



Scholarship of Teaching and Learning (SoTL)



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CENTER FOR ACADEMIC DEVELOPMENT
22 Feb 2022

Upon completion of the course, the participants are able to:

- i. define SoTL;
- ii. understand SoTL concepts and process;
- iii. relate SoTL concepts and process with their lessons;
- iv. design a SoTL project

Materials for download



<https://padlet.com/suluan5/sotl>





Do you know what is SoTL?

A: Yes

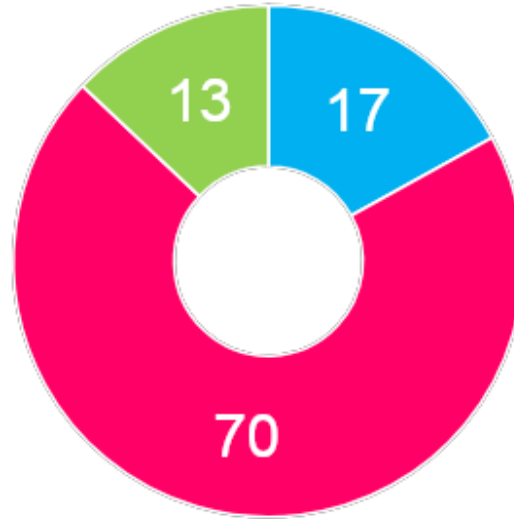
B: No

C: Heard about it but not sure what it
means

Putting things in context: Being an academician in UPM



Info Laluan Kerjaya Staf Akademik UPM



■ Pengajaran ■ Penyelidikan ■ Pengamal

Promotion Criteria for Associate Professor (Teaching Track)

Min. 36 jam kredit dalam pengajaran

Min. 5 jenis inovasi dalam penyampaian, penilaian dan penyeliaan

Graduatkan min. 1 pelajar Ph.D sebagai penyelia bersama (*co-supervisor*) **dan** min. 2 pelajar MSc iaitu 1 sebagai penyelia utama dan 1 sebagai penyelia bersama **atau** 1 pelajar MMed. sebagai penyelia utama

Min. 3 pengiktirafan berkaitan P&P (cth: anugerah, pakar rujuk, lantikan dalam jawatankuasa)

Min. 2 penglibatan (cth: keahlian persatuan, penganjuran seminar)

Clinical

Min. 36 jam kredit dalam pengajaran dan mempunyai sekurang-kurangnya 3 kursus berlainan

Min. 5 jenis inovasi dalam penyampaian, penilaian dan penyeliaan

Graduatkan min. 1 pelajar Ph.D sebagai penyelia bersama (*co-supervisor*) dan min. 2 pelajar MSc sebagai penyelia utama (*main supervisor*)

Min. 3 pengiktirafan berkaitan P&P (cth: anugerah, pakar rujuk, lantikan dalam jawatankuasa)

Min. 3 penglibatan (cth: keahlian persatuan, penganjuran seminar)

Science & Technology

Min. 36 jam kredit dalam pengajaran dan mempunyai sekurang-kurangnya 3 kursus berlainan

Min. 5 jenis inovasi dalam penyampaian, penilaian dan penyeliaan

Graduatkan min. 1 pelajar Ph.D sebagai penyelia bersama (*co-supervisor*) **dan** min. 2 pelajar MSc sebagai penyelia utama (*main supervisor*)

Min. 3 pengiktirafan berkaitan P&P (cth: anugerah, pakar rujuk, lantikan dalam jawatankuasa)

Min. 3 penglibatan (cth: keahlian persatuan, penganjuran seminar)

Min. 40 penerbitan artikel GHI dalam bidang

Social Science

Clinical

<p>Min. 10 penerbitan artikel CIJ dalam bidang subjek di mana min 5. daripadanya mestilah sebagai <i>senior author</i>;</p> <p>dan</p> <p>Min. 5 penerbitan artikel CIJ atau prosiding berindeks (termasuk min. 1 buku atau modul pengajaran) yang diterbitkan dalam P&P sebagai sebagai <i>senior author</i></p> <p><u>Kesetaraan:</u> Sehingga 50% daripada jumlah yang dikehendaki</p>
<p>Min. 2 projek penyelidikan sebagai <i>Principal Investigator (PI)</i> di mana 1 daripadanya mestilah berkaitan P&P (cth: GIPP)</p>
<p>Min. RM100 ribu yang mana RM80 ribu sebagai PI sementara RM20 ribu sebagai penyelidik bersama</p>
<p>Tidak berkenaan</p>
<p>h-indeks: 3 (Google Scholar)</p>
<p>Min. 2 penglibatan sebagai penilai geran, pewart, editor jurnal atau pemeriksa tesis Ph.D/ MSc/ MMed/ tesis/disertasi</p>

Science & Technology

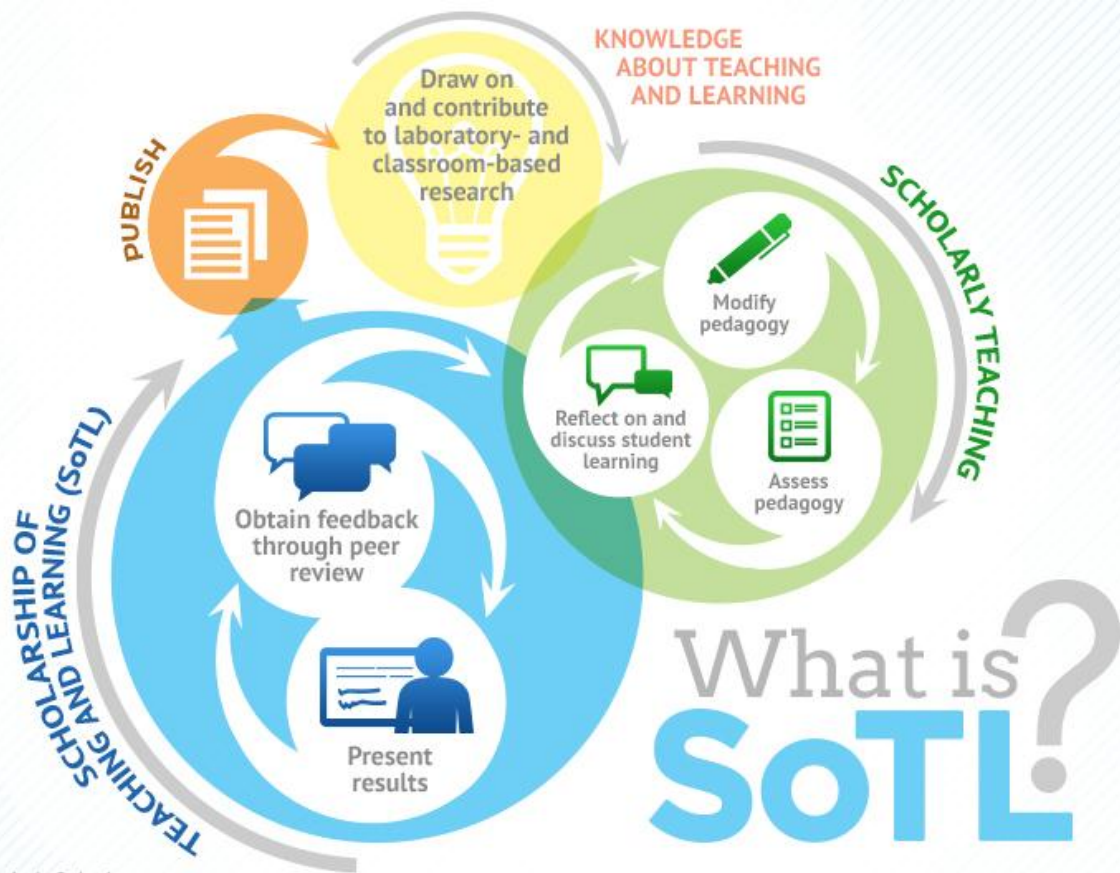
<p>Min. 10 penerbitan artikel CIJ dalam bidang subjek di mana min. 5 daripadanya mestilah sebagai sebagai <i>senior author</i>;</p> <p>dan</p> <p>Min. 10 penerbitan artikel CIJ atau prosiding berindeks (termasuk min. 1 buku atau modul pengajaran) yang diterbitkan dalam P&P di mana min. 5 daripadanya mestilah sebagai <i>senior author</i></p> <p><u>Kesetaraan:</u> Sehingga 50% daripada jumlah yang dikehendaki</p>
<p>Min. 2 projek penyelidikan sebagai <i>Principal Investigator (PI)</i> di mana 1 daripadanya mestilah berkaitan P&P (cth: GIPP)</p>
<p>Min. RM150 ribu yang mana RM120 ribu sebagai PI sementara RM30 ribu sebagai penyelidik bersama</p>
<p>Tidak berkenaan</p>
<p>h-indeks: 5 (Scopus)</p>
<p>Min. 3 penglibatan sebagai penilai geran, pewart, editor jurnal atau pemeriksa tesis</p>

Social Science

<p>Min. 10 penerbitan artikel CIJ dalam bidang subjek di mana min 5. daripadanya mestilah sebagai <i>senior author</i>;</p> <p>dan</p> <p>Min. 5 penerbitan artikel CIJ atau prosiding berindeks (termasuk min. 1 buku atau modul pengajaran) yang diterbitkan dalam P&P sebagai sebagai <i>senior author</i></p> <p><u>Kesetaraan:</u> Sehingga 50% daripada jumlah yang dikehendaki</p>
<p>Min. 2 projek penyelidikan sebagai <i>Principal Investigator (PI)</i> di mana 1 daripadanya mestilah berkaitan P&P (cth: GIPP)</p>
<p>Min. RM100 ribu yang mana RM80 ribu sebagai PI sementara RM20 ribu sebagai penyelidik bersama</p>
<p>Tidak berkenaan</p>
<p>h-indeks: 3 (Google Scholar)</p>
<p>Min. 3 penglibatan sebagai penilai geran, pewart, editor jurnal atau pemeriksa tesis Ph.D/ MSc</p>

What is SoTL?





What is?
SoTL

**“systematic
reflection on
teaching and
learning made
public”**

Illinois State University (2015)

**“systematic inquiry into
teaching-learning
processes and their
effectiveness made
public”**

Bates (2014)

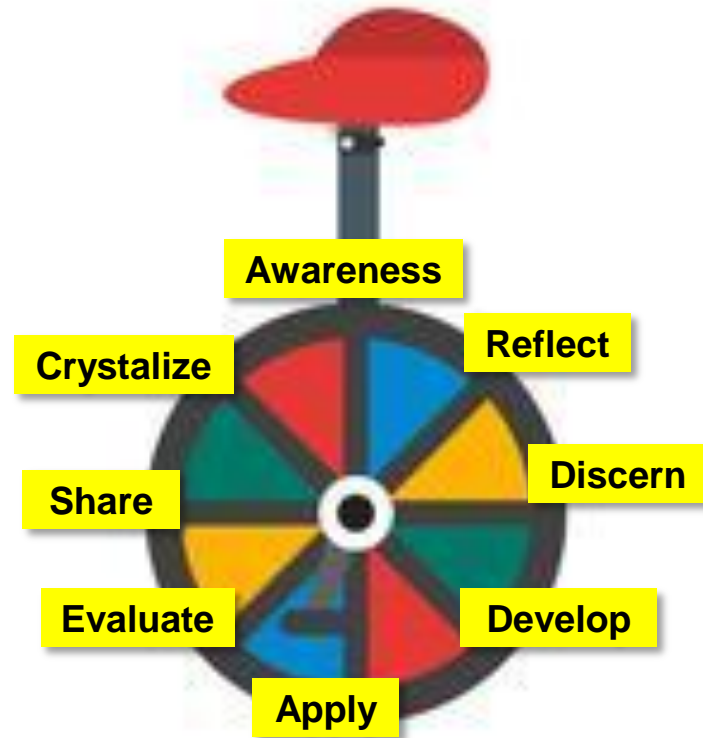
**Think and reflect
on my own
teaching to
enhance student
learning and
share scholarly
findings with
others**

(Wong Su Luan, 2018)

Unicycle of SoTL (SoTL Process)

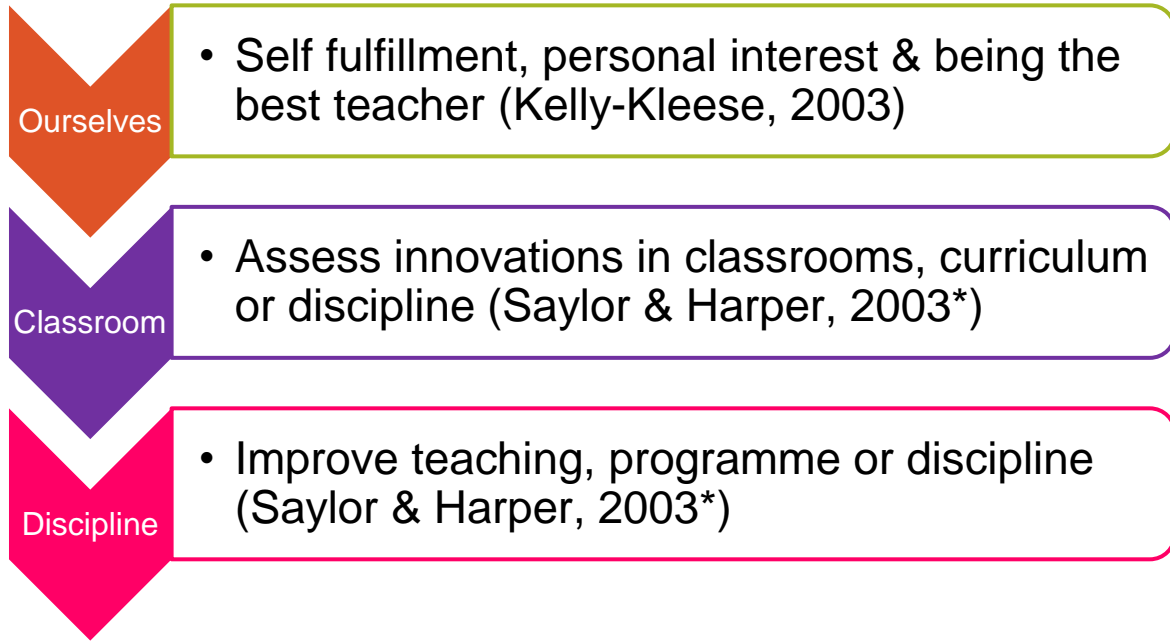
(Swart, 2016)

<http://www.tandfonline.com/10.1080/03043797.2016.1214689>



Why





Kelly-Kleese, C. (2003). Community college scholarship. *Journal on Excellence in College Teaching* . 14(2/3), 69-84

*Bishop-Clarke, B. & Dietz-Uhler, B. (2012). *Engaging in the Scholarship of Teaching and Learning*. Sterling: Stylus Publishing.

How



How was your teaching experience?

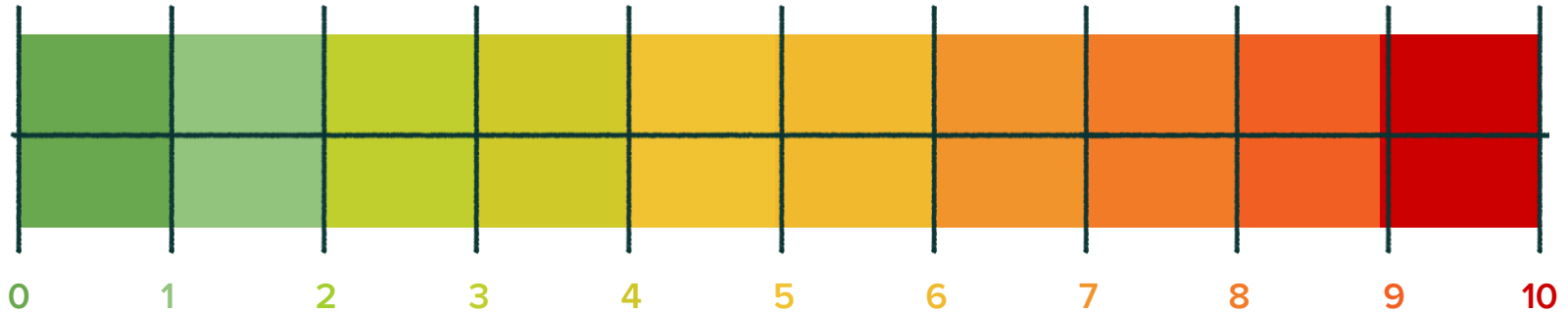


A. Good



B. Poor

Self-Check



I'm happy with the way I teach and I can totally handle this

I love my students and I love teaching, but finding the sweet spot is tough

Teaching is mentally and emotionally draining

How you think **your students** feel about your teaching?



A. This class is fun-fun-fun



B. I'm a little confused



C. Stop, I need help!

D. I do not know

What are the teaching challenges that you have encountered

1

2

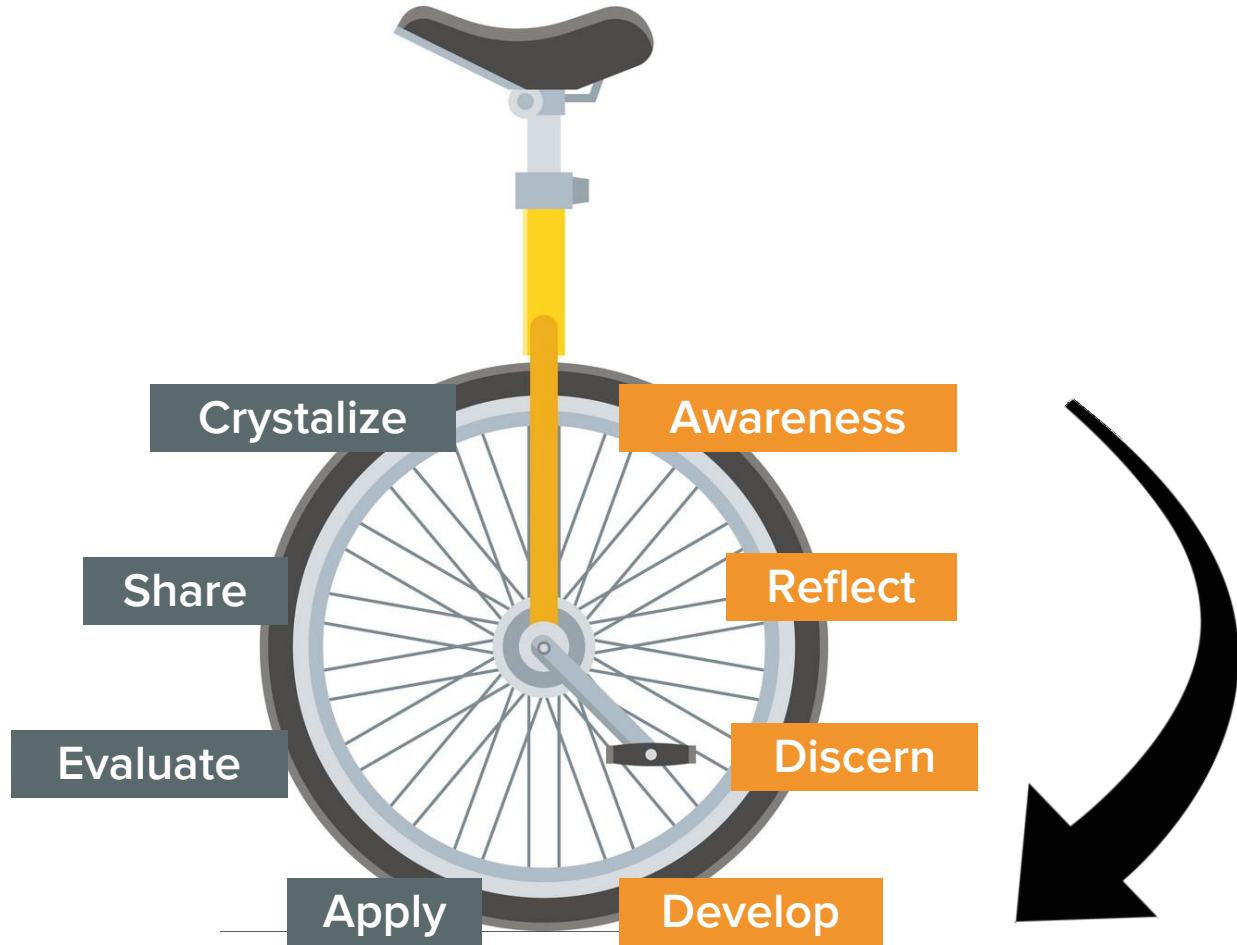


What is filling
your bucket and
what's draining
it?



In three minutes,
write your plans for
teaching in the
coming semester





(Swart, 2016)

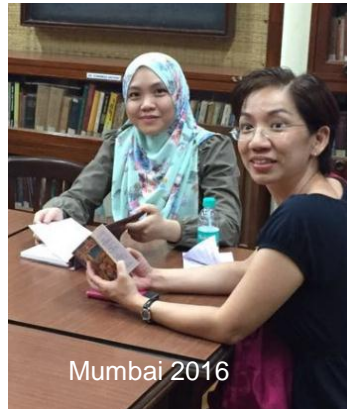


Congratulations! You have embarked on the journey as a **classroom researcher!**

- The term Classroom Researcher was coined by Cross (1986) more than 30 years ago, in reference to college teachers.
- Now the term SoTL has been a more commonly used term for Classroom Research



An Example of a SoTL journey — Dr Mas Nida Md Khambari



July 2014

Just getting back to work after a long study leave ●
Enthusiastic, cannot wait to teach ● Don't know what is
SoTL



Sept 2014

First given task: teach a group of boisterous students
● Trying to “tackle” the students was a challenging
task ● Students seemed not interested with her
approach

Dec 2014

Realized that enthusiasm is not suffice ● First
semester of teaching ended – She did not get the
satisfaction ● Started to plan for the second semester

Awareness

Reflection

December 2014

She reflected on the several strategies and approach that she have tried for teaching

What worked and what did not work

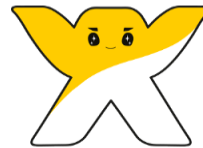
Characteristics of students

Started to strategize

Discern

December 2014

Created her own “toolbox” for teaching – gathered all the useful and relevant apps and webs



Discern

June 2015



The Scholarship of Teaching and Learning

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Developing a 21st Century Teaching and Learning Toolbox in an Educational Technology Classroom

Mas Nida Md. Khambari
Faculty of Educational Studies, Universiti Putra Malaysia

Introduction

As a 21st Century academician educating 21st Century pre-service teachers, I found it vital to prepare these pre-service teachers to brace a learning ecosystem beyond 21st Century. The cohort of undergraduate students currently enrolled at the school I am teaching will be graduating as teachers, stepping into the world of teaching, facing the Gen Z – the millennials generation. Realizing this, I took this as my responsibility to prepare these pre-service teachers to brave the intimidating world. This makes me reflect on my teaching pedagogy and realize the needs to be on the cutting edge especially when it comes to teaching Educational Technology, a common and compulsory course for all undergraduate students at the Faculty of Educational Studies, Universiti Putra Malaysia.

Reflections: My Previous Teaching Pedagogy

When I started teaching officially as a Senior Lecturer in Fall 2014, I was excited and really looked forward to my first semester of teaching. I have a mental picture in my head of how I envisioned my classroom. I think it is important that my students are given the chance to think out loud, be progressive and explorative, and broadminded. With this view in mind, I have decided to integrate several group activities into my lessons to initiate discussions and hoped that they could promote higher order thinking skills as well. I want to bring change, I want to be the change. I said to myself, "I will have a utopian 21st Century classroom."

Weeks before the Fall semester commenced, I had a meeting with the Educational Technology team. The team, which consists of two other seniors, briefed me of the course outlines, the assignments, and evaluations. I was assigned a group of 33 Physical Education students. The semester started, and I was enthusiastic. Each week, I tried to incorporate the group activities I had planned beforehand into my lessons. Each week, I worked towards my goal. It never escaped my mind that "I will have a utopian 21st Century classroom."

Development



May 2016

Step-up her pedagogy & choose an approach that she theorize would work for her students and herself

**GAMIFIED MOBILE
LEARNING TO
ENCOURAGE ACTIVE
LEARNING**

Development

Digitizing the Amazing Race Game

Crafting the Game

What are the rules

How many students in a group

How long should it take

How can it achieve the Learning Outcome

What is/are the desired outcome(s)?

What are the kinds of data I plan to collect (so that I can improve my teaching skills)?

Plan to collect some data (prepare Google Forms)

- Effectiveness? Skills enhancement? Character building?

Application







Evaluate

Getting students' feedback

Students reflect on their experience while “playing” the Amazing Race

How does the game affect their motivation to learn

What element do they like and do not like

What are their preferences

What are their suggestions to make it better

Wrote a paper on how she design the lesson and the students' feedback on it

Sharing

June 2016

Found the Early Career Workshop, one of the tracks in the International Conference on Computers in Education to start off

The 24th International Conference on Computers in Education
IIT Bombay, India Nov 28th - Dec 2nd 2016

Home About Us Organization **Call For Papers** Paper Submission Program Registration Location Contact Us

Call for Participation

24th International Conference on Computers in Education (ICCE 2016)

Early Career Workshop

Mumbai, India

<http://www.et.iitb.ac.in/icce2016/>

November 28(Monday) - December 2 (Friday), 2016

Organized by the Asia-Pacific Society for Computers in Education <http://www.apsce.net/>

Hosted by Indian Institute of Technology Bombay, India

** Successful applicants will submit a two-page position paper on their research which will be published in the Workshop Proceedings of ICCE 2016 and will be indexed by Elsevier Bibliographic Databases (e.g., Scopus, Engineering Village and others). **

ICCE 2016 Proceedings

Click [here](#) to view the proceedings of ICCE 2016

ICCE 2016 Photos

Click [here](#) to view ICCE 2016 Photos

[ICCE 2016 Keynote Videos](#)

Contact

Please contact [icce2016india \[at\] gmail \[dot\] com](mailto:icce2016india@gmail.com) for any inquiries related to registration, invitation letter, accomodation and travel

Sharing

Chen, W. et al. (Eds.) (2016). Proceedings of the 24th International Conference on Computers in Education. India: Asia-Pacific Society for Computers in Education

Innovating a Meaningful Gamified Instruction: An Instructor's Quest to Fulfill the Demands of 21st Century Learners

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[*khammasnida@upm.edu.my](mailto:khammasnida@upm.edu.my)

Abstract: In the quest to fulfill the demands of 21st Century Learners who are digital citizens, this study aims to explore the gamified instruction approach in the context of higher education institution and how it could impact learning and instruction. The dynamic and adaptive nature of today learners calls for a new mode of instruction—bringing new challenges to instructors. This study is deemed timely in the transformation age of instructional system. It also echoes the Malaysian Education Ministry aspirations to become world's leading education system that actively pursue technologies and innovations that fulfill 21st Century learners' needs and enables greater personalization of learning experience.

Keywords: Innovation, gamified instruction, gamification, game elements, 21st Century education, higher education

1. Introduction

Today's students are 21st Century learners. They are digital citizens growing up with rapid developments of technologies and advanced gadgets. They are dynamic and adaptive to new things. Because of this, the practice on teaching and learning has taken a different quest from what it used to be not so long ago. The challenges in getting learners to be engaged, participative, and motivated in lessons have increased. More often than not, learners are not keen to attend instructions which are carried out in a teacher-centred mode. Debates aroused: Why was this not a problem before? Why are learners today different from those from a decade ago? The Malaysian Education Ministry, in the Malaysian Education Blueprint 2015–2025 (Higher Education), has charted waves of transformation to accelerate improvement in Higher Education institutions; so as to create new generation of Malaysian students to excel globally in a competitive environment (Ministry of Education Malaysia, 2015). With such aspiration, a change of mode of instruction at the higher education institution level is of a crucial need.

2. Research Background and Literature Reviews

The dynamic nature of 21st Century learners calls for a new mode of instruction. Of late, gamification has become an emerging phenomenon in the field of education. Gamification in classroom instruction is defined as an approach whereby an instructor uses game elements in non-game context (Deterding, Khaled, Nacke, & Dixon, 2011), namely in teaching, to create a fun and engaging learning atmosphere (Amar & Ralph, 2014). It employs the elements of point-giving, playing for a specific goal to achieve in a specific structure (Nicholson, 2012) as a means to engage and immerse students in the teaching and learning process. Other elements include the use of such as badges, leaderboards, progress bars, performance graphs, quests, meaningful stories, avatars, and profile developments (Sailer, Hense, Mandl, & Klevers, 2013). Basically, gamification in instruction uses the motivational power of games but in the context of education to enhance and diversify the teaching approach and foster self-driving behavior.

Submitted a manuscript to the International Conference on Computers in Education 2016, at Mumbai, India

Accepted & published in conference proceedings

Proceedings indexed in Scopus

Sharing

December 2016

Mentor

Prof. Dr. Nikol Rummel

Ruhr University

Bochum, Germany

Adjunct Professor

**Human-Computer Interaction Institute
Carnegie Mellon University**



Crystallization

January 2017

Applied for a grant i.e. Geran Insentif Penyelidikan dan Pendidikan (GIPP) by CADe

Secured a RM10K grant to develop a Gamification Learning Kit (2017)

2019



Scholarship of Teaching and Learning @UPM UNIVERSITI PUTRA MALAYSIA

Editors

Wong Su Luan
Mas Nida Md Khambari
Abu Bakar Mohamed Razali
Suraya Abdul Rashid
Florence Toh Haw Ching

Chapter 1

Unpacking the Scholarship of Teaching and Learning for Academics

Wong Su Luan & Mas Nida Md Khambari

Keywords: scholarly teaching, systematic reflection, unicycle spokes

Introduction

The Scholarship of Teaching and Learning (SoTL) is gaining prominence in Malaysian public universities since the introduction of the differentiated career pathways (DCP) framework by the Ministry of Higher Education in 2016. The DCP framework aims to create "academic ecosystems capable of nurturing excellence and leadership in teaching, research, professional practice and institutional leadership" (Ministry of Higher Education, 2016, p. 12) through four different pathways — Teaching, Research, Professional Practice and Institutional Leadership.

The teaching career pathway was introduced as a way to give due recognition to academics who engage in SoTL. The Ministry of Higher Education (2016) acknowledges that achievements and contributions in SoTL have not been given due weightage for academic promotions in the past. Past studies have also suggested that SoTL work is less valued in promotion excercises, often causing academics to shy away from putting effort in SoTL work (McKinney, 2007; Swart, 2016). Swart (2016) stressed that too often, academics have the misconception that they need to focus solely on research related to their field of expertise to be eligible for promotions. In addition, being involved with SoTL work means one will be slow to yield papers as most education journals have low citation rates (Rowland & Myatt, 2014). Despite these concerns, Malaysian academics have shown great interest to pursue in scholarly teaching.

Indeed, a cursory survey by the Ministry of Higher Education (2016) among 5144 academics from 24 universities revealed 46% of them see themselves as passionate educators. A majority of the academics (42%) chose the teaching career pathway. Within the context of Universiti Putra Malaysia (UPM), 17% of

Chapter 5

Getting to Know the Scholarship of Teaching and Learning: A Typology from Reflections of an Academic's Teaching Journey

Mas Nida Mohd Khambari

Keywords: self-reflections, autoethnography

Introduction

Teaching involves the exchange of information between an instructor and his/her students. Research studies have emphasised on the importance of instructor's presence in learning by the concept of *talaqqi*, which means, learning happens through face-to-face instructions between a teacher and a learner (Mustafa & Basri, 2014; Abd Rahim, Yakob & Abd. Rahman, 2016; Yusof, Razali, Omar, Abdelgellil & Hamzah, 2018), and teachers are there to verify their students' comprehension as well as to rectify their mistakes in learning.

Academician have different experiences, challenges and struggles in their teaching journey. It is oftentimes through face-to-face interaction between a teacher and his/her students that the teacher understood his/her students' learning obstacles, and made reflections and improvements to his/her current teaching practices, so that the quality of learning can be improved (Swart, Luwes, Olwagen, Greyling & Korff, 2016). Hatch (2006) had highlighted the fact that teaching is a lonely journey, as teachers seldom have the opportunity to share their success stories with others. He recognised the importance of making teachers' profession public, so that it can foster collaboration and camaraderie among communities of practice, known as the scholarship of teaching and learning (SoTL).

Grants

related to TL in her
context of teaching &
cross faculty/university
collaboration

Copyrights

14 files

Innovation Competitions

Medals and Awards
(recognition), judges for
competitions

Community + Industry Engagement

Innovation Showcase,
UN+VAIL

Sharing & Crystallization

Publications

Book chapters,
journal papers,
proceedings

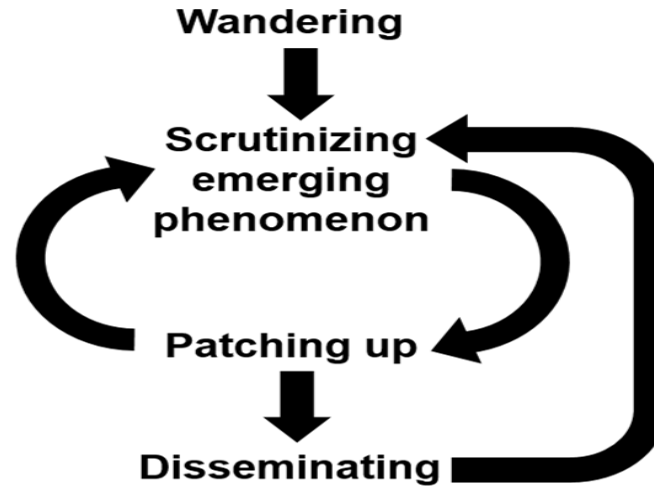
Invitation as Speaker

Keynote speakers,
webinars, talks

Conference

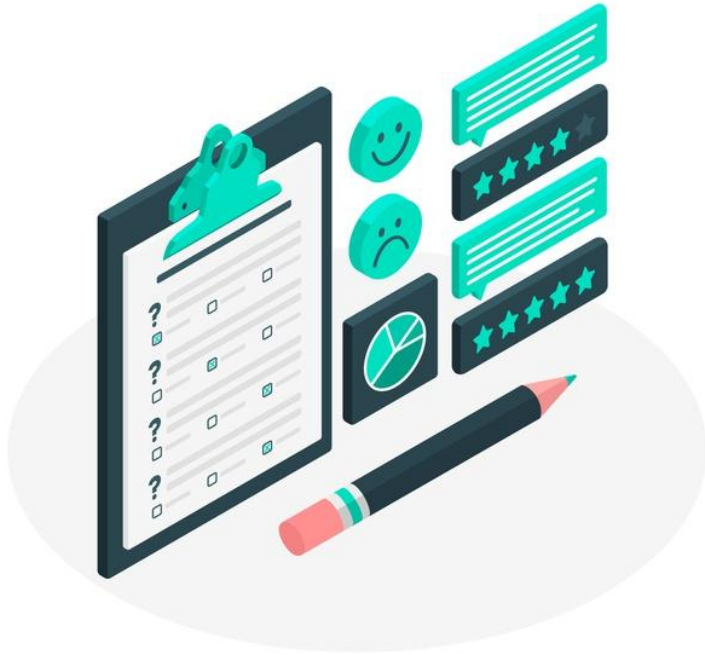
Feedback for
improvements

In sum ... Her SoTL Journey



Typology of the Scholarship of Teaching and Learning
Journey (Md. Khambari, 2019)

SoTL-ize your lessons!



Constructive alignment of your approach to the course outcome?

Feedback on each methods/technique/approach used in classroom

One-off

semester long

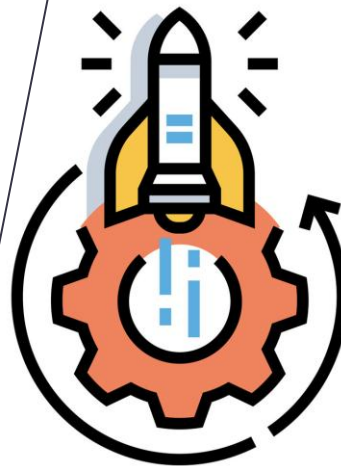
Effects of approach on soft-skills?

So you're probably thinking...

How do I start....?



1



2



3

What research design can I employ?

Some suggestions (but not limited to) :

- 1** Action research
- 2** Auto-ethnography
- 3** Self-study

What data can I gather?

Quantitative | Qualitative
Mixed method

Sequential Explanatory | Sequential Exploratory

Questionnaire

Open-ended
survey

Observation +
Rubrics

Interview

Students'
reflections

Documents
Analysis

Some samples (but not limited to) :

1

Students' skills/soft-skills/
learning outcome

2

Students' learning
satisfaction

3

Students' acceptance toward
your intervention/approach

4

Students' performance

Sample Survey

Online Learning Activities Check-Ins

* Required

Please rate your preference for each online activities for FCE3401.

The rating scale goes from 1 (definitely not helpful) to 10 (definitely very helpful). You can answer in English or in Bahasa Melayu.

Instructions (running order) in WhatsApp group.*

1 2 3 4 5 6 7 8 9 10

Definitely not helpful Definitely very helpful

Please elaborate why did you choose that rating for the Instructions (running order) in WhatsApp group? (example: I rated this activity at 9 because I think that this activity....) You may want to elaborate in terms of interest, time, convenience, benefit to you, clarity of explanation, Internet speed, etc.*

Students' Perspectives on the Use of PutraPacer as a Differentiated Assessment Tool for Learning

* Required

(B) Performance Expectancy

Please respond the following items according to the scale.

*

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
1. I think PutraPacer is helpful for my learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Using PutraPacer...					

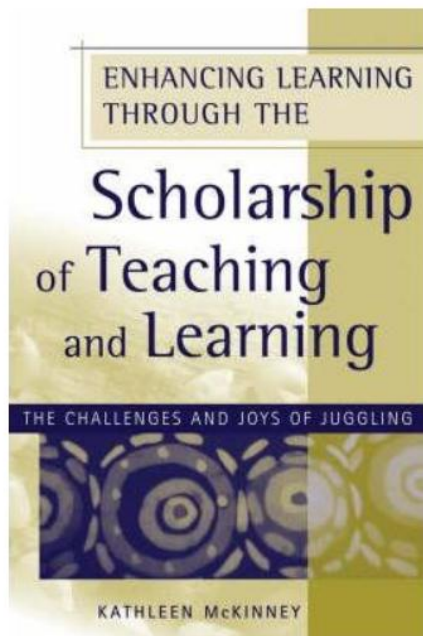
What's your SoTL journey?



Hands on Activity: How to design my SoTL project?

Download Worksheet





Enhancing Learning Through the Scholarship of Teaching and Learning : The Challenges and Joys of Juggling

★★★★☆ 3.56 (16 ratings by Goodreads)

Paperback | JB - Anker | English

By (author) Kathleen Mckinney , Foreword by K. Patricia Cross

Share



The Challenges and Joys of Juggling There has been growing demand for workshops and materials to help those in higher education conduct and use the scholarship of teaching and learning. This book offers advice on how to do, share, and apply SoTL work to improve student learning and development. Written for college-level faculty members as well as faculty developers, administrators, academic staff, and graduate students, this book will also help undergraduate students collaborating with faculty on SoTL projects. Though targeted at those new to the field of SoTL, more seasoned SoTL researchers and those attempting to support SoTL efforts will find the book valuable. It can be used as an individual reading, a shared reading in SoTL writing circles, a resource in workshops on SoTL, and a text in seminars on teaching.

Contents include: * Defining SoTL * The functions, value, rewards, and standards for SoTL work * Working with colleagues, involving students, writing grants, integrating SoTL into yo... [show more](#)



Thank
you

Slides were prepared in collaboration with Dr Mas Nida Md Khambari