Governance Of Graduate Programs Of Selected Prominent Universities In Different Countries: Strategies In Addressing Challenges And Impacts Of Global Changes

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Abstract— The present study is on the Governance of Post-Graduate Program: Strategies in Addressing the Impact of Rapid Global Changes upon the Governance of Graduate Programs of Selected Universities of Various Different Countries. The problems of the study are formulated in the following questions. (1) what is the nature of graduate programs of those selected universities (2) what are the general trends of governance of the graduate programs (3) how is the governance of the graduate programs addresses the impact of global changes upon the graduate programs (4) what strategies and innovations of the governance in addressing the impact for enhancing the quality of the graduate programs, and (5) what are the implications of the study particularly upon the governance of Indonesia University of Education. The subjects were Harvard University, Stanford University, The Ohio State University, Oxford University, University of Leiden, University of Heidelberg, National University of Singapore, University Pendidikan Sultan Idris (Malaysia), Monash University, Sydney University, University of Western Australia and Seoul National University. As the study conducted during the period of pandemic covid-19, the information was collected from officially published documents from official websites of each university, and downloaded by internet platform. Information from the official documents were selected by using a survey instrument. In addition, some research collaborators joined to provide more information and insight on the academic, social and cultural environments of the subjects. The findings show that, the governance of post-graduate programs are classified into two patterns: one where the graduate programs are organized under the same faculty with undergraduate program and the second graduate programs are organized under a faculty or a college of postgraduate. It is also found that in general each university took initiatives to respond to the global changes and pandemic challenges in closely similar global strategies. They adapt the governance of the university, develop new strategies to responding the challenges without leaving the characteristics of their historical, cultural and academic background. They also developed new graduate programs which are relevant for global study and pandemic situation, and adjusted the delivery system where students can do their study by on-line and off-line. The study also found that the universities provide more opportunities for international students to have their post-doctoral education. Some strategies which are suitable for Indonesia University of Education are recommended.

Keywords—prominent universities, governance, graduate programs, initiatives, strategies and challenges.

INTRODUCTION

Universities across the world including those in Indonesia have been constantly facing rapid global changes with all challenges and impacts upon the governance of those universities. The fourth Industrial revolution and the Corona virus 19 pandemic have brought about major challenges and impacts upon the governance of study programs including of graduate programs of those universities (M.Fakry Gaffar, 2021) Prominent universities selected for the study are: Harvard University, Oxford University, Heidelberg University, Leiden University and Seoul National University. Regardless of these challenges and impacts, universities across the world are also driven to move towards the establishment of world class universities (Sabzalieva, 2017). Becoming a world class university has been considered as a golden gate to obtain lots of gains not only from the national perspectives but also from those of the world communities (Yang et al., 2021). In order to accomplish the goals these universities should be capable of addressing the challenges and impacts of the global changes in the most efficient and effective ways. It is, therefore, considered essential to learn from these world class universities on matters related to the ways of facing challenges and impacts as benchmarking for improving the governance of the universities in Indonesia including the governance of graduate programs of Universitas Pendidikan Indonesia. The improvement of the governance is considered as an

appropriate strategy to move forward to a long and winding road for becoming a world class university. The study is aimed at achieving deep understanding and searching for credible lessons in regard with initiatives, innovations and strategies in addressing the challenges and impacts brought about by rapid global changes. The lessons could be used as reference for improving the governance of study programs particularly of Universitas Pendidikan Indonesia in an attempt of paving the way towards becoming a world class university.

LITERATURE REVIEW

A. World Class University

What is World Class University? There is little agreement on what is the definition of a world class university, although the term has gone around the globe with all effects upon the world class movement especially at present (Allen, 2021). Global world university ranking agencies such as QS, THE, ARWU and HEEACT (Hou et al., 2012) are well known as credible world university ranking agencies. These agencies have been conducting university ranking each year and the result of the ranking status has been influential across the globe especially as instrument in policy formation and competition in marketing (Shattock, 2017). Public discourses of several WCU presidents are used to influence social perceptions and expand reputation for their universities (Rodriguez-Pomeda & Casani, 2016). Common Indicators recognized as measures are: as a research university, the longevity, the university has been in operation for centuries. The universities are supported by unlimited resources and have been contributed not only to local communities but also to the communities of the world. The system of governance is a such and function effectively and enable to make universities survive and gain recognition of the world as contributing universities to humanity. The universities emphasise excellence in research and teaching and become the flag in making contribution to humanity and world civilization. The governance is very complex and yet efficiently and effectively function. Leadership of the universities is extraordinary and I recognized globally. Study programs offered well meet the global needs and are recognized globally and also gain strong recognition as the world most collaborative higher education institutions with collaborative strategies among universities and between universities and communities. The alumni has become leaders of the world in their own countries and leaders of the world such as having global leadership positions in the world organizations. Other common elements as world class universities also include the presence of international students and academic staff and Initiatives and innovations in enhancing knowledge pursued by the universities If all common indicators illustrated above a university could be considered as a world class university if all these elements are recognized by world university ranking agencies

B. The University Governance

The meaning of the governance varies depending on the context in which it is applied. In the context of higher education, the governance refers to the exercise of power invested in persons occupying certain positions based on the determined laws and regulations of higher education. It means it relates to all aspects of live of higher education in administering the process of teaching, research and community services.

The functions of higher education is to provide the highest level of educational opportunities for all regardless of all kinds of differences. It has been believed that only people of high capacities who could bring about development and prosperity to all (Gaffar, 2019). Only people of high capacity who could eliminate poverty and ignorance (Gaffar,2021) Higher Education institutions are of various kinds and types depending upon the needs of a particular country. In Indonesia higher education establishments consist of university, institute, college, polytechnic and academy (Indonesia Education Law, N0.20 /2003). Higher education is regarded the centre of the development of sciences, technologies and arts. World civilization has been regarded as one of the greatest contributions of scientists and higher education across the world. The function of the governance is to assure that the responsibility of higher education as mandated by the rules and regulation is accomplished optimally(Gaffar,2021).

There are studies conducted in different complex settings which demonstrate the effective application of the governance In the context of Malaysian reform of higher education the dynamic nature of the governance was heavily influenced by the philosophy and goals underlying the reforms (Barlete, 2020; Quddus & Ahmad, 2016). The governance of higher education was also used in analysing the roles of students of higher education in terms of contrasts, commonalities and controversies.It was also used to address multi issues, multi levels and multi actor dynamics (Chou, 2017) and applied as a means of establishing dialogues involving scientists of social sciences, economics and political sciences in relation to the complexity of public policies.Louin his study introduced in Hongkong (Lou, 20i8) the governance was used for creating the balance and equilibrium between East and West in Hongkong higher education called the hybridization which was the balance of university freedom and autonomy with the social political changes after the postcolonial era of Hongkong in 1977. Michelson and Stensaker (2011) conducted an interesting study in the case of Norway higher education governance introducing two models:the democratic and market orientation model in the governance. It was found that in democratic aspect, the student participation influenced the quality assurance

system of higher education at national and institutional level of governance. Minkova and Pabian (2011) in their study of five European countries introduced four models of governance of Higher education in which the students as major stakeholders participated in the governance successfully but failed in attracting the interest of the academicians. The four models are Academic Oligarchy, State Bureaucracy, representative democracy and market enterprise.

C. The Governance of Graduate Programs

The governance of graduate programs varies depending upon the philosophy underlying the graduate programs. It is a part of the overall university governance. The graduate programs in the study refer to master and doctoral degree programs of various fields of studies. Since the graduate programs are mandated to prepare the highest level of education with the highest quality. The general trends of the governance of graduate programs consist of two patterns. The first, the graduate programs are placed under the responsibility of a Faculty; the second, the programs are placed under the responsibility of graduate schools distinct from the administration of the undergraduate programs. The requirements to be appointed as academic staff of the graduate programs are highly competitive and selective. Instructors of undergraduate programs are not always eligible to teach at the graduate programs. The academic atmosphere and culture are completely distinct from those of the undergraduate programs. The governance puts heavy emphasis on the quality of research and teaching (Oxford link 2021, Heidelberg link 2021, Leiden link 2021)

High quality is the nature of graduate programs of many prominent universities followed by high quality of students, academic staff and published works (Oxford link 2021, Harvard link 2021). Because of the concern on quality, the governance of the graduate programs are totally separated from the undergraduate programs in terms of instructors, curriculum development, teaching and research. Each university tends to develop their own quality standards.

The quality of teaching and research of a number of world class universities have become their primary reputation which have been carried out from generation to generation. High quality of students and academic staff are strategic factors determining the enhancement of the quality in teaching and research. The functions of governance in the quality enhancement has proved to be highly effective (Heidelberg Link 2021 and Leiden Link, 2021).

RESEARCH METHODS

Methods of research used in the study qualitative research methods. Through this method all events occurring in the prominent universities selected for the study could be uncovered in great details. It was in this way a comprehensive understanding of each of the selected universities could be achieved. The selected universities were Harvard university, Oxford University, Heidelberg University, Leiden University and Seoul National University. According the QS ranking all these universities are World Class Universities

Data required for the study could be identified on the basis of each the research questions formulated in the study as the focus of the study. In qualitative research data needed was not quantitative in nature but rather in the forms of description and narration of all related events. Instrument needed for collecting the date were documents study guide and interview guide. The following table provides the overall data required for each of the research questions.

Table 1: Research Questions and Data needed

No	Research Questions	Data Needed
1	Nature of Graduate Programs	Kinds of graduate programs, graduate programs by field of study, curriculum design, teaching learning, admission requirements, admission procedures, academic staff, student enrolments, international students, teaching and research international academic staff.
2	The Trends of Governance	System of governance, organization structure, colleges, graduate schools, faculties, academic programs, pattern of governance, administration of graduate programs, administration of undergraduate programs, management educational resources,

		financial administration, human resource management, research and teaching administration, availability of student supports	
3	Challenges and impacts	Challenges and impacts of rapid changes, initiatives, innovation, reforms of graduate programs, kinds of initiatives in the delivery of graduate program, structured models of graduate programs, innovations in teaching and research.	
4	Strategies used	Strategies applied, kinds of strategies in addressing challenges and impacts, collaboration strategies, international collaborations, strategies used for advancement of knowledge and technologies, strategies university to university, university to community.	
5	Implications for the improvement of governances of UPI	Identification of implication to the administration of graduate programs, for enhancement of quality of research and teaching, and for governing graduate programs of UPI.	

On the basis of data required as shown above, the majority of data appear to be in the forms of documents and a small portion on explanation, thoughts and new ideas. This means that the number of respondents and data

of this kind is quite limited. This implies that ideas and explanation and argument about innovation and initiatives and strategies could also be identified through various official reports. It also means interview depends on the context and the needs of data.

Table 2: Respondent

University	Respondent
Harvard University	5
Oxford University	5
Heidelberg University	5
Leiden University	5
Seoul National University	5

Instruments developed and used for collecting all data needed were of the following:

- Document study guide: check list of all kinds of official documents needed including facts, figures, and images with relevant sources of documents.
- Interview guide: open questions to respondents about explanation, ideas and arguments.

There were a number of research collaborators assigned to a particular university of those selected universities to assist in the data collection, data analysis and initial writing of a draft report about the university these research collaborators were PhD students of the assigned universities. A research protocol was developed to be used as the overall guideline of the implementation of the study in including in the process of data collection and data analysis.

In the process of data collection and data analysis and the initial draft report regular online meetings were conducted to ensure that the assignments to the research collaborators work smoothly and any problems faced could be immediately resolved. However, in practice, in the process of data collection more flexible ways were allowed particularly due to the covid pandemic. Continuous discussions occured in the process of data analysis and in report writing. Finally each research collaborators successfully completed the assignments and a report of the assigned university was submitted to the research team. On the basis of the report, the overall report writing was undertaken by the research team.

An in depth analysis on Websites of all the selected universities was conducted by the research team to enrich the data in the process of the final report. Procedures of conducting the in depth analysis follows the following steps.

1. Identifying official open public website links on each of the universities. In this case, Harvard University website link. Oxford University Website link, Heidelberg University Website link, Leiden University Website link and Seoul National University website link.
2. Examining carefully the links in terms of adequacy and completeness of data and of information needed.
3. Reading all details of information provided to ensure that information needed is of value to be used in answering each of the research questions and identify contact persons indicted in the each section shown in t websites.
4. Selecting all relevant information and prepare notes.
5. Undertaking crosschecking on the information collected to ensure that they are correct and free from any kinds of mistakes.
6. Comparing all websites to identify similarities and differences in terms of adequacy and completeness.
7. After collecting all data and information needed then the overall data analysis could begin by Integrating into the report submitted by the research collaborators in the process of producing one integrated final report.

FINDINGS AND DISCUSSIONS

D. The nature and trends of Graduate programs

The terms graduate programs refer to all master and doctoral degree programs of various fields of studies offered by the universities. Harvard University, Oxford university, Heidelberg University and Leiden University offer master and doctoral degrees of various fields of studies. In addition to fields of studies commonly conducted by the world class universities, there are master and doctoral degree programs which are unique and different from one university to the other. The following table shows various fields of studies offered by each university.

Table 3: Graduate Programs by Field of Study

Universities	Graduate Programs
Harvard University	Life sciences, Archaeology, Astronomy, Earth and Planetary Sciences, African and African and American studies, Business administration, Theology, Philosophy, Bioengineering, Nano Technology, Data Science, Earth and planetary science, Education leadership, organization and entrepreneurship, Education Policy and Analysis, Human Development and Education, Teaching and teacher leadership, law, International relations, Public Policy, Public Administration.
Oxford University	Master of Philosophy (MPhil), Master of Business Administration (M.BA), Master of Fine Arts (MFA) Master of Public Policy (MPP), Master of Science (MSc), Master of Law and Finance, MSc in Mathematical Science, MSc in Advanced Computer Science, DPhil in Engineering Science, DPhil in Law, DPhil in Medical Sciences, DPhil in Material Science, DPhil in History.
Heidelberg University	Anthropology, American Studies, applied computer science, Biochemistry, Biomedical Engineering, Biosciences, Chinese Studies, Islamic and Middle East studies, Computational linguistics, Computer Engineering, Conference interpreting, Earth Sciences, Educational Studies, Geoarchaeology, Gerontology, Health and Care, Medicine, Matter to life, Molecular Electronics, Molecular Biotechnology, Public Law, Philosophy, Digital Law, Astronomy and Cosmic Physics , Quantum dynamics for Physics, Chemistry and Biology.
Leiden University	Advanced Computing and Systems, African Studies, Air and Space Law, Algebra, Geometry ad Number theory,

	Applied Mathematics, Applied Cognitive Psychology, Applied Neuroscience in Human Development, Archaeological Science, Artificial Intelligence, Arts and Culture Asian studies, South East Asian Studies. Graduate School of Archaeology, Graduate School of Humanity, Graduate School of Medicine, Graduate School of Science, Graduate School of Law and Graduate School of Governance and Global Affairs
Seoul National University	Public Health, Public Administration, Environmental studies, international studies, Dentistry, Medicine, Business, Law, Convergence Science and Technology, international Agricultural Technology, Engineering Practice, Dental Science, Data Science

Sources: Links of related Web sites (Oxford link 2021, Heidelberg link 2021, Leiden link 2021, Harvard link 2021, SNU link 2021)

The above graduate programs are delivered in various different ways. Oxford university offers graduate programs in various ways, by research and by taught courses. In Heidelberg the master degree programs are of several patterns, the conventional, the research based, the structured programs and the interdisciplinary in nature. Heidelberg university organized the master degree programs as consecutive. While the doctoral programs offered in the structured model in which taught courses combined with research of individual academic disciplines. The flexibility of undergraduate programs provides innovations to respond to the challenges in community. The structured doctoral programs are considered new and innovative programs although the conventional methods are maintained. Leiden university has reformed the graduate programs not only in the organisations but also the programs more flexible including the arrangement of teaching learning processes. The doctoral degrees in Leiden and Heidelberg are offered in 4 years and all resources used are for enhancing the quality of research and teaching. Harvard university has been offering varieties of courses well-known to the world for their excellence. Harvard law school produced world leaders. Several presidents of US are graduates of Harvard law school. Harvard has established values that the university is responsible to make contribution not only to the US citizens but also to humanity of the world. The university has become a flagship in higher education of the

world. Oxford university has been successful in maintaining the vision and mission based on values, the university has been strongly standing for maintaining the values for many centuries since its establishment in 1106. It is almost 1000 years the university has been standing there strongly and has been proved to the world on the university commitment to the excellence and worth of knowledge pursued for humanity.

There are other two elements, Student enrolment and academic staff which are essntial in the graduate programs especially in the proscess of learnig ad teaching.These two elements determine the advancement of research and teaching. The following table provides the overall picture of the universities taken in the study.

The above data shows that international students and international academic staff have become common features of World Class universities. All universities in the study emphasizing the quality of research and teaching. The emphasis implies to the quality of students and also the quality of academic staff. As research universities the quality of academic staff plays strategic roles in bringing the quality of research and teaching into reality. The interconnection between research and teaching has been the result of the interaction occurring when the academic staff perform tasks determined for them. The relevance of graduate programs offered to the needs of students and community is of outmost important. Gunderson and Gloeckner (2006) conducted a study on need assessment of doctoral degrees in construction management. The study revealed that the applicants were full and the graduates coming out of the programs were employed in high paying jobs. Patricio and Santos (2019) conducted a study on collaborative research in doctoral degree programs. The study showed the current trends of doctoral degree programs by the establishment of graduate schools across European universities through the collaboration among university graduate school and collaboration with the world of industries in the context of global changes faced by the universities. The trends were very popular and enlightening especially in regard to the doctoral degree programs. Boyce, Owen, Lund, and Almarode (Boyce et al., 2019) conducted a study on doctoral students' perception on the doctoral degree programs and academic department. The study indicated the importance of clear information about the process of selection, requirements, structure of the programs and department policies regarding to the overall processes of the doctoral programs. The students with unclear perception about their doctoral programs resulted in the unsatisfactory reactions. Only those students with clear perception and understanding about their doctoral degrees produced satisfaction of success in the completion of the programs. Guthrie (2009) on the other hand, conducted a research on modern doctoral degree programs with multipurposes. The findings indicated that multipurpose doctoral degree

programs were no longer appropriate because of the limited academic knowledge pursued. A combination of engineering and medical sciences and educational administration and other fields of studies shown limitations when performing either or both fields of studies in the world of work

The universities share the belief that it is the responsibility of the universities to always make the universities of great values to the needs coming from the society. The universities also believe the strength of the universities is on the trust of the community to the universities. All universities share common attitude that values should become conviction of the universities serving as guidelines upon which the graduate programs are based and developed. Without the values the graduate programs will loose the trust of the community. The emergence of excellence programs in higher education have brought about positive impacts on student learning gains because their needs are met (Huijts & Kolster, 2021). However, there should be an effective quality assurance system controlling the excellence programs in order to bring about wider impact upon the institutional ability to respond the needs of the communities locally and globally (Asiyai, 2020).

An excellent study conducted by Aubrey, et all (2016) indicating the historical development of graduate program in social work reflecting the response of a number of universities to the emerging socio cultural and political demand for the needs of having doctoral degree programs. Renown universities (Harvard University link 2021, Leiden University link 2021, Heidelberg University link 2021) strongly indicate their commitment that graduates of the doctoral degrees are expected to become world thinkers and leaders in their own fields of expertise to make the world a better place.

University Governance

The governance of graduate programs of the universities is integrated into the governance of the universities and it is impossible to separate one from the other. The system of governance goes from the university level down to the college or faculty level and further down to the academic department level, the end of the governance system. Although the governance system of those universities vary but there is a possibility to group the system into several patterns of gvernenace. Harvard University Oxford university and Heidelberg University patterns..

Harvard pattern shows that the organizational structure at the university level consists of two governing bodies, the Board of Corporation which consists of president, treasurer and the fellow, the Board of Overseer which consist of Harvard University alumni. From this level the span of the organization goes down to the school level and

further down to the academic department level. Graduate level programs fall within the system. In operational terms the graduate programs are put under the responsibility of graduate schools. Seoul National university appears to follow the system of governance of Harvard University. At the university level there are two governing Bodies, the Deliberative Board which consists of several committees, and the Advisory Board which also consists of several committees. The top executive of the organization is President of the university similar to that of Harvard university. In Seoul the span of control of the organization moves down from the university level to the college or faculty level and further down to the academic department level (Harvard University link 2021, SNU link 2021).

Oxford University pattern of governance is very complex. There are three governing bodies at the university level, the University Senate, the University Council and Congregation, a kind of parliament in the system of government. Within the system there are colleges which have the autonomy determined by charter. However, the university council has the responsibility to coordinate all colleges and faculties. The system of Oxford University governance is very complex, the top executive is Chancellor as a figurehead of the university. Vice chancellor has the power and responsibility to run the university. In addition to colleges there are also academic departments or faculties and divisions. Each of the units have different responsibilities. Although it seems very complex, yet all these units work professionally.

Heidelberg pattern shows the governing board consists of the senate, the university council and the Rectorate. Rector is elected by the university senate for six years. Leiden university basically follows the Heidelberg with some variations The governing bodies consists of the university Senate, the executive Board and the university council. President of the university is elected by the Senate for six years and Rector Magnificus, with certain responsibilities different from those of President (Heidelberg University link 2021)

Regardless of the different patterns of the governance, the fundamental question is how does the governance of the universities work in practice, what basic concepts underlying the practices especially in the era of today. The general trends appear that each university has basic values they believe in and the goals to accomplish, the values are the foundations of the governance while the goals are firm direction of all practices of the governance. The governance seems adopting various concepts formulated in such a manner adaptive to the current demand without loosing their conviction built in the philosophy of the universities.

Sahlin and Erikson-Zetterquist (2016) observe that various diffused modes of governance was adopted in governing the university in meeting the current demand

and challenges brought about the rapid global changes of today. Traditional ways of organizing remained, although in practice corporate-like management strongly put pressures upon the universities. Collegiality emphasizing academic excellence and freedom of expression dominating the research universities was under reforms and replaced under the system of governance emphasizing more control nature of the governance. Marcheridis and Poulson (2019) come with the ideas that professionalism of academic faculty deals with academic matters especially teaching and research, while the governance comes to play on matters related to rules and regulations when implemented. It implies that the professionalism of the faculty and of the governance could work side by side.

Rapid Global Changes: challenges, impacts, initiatives and innovations

The world keeps changing from time to time bringing about challenges to almost all aspects of life including higher education. The changes occur in the process of globalization in which the world becomes one. Countries of the world are borderless the world becomes a big place to live together. The fourth industrial Revolution is a global change, Covid pandemic has brought about changes with significant impact on human lives. Societies have been interacting one another in the process of changes. Graduate programs of universities have been facing challenges economically, socially and culturally. Graduate programs receive pressures from their respective countries to respond to the challenges. The universities should respond as a part of their contribution to the people they serve, if not the programs are absolute and have no values and give no meaning. The presence of graduate programs should give impact to the society to make graduate programs of significant values to community and to humanity. The greatest challenges being faced by these prominent world universities are as follows.

Understanding the changing needs of the society and determining the relevancy of the graduate programs to meet the needs of the society

Maintaining the trust of the local and the world community

Securing the financial sources

Maintaining and enhancing the excellence in research and teaching

Determining appropriate strategies in addressing the challenges and impacts upon the universities including the impacts of the fourth industrial revolution and the covid pandemic.

Oxford university has launched many initiatives and innovative ideas to face those challenges. To maintain the trust to the university and values and contribution to the community and humanity the commitment to values and quality should sustain and be proven. Various flexibilities of graduate programs such as interdisciplinary approaches, the adoption of taught courses in line with individual academic disciplines in research receives positive response from the community. The faculty of medicine conducted research on the making of vaccines, collaboration with industries that benefit all are initiatives of Heidelberg university.The university has been launching structured models of various sizes in doctoral programs, the emphasis on research and teaching of the medical schools, the collaboration with various research universities outside Europe are responses given to maintain contribution and worth to the community. The maintenance of internationalization regardless of the global impact of the covid 19 pandemic appear to be initiatives taken. Central services to the community in response to the fact of preventing the pandemic help maintain community trust. Heidelberg university and Leiden university have taken initiatives in the form of innovative programs in relation the commitment of sustainable development goals, fields of focus, collaborations among universities like Leiden- Delf and Erasmus cooperation become the collaborative programs beneficial not only to the people of the Netherland but also as evidence of the commitment to humanity. Extraordinary library collection on the Middle East and South East Asian countries particularly Indonesia become real evidence of the values and humanity. Harvard university has introduced many initiatives and innovations demonstrating to the world through various innovative programs particularly in the graduate programs.

Heidelberg University and Leiden University consider teaching and research are interwoven and impossible to be separated one from the other. High quality of research and teaching are the essential elements in graduate programs of both conventional and structured approaches adopted. All research universities in the study emphasized research and teaching as core values in the pursuit of becoming world research universities. Leiden university has taken initiatives in the form of innovative programs. The university has launched fields of focus and beyond the focus: artificial intelligence as a response to the current needs of the community. Resource sharing of research facilities with community is also a way of making contribution to the community. Cooperation with industries to share the innovations of new technology is carried out on the basis that the university should give impact to the community especially to industry that the university may share the new technology and innovation as the result of research the university has conducted. Sharing knowledge and technology with industries could build trust to Leiden university of the community of industries and the community at large. Cooperation among universities improve the capacity to better contribute to the

country. Leiden-Delf -Erasmus university cooperation provides better services to the country and community. Students of the three universities my learn freely from one academic discipline to the other without any problem. The academic staff may share and work together in the spirit of cooperation in research and teaching.

Harvard University offer many innovative programs to the world. Harvard Graduate school of education in 100 hundred years of its operation has launched innovative programs considered different from ordinary or usual programs. These programs are well-known to the world. Harvard law school has proved that the programs become well-known to the word because several of its alumni of law school has become world leaders. Harvard business school have produced alumni of becoming world leaders in business and industries across the world. Harvard has successfully made world reputation as the contribution not only to the people of the US but also beneficial to the world.

Seoul National university of South Korea has created many innovative programs not only at the undergraduate programs but also in graduate programs. Offering double degrees, mixed degrees, and more flexible programs provide better opportunities to learn in meeting the needs of students. Regardless of the initiatives to meet the needs of the people of South Korea, commitment to high quality always well maintained as the flag of the university in the pursuit of knowledge towards the future. Graduate programs are required to be capable of making strategic contribution to the economic demand of the country in responding of the changing demand of the global world. The university should prove that the university of great of worth to the country especially in the field of business.

Initiatives and innovations conducted by each university is the key to the capacity of the university in addressing the challenges faced by the university. The top executives of each university is held responsible for the initiatives and innovations to be sustainably conduced as the required responses of the university to the emerging needs and challenges faced by the university. Kvilhaugsvik (2021) undertaken a study in relation to address the question of close collaboration in resolving the question of relevancy of the graduate programs of Nordic universities with the demand arising out of the world of work. The establishment of mandated employer panels to ensure the relevance of university study programs to the world of work. The panels advise universities in building close connection and shared interests between the study programs and the needs of the world of work. An interesting study was conducted by Kovak,Ledic,and Rafajac (Kovač et al., 2003) on how the universities in Europe respond to external challenges and demand in order to survive. The university governance should be able to conduct the overall changes in the way the universities

are governed by adopting the learning organization model to effectively respond the changing challenges and demand if the universities should survive. One of the greatest challenge challenges is the participation of academic staff in strengthening the practice of the governance in responding to the external challenges faced by the universities. Holzweiss, Walker, Conrey (Holzweiss et al., 2019), conducted a study on the importance of specific skills required for leaders to acquire to support the efficiency and effectiveness in the practice of governance. Pierce (Osmani et al., 2017) comes with the Authentic approach to strengthen leadership in the practice of governance in higher education.

Strategies in addressing the challenges and Impacts

Strategies determined by selected world prominent universities are very complex and it is impossible to uncover them in details. The strategies that have made the world class universities survive for centuries. The countries have gone through difficult years and yet the universities had survived and been successful in coping with challenges of those many long years of struggle. Basic questions were what strategies they had taken to make them survive and become the landmarks of the country civilization? The answer could have been that each university had developed core values upon which all initiatives and strategies were based and made them survive from generation to generation until at present.

An interesting study was conducted by Zhu and Kurtay (2018) on leadership capacity building on academic leadership on the basis of perception of academic staff of Chinese universities and European academic staff. The findings pointed out that academic leadership skills required for Chinese universities and interpersonal leadership were needed for European academic leader of European universities in addressing the challenges of today. An innovative strategy introduced in a study by Mok and Jiang (2020) that was Corporatization approach such as in the World of Business and industries to be adopted in running the universities in response to the mounting challenges of the era of today. Universities of today are no longer in the era of great academic freedom of scholars but it is in time of global changes which requires different model of governing the universities if should survive. An interesting thinking put forward by Macfriane and Burg (2017) on the intergeneration strategy to respond to legitimization, professionalization and accountability in higher education emphasising the overall analysis of the universities strategies to make the universities strongly accountable to the public as the greatest asset of the community. Th idea of co creation co product and values -in- use (Dollinger et al., 2018) put forward in a research to analyse the students feedback in relation to their interaction with educators in their process

of learning. The study confirms the benefits for having student interaction with educators in the development of their learning to accomplish the maximum benefits not only to students but also to the institutions.

CONCLUSIONS AND RECOMMENDATIONS

Each university in the study has established core values, the university has strongly committed on the values as the foundation for all efforts in the pursuit of knowledge and technology for the community and humanity. Graduate programs, the master and doctoral degree programs are designed to respond to emerging needs as the result of changes brought about to the university.

Graduate programs consist of master and doctoral degree programs cover wide range of fields of studies designed to meet the emerging needs of the local and international community. The approaches adopted are of various kinds, flexible, interdisciplinary and cross border academic disciplines. The approaches are conducted as the response of the universities to meet the changing needs of the society. Initiatives and innovations are introduced to make the graduate programs more attractive to young researchers to actively engage in the pursuit of knowledge needed by the community locally and globally.

In the effort of making the graduate programs of values to the community, various initiatives are taken including collaborations with industries and businesses in an attempt of making impacts upon the world of industries and businesses. International collaborations are also taken to prove that graduate programs are also of values to the world community. Collaboration is also an instrument of building trust to obtain external financial sources needed to maintain the operation of the universities

The governance of graduate programs is a part of the university governance. Graduate programs are put under the responsibility of graduate schools separate from the administration of the undergraduate programs. High quality of research and teaching are crucial to build sustainability of the relevance of the graduate programs in addressing challenges and impacts brought about by the global changes

Each of the universities established strategies as instruments in the implementation of initiatives and innovations created by the university as a part of response given by the university to answer the needs raised by the community. Key to survival of the universities for hundreds of years are complex and impossible to uncover them in details because of the limitations of the study

The findings, discussions and conclusions of the study it is recognized that there is so much to learn from all world class universities taken in the study. Recommendations presented are crucial and of great values for the

improvements of the governance of the graduate programs of universities in Indonesia particularly of university Pendidikan Indonesia which are driven to move forward for establishing a world class university.

1. Develop and expand graduate programs of fields of studies needed by the community locally and globally for now and for the future
2. Develop the university governance including the governance of graduate programs capable of responding the future needs, Graduate programs should be placed under the responsibility of graduate programs separate from the undergraduate programs
3. Enhance the quality of research and teaching by applying quality assurance system recognized by other universities
4. Promote initiatives and innovations to respond to the changing needs of the communities in the pursuit of the advancement of science of technologies for the communities
5. Establish collaboration national and international to gain the recognition of the locl and global communities.

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