# Chapter 15 Enactive Nature of Scholarship and e<sup>2</sup>TPR

**Erdem Demiroz** *Trakya University, Turkey* 

Emine Demiroz University of Missouri, USA

### ABSTRACT

Enactivism is one of the emerging theories in cognitive science. This theory focuses on activity and active participation of agents in cognitive development processes. Scholarship, on the other hand, is also active and dynamic by its very nature. Therefore, it can be claimed that dynamic nature of scholarship should overlap with enactive nature of cognitive development for better learning experiences. In this respect, the active nature of scholarship is analyzed through lenses of ecumenical enactivism under the scope of this chapter. The chapter also focuses on ecumenical natural learning approach, which is built on ecumenical enactivism, and discusses why some teaching methods yield better learning outcomes than others in educational contexts. In this regard, discussions focus on total physical response (TPR), a method used in second language teaching, and ecumenical enactivist TPR (e<sup>2</sup>TPR), which integrate the active nature of cognitive development with the dynamic nature of knowledge.

#### INTRODUCTION

Cognitive and learning theories aim to explain the complex nature of human learning and to uncover secrets of cognition and knowledge acquisition. Cartesian Dualism, the grounding theory of traditional cognitive science, is one of those cognitive theories. Cartesian dualism separates mind, body, and environment. It assumes that all cognitive processes occur in the brain of a cognitive agent. This theory has engrossed humanity for many years and has lead research efforts to explain how cognitive processes and learning occurs only in learner's mind.

Recent cognitive theories claim that acquisition of knowledge is a whole process in which full body is involved. These non-Cartesian cognitive theories assume that mind and body are intertwined. Not only brain, but also whole body of a cognitive organism has a significant role in cognitive processes and learning. Embedded cognition, extended cognition, situated cognition and embodied cognition are four

DOI: 10.4018/978-1-5225-5667-1.ch015

main cognitive theories that reject Cartesian Dualism. Recently, enactivism was also added to this list and has gained popularity in cognitive and educational research for more than two decades. Enactivism emphasizes the active nature of cognitive agents. It focuses not only on mind-body integrity but also on the importance of body involvement and physical action in cognitive development and learning. Although enactivism and other non-Cartesian cognitive theories have some similarities, Ward and Stapleton (2012) looked from a different perspective and introduced ecumenical enactivism, which assumes that if cognition is enacted, it is embodied, embedded, affected, and extended.

Ecumenical enactivism also reflects upon learning and found its corresponding in education. Demiroz (2016) emphasized the connection between cognitive theories and learning theories by focusing on kinesthetic game play and introduced ecumenical natural learning approach. The ecumenical natural learning approach is grounded on ecumenical enactivism, and it claims that acquisition of knowledge is a complex process that involves whole body involvement and physical action in an environment. Demiroz's ecumenical natural approach learning can be formularized as learning = physical body involvement + physical action + environment is. In this manner, having disabilities, being passive listeners, and deficiencies in environments could possibly impact learning and knowledge acquisition. The first variable, whole body involvement, which is the cognitive agent itself in this equation, cannot be totally ignored and/or there is not much to do to manipulate it, but it is possible to improve opportunities for physical action and designing an environment in which cognitive agents naturally interact with the knowledge resources and with each other for better learning and cognitive development. That is, indeed, what some successful teaching approaches such as Montessori, Waldorf, and Emilia Reggio do. Demiroz also pointed out that there is a natural triangle which consists of cognitive agent, physical action and environment for each learner, and learning occurs because of the interaction within this triangle.

Ecumenical natural learning theory simply explains why "learn by doing" is the best approach to acquire knowledge by involving physical activity into the learning equation. It also makes sense when teaching methods such as Waldorf, Montessori or Reggio Emilia, which yield better student learning outcomes are taken into account. Common characteristics of these teaching methods involve, but are not limited to active learner involvement which supports freedom for being physically active and hands-on activities and a well-designed learning environment in which learners are able to interact with each other and other knowledge resources. In this respect, it is possible to conclude that all three approaches manipulate the two essential variables of the ecumenical natural learning approach, but whole body involvement, which is again the cognitive agent itself. It seems that ecumenical natural learning theory explains how learning occurs from its own unique perspective, but neither the ecumenical natural learning approach, nor other cognitive or learning theories specifically emphasize how scholarship should be organized and presented for better acquisition. Research on knowledge acquisition, knowledge organization and knowledge management shed some light over this issue, but does not clearly address that by emphasizing its importance under the guidance of cognitive and learning theories. Thus, the focus of this chapter is to reflect upon the dynamic nature of knowledge and scholarship and to synthesize it with the physical action component of ecumenical natural learning approach. This chapter emphasizes active nature of scholar, its constant changing, and active acquisition by a cognitive agent. The chapter does not only hone discussions to learning and cognitive theories, but also presents how knowledge should be organized and be presented to learners at all grade levels for better learning through examples of learning a foreign language. In this regard, this chapter focuses on total physical response (TPR), an effective method that involves physical action and gesture into language learning and introduces ecumenical enactivist total physical response (e<sup>2</sup>TPR).

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/enactive-nature-of-scholarship-and-e2tpr/199436

## **Related Content**

#### A Tale of the Field: Can Ethnographic Challenges Become Opportunities?

Yao Wangand Peter Sercombe (2021). Overcoming Fieldwork Challenges in Social Science and Higher Education Research (pp. 46-72).

www.irma-international.org/chapter/a-tale-of-the-field/266664

#### Plagiarism and Information Literacy Workshops for International Students

Guoying Liu, Zuochen Zhang, Clayton Smith, Shijing Xu, Karen Pillonand Haojun Guo (2021). *Multidisciplinary Perspectives on International Student Experience in Canadian Higher Education (pp. 240-264).* 

www.irma-international.org/chapter/plagiarism-and-information-literacy-workshops-for-international-students/262382

#### Examining the Benefits of Teaching Active Study Strategies as a Part of Classroom Instruction

Melissa McConnell Rogers (2020). International Journal of Innovative Teaching and Learning in Higher Education (pp. 41-55).

www.irma-international.org/article/examining-the-benefits-of-teaching-active-study-strategies-as-a-part-of-classroominstruction/260948

# Open Educational Resources in Higher Education: Two Approaches to Enhance the Utilization of OER

Lubna Ali, Colette Knightand Ulrik Schroeder (2022). International Journal of Innovative Teaching and Learning in Higher Education (pp. 1-14).

www.irma-international.org/article/open-educational-resources-in-higher-education/313374

#### Information Literacy Support for Online Students in Higher Education

Swapna Kumarand Kristin Heathcock (2014). *Handbook of Research on Transnational Higher Education* (pp. 624-640).

www.irma-international.org/chapter/information-literacy-support-online-students/78141