

How to Promote Lifelong Learning in P-20?

Betsy Ng
Guest Editor

This special issue of the New Waves Journal of Educational Research and Development focuses on promoting lifelong learning in students and preservice teachers. Lifelong learning is becoming increasingly important in the 21st century. With the relentless global change, all learners across educational settings in the 21st century should develop the drive to continuous learning and take responsibility for their own learning. Through open discussion of the issues involved in lifelong learning, the editors would like to take this opportunity to encourage all educators to consider how we can foster self-regulation in schools, colleges and universities.

At present, empirical research related to lifelong learning is still in its infancy phase and such research is limited. The articles selected for inclusion in this issue were written by researchers and faculty who are involved in motivation and learning. Motivation can be defined as one's drive to learn which is pertinent to lifelong learning. All three articles are research papers that provide strategies to promote lifelong learning in schools and preservice teachers.

The first article by Ong et al. is a qualitative research paper that focused on how teacher questioning during classroom discourse can play a useful role in promoting higher-order thinking among students, thereby facilitating them to gain deeper cognitive skills for lifelong learning. This paper provides a unique perspective of learning as it documents students' cognitive processes elicited by an experienced science teacher's discourse moves during classroom talk. The findings offer practical discourse strategies for educators to encourage deeper student engagement in classroom talk and to facilitate students in deeper thinking in science learning.

In the second paper, Chua et al. developed and validated an 18-item Problem-Based Learning Process Inventory (PBLPI) to measure preservice teachers' perception of the key PBL processes. PBL involves solving authentic problems whereby students will develop higher-order cognitive thinking and skills, nurturing them to be self-directed lifelong learners. This psychometric paper shows how PBLPI could be used to evaluate the effectiveness of PBL.

In the final article, Ng demonstrated a person-centred approach of student motivation and learning. The study identified four distinct motivational-cognitive profiles of secondary school students based on procrastination and self-regulation. It is interesting to note that learners could be grouped into active procrastinator; active self-regulator; passive self-regulator; and passive procrastinator. The findings suggest that a lifelong learner is likely to adopt the profile of an active self-regulator. As such, educators may consider implementing autonomy-supportive instructional behaviours to nurture students' intrinsic motivation and facilitate the use of cognitive strategies.

This special issue also includes two book reviews, one by Paulina Chng and Bee Leng Chua who reviewed *Teaching 21 thinking skills for the 21st century: The MiCOSA model* edited by C. Robinson-Zañartu, P. Doerr, & J. Portman, and another by Betsy Ng who reviewed *Building autonomous learner: Perspectives from research and practice using self-determination theory* edited by W. C. Liu, J. C. K. Wang & R. M. Ryan. The book reviewed by Chng and Chua, although not specific to lifelong learning, provides readers the MiCOSA (*Mediation in the Classroom: An Open Systems Approach*) framework to enhance students' learning and develop critical thinking skills. The second book review offers readers a pragmatic perspective on motivation and issues in education across the Singapore and global contexts. Both these books serve excellent resources for faculty and researchers to adapt functional ideas on developing critical thinking and lifelong learning skills.

As the guest editor of this special edition, I hope that these articles will provide practical insights to various aspects of learning and teaching to promote lifelong learning. Although some of the articles may not focus directly on lifelong learning, the antecedents that promote lifelong learning should not be neglected. Lifelong learning research has a long way to go and hopefully, more researchers will contribute their research in this area. Finally, I hope this special issue will encourage educators to consider how to build autonomous learners in schools as well as how to nurture students and teachers to be lifelong learners.