine, 2012) and in terms of how faculty can help "chart the course" of their own professional development paths (Cherry & Wiles, 2010, p. 49).

MOTIVATION

A relatively easy approach to help improve pedagogical intelligence among educators is that of *self-reflection* on one's teaching practices. This approach is independent of formalized professional

development programs and can be easily implemented in addition to (or in absence of) existing programs. Self-reflection can empower faculty to take control of their own learning processes related to improving teaching knowledge and "pedagogical intelligence" (Rubin, 1989) overall.

There has been growing interest in understanding the role of self-reflection within the teaching profession, particularly with the objective of strengthening educators' effective teaching practice (Bengtsson, 1995, 2003). Formal self-reflection practices are commonly integrated in the professional training and development process of K – 12 teachers (e.g., Good & Whang, 2002; Loughran, 2002). Pre-service teachers, as part of their student teaching assignments, are frequently tasked with self-reflection on their teaching practices. This reflection often takes the form of journal assignments or portfolios (e.g., Groom & Maunonen-Eskelinen, 2006). Pre-service teachers also are afforded the opportunity to discuss critical issues with their mentor teachers, and as a result are able to reflect on and further improve the content and processes related to their pedagogy. Research suggests that the act of engaging in self-reflection (as part of a teaching portfolio) can significantly improve pre-service teacher performance and professionalism (Robichaux & Guarino, 2012).

Self-reflection on one's teaching can be of considerable value in the higher education setting as well (McAlpine & Weston, 2000), with or without the use of journals or portfolios. It can be particularly useful for junior faculty or adjunct instructors who are new to teaching. Many faculty members, particularly at the beginning of their careers, likely have a desire to assess the effectiveness of their teaching approaches, but may not know what measures to look for other than student test scores, final grades, and/or course evaluations. An on-going process of self-reflection of the effectiveness of one's teaching approaches may be an effective supplement to quantitative measures that are available.

What types of approaches to self-reflection may be useful to higher education faculty? More specifically, what approaches to self-reflective practices would be useful to educators who are in constant need of updating the *instructional content* of their lessons (e.g., due to current events or new technologies), but may not be able to give the same attention to their *pedagogical knowledge (*the *process* used to effectively teach students about these current events or the use of new technologies)*?*

In the following, this article will discuss approaches to effective practices of self-reflection in the context of higher education. A brief review of relevant literature and existing research on the topic will be presented. In addition, relevant self-reflective questions for different knowledge domains and practical suggestions to an on-going self-reflective practice will be offered.

SELF-REFLECTION: CONCEPTUAL BACKGROUND

The ability to reflect on personal strengths, weaknesses, and approaches to one's teaching is an important quality of effective educators (Stronge, 2007). Similarly, the willingness for self-improvement is a critical personality trait of educators (Fry, 2009). For the purpose of the current discussion, previous work by Kreber and Cranton (1997; 2000) will be considered. Kreber and Cranton (1997, 2000) developed a useful framework to outline a knowledge system for teaching, based on Mezirow's (1991) theory of transformative learning. Mezirow (1991, p. 104-105) suggested that learning takes place through three levels of reflection: Content reflection, process reflection, and premise reflection. *Content* reflection focuses on the problem itself; e.g., the accurate description of the problem. *Process* reflection focuses on the procedures and processes of problem-solving, including connections to prior learning. Lastly, in *premise* reflection, the relevance of the question is analyzed (e.g., why is this question important in the first place?) Using Mezirow's (1991) three levels of reflection, the knowledge system for teaching developed by Kreber and Cranton (1997, 2000) can be described as (1) instructional knowledge (based on content reflection), (2) pedagogical knowledge (based on process reflection), and (3) curricular knowledge (based on premise reflection).

Table 1 illustrates examples of instructional knowledge, pedagogical knowledge, and curricular knowledge, as outlined by Kreber & Cranton (2000, p. 479 – 481).

TABLE 1
EXAMPLES OF THREE TYPES OF KNOWLEDGE OF TEACHING

Instructional knowledge examples	Pedagogical knowledge examples	Curricular knowledge examples
• Knowing how to facilitate discussions • Knowing how to organize or sequence instruction • Being able to write learning objectives • Knowing a variety of instructional methods • Knowing how to write good tests	• Knowing how to facilitate collaboration among students • Being able to encourage students to think critically • Knowing how to motivate students with different learning styles • Knowing when and how to provide meaningful feedback • Being able to help students overcome learning difficulties	• Being able to judge the quality of course goals • Being able to explain how a course fits into an existing program • Knowing the contributions that a course may make to students' existing knowledge • Being able to articulate how a course may affect students' learning skills

These three types of knowledge complement each other. They are qualitatively different, but interrelated: "Instructional knowledge is concerned with the strategies we use in teaching; pedagogical knowledge is concerned with understanding student learning; curricular knowledge is concerned with why we teach the way we teach" (Kreber & Cranton, 2000, p. 481).

SELF-REFLECTION IN ACTION

In the following, specific questions for the three areas for self-reflection related to higher education teaching are suggested. Self-reflection on the topical content, the process, and the premise will be highlighted. These questions do not claim to be exhaustive, but are rather intended as a starting point for a personal reflection related to teaching. Of course, instructors' prior education, level of experience, personal preferences etc. differ widely; therefore, the "things that matter" in teaching will certainly differ as well. For example, a seasoned college professor may not give much thought to some of these questions, whereas a junior faculty member may spend considerable time and effort on many of the questions. It is important to note that institutional and departmental guidelines will need to be taken into consideration as well.

Reflection on Teaching Content

Here are some examples of questions that faculty may ask themselves related to the broader *strategies* used in their teaching, as well as the topical content they may want students to acquire:

1. What types of general instructional approach would best be suited to this course? (Lecture, group work, cooperative learning, "flipped" classroom, etc.) Why?
2. Which learning objectives do I want my students to meet in each course/learning unit/week/lesson, etc.?
3. How can I facilitate meaningful discussions among my students?
4. Which methods of assessment are most effective for this particular course? (E.g., exams, written assignments, in-class exercises, simulations, group projects, multi-media presentations, online discussions/blogs/wikis, etc.) Why?
5. How do I develop a grading rubric? (Or: Do my grading rubrics need to be updated? If yes, how?)

6. Is my syllabus clear? Are my expectations for students outlined? (What changes do I need to make changes from the previous semesters, if applicable?)
7. Do I want my students to meet learning objectives in addition to those outlined by my department? Do I need to add certain topics?
8. Does my course calendar make sense? Do I need to change the sequence of particular topics?

While some of these questions may seem basic to seasoned instructors they are at the core of developing effective teaching knowledge. Even seasoned instructors may be well advised to reevaluate and reflect on their approaches every now and then. Why are these reflective questions on teaching strategy and content beneficial? Given the time constraints that most faculty members face it is often easier to "recycle" previously used syllabi, exams, assignments, case studies, articles, etc. rather than creating these learning resources and materials again. It may also be easier to simply use the same teaching approach (e.g., a lecture-based format) because the faculty may be most comfortable and experienced in this approach as compared to others (e.g., a "flipped" classroom). The students may not necessarily be the ones to benefit from these approaches.

In the context of business education, for example, industry developments happen so quickly that they should not be ignored. For example, a 2014 magazine article on commercial applications of Pinterest is outdated in 2017. New trends, especially related to social media, develop so rapidly that faculty members will likely find it necessary to update topical contents of their lessons from semester to semester or sometimes even within the same semester. The notion of "current events" takes new meaning in the age of social media where events can turn within a matter of hours.

Reflection on Teaching Processes

In addition to reflecting on teaching content, this next section suggests reflective questions related to faculty members' understanding of how students learn. Once again, seasoned instructors may be well versed in some of these issues, but junior faculty or those new to teaching may not be familiar with some of the questions that are at the core of effective pedagogy. For example:

1. How can I support students' individual learning styles? How can I vary instructional approaches in order to meet visual, auditory, <u>and</u> kinesthetic learners' needs?
2. How can I facilitate cooperation among my students? How can I design learning activities to encourage students to cooperate in class on a regular basis (for ad-hoc in-class exercises, perhaps), or outside of class in order to complete semester projects?
3. How can I foster critical thinking skills in my courses?
4. How can I encourage creativity in my courses?
5. What type of feedback do my students need in order to improve their work? How do I best give this feedback, and how often?
6. How can I best support students with learning disabilities or students who need accommodations due to physical disabilities?

This is an area that is often more challenging for faculty members than the first area on teaching content, because they may have little, if any, formal training in pedagogy. With growing experience higher education faculty likely become much more skilled in this area and will also know which additional institutional resources to consult (e.g., the Writing Center, the Math Center, or the office that serves students with disabilities).

Reflection on the Teaching Premise

Why do we teach the way we teach? In all likelihood, previous teachers and professors have strongly influenced faculty members' personal preferences towards teaching, but instructors' teaching approaches are likely also bound by departmental and institutional expectations. Some questions that come to mind in this area include:

1. Are the course goals of my courses still relevant? (If not, who can I approach to get updated course goals formally approved?)
2. Do I understand how the courses fit into the overall curriculum for the respective degree(s)?
3. How does this course build on students' existing knowledge in the field (if applicable)?
4. How does this course build on existing knowledge in other areas, for example, mathematics or statistics?
5. What role does this course play in developing specific career-oriented skills in students (if applicable)?

Faculty members will likely benefit from reflecting on these broader premises of their teaching because this type of reflection will help situate one's contribution to the overall goals of the institution.

Additional Areas for Self-Reflection

In addition to reflecting on the content, processes, and premises of teaching, as outlined above, an additional area of self-reflection relating to more personal needs and preferences of the instructor is presented in the following. For example, instructors may benefit from critically evaluating the impact of the topics below on their teaching effectiveness:

1. General policies and expectations for students (e.g., late work policies, make-up assignments, make-up exams, assignment submission procedures, etc.)
2. Classroom management issues (lateness to class, excused/unexcused absences, use of laptops/tablets/smartphones in class, etc.)
3. Personal time management (responding to student e-mail, office hours, turn-around time for grading exams and assignments, etc.)
4. New courses (is there something that interests me that I have never taught before?)
5. New course formats (are there opportunities for teaching new course formats, for example, online or hybrid courses?)
6. Which teaching schedule (days/times) works best for my current needs and personal preferences?
7. What can I do to be more organized? For example, how can I improve my filing system for my teaching materials in both hard copy and electronic formats?

These topics may be particularly valuable for instructors that are early in their career, but more experienced faculty may also feel encouraged to step outside their comfort zone every now and then.

PRACTICAL SUGGESTIONS

As the previous sections suggest there are a variety of areas and topics that are open to reflection. It is almost impossible for faculty to consider all of these areas simultaneously. Some of these areas lend themselves to on-going reflective practices, whereas others can be revisited on an annual or semi-annual basis. In the following, some practical suggestions for a personal reflective practice are outlined.

What should I choose to reflect on? There is no single right answer. Instructors may decide to pick one particular topic to focus on during a semester, perhaps the topic of fostering critical thinking skills in students or the topic of asking effective questions. Each instructor has to define his/her own priorities, but also find a personal "comfort zone" for the pace of personal development and growth.

When should I engage in self-reflection? Some faculty members may decide to take a few minutes at the end of each week to reflect on elements that worked and elements that did not work during the week, whereas others may reflect on their teaching effectiveness at the end of each month or at the conclusion of the semester. A folder to keep track of thoughts (either in hard copy or in electronic form) may help those reflective thoughts find a home. Eventually, instructors may decide to develop a more formal teaching

portfolio, as suggested by Babin et al. (2002). This type of portfolio is specific to higher education teaching.

How do I get started? The process does not need to be formal or complex. Instructors may decide to initially identify just a few elements of reflection that they might want to focus on. Alternatively, they could also identify new areas of pedagogy they would like to read and learn more about. It is likely that as instructors immerse themselves deeper in the theories and practices of pedagogical intelligence they may find new inspiration for teaching approaches or techniques they would like to try.

I am already doing this—what else can I do? Even experienced instructors might find areas that are outside of their current comfort zone. They may want to identify one area each semester that will be challenging. For example, they could teach a class they have never taught before. They could teach a class outside of one's area of expertise, perhaps in another department. They could use a new simulation, develop a new project for a course, or develop an entirely new course and then teach it. They could also foray into new course formats (e.g., teach an online course), volunteer for a writing-intensive course, or incorporate a new technology such as an interactive whiteboard.

Who can help me with my reflective practice? Some instructors may choose to engage in a private process of reflection, but others may benefit from the help of others. There are potentially many individuals who can help instructors with the process of self-reflection. Colleagues and department chairs are typically easy to approach for this purpose. Instructors may also be able to find a mentor, either inside or outside of the institution. Attending existing faculty trainings and professional development workshops may also be helpful in order to find like-minded individuals interested in cooperating. Perhaps instructors may be able find faculty member outside his/her department in order to brainstorm new approaches to pedagogy in general. This approach will likely direct of the focus on the teaching process rather than the content area.

More formal approaches to collaborative approaches of reflection on effective teaching practices are discussed in the following section.

BEYOND SELF-REFLECTION: COLLABORATIVE APPROACHES

There are several approaches that formally involve peers in one's efforts to improve teaching content and processes. For example, Japan educators routinely participate in so-called *lesson studies*. A lesson study refers to the "process in which teachers jointly plan, observe, analyze, and refine actual classroom lessons called research lessons (Institute of Education Sciences, 2012). Using lesson studies, teachers carefully consider the goals of a particular subject area, plan classroom lessons that bring to life the specific subject matter goals as well as long-term goals for the students, and carefully consider how students respond to the lessons, including their engagement and learning outcomes (Institute of Education Sciences, 2012). U.S. educational institutions have begun to incorporate lesson study approaches as well (e.g., Fernandez & Chokshi, 2002). In higher education settings, the lesson study approach may be useful as well, in particular since it represents a notable departure from the more traditional individualistic approach to teaching in higher education institutions.

Albers (2008) proposed the formation of *action groups* in order to promote the *collaborative* efforts of reflection on teaching. Action groups are conceptually similar to the Japanese lesson study approach, but have originated from industrial management. They may be used on an ad-hoc basis to complement ongoing faculty development programs.

There are significant benefits to *collaborative* approaches to teaching, which is still relatively rare in higher education settings. An ongoing focus on reflecting on existing processes may pave the way for incorporating collaborative initiatives.

CONCLUSION

Teaching is an on-going process that is ever-changing (Shulman, 2012). Recent initiatives in higher education are encouraging in that they recognize not only the need for training in new technologies, but also the need for understanding basic theories and practices of pedagogy (e.g., Athey & Hoffman, 2007; Cariaga-Lo et al., 2010; Hoffman, 2009; Mundy et al., 2011). Instructors that engage in an on-going self-reflection on what "works" and what does not work will likely see to more positive learning experiences among students as well as more effective learning outcomes. This article discussed the growing need for higher education faculty in understanding how their teaching practices affect their students' learning and suggested ways to incorporate a reflective practice on instructional knowledge, pedagogical knowledge, and curricular knowledge. In a subject area like business education, for example, it is important to not only update the topical content of the lessons, but to also to incorporate new and innovative approaches to the *process* of teaching. A number of reflective questions that may be helpful as a starting point for reflection were outlined. Practical suggestions on how to start with a practice of self-reflection were offered.

Reflection on one's teaching approaches can be helpful not only from a professional development perspective, but also from a personal growth point of view. In turn, faculty members who are comfortable with self-reflection may then ask their students to incorporate self-reflection in their learning processes, which has been found to be effective in the development of critical thinking skills (e.g., Reed & Koliba, 2003; Rogers, 2001; Smith, 2011).

Developing an on-going practice of self-reflection on one's teaching effectiveness may be a first step towards more effective teaching practices. Changes can be incorporated on a small scale and can eventually grow to include collaborative approaches.

REFERENCES

Albers, C. (2008). Improving pedagogy through action learning and scholarship of teaching and learning. *Teaching Sociology,* 36(1), 79-86.

Athey, S. & Hoffman, K. D. (2007). The master teacher initiative: A framework for faculty development. *Marketing Education Review*, 17 (3), 1-9.

Babin, L. A., Shaffer, T. R. & Tomas, A. M. (2002). Teaching portfolios: Uses and development. *Journal of Marketing Education,* 24 (1, April), 35-42.

Bengtsson, J. (1995). What is reflection? On reflection in the teaching profession and teacher education. *Teachers and Teaching: Theory and Practice.* 1(1), 23-32.

Bengtsson, J. (2003). Possibilities and limits of self-reflection in the teaching profession." *Studies in Philosophy and Education.* 22, 295-316.

Brown McNair, T. & Albertine, S. (2012). Seeking high-quality, high-impact learning: The imperative of faculty development and curricular intentionality. *Peer Review*, summer, 4-5.

Cariaga-Lo, L., Dawkins, P. W., Enger, R., Schotter, A., & Spence, C. (2010). Supporting the development of the professoriate. *Peer Review*, summer, 19-22.

Cherry, J. & Wiles, J. A. (2010). Revising professional development: Reconciling the needs and responsibilities of faculty, researchers, and administrators with the new realities in higher education. *Journal of Advancement of Marketing Education*, 16 (summer), 43-51.

Fernandez, C. & Chokshi, S. (2002). A practical guide to translating lesson study for a U.S. setting. *Phi Delta Kappan*, 84 (2, October), 128-134.

Fernandez-Balboa, J.-M. & Stiehl, J. (1995). The generic nature of pedagogical content knowledge among college professors. *Teaching and Teacher Education*, 11 (3), 293-306.

Fry, H. (2009). *A handbook for teaching and learning in higher education: Enhancing academic practice*. New York, NY: Routledge.

Good, J. M. & Whang, P. A. (2002). Encouraging reflection in pre-service teachers through response journals, *Teacher Educator*, 37 (4), 254-267.

Groom, B. & Maunonen-Eskelinen, I. (2006). The use of portfolios to develop reflective practices in teacher training: A comparative and collaborative approach between two teacher training providers in the UK and Finland. *Teaching in Higher Education*, 11 (3, July), 291-300.
Hoffman, K. D. (2009). Special session abstract: The master teacher initiative: A faculty development plan for enhancing the teaching mission." *Society for Marketing Advances Proceedings*, 152.
Institute of Education Sciences. (2012). What is lesson study?" Accessed May 30, 2017. http://www.lessonresearch.net/
Kreber, C. & Cranton, P. A. (1997). Teaching as scholarship: A model for professional development. *Issues and Inquiry in College Learning and Teaching*, 19 (2), 4-13.
Kreber, C. & P. A. Cranton. (2000). Exploring the scholarship of Teaching. *The Journal of Higher Education,* 71 (4, July/August), 476-495.
Kugel, P. (1993). How professors develop as teachers. *Studies in Higher Education*, 18 (3), 315-328.
Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 53, 33-43.
McAlpine, L. & Weston, C. (2000). Reflection: Issues related to improving professors' teaching and students' learning" *Instructional Science,* 28 (5), 363-385.
Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.
Mundy, M.-A., Kupczynski, L., Ellis, J. D. & Salgado, R. L. (2011). Setting the standard for faculty professional development in higher education." *Journal of Academic and Business Ethics*, 5 (October), 1-9.
Reed, J. & Koliba, C. (2003). Facilitating reflection: A manual for leaders and educators. Accessed on December 12, 2016. https://www.uvm.edu/~dewey/reflection_manual/
Robichaux, R. R. & Guarino A. J. (2012). The impact of implementing a portfolio assessment system on pre-service teachers' daily teacher reflections on improvement, performance, and professionalism. *Creative Education*, 3 (3). 290-292.
Rogers, R. R. (2001). Reflection in higher education: A concept analysis." *Innovative Higher Education*. 26 (1), 37-57.
Rubin, L. (1989). The thinking teacher: Cultivating pedagogical intelligence. *Journal of Teacher Education*, 40 (November), 31-34.
Shulman, R. (2012). Teachers and self-reflection: When change is the only constant." Accessed on November 30, 2016. http://www.ednewsdaily.com/teachers-and-self-reflection-when-change-is-the-only-constant-2/
Smith, E. (2011). Teaching critical reflection. *Teaching in Higher Education*. 16 (2, April), 211–223.
Stronge, J. H. (2007). *Qualities of Effective Teachers.* 2nd ed. Alexandria, VA: ASCD.