Analysing Cybernetic Governance at Higher Education Institutions in Malaysia: How is Co-Production Linked to the Transformation of Higher Education Institutions via Governance?

Marhaini Mohd Noor[1][*]

[1]*Faculty of Maritime Studies, Universiti Malaysia Terengganu*
Corresponding author: marhaini.noor@umt.edu.my

ABSTRACT

This paper attempts to analyse how important the cybernetic governance is to higher education institutions in Malaysia. Cybernetic governance is a structure, process of a system to empower greater decision making, autonomy, leadership, and greater accountability. Thus, cybernetic approach is heavily depending on information, utilise information for decision making, policy making and feedback to respond effectively. The concept also relevant with co-production strategy, whereby public services offered at the institution would focus on making use of resources through community building, collaboration, and resource sharing. In this context, "governance" refers to the role of multi-stakeholders involved in decision making, autonomy, leadership, and accountability. The effectiveness and success of this cybernetic governance depends on the institution community; the board, Vice-Chancellor, university management committee, Deans and Directors involved. The main idea is to analyse cybernetic governance as a model for processing information and a platform for co-production on governance empowerment at higher education institutions in Malaysia. Hence literatures are reviewed to apply the concepts to this research. An expected outcome of this research would be the evidence to improve policy performance in governance arrangements. Therefore, cybernetic governance contribution is the practice of good governance for intelligent institutions.

INTRODUCTION

This conceptual paper seeks to investigate and analyse how important the cybernetic governance is to higher education institutions in Malaysia. In particular, the focus will be on co-production strategy. Co-production in this context is a strategy and practice of public services offered in the institutions through utilization of resources for collaboration and resource sharing. Thus, this aligns with cybernetic governance which describes collaboration systems and the involvement from multi-stakeholders. As such, in decision making process it is also possible to have the society participation. The concept is very much similar with co-production and governance empowerment may be of benefit to the people at higher education institutions. With the co-production concept, people tend to share assets, spaces, physical goods, infrastructure and online services. Everything is being shared and privately owned, and the benefits are also shared. There is a strong collaboration in the co-production strategy because it offers cybernetic concept to lower costs compared to traditional concept. This is aligned with Malaysian National Blue Ocean Strategy (NBOS) that aims to provide high quality services at lower costs. NBOS is also one of the policies implemented to tackle the problem in public administration. Under NBOS, there is also an engagement program between university and community. It is known as UCTC or University Community Transformation Centre. The main purpose is to engage and empower community for better quality of life (KPM, 2016).

Comprehensive cybernetic governance system and efficient are essential to increase competitiveness in higher education institutions. Increasing population and high technology and inefficient public services needs a strategy that can solve issues arising from this situation. Therefore, the development of an integrated cybernetic governance system must be implemented with emphasis on the characteristics of multimodal and environmental-friendly system that addresses the problem of bureaucracy and inefficiency of governance in public administration. Policies that encourage the use of integrated cybernetic governance system, effective, dependable (reliable), user-friendly and able to be enjoyed by all classes of the population shall be established. This refers to cybernetic governance planning which is integrated with co-production strategy. The main thrust will be to ensure success. The basic use of the cybernetic governance system. (Schwaninger, 2019).

Cybernetic governance is a platform for public administration and governance to collaborate and get the support from the government in terms of policy, regulations and subsidies. All levels of government should be aware of co-production and full support from the government are essential for development. A policy model is proposed for this paper to highlighted the elements required for cybernetic governance. Government willingness to accept and implement the regulations for this platform is crucial to develop the awareness and successful of this practice. Most developed countries in the world have implemented this concept and they also need the government effective regulations to succeed. Therefore, National Public Governance Policy in Malaysia stated, a cybernetic governance system should be established.

Hence, this paper attempts to analyse cybernetic governance with the understanding of today's demand public services efficiency and the use of information for educational development. Therefore, this paper will focus on a case study of higher education institutions application in Malaysia with a co-production strategy. The paper tends to analyse how effective cybernetic governance to people in higher education institutions. To supplement the idea of this paper, a new model needs to be developed for effective cybernetic governance in higher institutions using co-production approach.

CONCEPTS / CONSTRUCTS

Cybernetics

The concept of cybernetic has been used for many years and it is a trans-disciplinary approach for exploring regulatory systems. The approach consists of structures, constraints, and possibilities. Cybernetic is a scientific study of how people work together, control and communicate with each other. It is applicable when analysing system with causal relationships (causes and effects) where action by the system generates some change in its environment and that change is reflected in the system in some manner (feedback) that triggers a system (Schwaninger, 2019). This cybernetic is related to a social system. Thus, in the institutions an organizational culture will influence work related behaviour and decision-making process. In this case the changes in higher education institutions reflected governance arrangement and policy implementation at state. Hence, the feedback or response from the multi stakeholders such as the government, civil society and other stakeholders involve in improving the system and policy performance.

A system of effective cybernetic governance shall be held to manage growth and development at various levels especially at the level of higher education administration. It is to ensure that the assets, economic, social and environment will be maintained and given added value towards making education institutions in Malaysia more sustainable. The public higher learning institutions as the lead agency should manages cybernetic needs and streamlining administration and management system with the optimization of financial resources including new resources. This is to improve the ability to make the institutions more competitive and viable; strengthen human resources with a staff of skilled and experienced as well as expanding the use of technology. In the face of rapid development, public higher learning institutions should emphasize to use methods and technologies innovative that can reduce costs and increase efficiency in all aspects of planning, development, and management. To support actions carried out, existing legislation relating to the management and administration the institutions should be reviewed to ensure enforcement and implementation of development the institutions can be run more effectively (Sicilia et al, 2016).

Governance

Governance is essential to the higher education functions at all levels, from the micro level, which is the faculty or school (department), to meso level of the organization and at the macro level of the higher education system. The goals and objectives of the academic levels are educating, researching, and providing services to multi stakeholders. The first two levels are governance role at university level in making decision and to ensure university achieve the performance outcomes. At the last level (ministerial level), through governance arrangements higher education institutions to achieve the state education goals (Markus, 2018).

The roles of governments are significant in recognising that they need more direct participation and empowerment by society, in order to govern well. This is to ensure stability, facilitate society's wellbeing and to manage environmental, health, security and energy issues in the future. Governments realise that they must cooperate, collaborate and engage with the non-government sectors such as business, academic, the professions, and voluntary organisations to enhance ideas, knowledge, wisdom and skills. If they fail to engage with them, this will waste resources and loss opportunities (Lueg & Radlach, 2015).

Governance is about giving privilege to society in decision making and free to speak, give ideas, opinions on policy problems or issues. The multi stakeholders' work together to create public goods and services such as education for all at higher education institutions. Besides, the government leads and administers, thus the management operates the institutions and governance is how the work gets done. This is a process and a system that having power, authority and accountability in society. The main actor is the government, whereby its actions affect the overall performance of the governance system, hence influence the behaviour of all other actors. "There is no 'sound governance' without 'good government', well-performing public institutions and competent public servants" (Medina, 2011).

Empowerment

Another construct on cybernetic governance is empowerment. This construct is associated with co-production concept which deals with society (volunteers) and treating them as actors (equal partners). It is the source of giving power and freedom to the society in decision making process. This led to the creation of shared information, resources, assets, engagement where people and volunteers participate together. The co-production approach can be successful if leaders have no control and being flexible enough to allow things as what society needs. Leaders need to realise when to interfere and when not to. Then the policy implementation for bottom-up approach is applicable (Tracey, 2019).

For example, based on Community Wellbeing Evidence Programme, the factors that determine community wellbeing with the evidence on Place (the physical characteristics of where we live), People (the social relationships within a community) and, Power (the participation of communities in local decision-making). Stakeholders consistently raised community involvement and influence over local decisions, together with concepts such as empowerment and co-production, as key ingredients of community wellbeing (Community Wellbeing Evidence Programme, 2015).

"Effective local delivery requires effective participatory decision-making at local level. This can only happen by empowering individuals and local communities." (Tracey, 2019). This can be applied for participatory decision making at higher education institutions whereby empowering students or customers to engage and participate in decision making.

In this review, there are several empowerment-based concepts are considered which includes co-production in higher education decision-making and policy-making, shared education community decision-making and policy-making, involvement in education decision-making, co-design, co-production in local education design and education community participation in local decision-making.

Co-production

Co-production is a construct, strategy and a practice in the delivery of public services in which society are involved in the creation of public policies and services. This is not a service delivery whereby society consume public services provided by governments. The strategy means professionals and society sharing power to plan, design and deliver services support together. This is to recognise that everyone has an important contribution to make to improve people quality of life. It is an approach determines all people as having skills and expertise to offer (assets). Co-production can also mean that people are less likely to use acute services (prevention) and can help to sustain and promote wellbeing (IIAS, 2017).

There are six principles of co-production which are (1) assets (2) capabilities (3) reciprocal relationships (4) peer support (5) deliver and receive services and (6) facilitating. This is to ensure power is balanced between people getting support, and the people who support them. It is different from engagement because it includes people skills and expertise. The concept is working together and assist people for better services and also achieve what they want. Multi stakeholders' creativity, innovative and collaborative ways to work together (Sorrentino et.al, 2018).

Co-production indicates "collaborative approaches where citizens or service users engage in partnerships with service professionals in the design and delivery of a public service" (OECD 2011, p. 27). In particular, the OECD report "Together for Better Public Services: Partnering with Citizens and Civil Society" (2011, p. 32) provides the following definition of co-production: A way of planning, designing, delivering and evaluating public services which draws on direct input from citizens, service users and civil society organizations.

According to Aschhoff & Vogel (2018), co-production has many definitions in the literature as follows; "Co-production consists of citizen involvement or participation (rather than bureaucratic responsiveness)". As for quality

approaches in higher education, co-production is the involvement of society in the design and delivery of services. As such at higher education institutions, this involves parents working with lecturers to improve the educational development of the students. Thus, co-production is to improve students' knowledge acquisition. Transforming students from participants to co-producers to meet the challenges of a dynamic knowledge base.

Co-production is also a sharing of power. It is the concern of how much control they are open to being shared, how much risk, and exactly which risks they are prepared. These considerations should shape the co-production and create transparency and accountability at the university level. Thus, students and parents know the extent and limitations of what they can and cannot influence (Sorrentino et.al, 2018).

Even though the concept supplies power to the actors, however there are limitations to some extent practitioners and academics should pay more attention to governance practices that are engaged in reformulating power structures. Within this framework, co-production remains as an experiment for universities as well as public authorities as it provides inclusive and practical guidance by facilitating learning. The education community can be engaged in policy development, delivery and research. In addition, the concept is very essential as it can contribute to the creation of alternative innovative higher education which would stimulate longer term transformations while contributing to sustainable higher education development. The university role is getting more prominent as they can be seen as a bridge between society, public institutions and community organisations. Nevertheless, there is a need to explore more democratic involvement in which it generates change in policy processes but also empower community-oriented practices (Campbell et.al, 2019).

Policy making

According to Howlett and Ramesh (2003) public policies are the choices government makes in order to undertake some course of action. The basic stages of policy cycle are formulation, implementation and evaluation. The stages do not exist in practice, but this framework is a relevant reference for the analysis of public policies. Although recognizing all the stages are essential, the reflections of this study are mainly directed to the implementation stage.

DeLeon (2002) stated in implementation stage, there is no best solution to policy problems or issues. Jakobsen and Andersen (2013) indicate that co-

producing public services could be the way forward in today's society, as problems have become increasingly complex and solutions less obvious. Similarly, public services are no longer delivered solely by government agencies, but co-produced by users and communities (Bovaird, 2007; Pestoff, Brandsen & Verschuere, 2012; Brandsen & Honingh, 2016).

In this context government acts less in co-production approach, yet it is still necessary to establish institutional arrangements to define the benefits and the individual participation, as well as to regulate the abuse of power in the reciprocal relationships. According to the actors should behave according to certain rules, in order to be able to respond to the challenges imposed by the policy problems. The rules need to define the competencies of the multi-stakeholders, the available resources and the multiple interaction with the society (Pestoff, Brandsen & Verschuere, 2012). In addition, the rules make processes easier, establish routines and decrease uncertainty in relationships (Fledderus, Brandsen & Honingh, 2015).

Thus, the concern in this context place the society in the centre of policymaking process as the main actor in decision making (theory and practice of public administration). The objective is to improve policies and design services that respond to individuals' needs. Co-production concept has emerged to describe this system of sustained collaboration between government agencies, non-government organisations, communities and individual society.

Developing countries practice democracy system, public participation in policymaking and service design has been argued, however unrealised. Public policy literature is plenty on collaboration and cooperation advocacy. Thus, the real engagement in the 'co-production' of policy and services requires major transformation in the institutional culture and operations of government agencies. The requirements for new skills as enablers, negotiators and collaborators. It demands of society an orientation to the public services, a willingness to actively engage, and the capabilities needed to participate and deliberate well. Hence if society are disengaged and marginalised group within the population are not participate (Chaebo & Medeiros 2017).

The role of policymaking and service delivery in the public institutions is seen as the negotiated outcome of many interacting policy systems. Thus, the community involves in larger role to make decisions and outcomes.

New Public Governance Theory

New Public Management emphasise on reduced red tape, and a view of the public as 'consumers'. Over the years, this view has been regarded the public as 'citizens', whereby citizens right to participate directly or indirectly in decisions that affect them should be acknowledged. Hence co-production concept is appropriate for public administration reforms; which public administration is the tool to determine society's needs. Thus, co-production provides a different division of power between public service agencies, private sector entities, civil society actors and citizens, questions of governance are especially important. New forms of accountability (which, like power, is also increasingly dispersed) are required, and must be made robust through governance arrangements that are suitable to networked collaborations (Dickinson, 2016).

The New Public Governance contains six aspects. Firstly, the New Public Governance emphasizes the dispersion of power. The New Public Governance stresses the coordination of the government. For a long time, the government has been regarded as the centre of the public administration, from policy formulation to implementation. This is to ensure mostly satisfy various demands from different interests' stakeholders, gain more information and collect the power from all aspects to solve complex social problems. New Public Governance forms a complex network. Integrates social organizations and individuals to form a complex network contained concentration and restriction of power from all aspects. The members of this network contain government, market, society, public organizations, community and individual citizens, etc. governance network is based on the resource exchange. Governance network relies on trust and stability of the contract. Essence of public service is to service citizens and pursuit public interests. Therefore, it is important that value the impact of public organizations (Osborne, 2010).

Key literatures on constructs for cybernetic governance

Constructs	Authors	Arguments
Governance	1) Markus Schwaninger, 2018 2) Rainer Lueg & Ronny Radlach, 2015	1) Governance for intelligent organisation 2) Administrative control and governance structures

Constructs	Authors	Arguments
Governance	3) Angela Espinosa & Roger Harnden, 2005 4) Eden Medina, 2011 5) Fabrice Henard & Alexander Mitterie, 2008 6) David Levi-Faur, 2012	1) Governance for intelligent organisation 2) Administrative control and governance structures 3) Cybernetics and participation 4) Cybernetics revolutionaries 5) Governance arrangements and a tool to improve quality in higher education 6) Information and governing: cybernetic models of governance
Empowerment	1) Tracey McConnell et.al, 2019 2) Diana Mitlin & Sheridan Bartlett, 2018 3) Anna Essen et.al, 2015	1) Co-producing a shared understanding and empowerment with people 2) Co-production: empowering communities 3) Co-production in chronic care: empowerment
Co-production	1) International Institute of Administrative Sciences (IIAS), 2017 2) Nils Aschhoff & Rick Vogel, 2018 3) Sanchika Campbell et.al, 2019 4) Alexandru Jivan & Maria Barabas, 2017	1) Study group on co-production of public services – frameworks and theory 2) Value conflicts in co-production: governing public values

Constructs	Authors	Arguments
Co-production	4) Alexandru Jivan & Maria Barabas, 2017 5) Mariafrancesca Sicilia et.al, 2016 6) Marlies Honingh et.al, 2018 7) Maddalena Sorrentino et.al, 2018	3) Co-production and participation approaches: education engagement 4) Coordinates of co-production in educational services 5) Co-production in multi-level governance settings 6) Co-production in primary schools: systematic literature review 7) Understanding co-production as a new public governance tool
Policy making	1) Aleksandras Patapas & Vainius Smalskys, 2014 2) Brenton Holmes, 2011 3) Gemael Chaebo & Janann Joslin Medeiros, 2017 4) Joop Koppenjan, 2015 5) Stephen P. Osborne, 2010 6) Helen Dickinson, 2016 7) Xu Runya et.al, 2015	1) New Public Governance: The tracks of changes 2) Policy making and public services 3) Co-production of public policies and directions for future research 4) New Public Governance: a framework 5) The New Public Governance: theory and practice 6) From new public management to new public governance

METHODOLOGY

The aim of this study was to investigate and analyse how important the cybernetic governance is to higher education institutions in Malaysia. This study applied secondary data on literature reviews and identified constructs related to the concept. The key literatures have been identified and grouped under each construct based on arguments. Based on the constructs identified, arguments and logical arguments were developed for associations between the constructs. The analysis was examined on arguments made for each concepts and theory discussed. As a result, a new model of cybernetic governance is proposed to improve quality of education in higher institutions.

FINDINGS AND DISCUSSIONS

The main objective of this paper is to explore and analyse the cybernetic governance concept in higher education institutions. Theoretically, this paper indicates that the cybernetic governance can develop people knowledge and skills on administration and leadership with the use of co-production approach through empowerment and policy development. For instance, this paper develops a comprehensive theoretical framework drawn from co-production approach, development and theories to assess the effectiveness of cybernetic governance. This is a new empirical contribution to the growing literature on co-production and governance. Majority of previous studies indicate a research focus on public administration in the context of governance perspectives. However, the role of cybernetic governance access is not particularly well understood in terms of the contribution of policy evaluation and development; especially in developing countries and in projects such as Malaysian cybernetic governance.

Based on the literature, most studies on cybernetic governance emphasised the challenges to the government and community, while this paper analyse cybernetic governance by focusing on co-production approach, i.e.; empowerment and the role of government agencies in implementing the policy for higher education. This paper might prove that cybernetic governance enabled good governance and contributes to the improvement in administration and leadership. In fact, the expected results from these key findings might be similar to other studies that identified the challenges of governance and that development of people is enabled through co-production application access. This paper analysed and synthesised with an extensive review of the relevant literature to support the conclusions presented here

and the subsequent recommendations for developing the effective cybernetic governance model enabled by co-production access that builds society capacity in sharing skills and knowledge. With the idea, a proposed model is developed for the purpose of this paper. Figure 1 illustrates the model in details.
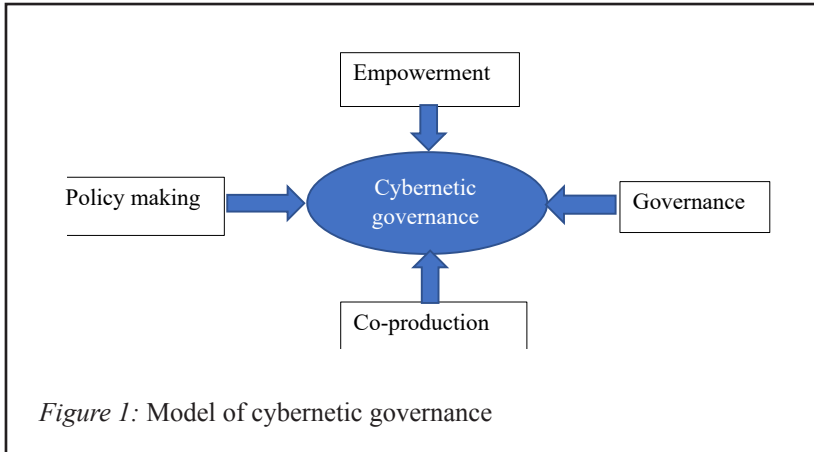

Figure 1: Model of cybernetic governance

The model identifies the relationships between the constructs used in this study. There are four inter-related constructs which are: (1) governance, (2) co-production, (3) policy making and (4) empowerment. These constructs are related to each other. The governance concept is vital in public administration and public policy. This concept involves multi stakeholders such as government agencies, businesses and civil society. The role of governance is to support and participate in public affairs, this includes decision making process. As for co-production concept, the idea is to share resources, each stakeholder contributes making decisions and the society is the central role in cybernetic governance. Co-production is a tool to improve governance and public policy. The policy making concept is the policy that guides the governance in decision making. Thus, this relates with governance and co-production approach. Lastly, empowerment concept is focus on society to participate and engage in decision making process. Society empowerment means use the power to produce better administration and governance. Therefore, the outcome of this model is cybernetic governance which comprises of all the association between the four constructs. As a result, the performance of this cybernetic governance is the response or feedback from the multi stakeholders being implemented to improve the quality of education in higher institutions.

Based on the discussion earlier, a higher education institution needs robust commitment, high accountability, high transparency, high integrity and tolerance in governing institution. Therefore, an example of cybernetic governance in higher education institution in Malaysia is crucial in becoming a better administrative university and good governance. This is also a governance reforms. Thus, the concept of cybernetic governance is closely related to the concept of this intelligent university (Schwaninger, 2018). If it is implemented effectively it will leads to a good governance in higher education institution as well as improving policy performance for better quality education. This is aligned with sustainable development goals (SDG 2030), which stated education is for all group of people. The quality of education is a must so that no people left behind.

The concept of intelligent university means a complete set of efficient management and administration of institution, starts from the top level until the bottom level of management. Followed by other stakeholders to support and collaborate with the administration. In addition, an application of good governance characteristics is significant to justify the needs for intelligent university and quality education. This suggests for better quality education to achieve sustainable development goal 4 and become a developed nation by the year 2030.

CONCLUSION

In conclusion, cybernetic governance is vital in today's public administration. The idea of cybernetic governance is to have better governance system in higher education institutions. Although the concepts used are quite similar to each other, the content complements and integrates with one another thus this has to work together not separately. Hence cybernetic governance approach is relevant to the implementation of higher education affairs at policy level. In addition, it becomes comprehensive cybernetic governance. However, there are weaknesses in the implementation of cybernetic governance. Thus, for future recommendation a research on identifying these weaknesses and more research on co-production in higher education. This conceptual paper focus on integration and proposing new relationships between the four constructs identified. Hence developing logical and arguments for associations build between them. And also proposing new model for improvement in governance settings.

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