



۲

Editors Affero Ismail Razali Hassan Mohd Irman Harun



۲

۲

© Penerbit UTHM First Published 2020

Copyright reserved. Reproduction of any articles, illustrations and content of this book in any form be it electronic, mechanical photocopy, recording or any other form without any prior written permission from The Publisher's Office of Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat, Johor is prohibited. Any negotiations are subjected to calculations of royalty and honorarium.

Perpustakaan Negara Malaysia Cataloguing—in—Publication Data

TVET Professional Educator : Guidance on the competency development / Editors: Affero Ismail, Razali Hassan, Mohd Irman Harun.
ISBN 978-967-2916-09-3
1. Technical education.

- 2. Vocational education.
- 3. Educators.
- 4. Education, Higher--Malaysia.
- 5. Government publications--Malaysia.
- I. Judul.
- 370.113

Published & Printed by: Penerbit UTHM Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat, Johor Tel: 07-453 7051 / 7454 Fax: 07-453 6145

Website: http://penerbit.uthm.edu.my E-mail: pt@uthm.edu.my http://e-bookstore.uthm.edu.my

Penerbit UTHM is a member of Majlis Penerbitan Ilmiah Malaysia (MAPIM)

TABLE OF CONTENTS

۲

		Pages
Acknowledge	ment	vii
Preface		ix
List of Abbrev	riation	xi
CHAPTER 1:	Innovative Teaching and Learning	1
	Hanipah Hussin, Zulkifli Mohd Sidi and Irwan Mahazir Ismail	
	Topic 1.1	3
	TVET Curriculum Planning and Development	
	Topic 1.2	17
	TVET Curriculum Delivery	
	Topic 1.3	22
	TVET Curriculum Evaluation	
	Topic 1.4	31
	Online and Blended Learning	
CHAPTER 2:	Quality Assurance	41
	Abdullah Mat Rashid, Zulkifli Mohd Sidi and	
	Nizamuddin Razali	
	Topic 2.1	42
	Leadership and Management	
	Topic 2.2	50
	Continous Quality Improvement	
	Topic 2.3	61
	Quality Management	
	Topic 2.4	75
	TVET Laws and Regulations	
CHAPTER 3:	Professionalism and Internationalization	87
	Affero Ismail, Yusri Kamin and Khairul Anuar Ab-	
	dul Rahman	
	Topic 3.1	89
	Professional Services	

۲

۲

	Topic 3.2	98
	Academic Advisory	
	Topic 3.3	103
	Culture and Virtue	
	Topic 3.4	109
	Entrepreneurial and Soft Skill	107
	Entrepreneuriar and boit okin	
CHAPTER 4:	TVET Research and Development	119
	Razali Hassan, Alias Masek and Suhaizal Hashim	
	Topic 4.1	120
	Creativity and Innovative in TVET Research	
	<i>Topic 4.2</i>	124
	Production Based Research	1 - 1
	Topic 4.3	129
	Problem Based Research	129
		120
	Topic 4.4	136
	CDIO Approaches in Conducting Research	
CHAPTER 5:	Professional Technical Skill	141
	Ridzwan Che Rus, Affero Ismail and Nurhanim	
	Saadah	
	Topic 5.1	142
	Workshop and Laboratory Management	172
		150
	Topic 5.2	159
	Industrial Training and Project Supervision	
	Topic 5.3	165
	Greening TVET for Sustainable Development	
	Biography	173
	Index	175

۲

۲

۲