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Activity Theory in Education: Research and Practice is a collection of eleven papers on the application of Activity Theory (AT) to investigate the what and how of developments(s) in education. The articles are characterized by their wide geographical scope and variable educational themes. The Foreword, by Yrjö Engeström, describes the volume as “such a much needed collection of practical experiences, theoretical insights and empirical research findings on the use of Activity Theory in educational settings” (p. vii). Then, Marilyn Fleer’s Introduction to the volume specifies that studies categorized under AT research have a number of characteristics in common. These include focusing on transitions caused by tensions/contradictions, adopting a holistic approach to research, emphasizing historical developments to capture dynamic motions across time and generation, ensuring theoretical robustness in data collection and interpretation, and admitting the role of the researcher in providing insights into the process of development. Careful scrutiny of the papers, organized around four sections, shows that these features have served as the selection criteria for the articles included in the volume.

Section one begins with Alcuin Ivor Mwalongo’s study on student teachers’ perceptions of effective ways for promoting critical thinking through asynchronous discussion forums. The analysis of data from an AT perspective reveals that the manner in which tools are used by subjects, effective performance of their roles by community members, and the use of tools to resolve real-life problems positively influences the promotion of open-mindedness, achievement of expected outcomes, and meaningful engagement of subjects in the application of tools.
In the last paper in section one, Kathrin Otre-Cass, Karen Egedal Andreasen, and Lars Bang report on a study in which the effects of standardized national testing on identity formation are explored. Data analysis through the lens of AT provides evidence for subjectivity production referred to as active shaping of our identity based on others’ expectations and as a result of the activity system one is exposed to/engaged in.

Dilani S. P. Gedera commences sections two by explaining the types of contradictions experienced by student teachers in a blended e-learning and face-to-face university course. Data analysis indicates at least three types of contradictions, including a primary contradiction in which tensions are experienced within an element (e.g., division of labor in this case) of an activity system, a secondary contradiction where the conflict arises between the elements (e.g., subject, or students, and community, or lecturer and assistant) of an activity system, and, finally, a quaternary contradiction occurring between a central (online discussion) and a neighboring activity system (in-class presentation). A tertiary contradiction caused by the introduction of a new technology, for instance, was not observed in Gedera’s study. The paper illustrates how AT is applied in the systematic identification of educational contradictions as an essential first step in their effective resolution.

In their contribution, Melissa Harness and Lisa C. Yamagata-Lynch apply AT to explore the tensions around teachers unions in the U.S. Qualitative analysis of the three relevant articles published in the Wall Street Journal, The New York Times, and POLITICO reveals a number of serious contradictions at the levels of subject (falling membership), tools (declining funds), object (inability in meeting teachers’ professional needs), rules (laws against tenure and seniority rights in some states), and community (criticisms leveled even by some teachers and advocacy groups). The paper provides pragmatic insights into how methodological robustness can be achieved in AT informed approaches to educational issues.

Section two closes with Lee Yong Tay and Cher Ping Lim’s ethnographic case study which explores the potential of AT in facilitating the integration of Information and Communication Technology (ICT) at a primary school in Singapore. The paper explains how the school adopted a distributed leadership approach, in which the principal, ICT coordinator, curriculum developers, and teachers (community) worked in conjunction, to achieve the object (ICT integration).

Section three starts with an examination of the interactions among emotion, cognition, and action in experienced and novice tutors at a university in New Zealand. Jinrui Li finds a number of object-subject and subject-community contradictions in the activity system of assessing undergraduates’ written work. To resolve the issue, the study suggests that subject experts develop a standard assessment genre (rules and tools) and promote collaborative dialog among experienced and novice teachers (community). The article illustrates the role of AT in systematization of data collection and analysis procedures in research.

Joseph Ramanair, then, uses AT to investigate tensions in the integration of technology in an English language program in New Zealand. The findings identify emphasis on assessment, lack of technological infrastructure, and inefficient training in the use of Moodle as the main
impediments to technology integration. Moreover, a text based speaking exercise, which is used to improve students’ online and classroom communication ability, serves as evidence for the mismatch between tools and the object (enhancing learners’ speaking ability) of the program.

In his contribution, Claudio Aguayo applies AT to investigate the use of an online learning system for community education for the socio-ecological sustainability of a lake, negatively affected by human activity, in Chile. The study is conducted in pre-visit, learning website visit, and post-visit interviews followed by a survey five months after the first visit to the learning website to explore the change in participants’ understanding, action taking, and adoption of sustainable living practices. The study concludes that positive changes among the participants in these regards are rooted, as expected by an AT framework, in the community members’ socio-cultural, historical, technological, and educational backgrounds.

Karen Pohio ends section three by addressing the importance of the ‘tool’ element of AT. He distinguishes technical (physical) tools, used to affect external items in the environment, from psychological (conceptual) tools, which inspire internal change and cognitive development. He, then, reports on a case study in which AT is used to investigate the role of organizational culture, as a psychological tool, in facilitating communication among the members of a school community. Pohio finds that a culture of caring for others permeates around school and such symbolic features as the presence of the school principal at the beginning and end of all classes represent that culture.

The first paper in section four is a study by Chris Eames in which the development of pedagogical content knowledge among four early career teachers of Science and Technology is explored. The study is carried out in three phases in which the teachers first designed the representative content of a topic in science and technology. They, then, developed a plan for the delivery of those topics and, finally, presented the lessons in their classes. The study shows that the application of AT is helpful in identifying contradictions in such elements as rules in the development of teachers’ pedagogical content knowledge.

Finally, John Lockley’s contribution to the volume presents a case study in which a local curriculum in education for sustainability is developed by a teacher. The analysis of data through the lens of AT clarifies the role of teacher’s perception of sustainability (subject), the design and implementation of a local curriculum (object), the national curriculum (tool), the educational culture (rules), various shareholders (community), and curriculum development practices (division of labor) in the enactment of a local curriculum.

The impetus behind the current review comes from a recent interest among foreign/second language education researchers in the application of AT as a theoretical lens to examine such significant issues as teacher (de)motivation (Song & Kim, 2016). Furthermore, AT is a potential framework in identifying, categorizing, and resolving educational tensions, which are prevalent in language education (Farrell, 2016). This is while language education researchers are often left without any templates on how to apply a basically work-related AT to explore educational issues. The empirical papers included in the volume epitomize how AT terminologies and data collection/interpretation methods can be translated into educational terms and research methods.
As such, the volume readership can vary widely, including experts in language teaching, teacher education, curriculum development, and technology integration into language programs, to name but a few examples.

To avoid unnecessary repetition, however, it is suggested that the future editions of the volume present a general introduction to the developmental history, principles, and potential of AT so that the selected papers can simply discuss their findings from an AT perspective without detailing different aspects of the theory as in a stand-alone article.

*Activity Theory in Education: Research and Practice* is a researcher companion to scholars in different disciplines within education.

**References**
