

A Statement of Learning and Teaching Philosophy: With Emphasis on Experiential and Peer Learning

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Abstract

This paper presents deliberation on the various learning and teaching functions undertaken as an academic, with a main focus on experiential and peer learning and teaching approaches. As it presents reflections on learning and teaching tactics, based on past experiences and observations, it can best be described as the authors' statement of learning and teaching philosophy. To this end, this paper is three-fold. First, it provides an overview to learning and teaching approaches, with an emphasis on experiential and peer learning. This is followed by a presentation of past experiences with strategies of peer learning, which in the past have proved encouraging and invaluable to the continued use of peer learning. Finally, given previous observations and experiences, this paper ends with a conclusion that provides suggestions and recommendations related to student learning and other relevant academic activities.

Keywords

Learning and Teaching Styles, Active Learning, Experiential Learning, Peer Learning, Inductive Learning

I. Introduction

The authors' academic mission as educators is broader than mere teaching. It is an undertaking of cognitive development, intellectual growth and human advancement, achieved through the attainment of set learning objectives and career aspirations, and facilitated by the employment of technologically creative and innovatively engaging modes of knowledge sharing, aimed at individual and group progression. As an educator, the academic serves the University and its stakeholders, industry, business, the profession and the community.

(Mission Statement, 2016)

A wise academic once advised that, "... if you decide to be an academic, be prepared to be a student for life. There is no single formula for successful education. The art of teaching is just as salient as the science entailed in content delivery. Teaching and learning are sides of the same coin. It is all about knowledge sharing and acquiring the teaching skills needed through extensive experience, that is, it is about learning to teach in as much as it is teaching to learn. Each class session is a performance in itself, and achieving desired student engagement is always a challenge. The more complex or dull the subject matter may get, the more of an entertainer the lecturer needs to be to assist students to get into an engaged spirit and state of mind to comprehend, discuss and learn. ... do not be apprehensive of peer feedback or student evaluations, constructively embrace them, capitalize on the positive feedback, and adapt and learn from negative comments. In fact, negative comments are just as valuable as positive feedback in shaping your teaching and learning style and strategies. Keep in mind the teacher-student relational aspects, thus, take the time and effort to genuinely deal and communicate with students. A satisfied student is not necessarily an outstanding student, but one who knows why they have succeeded or failed ...". Once received, the advice did not initially all sink in. Of course, as the years unfolded,

it continued to echo and make better sense, especially with the practice of the active learning approach, the student-centered modes of delivery, the employment of the blended approach and online learning.

This paper reflects on the various learning and teaching functions undertaken as an academic, with a main focus on experiential and peer learning and teaching approaches. The reflections on learning and teaching tactics presented in the current paper are based on past experiences and observations, as well as current research findings. The current study can best be described as the authors' statement of learning and teaching philosophy. As such, this paper is three-fold. First, it presents an overview to learning and teaching approaches, with an emphasis on experiential and peer learning. This is followed by an evaluation of past observations and experiences as they relate to strategies of peer learning that have proved invaluable in advancing the adoption of the peer learning approach by the authors. Finally, given previous observations, this paper concludes with the provision of suggestions and recommendations related to student learning and other relevant academic activities.

II. Reflections on Experiential And Peer Learning

The authors' teaching philosophy relates to experiential learning (Felder and Brent, 2003; Helou, 2008; Kolb, 1984; Kolb et al., 2000), that is designed to meet the educational requirements and quality standards, students' learning needs, and industry/organizational needs. It is on-the-job-learning or learning by doing, that is conducted in close collaboration with business, industry, government and the professions. In other words, it is creating the knowledge and applying it, while engaging external speakers and industry professionals. As such, the support for work-integrated learning, facilitated by internships, investigative projects, study tours – with both group and self-directed study tour activities related to students' experiences with new territories, customs, cultures, different ways of life and people – and, for a more extended global education and overseas experience, study abroad programs, with the recommended inclusion of journal writing, selected readings and special projects, all designed and developed to facilitate students' smooth transition into the workforce. The authors are also believers in peer learning (Bellanca, 1990; Bullard et al., 2008; Felder and Brent, 1996; George, 1994; Helou, 2008; Oakley et al., 2004), with a strong emphasis being placed on critical analysis and lateral thinking (Helou, 2008). Although for some units, long traditional lectures are still being developed and delivered, followed by tutorial activities, the authors do not fully agree with the authoritative transmission of subject contents, where the student is considered a passive recipient and the educator/expert is the source of all knowledge, wisdom and enlightenment; thus, any failure to learn is attributed purely to student faults in terms of a lack in their ability, personality and/or attitude (Helou, 2008).

It is the view here that education is about cultivating and training professionals, knowledge sharing and community engagement. Teaching encompasses the design, organization, facilitation and moderation of harmonious activities, delivery

modes, techniques and assessment activities, all of which aim at facilitating collaborative (Hew and Brush, 2007; Prince, 2004), active (Bonwell and Eison, 1991; Bullard et al., 2008; Prince, 2004), inductive (Bruniges, 2005; Bullard et al., 2008; Gollin, 1998; Prince and Felder, 2006), progressive (Bloom, 1956), and elaborative student learning (Helou, 2005). This takes place in a flipped classroom environment, with the employment of the problem-based learning approach (Prince, 2004), and the practice of internal and external evidence (Bullard et al., 2008; Zwicky, 1980). Inductive student centered learning and teaching (Bullard et al., 2008; Gollin, 1998; Prince and Felder, 2006), supported by the pillars of progressive learning (Bloom, 1956), scaffolding designs (Vygotsky, 1978), adaptive and flexible learning experiences (Rogoff, 1990), technology-assisted (Bhasin, 2012; Cope and Ward, 2002; Hew and Brush, 2007), vibrant learning environments (Cooper, 2002), and supportive learning enablers (King, 2002); underpinned by an evidence-based approach to quality (Prince, 2004), is an essential component of contemporary learning and teaching practices. The student becomes an independent, self-reliant and active learner, while the educator focuses their efforts on curriculum design and development, and serve as facilitators of the learning process.

Keeping this in mind, the authors have experimented with the implementation of various forms of experiential learning (Felder and Brent, 2003; Helou, 2008; Kolb, 1984; Kolb et al., 2000), and the choice of delivery methods aimed at motivating and capturing students' attention and engagement, techniques for encouraging discussions, both in class and online, and processes which inspire progression and elaboration with previous course work and students' personal experiences, as well as assessments development, that effectively measure the degree of attainment of particular learning objectives. Given past experiences, and after close observations and discussions with many faculty members from various departments and schools, at the national and international scene, it is worthwhile to note that the effective adoption of experiential learning allows teachers to experiment and learn about the possible outcome of implementing different teaching techniques, innovate with new methods of content delivery, evaluate how well the innovation/s work with students, and, accordingly, adapt them as needed. It further facilitates the learning experience given students' feedback and evaluations of the subject matter and the learning and teaching approach employed. It further allows to apply the gained knowledge to new student situations; thus, grow and improve on the learning and teaching practices over time. In addition, the authors herewith encourage educators to allocate sessions for informal face-to-face student advice as needed, especially for the 'At Risk' students, for they contribute to and encourage student learning. They allow educators to identify students' knowledge gaps, and intercede as needed to fill them up, thus, gradually inspire students to possibly get more involved with the subject matter and future assigned activities.

Knowing that students do not just learn from the academic involved, or purely from their previous experiences, and/or the learning material made available, but also from one another, experimentation with peer learning, given small groups of 5 to 6 students, employing various activities including term-projects undertaken for and with real world companies/organisations, case studies, simulations, small group research article presentations, and role plays of allocated case study scenarios, all of which being emphasised in curriculum planning, design, progressive

development and delivery of subject matter, have, in the past, proved to be of great value to students in terms of engaging them and enhancing their learning experience. Generally, students are encouraged to keep a learning journal for the group work activities undertaken. Furthermore, based on past observations, peer evaluations of team work undertaken are also encouraged, where students' outcomes get assessed by the student groups themselves, a larger class group, as well as the educator and industry professional/guest speaker, if one is available.

Pedagogy used to realise set learning outcomes have mostly been facilitated with the use of collaborative and small student group work. This has in the past provided students with the opportunity to experience a combination of both formal and informal learning, as well as brain storming sessions. This has also allowed students to better express themselves in oral presentations and written reports/essays. Furthermore, it enabled them to learn from each other's experiences, especially where teams have been designed to incorporate local and international members of heterogeneous academic ability and diverse cultural backgrounds.

Both peer reviews and students' feedback, regarding the outcome of group work and the informal peer learning strategies implemented over a period of four semesters, in various education, business, science and computer engineering classes included the following: 'It has been challenging', 'it allowed us to brain storm and take risks as a group', 'it provided us with the opportunity to try new things', 'it was interesting to learn about different cultural perspectives to the same issues discussed', and 'group work has helped us to learn and know one another in terms of our individual strengths and weaknesses, which, in turn, facilitated the division of work and allocation of tasks among each other'. Even though difficulties may occasionally surface within small student groups, it is the view here that overall experiences with informal peer learning has been invaluable in terms of realising set learning objectives and outcomes.

Furthermore, typical small student group difficulties can be further minimised with proper pre-planning, effective small groups organization and the employment of well thought of individual and group forms that students would be asked to fill out at the beginning of and during certain intervals/group activities held within the semester, and possibly towards the end of it. This, in turn, would go miles in turning small groups into effective learning teams, which increases the chance of consequential deeper learning levels, longer information retention periods, and higher degrees of achievement (Oakley et al., 2004). As such, this would lead to an improved learning experience, possibly characterized by enhanced levels of student satisfaction, retention, completion and success.

Such peer/small group learning forms would include clearly outlined set team policies and expectations, more specific assignment/s team expectations, and peer grading/evaluation forms, where students would evaluate the performance and contributions of each and every team member after each and every group activity is undertaken (Oakley et al., 2004). It is helpful to allow team members to share their feedback, as they appear on the forms, among each other. Such forms would clarify team members' roles and the set expectations out of team work. It would further take away any guess work out of the equation. In other words, this would clarify to all team members the rules

and policies governing peer cooperation, and the set expectations for peer learning, right at the beginning of the semester. This is undertaken with the understanding that it would increase the possible chances for the realization of enhanced peer cooperation and learning.

This has been facilitated by the application and integration of new learning technologies, in both the design and the delivery of the units concerned, in ways that can impact on the engagement and achievement of all participating students. Past experiences and prolonged observations have indicated that effective integration of digital learning technologies into the curriculum is a central and crucial issue for student learning. The key is to ensure that the technology fully supports the curriculum objectives being assessed. Thus, appropriately designed and developed curriculum is of the essence. Furthermore, it is the view here that personalized learning plans, carefully crafted based on students' individual learning styles (Claxton and Murrell, 1987; Felder, 1993; Grasha, 1990; Grasha, 1994; Heffler, 2001), and provided to them to follow up with, especially for those students who seem to be lagging behind or have previously been identified as 'At Risk', are crucial in terms of enhancing their chances of better engagement and higher achievement, as they allow for the provision of student learning opportunities, that are otherwise difficult to attain.

Based on previous experiences and current research outcome (Bhasin, 2012; Cope and Ward, 2002; Hew and Brush, 2007), the integration of information and communication technologies (ICT) in education has gradually enhanced students' learning and performance. Developing a strong understanding of the interactions, and consequential interrelationships, among information technology, students and pedagogy, allow the stakeholders involved to implement effective policies and procedures, to ensure a successful integration process, facilitate optimal use of the new learning technologies by all stakeholders involved, and possibly re-visit the pedagogy as needed.

In terms of online teaching, and in line with previous experiences, the authors strongly believe that it is extremely important to capture students' concentration and engagement while online (Graham et al., 2001). This is achievable through effective curriculum design and interesting lecture deliveries, accompanied by a wide variety of online engaging learning activities. It is crucial for the online participating students to feel the facilitator's presence. Thus, the virtual class environment should be a replicate mirror image of the face-to-face classroom environment (Graham et al., 2001). The same issue applies to online discussion forums, whereby the educator's frequent intervention in the discussion to assert their presence (Graham et al., 2001), as the facilitator in charge, is salient, as it encourages as many students as possible to engage themselves and participate in the discussion. Furthermore, to ensure that students are preparing themselves in advance to respond to the discussion questions and forums provided, using the university's learning management system, it is essential to enable ahead of time the option which prevents a student from responding to other students' posts before posting their own response first.

Student supervision is considered by many a main teaching-related task. Supervision to completion of master research students, doctoral research students, student projects within the Masters and Doctorate programs, industry related projects, and Bachelor

Honours theses have each proved to be an invaluable experience. The skills gained with repetitive research supervision, and the knowledge sharing each research student brings along, have proved to be priceless, as supervision skills build and expand over time. With principal supervision, gradual learning and adaptation with the supervision style gets experienced. The approach to the role of research supervision incrementally transforms overtime from pure transmission of information, and the provision of optimal courses of action, given students' respective research topics, to that of mentoring, and preparing students to set expectations and requirements, as well as, providing feedback, advice and suggestions on the research tasks in focus. Over time, contributions to and learning from student supervision has proved to be a reciprocal process. It contributes to the shaping of one's supervision style, in as much as the principal supervisor contributes to the advancement of students' research skills, methods, processes and knowledge.

Furthermore, it is the view here that being available for genuine student advising and consultations, is valuable in facilitating student learning and engagement. It further helps students to know, for example, that there is no such thing as a silly question, and that all students' questions are valuable, and should be voiced, addressed and clarified. Students should be encouraged to reach their educators online, by phone, in person, and pass by the office for face-to-face consultations. In the past, this has enabled the authors herewith to spot the 'At Risk' students, who seem to have poor areas of comprehension, pinpoint this to them, and intervene to organize, direct and assist students to fill in their knowledge gaps; thus, enhance their chances to more actively engage with the subject contents, and forthcoming class activities, both in class and online.

III. Conclusion

In conclusion, it is the view here that the process of improving teaching is dynamic, in the sense that academics continue to grow and improve on their teaching with time (Helou, 2005; 2008). It is the view here that engaging teaching styles; efficient lesson planning; effective curriculum design, development and implementation of learning activities; including overall teaching skills and experimentations with techniques used to more engagingly get ideas across to students continue to grow and improve over time. There are always new avenues to experiment with and learn from. Thus, the advice received decades back, namely that, 'a teacher is a student for life', is indeed true.

It is the view here that it is essential for the educator to continuously sharpen their learning and teaching skills, thus, participate on an on-going basis in professional development short training courses, workshops and intensive deliveries aimed at enhancing their professional skills, in this case, as related to learning and teaching. As need be, this may include staff/faculty mentoring; domestic and international student orientations; exploring the impact of international students' socio-cultural backgrounds and their learning needs; instructional methods that enhance intercultural peer interaction, cooperation and learning among domestic and international students given diverse socio-cultural and educational backgrounds: European, American, Asian, and Australian; learning and teaching philosophies; learning and teaching-related training courses; transformation from traditional to more contemporary educational approaches, especially with big classes; active learning approaches; student-centered methods

of instruction for in class and out of class use; associated issues related to curriculum design and development; blended learning; online learning environments; course work industry project student supervision; principal research student supervision ... etc. This further includes sole and collaborative empirical explorations with active learning approaches, innovative and creative curriculum designs and development, and different student-centered modes of delivery. The field of education, with its multi-dimensional facets, has a lot to offer, especially in the area of inductive and evidence-based learning (Bruniges, 2005; Prince and Felder, 2006).

As mentioned in the mission statement above, '... As an educator, the academic serves the University and its stakeholders, industry, business, the profession and the community'. As such, it is the view here that the generous provision of professional services and community engagement activities is beneficial, not just for the receiving institution/s and/or individual/s concerned, but the knowledge sharing in the process of delivering such services positively impacts all stakeholders in the equation. Examples are plentiful, including, but are not limited to, reviewal and endorsement of books authored by postgraduate students and colleagues; review and examination of theses; service to nationally and internationally refereed conferences - on organization committees, as an academic referee, editor of conference papers, strand chair and discussant; service to other academics and non-academic industry colleagues as guest and note speaker and visiting fellow; delivering relevant teaching, learning and research-related seminars and presentations in specialized areas of expertise, for other departments/faculties and universities; delivering annual school presentations on Career Days to provide student advice and address their aspirations, while educating them in relation to the major and sub-major study programs on offer; undertaking of units, courses and program moderation tasks for other educational institutions; ... etc. Finally, the message to be conveyed in this paper is that with continued ongoing improvements in the field of education, the sky is the limit in terms of identifying venues for professional development as related to enhanced learning and teaching skills, especially with the employment of experiential and peer learning.

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