

Project Summary for IAL Website

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| Project Title: | Dialogical Inquiry: Developing Quantitative Instruments for Profiling Future-oriented Capabilities |
| Project Number: | GA20-09 |
| Year of Approval: | 2021 |
| Funding Source: | WDARF |
| Objectives and intended outcomes of the project: | This project brings together two fields of research that rarely work together – social psychology and a socio-cultural perspective, both within the field of adult learning. In a small way, this project provides a means to make visible the assumptions, theoretical stances, and units of analysis embodied in the logic of various epistemological, ontological approaches that are otherwise assumed and, thus, silent. The project will move beyond multi-disciplinary research towards a transdisciplinary approach in the field of the science of adult learning, in Singapore and around the world. |
| Project Team | |
| Principal Investigator: | Albert (Kai Chung) Lee |
| Summary of Project (up to 300 words) | |
| <p>Specifically, this research aims to (1) develop quantitative instruments to assess the pedagogical benefits of the Map of Dialogical Inquiry and, with these instruments, (2) examine how the Map of Dialogical Inquiry can foster future-oriented capacities.</p> <p>First, we seek to create quantitative instruments for the Map of Dialogical Inquiry which can be used as profiling tools of learning. Instruments development follows standard procedure of scale development (e.g., Carpenter, 2018), including psychometric steps such as (1) reducing the number of variables, (2) detecting the dimensions of each variable (3) examining underlying relationships between variables, (4) evaluating the reliability and validity of items. Samples will come from Singapore and countries abroad (e.g., Australia, United Kingdom) as long as dialogical inquiry courses are offered in these countries with instructors professionally connected with us.</p> <p>Then, we evaluate these instruments. Specifically, we examine to what extent the instruments can capture the learning benefits of the Map of Dialogical Inquiry, in terms of the cognitive aspects outlined in the Map and future-orientedness, operationalized as critical thinking, sense-making of multiple perspectives and experiences, knowledge creation, ability to know how to learn, learning motivation, and agency. With the instruments developed, we investigate the prediction that future-orientedness would be stronger among participants who learn dialogically than participants who learn in non-dialogical ways. Samples come from classes at various educational institutions in Singapore. Using an experimental design allows us to systematically compare learning outcomes between (dialogical learning and traditional learning) and within conditions (pre-dialogical and post-dialogical). Data from semi-structured interviews throughout the classes help strengthen our conclusions about the instruments.</p> | |

With the quantitative instruments developed, educators, researchers, and curriculum designers in diverse educational contexts can statistically track, communicate, and compare the strengths and weaknesses of learners, and develop appropriate teaching strategies, contributing to changes in practice. While the proposed research may of itself induce major changes in policy formulation, we believe it is a means for providing evidence for institutional change and has the potential to motivate transdisciplinary research towards that direction, in Singapore and worldwide.