PUBLIC VALUE DIMENSIONS AND CHARACTERISTICS OF FUTURE UNIVERSITY

ANIS SYAHIRA BTE ZULKIFLI

A dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Management (Technology)

Faculty of Management Universiti Teknologi Malaysia

MARCH 2014

DEDICATION

Specially dedicated to *Emak* and *Abah*, thank you for your unconditional love and support.

To my heroes, *Along, Ojan, Adik* and *Kareshi-kun,* thank you for always being by my side.

And to my five-coloured rainbow, thank you for always cheering me up with your songs and smiles.

ACKNOWLEDGEMENT

From the blessing of Allah S.W.T, finally I managed to complete this research. Along the way, You have not forsaken me. Indeed, With You, all things are possible.

First and foremost, I offer my sincerest gratitude to my supervisor, Dr. Ahmad bin Jusoh. This research would not have been possible without his constant help, support and patience. One simply could not wish for a better and friendlier supervisor. I am also thankful to my parents, Mrs. Mahani Mohd Said and Mr. Zulkifli Abu Hassan and my beloved siblings for their precious love, advices and motivation. Words cannot express my love and gratitude to all of you.

To my best friends and research buddies, thank you for the moral support, encouragements and bondings that I will forever treasure. I am also very grateful to Mohd Haniff, for being so supportive and helping me through good and hard times, and willingly accompanying me on our life journey.

Last but not least, I am also grateful to kind-hearted people who have contributed to this research, especially all the respondents in five research universities. Thank you for all the trust and support. It would not happen automatically without all the support and direction given by each of you.

ABSTRACT

Nowadays, higher education has already progressed beyond the traditional settings where university plays the role of country's innovation excellence by recognizing some research universities in Malaysia. The rapid change of higher education system in Malaysia is in line with the ministry's higher education objective which is to establish a world-class university system in Malaysia. This evolution of education might increase the expectation of public value in the university. Therefore, there is a need to re-evaluate public value expectation from the point of view of various stakeholders such as academic administrators. At the same time, the characteristics of future university should be anticipated as we are moving towards the future. The concepts of public value have been discussed and debated frequently by many researchers in value literature. However, there is still lack of research in public value concept which focuses directly on the scope of higher education especially in Malaysia. This research aims to know what constitutes university public values in the future, particularly Malaysian Public Research University. There are two objectives that have been outlined, which are to know what constitutes university public value in the future and to examine how administrators anticipate the characteristics of future university. The research is conducted by distributing questionnaires to heads of departments at five Malaysian research universities. Data from the questionnaires were analyzed by factor analysis, descriptive analysis and mean score value. From this research, there are ten dimensions that constitute university public value in higher education institution (balancing interests, sustainability, user focus, rule abidance, professionalism, lean thinking, efficient supply, budget keeping, the public at large, and innovative). Beside that, there are nine anticipated characteristics of future university (dynamic environment, democratization of knowledge, sustainable infrastructure, global mobility, technology advancement, institutional autonomy, teaching-research balance, smart partnership, and abundant resources). The academic administrators perceived all these public dimensions as highly important in carrying out their tasks at the university. Similar to that, the characteristics of future university are also highly agreeable. Therefore, there is a need to enhance each of the dimensions and characteristics towards shaping a great university in the future.

ABSTRAK

Pada masa kini, pendidikan tinggi telah mencapai kemajuan yang lebih tinggi daripada seting tradisional di mana universiti memainkan peranan utama dalam meningkatkan kecemerlangan inovasi negara ini dengan adanya pengiktirafan terhadap beberapa universiti penyelidikan di Malaysia. Perubahan pesat sistem pendidikan tinggi di Malaysia adalah selaras dengan objektif pendidikan tinggi kementerian iaitu untuk mewujudkan satu sistem universiti bertaraf dunia di Malaysia. Evolusi pendidikan ini dilihat mungkin meningkatkan jangkaan nilai awam di universiti. Oleh itu, terdapat kepentingan untuk menilai semula jangkaan nilai awam dari sudut pandangan pelbagai pihak berkepentingan seperti pentadbirpentadbir akademik. Pada masa yang sama, ciri-ciri universiti masa depan perlu dikenal pasti. Konsep nilai awam kerap dibincang dan diperdebatkan oleh ramai penyelidik. Namun hanya segelintir golongan penyelidik yang menjalankan kajian terhadap konsep nilai awam di skop pendidikan tinggi terutamanya di Malaysia. Kajian ini bertujuan untuk mengetahui apakah nilai-nilai awam universiti penyelidikan di Malaysia pada masa akan datang. Terdapat dua objektif yang telah digariskan, iaitu ingin mengetahui nilai awam di universiti, dan mengkaji bagaimana pentadbir menjangka ciri-ciri universiti pada masa hadapan. Kajian ini dijalankan dengan mengedarkan borang soal selidik melibatkan ketua-ketua jabatan di lima universiti penyelidikan di Malaysia . Data daripada soal selidik dianalisis menggunakan analisis faktor, analisis deskriptif dan min skor. Hasil yang didapati daripada kajian ini ialah terdapat sepuluh dimensi yang membentuk nilai awam universiti di institusi pengajian tinggi dan terdapat sembilan jangkaan ciri-ciri universiti masa hadapan. Para pentadbir akademik bersetuju bahawa semua dimensi nilai awam sangat penting dalam menjalankan tugas-tugas mereka di universiti, di samping bersetuju dengan ciri-ciri universiti masa depan yang digariskan. Oleh itu, adalah penting untuk menambah baik dan mengaplikasi setiap dimensi dan ciri-ciri ke arah membentuk sebuah universiti yang lebih baik pada masa hadapan.

TABLE OF CONTENTS

CHAPTER	TITLE		PAGE	
	DEC	CLARATION	i	
	DED	DICATION	vi	
	ACK	KNOWLEDGEMENT	vii	
	ABS	TRACT	viii	
	ABS	TRAK	ix	
	TAB	LE OF CONTENTS	X	
	LIST OF TABLES		xiii	
	LIST	Γ OF FIGURES	xvi	
	LIST	T OF ABBREVIATION	xvii	
	LIST	T OF APPENDICES	xviii	
1	INTRODUCTION		1	
	1.1	Introduction	1	
	1.2	Problem Statement	3	
	1.3	Research Questions	5	
	1.4	Research Goal and Objectives	5	
	1.5	Research Scope	6	
	1.6	Significance of the Research	6	
	1.7	Limitation of the Research	7	
	1.8	Structure of the Research	7	
	1.9	Conclusion	9	
2	DEV	ELOPMENT OF UNIVERSITY, UNIVERSITY		
	OF THE FUTURE AND PUBLIC VALUE CONCEPT		10	
	2.1	Introduction	10	
	2.2	Development of University	10	
		2.2.1 Definition of University	10	

		2.2.2 H	istorical Background of University	
		De	evelopment	10
	2.3	Islamic P	erspectives on Higher Education	13
	2.4	Higher Ed	ducation in Malaysia	14
	2.5	Research	University in Malaysia	19
	2.6	Universit	y of the Future	21
		2.6.1 Cl	naracteristics of Future University	21
	2.7	Public Va	llue Concept	29
		2.7.1 Pu	ablic Value in Higher Education Sector	30
		2.7.2 H	igher Education Public Value from	
		St	akeholder Perspectives	31
	2.8	Public Va	llue Dimension	31
	2.9	Dimensio	ns Proposed for this Research	34
	2.10	Conclusio	on	38
3	RESI	ARCH M	ETHODOLOGY	39
	3.1	Introducti	on	39
	3.2	Research	Design	39
		3.2.1 Sa	ampling Design	41
		3.2.2 Da	ata Collection	49
	3.3	Validity of	of the Research	50
		3.3.1 Co	ontent Validity	50
		3.3.2 Co	onstruct Validity	51
	3.4	Procedure	e of Data Analysis	52
		3.4.1 Fa	actor Analysis	52
		3.4.2 De	escriptive Analysis	53
	3.5	Expected	Outcome	53
	3.6	Conclusio	on	54
4	RESI	ARCH FI	NDINGS	55
	4.1	Introducti	ion	55
	4.2	Response	Rate	55
	4.3	Factor Ar	nalysis	56
		4.3.1 Pu	ıblic Value Dimensions	56

			xii
		4.3.2 Future University Characteristics	61
	4.4	Descriptive Data Analysis	68
		4.4.1 Demography of Respondents	68
		4.4.2 Frequency Analysis and Mean Comparison	72
	4.5	Conclusion	83
5	DISC	CUSSION AND CONCLUSION	84
	5.1	Introduction	84
	5.2	Discussion on Findings	84
	5.3	Discussion on Public Value Dimensions	85
	5.4	Discussion on Future University Characteristics	87
		5.4.1 New Future University Characteristics	87
	5.5	Direction for Future Research	90
	5.6	Conclusion of the Research	90
	REF	ERENCES	92
	APPENDIX A		101
	APP	APPENDIX B	
	APPENDIX C		109

LIST OF TABLES

TABLE NO.	TITLE	PAGE
2.1	List of Public Universities in Malaysia	15
2.2	List of Private Universities in Malaysia	17
2.3	List of Research Universities in Malaysia	20
2.4	Characteristics of Future University	26
2.5	Modes of Governance	32
2.6	Relationship of Public Values and Modes of Governance	33
2.7	Public Value Dimensions	33
2.8	Proposed Public Value Dimensions	35
2.9	Summary of Proposed Public Value Dimensions	37
3.1	Heads of Departments in Research Universities	42
3.2	List of Heads of Departments at UTM	42
3.3	Fraction of the Sample Size According to University	48
3.4	Summary of Questionnaire	49
3.5	Analysis Methods to Conduct Research Objectives	52
4.1	Response Rate of the Questionnaire	56
4.2	Total Variance Explained for Public Value	57
4.3	Result of Factor Loadings for Each Item for Public Values	59
4.4	Total Variance Explained for Future University	61
4.5	Result of Factor Loadings for Each Item for Future University	63

4.6	The Appropriate Dimensions after Conducting Factor Analysis	66
4.7	Summary of Demographic Variable	71
4.8	Mean Score of Public Values based on Balancing Interest Dimension	73
4.9	Mean Score of Public Values based on Sustainability Dimension	73
4.10	Mean Score of Public Values based on User Focus Dimension	74
4.11	Mean Score of Public Values based on Rule Abidance Dimension	74
4.12	Mean Score of Public Values based on Professionalism Dimension	75
4.13	Mean Score of Public Values based on Lean Thinking Dimension	75
4.14	Mean Score of Public Values based on Efficient Supply Dimension	75
4.15	Mean Score of Public Values based on Budget Keeping Dimension	76
4.16	Mean Score of Public Values based on The Public at Large Dimension	76
4.17	Mean Score of Public Values based on Innovative Dimension	77
4.18	Overall Mean Score of University Public Value Dimension	77
4.19	Mean Score of Future University Characteristics based on Dynamic Environment Dimension	78
4.20	Mean Score of Future University Characteristics based on Democratization of Knowledge Dimension	78
4.21	Mean Score of Future University Characteristics based on Sustainable Infrastructure Dimension	79
4.22	Mean Score of Future University Characteristics based on Global Mobility Dimension	79
4.23	Mean Score of Future University Characteristics based on Technology Advancement Dimension	80
4.24	Mean Score of Future University Characteristics based on System Governance Dimension	80

4.25	Mean Score of Future University Characteristics based on Teaching-Research Balance Dimension	81
4.26	Mean Score of Future University Characteristics based on Smart Partnership Dimension	81
4.27	Mean Score of Future University Characteristics based on Abundant Resources Dimension	82
4.28	Overall Mean Score of Future University Dimension	82
5.1	Summary of Overall Results of the Research	84
5.2	Mean Score Ranking of Public Value Dimension	86
5.3	Mean Score Ranking of Future University Characteristics	89

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
1.1	Outline of the Research	7
2.1	Malaysian Higher Education Legislation	15
3.1	Flow Chart of Research Activities	40
4.1	Analysis towards Gender	68
4.2	Analysis towards Age	69
4.3	Analysis towards Ethnicity	70
4.4	Analysis towards Working Place	70
4.5	Analysis towards Working Years	71

UiTM

LIST OF ABBREVIATION

Kaiser-Meyer-Olkin **KMO** Ministry of Higher Education **MOHE** Research University RU SPM Sijil Pelajaran Malaysia Sijil Tinggi Pelajaran Malaysia STPM SPSS Statistical Packages of Social Science Universiti Islam Antarabangsa Malaysia UIAM Universiti Kebangsaan Malaysia UKM Universiti Malaya UM University Industri Selangor UNISEL Universiti Putra Malaysia **UPM** Universiti Sains Malaysia USM. Universiti Teknologi Malaysia UTM

Universiti Teknologi MARA

LIST OF APPENDICES

APPEN	DIX TITLE	PAGE
A	List of Administration Offices and Faculties in Five	
	Research Universities	101
В	Questionnaire to the Respondents	104
C	SPSS Output	109

CHAPTER 1

INTRODUCTION

1.1 Introduction

Nowadays, higher education has already progressed beyond the traditional settings where university was an institution for spreading the knowledge, but today university plays the role of country's innovation excellence. Ramli et. al. (2013) mentioned that higher education now has become a place for disseminating the knowledge as well as commercializing university's research output which majorly contributing to the economic development of the country.

According to Selvaratnam (1985), there are several stages of historical growth of Malaysian higher education system before and after Malaysia's independence, until the growth of research universities in this country. The first stage is the development of a higher education institution in Malaysia and Singapore before Malaysia's independence in 1957. The second stage is the establishment of University Malaya (UM) in Kuala Lumpur in 1961, which was the first university established in Malaysia. The next stage is the establishment and development of three national universities after 1969, and the upgrading of the Agricultural and Technical Colleges in 1971 and 1972 to full university status (Selvaratnam, 1985).

In these recent years, Malaysia has taken a big step in increasing the innovation activity and knowledge-based economy of the country by recognizing some universities that focused more on research activities and education based on research and development (MOHE, 2014). There are five public universities in Malaysia that have received Research University (RU) status by the Malaysian government until 2014. This evolution of education might increase the expectation of public value in the university. Therefore, there is a need to re-evaluate public value expectation from the point of view of various stakeholders from time to time. At the same time, the characteristics that the university should have in the future should be anticipated. This is because the development of these universities have to move forward in establishing a world-class university system in Malaysia.

The concepts of public value have been discussed and debated frequently by many researchers in value literature. Efforts to understand and identify public value have been undertaken over the past two decades. The term public value was invented by Moore (1995), who emphasized on three aspects of performance for public agencies, which are delivering actual services, achieving social outcomes, and maintaining trust and legitimacy of the agency. Moore initially formulated the public value framework in order to help public managers with a greater appreciation of the constraints and responsibilities within their working periods. From this study, public administration research has paid huge attention to public value researches in these recent years (i.e. Bøgh Andersen et al., 2012; Bozeman, 2007; Moore and Khagram, 2004; Smith, 2004; Kelly et al., 2002).

From the overall understanding of public value concept, several studies have been done by Beck Jørgensen et al. (2012) in acknowledging the multi-dimensionality of public value concept. This is because there is a need to classify the public values, as a multi-dimensional value may gives confusion, vagueness and conflict to public employees and public managers (Bøgh Andersen et al., 2012). Different types of classifications have already existed in the literature (i.e. frequency of use, chronology, hard versus soft values, families of values concerning economy versus fairness versus security; Rutgers, 2008). Beck Jørgensen and Bozeman (2007)

have identified seven overall dimensions of public value i.e contribution of the public sector to society, transformation of interests to decisions, relationships between politicians and administrators, relationships between public administrators and their environment, intra-organizational aspects of public administration, behaviour of public sector employees, and relationship between public administration and the citizens. Therefore, the classification and dimensions derived from the studies becomes the main pillar in this research, with modification and addition to the Malaysian context.

In understanding the concept of public value in high education system, various perspectives from different groups or individuals, such as government, policy makers, industry, staff, parents, and students as well as the public communities in general are needed. This study aims to discover more aspects in determining public value dimensions and proposes a theoretical framework of these dimensions in high education context. Hence, this study attempts to provide a better understanding of high education public value dimension particularly from the public administrators' perspective, due to lack of research that directly focuses on high education public value concept especially in Malaysia.

1.2 Problem Statement

In recent years, there has been a high-pitched appreciation in the social roles corporation are expected to play. Organizations are facing new demands to be accountable not only to shareholders but to other stakeholders as well including customers, employees, suppliers, local communities and government. As the main goal of private companies was to create private or economic value, the ultimate goal of government agencies was to create public (social) value (Moore and Khagram, 2004).

In private organization context, understanding the concept and how to create and measure private value is basically not a complicated issue since it is about creating wealth. However, as for the public agencies the issues of public value are more complicated since the main agenda is not for profit generation but focusing more on the issues of right and benefits to which citizens should be entitled (Bozeman, 2007), efficiency, honesty, fairness, reliability (Hood, 1991) and the interaction between politicians, officials and communities (Smith, 2004).

The seven dimensions of public value from the study done by Beck Jørgensen and Bozeman (2007) are comprehensive in the context which it was used. Nevertheless, as the business, political and social environment is vibrant, the concept and dimensions of public value change dynamically and has to be redefined accordingly. In addition to that, the concept of public value is basically context-dependent where the expectation of stakeholders may vary across country and culture as well as the sector.

As for the higher education institution context, among the relevant issues related to public value are: (a) What is this organization for? (b) To whom are we accountable? (c) Do the primary functions of university i.e teaching, research and service have to be assessed and reposition in response to the preferences of the stakeholder? Those questions have been debated for more than a century and we believe that because of the changing in politics, economic, social and demographic settings, all of the above questions must be reconsidered, and eventually will influence the formation or creation of the public value of a university.

So far, however, there has been little empirical works on public value. Most of the discussions in public value literature are theoretically driven (William and Shearer, 2011) and are of conceptual debate. There is still lack of research in public value concept which focuses directly on the scope of high education especially in Malaysia. Thus, more empirical studies need to be done to strengthen and validate the concept of public value.

To determine what constitutes university public values, particularly in Malaysian Public University where the national and Islamic values are implanted, a comprehensive study need to be carried out from the employees' point of view or at individual level. Is their expectation of delivering public values is in line with the ideal public value dimension? How much is their level of understanding about public value dimension? How far they have achieved in implementing public values to the customers? Therefore, public administrators' ways of thinking regarding their way of services need to be captured in this research. A complete model has to be developed so that it can provide basis and direction for policy and strategy development as well as providing necessary resources to sustain the effort of creating public value.

1.3 Research Questions

Two main research questions of this research are drawn as follows:

- i. What are the public value dimensions in higher education institution?
- ii. What are the characteristics of future university from the perspective of heads of departments?

1.4 Research Goal and Objectives

The goal of this study is to know what constitutes university public values in the future, particularly in Malaysian Public Research University.

Two objectives have been identified to achieve the above goal. In particular the objectives of this study are:

i. To know what constitute university public values in higher education institution

ii. To examine how administrators anticipate the characteristics of future university

1.5 Research Scope

According to Smith (2004) public value notion is the product of interaction between three main stakeholders: politicians, officers and communities. Thus, to gain insight on what dimensions of university public value in the future, views and thought from those parties have to be sought. Due to time and resources constraints, this study will investigate the issue of public values from the perspective of the heads of departments in Malaysian public universities i.e Universiti Teknologi Malaysia (UTM), Universiti Sains Malaysia (USM), Universiti Kebangsaan Malaysia (UKM), Universiti Putra Malaysia (UPM) and Universiti Malaya (UM). The sample of the population is derived from the lists of heads of departments of each faculty in the universities' websites. The total samples were employed based on Krejcie & Morgan equation (1970).

1.6 Significance of the Research

This study will contribute towards determining what constitute university public values, particularly in Malaysian Public University. This study will also:

- contribute more in public value theories or literature that relate to the high education context, which provides a better understanding of this respective field.
- ii. serve as the basis and direction for policy and strategy development as well as providing necessary resources to sustain the effort of creating public values.
- iii. provide a theoretical model for further researches in public value concept. Future researchers will benefit from this study as it will provide them the

facts needed to compare their studies during their respective time and usability.

- iv. provide a theoretical contribution for further researches in the way to:
 - a. To develop a more comprehensive dimensions of university public value
 - b. To provide a model of public values for university of the future
- v. provide a managerial / strategic contribution by giving input for university top management as well as Malaysian government on the perception of university's administrative leadership in the aspect of university public values and its characteristics.

1.7 Limitation of the Research

There are certain limitations in this research. Firstly, there are lack of previous studies particularly on higher education public values and future university characteristics in Malaysia. Therefore, it takes a considerable amount of time to gather the information and data as well as literature review. Secondly, this research is focusing on the view of heads of departments of research universities in Malaysia, therefore the outcome of this research might not be applicable to the other type of stakeholders. Thus, there might be a need for further studies on a wider scope of stakeholders in the future.

1.8 Structure of the Research

The general structure of the research is illustrated in Figure 1.1.

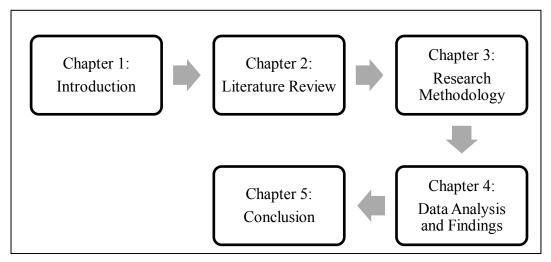


Figure 1.1: Outline of the Research

i. Chapter 1: Introduction

Chapter 1 is the introduction or background of this study. It includes problem statements, research questions, goal and objectives, scope of the research, significance and limitation of the research, and structure of the research.

ii. Chapter 2: Literature Review

The literature review helps in finding the research gap between the previous research and finally to conduct a similar research with new improvement. This chapter also gives an overview of literature and models that are related to this research, such as development of university, higher education in Malaysia and Islamic perspective, future university concept and characteristics, and public value concept and dimensions.

iii. Chapter 3: Research Methodology

Chapter 3 discusses more on the methodology of the study. It gives directions of the study and shows the overall methods which are involved in this research. This includes research and sampling design, data collection, research instrument, pilot study, procedure of data analysis and expected outcome of the research.

iv. Chapter 4: Data Analysis and Findings

In Chapter 4, the detailed analysis and findings based on the results of the questionnaire is presented. The data is analyzed using Statistical Package for

the Social Sciences (SPSS) software. The statistical methods that will be used are descriptive statistics and factor analysis.

v. Chapter 5: Conclusion

The final chapter discusses the summary of the findings of the data analysis and its relation with previous researches. Other than that, this chapter provides a few contribution and suggestions in relation to the study area. Besides, the chapter states the conclusion of this study such as the limitations of this study, suggestions for future research and conclusion.

1.9 Conclusion

This chapter exposes the background and direction of this study. Mainly, the purpose of this study is to know what constitutes university public values in the future. By determining the public value dimensions in high education context, it will help in understanding administrative point of views, particularly the heads of departments in Malaysian public universities. This study will significantly contribute to the public value theory and at the same time provide a theoretical model for further researches in this field or any similar researches from different perspectives.

In achieving the goal of the study, several objectives and scope of the study have been identified. The stages and methodology of the research are determined in order to ensure that this study can be conducted properly.

REFERENCES

- Adèr, H.J. and Mellenbergh, G.J. (2008). *Advising on Research Methods: A Consultant's Companion*. Huizen, The Netherlands: Johannes van Kessel Publishing.
- Andersson, T. (2008). The Future of Universities in Europe in *The Future of the Research University, Meeting the Challenges of the 21st Century*. Kansas City: Kauffman Foundation.
- Arimoto, A. (2013). The Teaching and Research Nexus. Research Institute for Higher Education, Kurashiki Japan. Retrieved 22th January 2014 from http://www.uni-kassel.de/wz1/pdf/Day1/01_04_1_A.Arimoto.Paper.pdf
- Atkinson, R.C. and Blanpied, W.A. (2008). Research Universities: Core of the US Science and Technology System. *Technology in Society*, 30(1), 30-48.
- Beck Jørgensen, T. and Bozeman, B. (2007). Public Values: An Inventory. Administration and Society, 39(3), 354-381.
- Bhatia, N. and Drew, J. (2007). Applying Lean Production to the Public Sector. *McKinsey Quarterly*, 13, 97-110.

- Bøgh Andersen, L., Beck Jørgensen, T., Kjeldsen, A.M., Pedersen, L.H. and Vrangbæk, K. (2012). Public Value Dimensions: Developing and Testing a Multi-Dimensional Classification, *International Journal of Public Administration*, 35(11), 715-728
- Bøgh Andersen, L., Beck Jørgensen, T., Kjeldsen, A.M., Pedersen, L.H. and Vrangbæk, K. (2012). Public Value Dimensions. Developing and Testing a Multidimensional Classification. *International Journal of Public Administration (forthcoming)*.
- Bogle, D. and Seaman, M. (2010). The Six Principles of Sustainability. *TCE Today*, 30-32.
- Bonina, C. M. and Cordella, A. (2009). Public Sector Reforms and the Notion of Public Value: Implications for E-government Deployment. *AMCIS 2009 Proceedings*. Paper 15. Retrieved 5th September 2013 from http://aisel.aisnet.org/amcis2009/15
- Borins, S. (1997). What the New Public Management is Achieving: A Survey of Commonwealth Experience in *Advances in International Comparative Public Management*. Greenwich: JAI Press. 49-70.
- Bozeman, B. (2007). *Public Value and Public Interest: Counterbalancing Economic Individualism*. Washington, DC: Georgetown University Press.
- Brace, N., Kemp, R. and Snelgar, R. (2006). SPSS for Psychologists (3rd Edition).

 Basingstoke: Lawrence Erlbaum Associates.
- Brennan, J., King, R. and Lebeau, Y. (2004). *The Role of Universities in the Transformation of Societies*. London: Association of Commonwealth Universities/The Open University.
- Carneavale, D. (2004). *Educational Technology Fails to Deliver Its Promises*. Chronicle of Higher Education. Retrieved 6th January 2014.

- Canadian Council on Learning. (2010). *Challenges in Post-Secondary Education.*Navigating Post-Secondary Education in Canada: The Challenge of A

 Changing Landscape. Retrieved 6th January 2014.
- Che Omar, I. and Mohamed, Z. (2008). Adapting to Challenges in Higher Education in Malaysia: The Case of Universiti Malaysia Kelantan. Retrieved 10th December 2013.
- Chua, Y.P. (2009). Statistik Penyelidikan Lanjutan: Ujian Regresi, Analisis Faktor dan Analisis Sem. Malaysia: McGraw-Hill.
- Clugston, R.M. and Calder, W. (1999). Critical Dimensions of Sustainability in Higher Education in *Sustainability and University Life*. New York:Peter Lang. 31-46.
- Cresswell, A.M. and Sayogo, D.S. (2012). *Developing Public Value Metrics for Returns to Government ICT Investments*. Center for Technology in Government. Retrieved 4th January 2014 from http://www.ctg.albany.edu/publications/reports/pubvalue_microsoft/pubvalue_microsoft.pdf
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Method: Choosing among Five Approaches (2nd Edition)*. Thousand Oaks, CA: Sage.
- Ernst and Young. (2012). *University of the Future. A Thousand Years Old Industry on the Cusp of Profound Change*. Australia: Ernst & Young.
- Fassin, Y. (2009). The Stakeholder Model Refined. *Journal of Business Ethics*, 84 (1), 113-135.
- Florida, R. (1999). *The Role of the University: Leveraging Talent, Not Technology*. Issues in Science and Technology. Retrieved 15th November 2013.

- Gill, S. K. (2007). *The Dynamics of Research and Teaching and Learning Demands in Research Universities: The Malaysian Case*. Country Paper for the Regional Research Seminar for Asia and Pacific Competition, Cooperation and Change in the Academic Profession: Shaping Higher Education's Contribution to Knowledge and Research. Retrieved 12 th January 2013 from http://portal.unesco.org/education/fr/files/53951/11864781635Saran_Kaur_Gill.pdf
- Goldstein, P.J. (2006). *The Future of Higher Education: A view from CHEMA*. The Council of Higher Education Management Associations. Retrieved 27th May 2013 from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/APPA39
 a.screenOpt.pdf
- Grendler, P.F. (2004). The Universities of the Renaissance and Reformation. Renaissance Quarterly, 57, 1-3.
- Gruening, G. (2001). Origins and Theoretical Basis of New Public Management. International Public Management Journal, 4(1), 1-25.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006). Multivariate Data Analysis: Sixth Edition. USA: Pearson Prentice Hall.
- Hashimshony, R., & Haina, J. (2006). Designing the University of the Future. *Planning for Higher Education*, 5-19.
- Heijer, A. D. (2012). Managing the University Campus: Exploring Model for the Future and Support Today's Decision. OECD.
- Heitor (2008). A System Approach to Tertiary Education Institutions: Towards Knowledge Networks and Enhanced Societal Trust. *Science and Public Policy*, 35(8), 607-617.

- Hood, C. (1991). A Public Management for All Seasons? *Public Administration*, 69(1), 3-19.
- Hussin, S. (1993). *Pendidikan di Malaysia: Sejarah, Sistem dan Falsafah*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Immerwahr, J. and Foleno, T. (2000). *Great Expectations: How the Public and Parents White, African-American, and Hispanic View Higher Education*. North America-United States: National Center for Public Policy and Higher Education.
- Jaaron, A. & Backhouse, C. (2010). Lean Manufacturing in Public Services: Prospects for Value Creation. *Exploring Services Science*. Springer Berlin Heidelberg, 2010. 45-57.
- Kelly, G., Mulgan, G. and Muers, S. (2004). *Creating Public Value An Analytical Framework for Public Service Reform*. London: Cabinet Office Strategy Unit
- Kettl, D. F. (2005). *The Global Public Management Revolution (2nd Edition)*. Washington, D.C.: Brookings Institution Press.
- Khelghat-Doost, H., Sanusi, Z.A., Jegatesen, G., Firdaus, T.F. and Fariddudin, T. (2012). Transforming Higher Education Towards Sustainability: An Islamic Perspective. OIDA International Journal of Sustainable Development, 4(2), 93-106
- Krejcie, R.V. and Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.
- Leisyte, L., Enders, J. and H. de Boer (2009). The Balance between Teaching and Research in Dutch and English Universities in the Context of University Governance Reforms. *Higher Education*, 58(5), 619-635.

- Martin, B. and Whitley, R. (2010). The UK Research Assessment Exercise: A Case of Regulatory Capture? in *Reconfiguring Knowledge Production: Changing Authority Relationships in the Sciences and their Consequences for Intellectual Innovation.* Oxford: Oxford University Press
- Ministry of Higher Education Malaysia (MOHE) (2007). *The National Higher Education Strategic Plan: Laying The Foundation Beyond 2020.* Putrajaya: Kementerian Pengajian Tinggi Malaysia.
- Ministry of Higher Education Malaysia (MOHE) (2011). *The National Higher Education Action Plan 2011-2015*. Putrajaya: Kementerian Pengajian Tinggi Malaysia.
- Meyers, L.S., Gamst, G. & Guarino, A.J. (2006). *Applied Multivariate Research:*Design and Interpretation. USA: Sage Publications Inc.
- Moore, M. (1995). *Creating Public Value: Strategic Management in Government*.

 Cambridge: Harvard University Press.
- Moore, M. and Khagram, S. (2004). On Creating Public Value: What Business Might Learn from Government about Strategic Management. *Corporate Social Responsibilities Initiative Working Paper No.3*. Cambridge, M.A: Harvard University.
- National Strategy for Higher Education to 2030 (2011). Dublin: Department of Education and Skill, Ireland.
- Perkin, H. (2006). History of Universities. London, UK: Springer Netherlands.
- Radnor, Z. & Walley, P. (2008). Learning to Walk Before We Try to Run: Adapting Lean for the Public Sector. *Public Money & Management*, 28(1), 13-20
- Ramli, N., Zainol, Z.A., Aziz, J.A., Ali, H.M., Hassim, J., Wan Hussein, W.M.H., Markom, R., Wan Dahalan, W.S.A., Yaakob, N.I. (2013). The Concept of

- Research University: The Implementation in the Context of Malaysian University System. *Asian Social Science*, 9(5), 307.
- Riché, Pierre (1978), Education and Culture in the Barbarian West: From the Sixth through the Eighth Century, Columbia: University of South Carolina Press.
- Ridder-Symoens, H. (1996). A History of the University in Europe: Vol. 2. Universities in early modern Europe (1500–1800). Cambridge, England: Cambridge University.
- Röhrs, H. (1987). The Classical Idea of the University. Tradition and Reform of the University under an International Perspective, ed. Hermann Röhrs, *Berlag Peter Lang*, New York, 13-27.
- Rüegg, W. (2004). A History of the University in Europe: Volume 3, Universities in the Nineteenth and Early Twentieth Centuries (1800-1945). New York: Cambridge University Press.
- Rutgers, M. (2008). Sorting out Public Values? On the Contingency of Value Classifications in Public Administration. *Administrative Theory and Praxis*, 30(1), 92-113.
- Salmi, J. (2009). The *Challenge of Establishing World-Class Universities*. Washington DC: The World Bank.
- Scott, J.C. (2006). The Mission of the University: Medieval to Postmodern Transformations. *The Journal of Higher Education*, 77, 1-39
- Selvaratnam (1985). The Higher Education System in Malaysia: Metropolitan, Cross-national, Peripheral or National? *Higher Education*, 14(5), 477
- Shuib, M., Kaur, S. and Jamaludin, R. *Governance and Leadership in Higher Education*. Pulau Pinang, Malaysia: Universiti Sains Malaysia. 168-181

- Smith, R. (2004). Focusing on Public Value: Something New and Something Old. Australian Journal of Public Administration, 63, 68–79.
- Sohail, M.S. & Daud, S. (2009). Knowledge Sharing in Higher Education Institutions: Perspectives from Malaysia. *VINE*, 39(2), 125 142.
- The Research Foundation of State University of New York (2011). *Open Government and Public Value: Conceptualizing A Portfolio Assessment Tool.* Retrieved 27th April 2013 from http://www.ctg.albany.edu/publications/online/pvat/PVAT_Conceptualizing_theTool.pdf
- The Research Universities Future Consortium (2012). *The Current Health and Future Well-Being of the American Research University*. Retrieved 6th May 2013 from http://www.researchuniversitiesfutures.org/RIM_Report_Research%20Future%27s%20Consortium%20.pdf
- Tengku Kasim, T.S.A. (2012). Teaching and learning experiences in Malaysian higher education: A case study of a teacher education programme. New Zealand: Auckland University of Technology
- Thomas, D.J. (1973). Universities. London: Batsford.
- Thompson, M. M. (1960). The History of Education. New York: Barnes and Noble.
- Trow, M. (1996) Trust, Markets and Accountability in Higher Education: A Comparative Perspective. *Higher Education Policy*, 9, 309-324.
- Ujang, Z. (2012). Akademia Baru: Memartabatkan UTM Berjenama Global 2012-2020. Johor Bahru: UTM Press
- University (2006). In *Encyclopaedia Britannica*. Retrieved 10th December 2013 from Encyclopaedia Britannica Online.

- University (2013). In *The Oxford Student's Dictionary of Current English*. Retrieved 10th December 2013.
- University (2013). In *The Canadian Information Centre for Inernational Credentials' English Terminology Guide to Academic Credential Assessment in Canada:* 3rd Edition. Retrieved 10th December 2013.
- Vrangbæk, K. (2009). Public sector values in Denmark: A survey analysis. International Journal of Public Administration, 32(6), 508–535.
- Williams, I., & Shearer, H. (2011). Appraising Public Value: Past, Present and Futures. *In Public Administration*. 89(4), 1367-1384.
- Womack, J.P. and Jones, D.T. (1994). From Lean Production to the Lean Enterprise. *Harvard Business Review*, 72(2), 93-103.