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STRATEGIC FRAMEWORK FOR ASSESSMENT OF ARCHITECTURAL PROGRAM ACCREDITATION

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Abstract:

Accreditation of programmes in universities is a form of responsibility between education providers and stakeholders in producing graduates who meet the requirements in accordance with the provisions. In Malaysia, Majlis Akreditasi dan Pendidikan Senibina Malaysia was formed under the purview of Lembaga Arkitek Malaysia as the professional body, responsible for coordinating, monitoring, and regulating the National competency standard of local Architectural education programmes. This study is to review the current architecture accreditation process and to propose a new accreditation framework that can improve the assessment method used, based on the criteria and standards of accreditation for Architectural programmes. Current accreditation assessment procedure lack of objective assessment mechanism to indicate definable performance of an Architectural programme which includes a set of determination statement related to the criterion that can be used to measure consistency in an accreditation outcome. The adoption of an objective assessment mechanism will systematically ensure traceability of assessment results are backed by fundamental requirements, which is typically not found in an objectively or judgement-based assessment method. The new accreditation framework should act as a strategic tool in identifying the accreditation process outcome by producing a guided and measured assessment which may adopt an automated platform. It is vital to understand and identify ways to improve the assessment process during accreditation for visiting panels, ascertain a justified outcome for education providers and enhance connections between the professional body and higher learning institutions. The proposed mixed method through action research approach will require

participatory from both the professional body and education providers to promote development and put into practice the maintenance of standard and quality within architectural education.

Keywords:

Accreditation, Architecture, Assessment, Education, Framework

Introduction

Accreditation is a voluntary process to recognise quality assurance which operations and services are evaluated by a third-party input who are professional within their field, against a defined set of standards and criteria. Architectural programme accreditation offered by Architectural Education Providers (AEP) is a formal recognition given by Majlis Akreditasi dan Pendidikan Senibina (MAPS) Malaysia or also known as the Council of Architectural Accreditation and Education Malaysia (CAAEM) to education providers for their competency in carrying out academic activities that have met quality standards and produce graduates who met the requirements according to the criteria and standards for program accreditation in The Manual of Accreditation for Architecture Programme.

Background of The Study

MAPS is responsible for facilitating, coordinating, advocating the national standard of competency and provides an assessment system for local program accreditation in the bachelor and master architecture programme. The main purpose is to understand and identify ways to improve the evaluation experience during accreditation for Visiting Panel and provide an outcome that is consistent with the criteria and standards for programme accreditation for AEP. Enhance connections between MAPS and AEP for uplifting the architectural profession.

This research is to establish a strategic framework which itself is a tool to identify an assessment model that is measurable and significant for architectural programme accreditation and its process. This research is to question whether the proposed framework has the capacity to revise the current method used by Majlis Akreditasi dan Pendidikan Senibina Malaysia. This research is to not only understand but also identify means to improve the assessment process during accreditation visits that can benefit the MAPS Visiting Panels and Architecture Education Provider as below:

- a) Understand the assessment system and methods used
- b) Identify things that can invite dispute in the decision-making process
- c) Propose an objective based method that balance and control assessment from expert opinion judgement; and
- d) Develop and test new assessment methods through action research

MAPS accreditation exercise forms a substantiated independent evaluation by an appointed Visiting Panels which is set up by the council. The decision of the Visit Panel outcome will determine the accreditation process to be fully accepted, conditionally accepted or failed, depending on the assessment made through documentation submitted and evidence showed during the visit. Reporting duration on assessment to approved the outcome of the visit is up to twelve weeks in a minimum of ten pages 'written format' using national language. The written report requires consistency, panel approach, procedural requirement, and weighting to

ascertain that the recommendations substantiated in a thorough, proper and verifiable manner, to assure panels has reached consistent judgement. The proposed framework is to avoid visiting panels from having the tendency to adopt personal preference of quality and making an assumption.

Pre-accreditation visit, preparation begins with an internal review of documents by appointed visiting panels are made within four weeks prior to the full accreditation visit. Four months prior to the actual accreditation visit date, documents are submitted by the respective education providers. During the official visit, reviews, and evaluation of the submitted documents, work and facilities are made within two continuous days at the education provider's premise. This is where the critical decision-making process takes place. The post accreditation visit comprises of reporting on the evaluation and outcome of the visit and visiting panels are given up to twelve weeks to make judgement based on what is presented, derive a decision on the current practice presented and propose remedies for the future of program development.

Research focuses on the three critical stages in an accreditation process identified in this study beginning with involvement by relevant education providers and appointed visiting panels during the pre-accreditation visit, leading to the accreditation visit and ending with a post accreditation visit.

The outcome of the accreditation process shall be formalised through the visiting panel's written report, outlining documented observations and findings on various aspects of the program which includes graduates from the architecture program to meet the minimum performance required in a set criteria. Findings are generally delivered in three forms of expressions, namely recommendation, advice, and comments. The report consists of:

- a) The outcome of accreditation for a program applied,
- b) A recommendation of receiving either full, conditional or fail accreditation outcome,
- c) Action items detailing failure in demonstrating a specific performance, and
- d) Advice on the future development of the program.

The proposed framework will ensure on eloquent human involvement during the accreditation assessment process and is supported by an automated platform to ascertain accuracy is obtained during the decision-making process by the visiting panels. Research model below reflects the process which takes places during observation of intention, practices, and aspiration. The accreditation assessment outcome recommendation is made by the MAPS accreditation review panels through post – accreditation visit report.

- a) MAPS forms a substantiated and independent assessment from selected review panels. The decision may be positive; conditionally positive or negative.
- b) Reporting duration from assessment to approve the outcome of the visit is up to 12 weeks in a min. of 10 pages of 'written format' - language.

Report requires consistency, panel approach, procedural requirement, and weighting to ascertain that the recommendations substantiated in a thorough, proper, and verifiable manner, to assure panels has reached consistent judgement.

Research Aim and Significant

Research Aim is to produce a guided (measured) assessment through a framework based on the criteria and standards of accreditation for architecture program by Majlis Akreditasi dan Pendidikan Senibina Malaysia (MAPS) which may adopt an automated platform. Commitment by MAPS to all stakeholders is that the programs accredited by MAPS is quality assured. This study is significant to ensure that the MAPS accreditation assessment method for quality assurance matches the quality attainment imposed to AEP. Awareness is created on the influence during accreditation assessment, decision-making and outcome affects stakeholders. Accreditation assessment methods incorporated should be able to mitigate the effects of a reversible outcome

Research Objective

The research development is in relation to evaluating, monitoring, and improving the quality of the accreditation process, which are not new and may have an impact on governance, resources and services offered by the Board. Developments made will be linked with the management of quality assurance, and this is essential as the current implementation of quality assurance system on accreditation assessment through LAM which has an impact on AEP, is still missing on its empirical evidence. Until now, the focus has been entirely on AEP to conduct their assessment processes without considering the need to question LAM's own internal dynamics on how to improve the accreditation assessment processes that is conducted on AEP. The objectives of research are:

- (a) Move from subjective to an objective consensual method of assessment; create an environment that lessens the imposition of individual preferences.
- (b) Act as an enabler that can assess observation, thoughts and reasoning; conducive for end-users to benefit from the assessment method To define the best parameter estimate.
- (c) Evaluate the effectiveness of the enabling tools with factors relating to accuracy, consistency and relevancy in the delivery of accreditation visit assessment and outcome.
- (d) Improve accreditation review panel workload & accreditation assessment report content and duration.

Research Question

Nowadays, more and more AEP are requiring that their programme is accredited, aimed primarily to increase their desirability, reputation, ranking and the visibility of their programme that meets national or international standards then followed by the teaching and learning process conducted.

Proposed research is to relook at the assessment method used during accreditation visit and create a framework that is guided or measurable which should act as a tool to be used during the accreditation process. The central research question is based on the line of thoughts derived from the objectives of this study.

1. What are the factors contributing to accreditation assessment and outcome report issues?

Evaluating quality & effectiveness: Regional accreditation principles and practices (Ronald L Baker, 2002)

Answering the central question above, several research questions will be derived based on the query, where the research process and analysis will be guided. Firstly, better understanding of the used method in the current accreditation assessment is needed to establish the general framework. As a brief overview, there is a need to reflect that interpretation of accreditation exercise has undergone a different vision over the years as it has moved from being a dictator to being a friendly advisor to the AEP. There are two sides to the answers from this question, depending on Visiting Panel or AEP side, the answer will reflect a different 'user' experience. This leads to the first research question.

2. Who and why most effected during the accreditation assessment visit and outcome, Visiting Panel or AEP?

Factors affecting implementation of accreditation programmes and impact on the process (KB Ng, 2013)

When this is clarified, the possible challenges will be for MAPS to improve the framework for assessment methods used and ascertain a new method for quality assurance are being explored; from the current theoretical perspective assessment method used to be moved towards a method that adopts a practical quantifiable outcome. This is the first step towards an effective framework for quality assurance in an accreditation assessment process and procedure.

The following research question is then formulated as below:

3. How technology can improve assessment, workload, process & duration? and Validity & reliability in quantitative research studies (Heale R. Alison 2015)

4. When and whom to ensure accuracy, challenges in consistency and relevancy in its delivery?

Code of practice for programme accreditation, COPPA 2nd Edition (MQA, 2017)

As explained in Chapter 3 under Research Methodology, the basis for this study will lay on the formulated framework where quality assurance derived will be linked with the implementation of internal assessment method used. As accreditation is an ongoing process, in the interest of quality, it is natural the accreditation process and method used is reviewed and revised from time to time as and when the need arises to ensure a continuous quality improvement and the need to strive for excellence. If these research questions can be answered, the study will achieve objectives set the objectives set in the earlier sections.

Observed in the below table, are the method of investigations which will derive research instrument such as pilot study, interview, observation, and questionnaire for further investigation during the accreditation exercise.

Table 1: Link between Research Objective and Method of Investigation

METHOD OF INVESTIGATION					RESEARCH OBJECTIVE	
LR	OB	PS	IN	SQ		
Literature	Observe	Pilot	Interview	Survey		
LR		PS			RO1	Move from subjective to an objective consensual method of assessment; create an environment that lessens an imposition of individual preferences
LR	OB		IN	SQ	RO2	Act as an enabler that can assess observation, thoughts, and reasoning; conducive for end-users to benefit from the assessment method
LR	OB		IN	SQ	RO3	Evaluate the effectiveness of the enabling tools with factors relating to accuracy, consistency, and relevancy in the delivery of accreditation visit evaluation, and outcome
LR	OB	PS			RO4	Improve accreditation review panel workload & accreditation evaluation report content and duration

Source: (Author's Own Elaboration)

Literature Review

Greater accountability is required by accrediting bodies in reporting their own findings; processes implemented during accreditation affects AEP performances and 'road-map' recommended accrediting bodies should not be overly complicate the information and process provided as recommended by Garfolo and Huillier (2015) since accrediting bodies still come short in these areas as after recommendations are made through reporting, an action plan must be created and the action plan should include monitoring the process to see if the adopted guidelines have impacted student learning which closes the loop at the end phase before the beginning of the coming assessment cycle. In evaluating accreditation, Shaw (2003), mentioned that the accreditation endpoints are difficult to specify and varies depending on observers and users' expectations as accreditation is not 'a single technology, but a cluster of activities that interacts' prior to producing processes that is documented that will affect organizational changes.

This study is supported by Junsuk 2018 on the perspective of design based architectural education and its holistic assessment on quality assurance in the Asian architectural education system. Actual methodology, as a working system is required in delivering an accredited architectural education which serves as a prior principle in articulating an architect's proper education. The study suggests not to include quantitative measures to avoid uniformity which will leave all programmes without a character. The method should possess enough specificity and become as a guide for Visiting Panel to judge AEP's students learning outcome and level of competency.

According to a study by Hash in 2019, cited in Marre (2014), an architectural program accreditors' credibility depends on decision-making consistency among members of Visiting Panel on the overall accreditation visit process, not only during a visit. Peer-review accreditation teams can be used as a source of potential consistency in the review of a program as mentioned in 'Consistency in Decision-Making between Survey Teams and the Decision-Making Body in a Professional Education Program Accrediting Agency'. There are three questions an accrediting Body must ask itself when it comes to decision-making consistency which, are:

- a) Decisions made based on standards or criteria?
- b) Visiting Panel's interpretation according to the intended standards or criteria?
- c) Recommendations made defensible over time?

This is supported by Benmoussa et al in 2019 where Multi-Criteria Decision Making (MCDM) approaches made it possible to select and prioritise actions to be taken for an effective decision, especially in the management of uncertainties and sensitivity of situations through a prescriptive and descriptive approach, and scorecards for helping in decision-making. MCDM tools used will enable to quantify internal and external criteria identified from specifications and interviews, which enables decision makers to target the best alternative and to correct those that are interesting but have lower results. Gass 1993 agrees that the accreditation model is used as a process for determining a numerical rating's rationale and should only be used as a decision-making aid. This research offers a rational approach for stating a level of accreditation by a numerical score.

The invention at present, provides an accreditation certification platform that is a sophisticatedly automated and substantially streamlines process which may be oversight, which in turn will reduce the on-site assessment duration and eliminates extensive manually handled paperwork by allowing efficient electronic transfer of documents.

On another hand, Wagner 2019 stressed that decision making which is automated are becoming the norm across the society at large, this rises challenges in liability when human control becomes increasing limited over technical systems. The fully automated decision-making tool is not recommended to avoid humans becoming 'human basic rubber-stamping mechanism' in an otherwise completely automated decision-making system. Opinion of humans to be included in an automated decision-making systems must be ensured. Human should not be made responsible but not in control and to ensure that in any decision-making system that is automated, meaningful human control is evident. In 'Leveraging the Full Value and Impact of Accreditation, Nicklin et al in 2017 questioned as below:

- a) Why is the issue raised as important at present when the existence of accreditation has been practiced for decades?
- b) What needs to change in perspectives held regarding accreditation and how methodology for accreditation is applied?
- c) What unique elements does accreditation methodology bring to improvement that other methodology does not?
- d) What role does data play in assessment and improvement of methodologies; and what cannot be measured, cannot be improved as all improvement methodologies have their foundation of good data.

Winston in 2019 wrote that quality assurance is everyone's responsibility. Frank Lloyd Wright School of Architecture almost lost its accreditation in 2022, and if that had happened the ongoing student's degree wouldn't have been worth anything and it would take a longer process and series of re-assessment on individual students for them to pursue their professional status. In views of stakeholder perspectives on implementing accreditation for architecture programmes, Greenfield et al (2013) identified that an accreditation body is to support stakeholders as this is a partnership and not an audit or tax investigations. If that partnership can be developed, opportunities to strengthen, support and educate the AEP will grow and continue to improve towards continuing the cycle for future accreditation. This will likely increase the implementation of a successful accreditation process. Attia in 2019 addresses accreditation as an important tool for continuous assessment in local architectural programmes to foster professional practice competitiveness. The global accreditation process may be viewed as a mechanism for program improvement since it includes requirements specific to architectural professional practice where significant equivalency is needed and the requirement for a foreign accredited program which train graduates for professional practise around the world have quite similar grounds.

Accreditation Body Comparison





'Accrediting in a comparative analysis of Architectural education standards across the world', a study by Bhattacharjee and Bose (2015) on information regarding regulatory bodies who are monitoring the education system which is performed by the International Union of Architects and Architectural education standards of different governing regulatory bodies. According to survey conducted, 78 countries out of 91 countries have regulating authorities maintaining architectural education standards and the Board of Architects Malaysia is listed as one of the 78 countries.

Duration of Architectural program studies generally consolidated at five (5) years with some offering at four (4) plus one (1) or three (3) plus two (2) and accreditation is mainly carried out by a government body. Responsibility for the organisation is well laid out by focusing on the education system gearing towards policies and practices of the profession with emphasis on the core requirements that is broadly categorised as theories in design, design documentation, technical systems, and professional practice.

During the transformation of an institutional organisation by the Australian architecture profession, AACA's primary objectives were to promote, recognised, accredit Australian higher education Architecture program and the practice of architecture, which occurred in 2014. Orr and Kristen (2019) mentioned that in institutionalising national standards for the Architects Accreditation Council of Australia (AACA) and the National Competency Standards Architecture (NCSA), significant changes were seen through Australia leading the Accreditation system.

In conditions for the United States of America (USA) accreditation, National Architectural Accrediting Board (NAAB) stated that accreditation in architecture education is unique that the NAAB expects programs to demonstrate that all graduates possess the knowledge and skills defined by 34 performance criteria set out by NAAB Conditions for Accreditation in 2004. Known as the "SPCs," these criteria are considered to represent a minimum education standard.

Table 2: International Accreditation Body comparison for Architectural Program

Governing Body	Board of Architects Malaysia	Royal Australian Institute of Architects	Architects Registration Board	National Council of Architectural Registration Board
Accreditation Body	 Council of Architectural Accreditation and Education Malaysia	 Architects Accreditation Council of Australia	 Royal Institute of British Architects	 National Architectural Accrediting Board USA
Country Covered	Malaysia	Australia; New Zealand	United Kingdom	United States; Canada
Established	1951 [ordinance] 1967 [act]	1970	1863, 1924 [evaluate programs]	1940
Pathway	LAM Part I 3years Undergraduate Internship Experience 6 months LAM Part II 2years Postgraduate	5year Bachelor of Architecture	RIBA Part I 3years Undergraduate Internship Experience 12 months RIBA Part II 2years Postgraduate	5year Bachelor of Architecture
Default Period	3years; 5years	5years	5years	5years
Outcome	Report [1 - 3 Months]	Report [within 6 weeks]	Report [within 8 weeks]	Report [within 40 days]
Standing Panel	Membership of a visiting board is normally as follows: chair: academic/practitioner member: practitioner & academic secretary: MAPS staff member regulatory: MQA representative	Composition of Accreditation Standing Panel provides a representative balance of experience in architectural practice and education. Accreditation Review Panel experience, gender, and geography	5 Membership of a visiting board is normally as follows: chair: academic/practitioner vice chair: academic/practitioner member: practitioner & academic co-professional: related discipline student/graduate: studying part 1/2 regional representative: secretary: RIBA staff member	Teams will consist of at least four individuals, each of whom represents one of the four constituent areas of expertise all selected from the team pool: 1 practitioner 1 educator 1 regulator 1 student
Performance Criteria	The Manual of Accreditation of Architecture Programme <ul style="list-style-type: none"> ▪ Design ▪ Technology & Environment ▪ Culture & Context ▪ Communication ▪ Management, Practice & Law 	National Standard of Competency for Architects; 37/70 Performance Criteria on Knowledge, Skills, Knowledge and Skills <ul style="list-style-type: none"> ▪ Design 	1 School context and history, 2 School Unique Mission statements 3 Education Criteria Achieved-Matrix 4 Statistic Information Student Enrol 5 Descriptions of facilities 6 Management, Staff & Faculty 7 Research and Staff Improvement 8 Exhibition of Student Work 9 Interview Staff & students in private 10 Recognition Pre-app Consultancy	1 General Data History and mission, learning the culture, long-range planning for development, available resources 2 Educational Outcome Curriculum Student performance 3 Appendices 4 Documentation course files and student's portfolio
Visit Duration	2days	3days	3days	Saturday evening - Tuesday noon or Sunday evening - Wednesday noon
Accredited School	17 (Local), 24 (International)	19 (Local), 07 (International)	54 (Local), 51 (International)	132 (Local), 16 (International)

Source: (Author's Own Elaboration)

Methodology

This study is Mix Method Research (MMR) that combines Quantitative Research and Qualitative Research through participatory of Action Research approach. Quantitative Research uses a survey method to collect data and interview method is used for Qualitative Research. Survey research allows researchers to gather the required data quickly in a short amount of time. Some researchers such as Noraini (2010), McMillan (2008), and Creswell (2008) have similar views on the advantages of using survey research. Many questions related to the topic of studies can be asked to many respondents which can be easily managed by researchers and very appropriate when the study involved many variables to be analyzed statistically. According to Neuman (2003), by using a combination of questionnaires and interviews, this study can provide an overview of the problems obtained from quantitative data and can also see more clearly through qualitative data.

Proposed Method

Mix Methods is used because quantitative methods can describe the scores of items and data that have been analysed while qualitative data provide different views from various perspectives and provide a complex picture of the study situation (Creswell, 2008). The study is using the MMR method, referred to as Explanatory Mixed Methods which is a quantitative and qualitative study conducted consecutively in two data collection times and using relevant data collection forms (Creswell, 2008). The MMR method brings together both methods and methodologies for conducting research involving collecting, analysing, and integrating quantitative and qualitative research in a study (Creswell, 2012). Qualitative methods are used by researchers to further explain the findings than quantitative.

This survey study is very suitable because the researcher wants to collect information on opinions, views, current attitudes, beliefs of respondents and provide information of decision makers (Creswell, 2008). The interview method that will be used is an individual interview which involves respondents from each case study. The rationale of how the survey questionnaires and interviews were designed is how they complemented, reinforced the findings of the study, supported each other and are appropriate for answering research questions constructed based on the purpose of the study (Neuman, 2003). Semi -structured interviews were used in this study and these interviews were audio - recorded. Key methodological concepts will emerge during these three research stages:

- a) Unfreezing – Planning of preliminary analysis, gathering of data, feedback on the result, drawing up action plan
- b) Changing – Executing action plan, learning process, follow-up on actions
- c) Freezing – Result on change behavior, data gathering, measurement of result.

Table 3: Comparison between Action Research Condition and Current Practice

Action Research Condition	Current Practice Condition
Research must be PROBLEM-ORIENTED	Current assessment procedure lack of scoring percentage to measure consistency in the assessment and outcome of the accreditation visit report.
CLIENT must be at the CENTRE	LAM-MAPS as the client is at the centre as a provider between Panel Reviewer as the executor and the Higher Learning Institution at the receiving end.
CURRENT SITUATION must be included in the DISCUSSION	Reporting on the assessment and outcome of the accreditation visit, 12 weeks duration from the visit to report submission and approval
Research must PRODUCE empirically demonstrable propositions, DIRECT AND INDIRECT OBSERVATIONS.	Currently >70 participants able to conduct direct and indirect observation and provide feedback via MAPS professionals, academician & Accredited Institution.
PROPOSITIONS & FINDINGS must systematically FIT INTO A USEFUL THEORY.	Ascertain that accreditation is the way forward, comparison amongst international architectural bodies, other professional bodies and create an accreditation assessment framework and tools for improvements.

Source: (Author's Own Elaboration)

Through Action Research, which is mission oriented, knowledge is created through the process of change, Kurt Lewin (1947). Action Research approach is a method where researcher intervenes in and during the research to improve the quality of an organisation. According to Lewin's action research is best achieved through a mutual understanding between the researcher and MAPS at the practitioner. Action research focus on exploring the multiple determinants of actions, interactions, and interpersonal relationships in unique contexts and aim to deepen practitioners' understanding of complex situations so that their actions are better informed. Action research generates what Elliott (1991, pp. 52-53) calls 'practical wisdom' and Dreyfus (1981) and Elliott (1993a, pp. 66-70) call 'situational understanding'.

An Ontological assumption is where participants learn from trying to improve the existing condition. This is towards the study whereby the current assessment procedure lacks scoring percentage to measure the assessment and outcome of the accreditation visit report. An Epistemological assumption is the practice during accreditation visit exercise for advisory visit, reaccreditation visit, continual and compliance visit. Disciplinary in decision making will be the focus on developing practical result in solving real problems to set change in motion by creating consistency, ensure accuracy and delivering fast track to eliminate delays and reducing the workload during the accreditation process. Research goals remain to develop, implement, and evaluate action plans by producing a guided assessment through criteria and standards of accreditation for MAPS which may adopt an automated platform. Empowerment or to have autonomy in putting the action plan into place, Memorandum of Understanding (MOU) between researcher and MAPS will need to be established on implementing this model through a workshop that will be conducted for the accreditation panels.

Comparison groups are often used to diagnose the problem where the client must be at the center, which refers to MAPS as a client at the center, being a provider between the accreditation visiting panel as the executor and education provider at the receiving end. Comparison group will also be between the accreditation panel as the report provider and education provider as the report receiver. In data analysis, the basic steps of action research are meant to recognise the issue of studying and collecting related data on the identified issue, analysing the data collected is done to derive the action plan in which will be applied onto the action research result. Furthermore, an action plan represents the application of action research, and the result will establish a framework and measurement method for architectural accreditation; it will also inform how accreditation framework and its tools that is used to influence decision making process during an accreditation assessment. A revised accreditation assessment framework and producing a tool to assist in areas of architectural accreditation policy and practice, is equally important in measuring factors relating to accuracy, consistency, and relevancy in the delivery of accreditation visit assessment and outcome. Participant's role in research is explored by having collaboration with clients. Accreditation panels consists of expert with extensive experience, experts with experience and expert with less experience similarly to academician who are experts with less experience in accrediting public and private higher learning institution. Shall there be any political pressure arise, it is included in the context of action research art, presumably to be coming from the Ministry of Higher Education, Jabatan Kerja Raya Malaysia, and AEP as a related example.

Research Population Sample

MAPS Malaysia accreditation process and procedure was first conducted in 1981, after 40 years, the population of Accreditation Assessors and Accredited Programmes from Public and Private AEP and IDEP have accumulated to a total of 109, up to date. The entire intended population above was selected as a sample of this study (Creswell, 2008; and Gay & Airaisan, 2003). This study uses Purposeful Sampling, that is, all respondents for the intended sampling are from a specific selected group.

Through qualitative study, the sample used for semi-structured interviews involve Accreditation Assessors from Practitioners and Academicians who are experts with experience in their specific field (Creswell, 2008). A list of samples selected was provided to MAPS through a working paper presented and approval granted by MAPS council in February 2021. Further individual consent will be obtained prior to conducting the process. The intended research population which consists of appointed Visiting Panels, AEP and IDEP.

The selection of respondents was made because the researcher believes these respondents can supply useful information and will be able to provide input to understand the research question (Creswell, 2008). They consist of a group of MAPS Accreditation Panels who have followed a preparatory workshop conducted for Manual of Accreditation for Architecture Programme (MAAP) and Policy and Procedure of Accreditation for Interior Design Programme (PAID) prior to their appointment. Currently, as of October 2020, there are 83 eligible accreditation panels distributed under four different categories who are experts and experienced practitioners and academician.

Next, a research population will be selected among Education Providers from Architecture and Interior Design programmes who have undergone various accreditation process, namely for New Accreditation, Continual Accreditation, Advisory Visit and Compliance Visit. As of June 2021, a total of 26 public and private recognised higher learning institutions who are Architecture Education Provider (AEP) and Interior Design Education Provider (IDEP) that are potential respondents for the intended study.

Questionnaire Instrument

Through this study, a questionnaire was distributed to all respondents consisting of Accreditation Assessors, Architectural Education Providers and Interior Design Education Providers. According to Chua Yan Piau (2006), a questionnaire is a form of instrument or formal tool used to obtain information directly from respondents on a matter to be studied. There are two parts of the research instrument for this questionnaire which will address feedback from the Assessors (Part A) and Education Providers (Part B).

Interview Instrument

Through this study, interviews will involve respondents from selected group. Semi structured interview questions were asked to this group through recorded conversations. Interviews were widely used to collect data on phenomena that cannot be directly observed such as attitudes, beliefs, intentions, views, experiences, values held, interest (Patton, 2002). Interview questions touched on areas related to accreditation assessment and decision making issues, effects during accreditation assessment and the visit process, improvement on the accreditation assessment workload, duration and accuracy, challenges and consistency in outcome delivery. Items were modified the questionnaire instrument and an appointed expert evaluators to provide their

views on these items. The conclusion of the assessors, AEP and IDEP answers will be grouped according to the category of the assessment constructs. The interview data will then be analysed manually and made into a transcript through encoding the data. The list of AEP and IDEP for accreditation that is available for researcher to join as observers for the interview, pilot project, and questionnaire will be made available by MAPS.

Conclusion

Findings indicate that COVID-19 pandemics have a significant impact on the accreditation process, which has contributed to change or adjustment to the rules and requirements of the educational institutions due to changes in the fulfilment of the accreditation by institutions during this period. Accreditation bodies were also hit by the sudden modifications deemed necessary to be customised to acclimatise the sudden change in conventional methods. Special Note # 3-2020 by MAPS is intended to provide guidance to AEP to AEP who have been, are present and will be seeking accreditation from the Board of Architects Malaysia throughout the duration of the MCO by granting between 6 months to one-year extensions to the current AEP's application which cause as an impending factor to research progress. Will this change be permanent and when it affect the student's quality learning in the long term will that affect the accreditation assessment outcome? How will the new regulation fit into the current or proposed accreditation assessment framework? These questions seeks answers by various stakeholders and will find a light of solution through temporary online and hybrid accreditation process implemented after a year of half to the MAPS Malaysia system.

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