

# Using an Innovative Assessment Method to Promote Lifelong Learning Among Psychology Undergraduate Students

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## Introduction

The term “lifelong learning” is a literal translation of the original French term, “l’éducation permanente”, coined by the politician Edgar Faure (1972). This term was subsequently used by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to advocate the importance of learning as a basic form of human activity that should continue throughout the lifespan, owing to its necessity for achieving self-actualisation at the individual level, and its potential for furthering economic growth and social cohesion at the societal level. More recently, researchers argue that learning should not only be “lifelong”, but also be “life-wide”—that is, learning ought to encompass all settings in everyday living, continuing even after one’s years of formal schooling are long over (see, e.g., Merriam, Caffarella & Baumgartner, 2007). At present, lifelong learning (LLL) refers to both the longitudinal (i.e., from the cradle to the grave) and cross-sectional (i.e., spanning not only formal, but also non-formal and informal learning contexts) pervasiveness of learning in one’s life (Laal, 2011).

## Lifelong Learning in Higher (Psychology Undergraduate) Education

Inspiring students to adopt a lifelong perspective towards learning should, in our view, be a key objective of any academic programme in higher education. It takes only about half a decade before half of one’s knowledge in one’s area of expertise becomes outdated (Vasquez, 2011). This sobering observation underscores the importance of emphasising LLL in the practice of tertiary education which supposedly prepares the student for the workforce right after his or her graduation. Psychology graduates who embark on psychology-related careers, for instance, will soon discover that the knowledge and skills they acquired in university have quickly become outdated, and that constantly updating themselves on emerging research, methodologies, and skills relevant to their field is necessary for attaining (and maintaining) job competencies. As an example, in the field of clinical psychology, clinicians need to continually revise/improve diagnostic criteria for known psychiatric conditions; newer versions of existing psychological assessment tools are constantly being created due to the need to

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refine their diagnostic competencies, improve their psychometric properties, and ensure their suitability for use in emerging (sub)cultures. It is therefore of utmost importance that clinicians keep close tabs on research developments that are relevant to their areas of practice, and consider how they might (re)align their clinical management strategies in accordance with major advancements in the field. Importantly, regardless of whether a graduate pursues a career in (clinical) psychology per se, we believe that the benefits of embracing and pursuing LLL are universal and apply to all aspects of daily living. It is thus crucial for tertiary-level educators to tailor their curriculum in ways which would encourage their students to embrace and pursue LLL.

We specifically think that students' intrinsic motivation to learn (and keep on learning) can be increased by *making the subject matter become personally relevant* to them. To achieve this, lecturers can connect classroom content to everyday life experiences. Su and colleagues (2012) reported that students found their learning experiences to be better when teachers contextualised the educational materials, connecting them to personal life experiences; this helped students develop a deeper appreciation for learning. In a similar fashion, psychology lecturers can proactively relate psychology-based theories, concepts, and frameworks to their own (and students') experiences, and/or link these abstract pieces of information to real-life examples (e.g., from the news, a character in a well-known movie, or any other prominent sources of information to which students can relate). This would potentially pique students' interest towards psychology as a subject at a deeper (more personal) level, and incentivise them to learn intrinsically. In the next section, we report our recent study which was developed along these lines, involving the innovative use of the assessment component that, on the basis of data that we gathered, promoted LLL among psychology undergraduate students.

## Our Study

Pedagogical strategies and assessment methods typically involve traditional midterm tests, student presentations on designated research papers and topics, and knowledge-based final exams; however, these methods might not be the most effective for promoting LLL. In this regard, we designed an innovative assessment method and tested its efficacy in terms of promoting LLL. In two undergraduate psychology modules—PL3243 “Sensation & Perception” (taught in Semester One AY2011/12) and PL4214 “Evolutionary Psychology” (taught in Semester One AY2011/12 and Semester Two AY2012/13)—we introduced a class assessment strategy, which we called the “Innovative Idea Presentation”, in addition to traditional assessment methods. This new assessment component required students to proactively apply theories to manifest occurrences in order to gain a deeper appreciation of human behaviours and natural phenomena. The goal was to encourage students to become more sensitive towards their observations and experiences in everyday living, and make sense of them by applying concepts which they earlier acquired. In this respect, learning would have occurred beyond the classroom.

An excerpt of the instructions given to students is as follows:

Each student group will share a personal observation or experience. Specifically, the group will attempt to explain the observation or experience using theories and principles of sensation and perception (in the case of PL3243, or evolutionary psychology in that of PL4214). In explaining your experience, you can adopt theories and principles that you would have learnt in our module, or engage in additional research-based reading, or combine

these information sources. Based on your presentations, the audience, at the end of your sharing, should have gained insights into (1) what your experience or observation is/reflects, and (2) why your experience or observation might have occurred the way it did based on principles of sensation and perception (or evolutionary psychology). The two best presentations of our cohort will receive the Stephen Lim Innovative Idea Prize.

Students taking PL3243, for instance, have questioned how and why a banana remains (i.e., is perceived by the visual system to be) yellow in its colour, despite various lighting conditions under which it is viewed. In a similar vein, students doing PL4214 have questioned, for instance, their observation of ladies' tendencies to flip their hair whilst interacting with attractive men who may be potential sexual mates. The fundamental perceptual/evolutionary laws that undergird these observations were then considered and evaluated during classroom discussions. For instance, flipping one's hair is possibly closely associated with flirting; there is in fact a rapidly emerging literature that purports the evolutionary benefits of flirting, e.g., organisms which demonstrate flirting manoeuvres are more likely to earn mating opportunities successfully, thereby increasing their genetic fitness etc., accounting for how such a behaviour became so widespread in all humans today.

It is predicted that students who recognised or witnessed the manifestation (and therefore relevance) of perceptual and evolutionary concepts in their personal lives will in turn be encouraged to pursue LLL. Students' self-report feedback data across both modules were gathered through online e-surveys. The critical

test item was: **“Which assessment component in our module best promotes lifelong learning for you?”**

In PL3243, 8 out of 12 respondents indicated the “Innovative Idea Presentation” as their choice over other traditional assessment options, such as the midterm test (no votes), topical presentation (no votes), and the final exam (3 votes; 1 vote supported “none of the above”). In PL4214, a total of 38 out of 55 respondents picked the “Innovative Idea Presentation” over the midterm test (2 votes), topical presentation (7 votes), and the final exam (5 votes; 3 votes<sup>1</sup> supported “none of the above”). These data were analysed using a chi-square test for independence, which first affirmed that data patterns were comparable across both modules, following which the data were collapsed across both modules, and chi-square tests for goodness of fit were applied and revealed that the “Innovative Idea Presentation” received significantly more votes than all other traditional assessment methods. In summary, the present data suggest that the “Innovative Idea Presentation” was significantly superior to all other traditional assessment methods in promoting lifelong learning among students across both modules.

Some students also provided qualitative comments:

- “[T]he innovative idea presentation and the [S]tephen [L]im [A]ward [are] really cute (: [I] really like the innovative idea presentation that makes use of observing everyday life examples and applying evo[lutionary] theories to it. [T]his really changes my perspectives of everyday living and [I] am still constantly applying evo[lutionary] psych[ology] principles until today, lessons which [I’m] sure would last a life time... (: thank you prof!”

- “I thought that the innovative idea presentation was an excellent idea for us to engage in purposeful learning and to apply the concepts we have learnt.”
- “Sir, [I] think that the innovative idea presentation is a brilliant idea! It makes us think critically and allows us to explore our creativity. It is a good addition to the module, and thus you should keep having it! :) Great Idea Sir!”
- “The Innovative Idea Presentation was the most interesting assessment component in this module because it allowed us (students) to engage in real-world observations and to critically think and propose unique explanations for the topics chosen. It further allows us to express our views towards the topic of choice, in any way we like, instead of giving a textbook-guided answer which sometimes constitute[s] a “correct answer”. The innovative idea presentation was a fun learning experience from me, both in preparing my own presentation and learning from others’ presentation. Thanks Prof Lim! :)”
- “Innovative idea presentation allow[ed] us to think out of the box and apply what we learnt in the course! Good!”
- “[T]he [Innovative Idea Presentation] was a great way for us to find creative ways to apply what we’ve learned into aspects of our everyday lives, something which we can apply for other modules as well... thank you for the interesting course sir!”

In addition, a former student who had taken PL3243 wrote more than a year after graduating. In his email, he described his observation, as he rode on his motorbike, of dotted lines on roads turning momentarily into tiny, closely-spaced strings of dots before appearing to join into a continuous line. More importantly, he critically

discussed and questioned the biological and perceptual underpinnings of that experience. This, in our view, constitutes evidence of LLL.

### **Reflections: Towards a Culture of Lifelong Learning in the 21<sup>st</sup> Century**

LLL has become a staple in education policies throughout the world (Green, 2002; Schuetze, 2006). Rapid advancements in science and technology over the past decades have resulted in globalisation, which in turn has given rise to the formation of economies driven by knowledge, technical expertise, and innovation, as well as an increase in cultural heterogeneity within societies (World Bank, 2002). These advancements have also significantly contributed to the exponentially increasing rate at which new information is being created (Demirel, 2009; Su et al., 2012). Keeping in step with the constantly evolving information and sociocultural landscape is not only vital for a country’s sustained progress, but essential for individuals to maintain their economic competitiveness and enjoy meaningful social interactions in the globalised society. In the light of these challenges, we think it is paramount that programmes offered by educational (especially terminal diploma-/degree-awarding) institutions aim to inculcate a spirit of LLL in students, and to emphasise that the learners’ professional and personal successes in the future are inevitably intertwined with their attitude towards learning today. Here, we have devised a way of promoting LLL through the use of an innovative assessment method; based on students’ qualitative feedback, this method appeared to have also promoted elements of authenticity and creativity in their learning. We intend to continue adopting it in subsequent semesters to train lifelong learners, and advocate its adoption by teachers across a diversity of disciplines. We believe that fostering this LLL attitude in students is key in enabling their successful transition from school to society.

## Endnote

1. All three students indicated that the lecturer, via his classroom teaching during the weekly lecture seminars, directly promoted lifelong learning.

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## ABOUT THE AUTHORS



**Dr. Stephen Lim (pictured, left)** hails from the Dept of Psychology and strives to continue bringing life-transforming educational experiences to his students. As Assistant Dean (Undergraduate Studies) in the FASS and a Fellow of the NUS Teaching Academy, he endeavours to contribute meaningfully towards undergraduate education at the NUS. He is also the Founding Director of the Cognition Lab in his Dept, and continues to spearhead pedagogical research projects.

**Mr. Daniel Gan (pictured, right)** is a Masters student in the Dept of Psychology. His postgraduate work focuses on early predictors of autistic traits. Since the start of his candidature in August 2012, Mr. Gan has served the Dept as a Teaching Assistant, and is a winner of the FASS Graduate Students' Teaching Award. Mr. Gan finds it a challenge and joy in helping students recognise that learning extends beyond the classroom, and the importance of developing a spirit of lifelong learning.