### Chapter 15

# A Collaboration-Based Spiral Model for Curriculum Development of Older Adult Education:

## A View from Service Science Perspective

#### Jinfang Cai

Japan Advanced Institute of Science and Technology, School of Knowledge Science, Ishikawa, Japan

#### Michitaka Kosaka

Japan Advanced Institute of Science and Technology, School of Engineering, Ishikawa, Japan

#### **ABSTRACT**

Older Adult Education (OAE), which is considered as an effective way of dealing with social problems caused by aging society, has been widely adopted in many countries. One of the most challenging problem in OAE is curriculum development due to the unique features of OAE, such as the variety of requirements and background of older learners and multiplicity of the objectives of education providers. Fewer studies have been conducted on curriculum development for OAE, compared with those for regular school education. In this paper, we propose a collaboration-based curriculum development model, inspired by value co-creation model in service science. In the proposed model, the role of older learner is emphasized in that education providers collaborate with older learners in curriculum development, as business service providers collaborate with customers for value creation from service science perspective. We study the curriculum development in two representative OAE universities in China to demonstrate the effectiveness of the proposed model.

DOI: 10.4018/978-1-7998-8598-6.ch015

#### INTRODUCTION

The increasing aging population in many countries is causing many social problems such as shortage of labor force, increasing demands for health care, financial burdens. Older Adult Education (OAE) is a kind of education for older adult learners, which is considered as an effective way of alleviating those problems caused by aging society and now being adopted in the world wide. Although much progress has been made, there are still many challenges in OAE. In the report of American Council on Education (2007), it is pointed out that challenges for OAE provider are mainly from shortage of funding, outreach barriers, and programming concerns. The third challenge, i.e., programming concerns, means that the programs, courses and models that are adopted for older adults are difficult to design. Like in regular school education, the process of designing and developing programs, courses and models in OAE is called curriculum development. Curriculum consists of several elements such as objectives, teaching contents, methods, assessment and learning resources.

Curriculum development plays a central role in OAE to solve the third aforementioned challenge, because programs and courses are the main media and means by which older adults get educated and satisfied from participating education. The reasons that make curriculum development for OAE difficult are multiple, such as requirement variety of older learners, uncertain objectives of education providers, non-specific contents and forms for teaching. Currently, there are few studies on curriculum development for OAE. Although there are a number of researches and models of curriculum development for regular school education, they are not well suited to OAE. In regular school education, curriculum development is usually a top-down process in that education providers determine curriculum based on their objectives which are usually clear. However, the requirements of older learner are the main factors which must be considered in curriculum development for OAE. In that sense, curriculum development of OAE is a bottom-up process.

In OAE, curriculum should be customizable in order to meet various requirements of older learner. Such feature makes OAE share a common feature with business services, i.e., both of them are user-centered. Such similarity inspires us to consider OAE from the perspective of service science. In service science, one important research field is to study how to provide satisfying services to customers. The process of developing and providing satisfying services is called service value co-creation. Many service value cocreation models have been proposed, and some have been successfully applied to practical business fields such as health care (Kennedy, Vargo, et al., 2012) and energy-saving service business (Kosaka, Zhang & Dong, 2012). Inspired by a service value co-creation model called KIKI model (Kosaka, Zhang & Dong, 2012), the authors present in this paper a novel collaboration-based model for curriculum development of OAE. In the model, the role of older learner in the process of curriculum development is emphasized in that education providers develop their curriculum by closely collaborating with older learners. Another feature of proposed model is that curriculum development is a spiral process, like the process of value co-creation in KIKI model. The difference between two models is that the spiral process of curriculum development has clear feature in different stages, while there are no clear stages in the process of KIKI model. The whole process of curriculum development is divided into three stages which are germination stage, maturation stage and post-maturation stage. To demonstrate the effectiveness of proposed model, the curriculum development mechanisms of two representative OAE universities in Shanghai are studied, and the conformance of their mechanisms to proposed model is examined.

16 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/a-collaboration-based-spiral-model-for-curriculum-development-of-older-adult-education/279733

#### Related Content

#### From Basic Participation to Transformation: Immersive Virtual Professional Development

Diana Ayling, Hazel Owenand Edward Flagg (2014). *Adult and Continuing Education: Concepts, Methodologies, Tools, and Applications (pp. 446-473).* 

www.irma-international.org/chapter/from-basic-participation-to-transformation/105258

#### Perspectives on a Visual Map-Based Electronic Portfolio System

Paul Kim (2006). *Handbook of Research on ePortfolios (pp. 44-53).* www.irma-international.org/chapter/perspectives-visual-map-based-electronic/20299

## Comparing Peer-to-Peer and Individual Learning: Teaching Basic Computer Skills to Disadvantaged Adults

Patrick Kellyand Larry Katz (2016). *International Journal of Adult Vocational Education and Technology (pp. 1-15).* 

www.irma-international.org/article/comparing-peer-to-peer-and-individual-learning/171102

# The Promise of Protocols in the Virtual Classroom: Using Microstructures to Enhance Adult Learning

Harriette Thurber Rasmussen, Amy Baeder, Margaret A. Hunterand Jane Chadsey (2021). *Research Anthology on Adult Education and the Development of Lifelong Learners (pp. 812-836).*www.irma-international.org/chapter/the-promise-of-protocols-in-the-virtual-classroom/279760

#### Returning to Learning: Conversations with Nontraditional Students

Marsha Black Chen (2015). International Journal of Adult Vocational Education and Technology (pp. 45-60).

www.irma-international.org/article/returning-to-learning/133839