



**A Prologue to TVET 4.0 and Responding to the
Challenges of Industry 4.0: Perspectives
for Policy Formulation**

Dr. Romulita Alto

ABSTRACT

The purpose of this paper is to discuss how TVET system should respond in the era of Industrial Revolution 4.0 (IR 4.0) and to offer a platform to produce a strategic framework for the smooth transition to IR 4.0 for key players from TVET. Due to the changing landscape of technologies and employment trends, the need to adapt TVET has become imperative more than any time before.

To deal with IR 4.0 challenges, TVET need to initiate innovative strategies, for teacher preparation and student development to cope with the changing time. The objective of this document is to provide guidelines and recommendations for the formulation, development and review of policies for implementation of the TVET system. These recommendations and guidelines should be viewed as providing general direction, rather than specific prescriptions for action. As a final output, this paper proposes a generic conceptual framework on how a policy may be formulated.

Keyword: TVET System, Employment Trends, Innovative Strategies, Teacher Preparation

BRIEF CV

Prof. Romulita C. Alto, EdD has retired from government service in 2006, however, she continuously impart her knowledge in various capacities like currently, she is a CPSC Project-Based Faculty Consultant, Accreditor of APACC and Research Consultant of the Technological Institute of the Philippines. She is not new to the CPSC, since she has been associated with the Staff College since year 1992 in various capacities. From 1992-1994, she was a Research Associate. From year 1997 to 2001, she was engaged in CPSC as Governing Board engaged Core Faculty Consultant and Chairperson of Consultancy and Marketing Division and Research and Development Division. Dr. Alto is the lead author of CPSC's best-selling book - the Research in TVET Made Easy and was the lead reviewer of the APACC documents in year 2013 – 2014. She was also able to handle several high-profile assignments and projects in ADB, JICA, being an educator and international consultant for 57 years now. Dr. Alto earned her Doctorate Degree in Educational Administration in 1984, Master's Degree in Teaching Chemistry in 1970, and Bachelor of Science Degree in Home Economics and Bachelor of Science in Education in 1961 all from the University of the Philippines. In addition, as an educator, Dr. Alto was a recipient of some awards in recognition of her outstanding performance such as the Outstanding Public School Teacher of the City, Program Design: Leadership And Change Management for TVET Manila in 1971, the Most Outstanding Natural Science Teacher of the Year in 1972, and the Outstanding Faculty of the Technological University of the Philippines in 2005. Among the scholarship grants she enjoyed are a CDG-Gesellschaft scholarship at the Asian Institute of Technology in Thailand on Remote Sensing Technology and Environmental Resources Management, Asia Foundation Scholarship on the Teaching of CBA Chemistry, and Teaching of Chemistry at RECSAM in Penang Malaysia to name a few.