MANAGEMENT MODEL FOR HIGHER EDUCATION SUCCESS-A CONCEPTUALIZATION STUDY

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ABSTRACT

The global access to Information Communication and Technological tools has been a boon to the twenty first century pedagogy. It has changed the current era of Higher Education Set-up, where students have thirst for learning and demand for varied expectations from Educational Institutions. Under the circumstances, Educationalists should give at most priority to Student-centered learning which will go hand in hand with the existing system of learning. Yet, there is no concrete literature on the subject matter as student-centered learning as such has wide scope and applications. In realization of this fact, a practical and effective business model has been proposed in the present research. The proposed business model has five dimensions namely; Smart Class room, Technology, Peers support, Partnership and Governance. Each dimension has many sub-dimensions with the operational functions; its extensive scope for students is fully explored. The ultimate outcome of the proposed business model and its impact for ground reality will be investigated. Further, the constructed business model can be customized to suit students in various higher education institutions irrespective of the geographical locations in ASEAN context. The proposed research model is vital for educationalists when they design course curriculum for higher education institutions.
Key words: Student-Centered Learning; Dialogue; Articulate; Personalize; Ownership; Governance; Higher Education Success

1. Introduction

The students who pursue higher education have been increasing significantly especially in Asia over the last 20 years (Shahijan, Rezaei & Preece, 2016; Miyahara, 2015). According to Rahman (2016), there are currently 120,000 international students studying in Malaysia in which about 30,000 are pursuing postgraduate degrees. In addition to that, in terms of

economy Malaysia is benefiting about RM7.9 billion and this is expected to increase to about RM15.6 billion per annum by 2020. Higher education is paving its path towards being 'world class' which leads students for an international arena (Shahijan, Rezaei & Preece, 2016). The educational system is one of the main platforms for students to make contributions to the world and communities (Boone, 2015).In Malaysia, the chances are bright for an advanced higher education system in terms of quality when there are more international collaborations. (Shahijan, Rezaei & Preece, 2016). This can be seen when Rahman (2016) highlighted that Malaysia is currently home to 10 international university branch campuses which makes it the highest in Asia. The five British universities are such as Nottingham, Reading, Newcastle, Southampton and the newest, Heriot-Watt. The rest are universities from Australia which is Monash, Swinburne and Curtin, then China, Xiamen and Singapore (Raffles). Higher Education (HE) faces a very competitive marketplace throughout the past 10 years which leads to a situation where students been viewed as customers (Hunt-Grubbe 2010; Wells & Daunt, 2016). Apart from that students were also referred as informed customers of received knowledge, junior partners and professional services clients (Bedeian 2004; Ferris 2002; Armstrong 2003; Wells & Daunt, 2016). This scenario arises when there is demand from the students in terms of learning environments, flexibility and facilities (Wells & Daunt, 2016). The Malaysian international education has been growing rapidly and ranked 25th in the world in Higher education system (Rahman, 2017). The advantage of Malaysia's achievement in the international education market includes strategy of location between the West and East, diverse culture and a socio-economic related environment. The Higher education institution in Malaysia is striving to establish a holistic strategy to create a useful learning environment and make higher education hub at regional stage (Cheng, Mahmood, & Yeap, 2013). The present study focuses on a construction of a research model for Higher Education Success based on extensive literature review.

2. Literature Review

The Education quality in higher education institutions has a direct effect for employment of Malaysian graduates in top positions. There is gap between the expectations of the Malaysian industries and the syllabus curriculum in higher education system (Hanapi & Nordin, 2013). According to Zamri Bin Khairani, Bin and Razak (2013), among the four factors influencing the higher education success namely; courses offered, facilities provided, environment and university image, university image plays an important factor in influencing perspectives of students in selection criteria. Similar study was conducted by Ali et al. (2016) stated that higher education service quality (non-academic aspects, academic aspects, access, reputation

and program issues) lead to greater satisfaction, in turn brings better image for university and student loyalty. A Study by Migin, Falahat, Yajid and Khatibi (2015) states that academic reputation (cost of education, academic recognition, programme and facilities) is crucial factor for international students in choosing the universities. Alemu and Cordier (2017) conducted a study in Korea, found that academic quality, living and support service experiences were the strongest influence on higher education success and student satisfaction. Thus in the present study, higher education success is considered as the dependent variable.

2.1 Higher Education Success (Response Variable)

The higher education success is an achievement of an action or completing an objective within a specified period of time. It involves a project or task within a specified parameter. In this study, higher education success involves four dimensions namely career development; holistic education; research and strong alumni.

2.1.1 Career Development

The lifelong process of managing one's work experience within or between organizations. Career development is the action taken towards their career goals. Career development in a way set the target that need to be achieved and these will motivate one to assess their skills in order to achieve their target.

2.1.2 Holistic Education

Holistic education prepares students to meet any challenges that they may face in lives and in their academic career. It is about learning about oneself positively in aspects related to social, mental and emotional, beauty, experience and truth through connections to the community.

2.1.3 Research

Research is a systematic investigation in order to establish facts and reach new conclusions. Research discovers, broadens and develops knowledge in certain areas. Students are to broaden their horizon and understand the rationale for innovation to address problems and work towards continuous improvements. According to Zamri Bin Khairani et al. (2013), for betterment of Universities government should not focus only on teaching and learning but also on research and development.

2.1.4 Strong Alumni

A group of people who have graduated from the university. These people will extend their support to their parent university and provide all necessary help to the Alma mater. Strong parent relationship management in the university cause students to highly recommend to others. The existence of effective parent relationship management in the university to increase the level of student repeat patronage intension (Ogunnaike, Borishade, & Jeje, 2014). The

higher education success in the present context depends on five important predictors (variables) namely smart class room, user friendly technology, peers support, partnership and governance. Each predictor has many sub-dimensions with its conceptualization and the operational functions. The perceived benefits of these predictors form an intervening variable (mediating variable). The existing literatures on these variables are elaborated in the following sections.

2.2 Smart Classroom (Predictor-1)

The advent of Information and Communi(cations technology (ICT) in recent years has significantly driven the growth of smart classrooms. Smart classrooms are study theatres augmented with state-of-the-art technologies and facilities, primarily designed to foster holistic education and teaching opportunities (Chen et al., 2015). These classrooms help enhance the students' performance by integrating learning technology such as digital library, web applications and specialized software tools for presentations, e-board, e-notes, FAQs, quizzes, assignments, study material storage, audio/video lectures, audience response detection and listening aids (Keng Lin Soh et al., 2012). It intends to integrate human interactions, technology and traditional teaching approaches to form creativity, progression and flexibility learning environment (Ren & Xu, 2002). It is the best configuration for students to in the information age to acquire knowledge and instructors being a guide. The smart features are able to assist learners and instructors to overcome difficulties associated with learning in large classrooms and conserve time and reduce paperwork (Shen et al., 2014). It has become more common and allow students to interact interestingly, innovatively and eventually become autonomous learners. These technologies fortify student-teacher, student-student and teacher-student interactions evolving the students to become independent thinkers rather than regurgitating facts in a linear one way (Jo et al., 2016).According to Liu and Littlewood (1997), smart classroom is particularly a worthwhile education practice for Asian students who are not willing to express their views during class. Sevindik (2010), pointed basic teaching and learning activities involved in smart classroom and emphasize to evaluate the students with certain alternatives (Winer & Cooperstock, 2002). It is not merely about technology but how technology assists learners and makes learning deeper, meaningful and effective. Technology is used between instructor and students. The environment of classroom where face to face interactions is well supported with technology. Thus, smart classroom leads to a positive commitment and lifelong interest in education. Studies found that the inclusion of technology in smart classroom has been overwhelmingly positive. Smart

classrooms in this study complement four dimensions namely brainstorming, articulate, personalize and ownership.

2.2.1 Brainstorming

Brainstorming is frequently associated with student-centered learning and experiential learning methods (Kilty, 1983).The idea of brainstorming is for the students to be involved in learning process. It actively encourages students to generate ideas through freewheeling group discussion in order for students to put forward as much ideas as possible. It is suggested that brainstorming is able to improve creativity among group members (Osborn, 1963). By integrating brainstorming academic instructors could engage groups of students with different theme for each group to generate smooth flow of interactions, leading to creative ideas and solutions for any kind of problems at hand. In a smart class environment, technology comes in handy for conducting such brainstorming sessions to have team efforts.

2.2.2 Articulate

Learning demands personal changes which includes understanding and appropriate activities and actions. This involves the dimension of knowing, understanding why and carrying out the action appropriately (Karakas &Kawas, 2008). It enables one to act differently and have greater understanding of his/her actions. According to Gagne (1977) the traditional method of learning emphasized cognitive presence and this cannot be viewed as a feature of a learned person. Students should have the ability and confidence to speak fluently and coherently, especially in public. It exposes them to a stimulating atmosphere of learning with each other, thereby enables them to attain eloquence in communication without stage fear.

2.2.3 Reflective Engagement

The new generation, called Digital Natives or Net Generation with the overconfidence and overreliance on Internet applications, face problems in learning. According to Karakas et al. (2015), students are not able to concentrate during lectures. Digital natives are overwhelmed with information and complexity in the digital ecosystem (Tapscott, 2009) and tend to feel burned out, forgetful, and addicted to technology. As a consequence, students find it difficult to focus on information and to search for deeper meaning and decide what one wants (Karakas &Kawas, 2008). To overcome this problem, reflection is deemed pertinent. Reflection maximizes critical thinking and analyzes reasoning (Mamede et al., 2008). Reflection in a way link the divide between thought and action which gives an opportunity for students to illustrate their action and activities, evaluate their challenges, and recognize their

victory (Allan & Driscoll, 2014). Dewey (1910) highlighted that it is possible for reflective thinking to lead to effective educational transformations. Universities are regarded on what kind of students and teachers they possess. Reflection in a way allows rational thinking. The Learning outcomes of students (Skills and Knowledge acquisition) do not rely only based on the perceptions of higher education quality but in terms of student co-creation (effective interaction with other educational actors and efforts) and as well on psychological case in connection to their studies. In addition, these perceptions towards learning outcomes have higher effect on satisfaction overall with higher education experience and in more general perception towards affective learning outcomes (self-concepts, attitudes, goals, values, worldview and behavior). This somehow confirms that when students are satisfied and their perceptions are higher in term of affective outcomes, the student intentions to leave their studies are lower.(Duque, 2014). In Dubai, Students at Branch campuses, as elsewhere are concerned with their experience in classroom and use of and access to learning resources. The competitiveness of higher education hubs as many campus branches are operated strive to achieve in increasing satisfaction of students could cause a significant competitive advantage by improving student achievement and student retention and drawing attention to new students positively through a word of mouth.(Wilkins & Stephens Balakrishnan, 2013).

2.2.4 Ownership

According to Dewey(1916), students' ownership "give pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results" (p. 181). In this study, Ownership refers to the complete control of knowledge and experience that have been acquired by the students. It not only instils individual responsibility and helps in exhibiting the inbuilt talents and skills of every student to boost up morale, but also demands for fullest thinking. Physical evidence refers to tangible elements service in higher education institutions that can be touched and seen by students. It therefore includes aesthetic design of university building and amount to which university ground and buildings are clean. It is significant since its influential part in determining attitudes that students incorporate towards the university(Siti Falindah Padlee & Azizul Yadi Yaacop, 2013). According to Vaz and Mansori (2013), the highest effect on student satisfaction is tangibility of infrastructure facilities.

2.3 Peers support (Predictor-2)

The human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them (Vygotsky, 1978). With the help of social interaction, such as guidance from teachers and peers, learners can understand concepts and

ideas that they cannot grasp on their own. It is an initial help for students to learn and gradually the help is reduced as soon as the students are skilled in that particular area (Bruner, 1983). Development happens when children's acquired knowledge is applied to solve new problems. Soon, the self-regulative capacities will emerge as the learners are able to control their own actions and behaviors (Vygotsky, 1981). There are three dimensions for the interactions in the higher education which includes peer students-student interaction, Student-instructor interaction and student-content interaction.

2.3.1 Students' interactions

Student-student interactions or peer support is one of the richest learning resources (Arendale, 2015) and a growing internationally as a worthwhile pedagogical practice in education (Williams et al., 2012). When successfully organized and carried out systematically, peer support can enhance high-level cognitive processes (Volet et al., 2013). According to Meed (2003), peer support is related respect, shared responsibility, and mutual agreement of what is helpful. With the advent of technology, peer online learning has been introduced. Peer online leaning enable students to work with time and spatial constraints, minimize isolation and learners seem to be motivated and participate well (Raymond, 2016).This approach of 'peer online learning groups' provides a fertile learning space and assist students helps to model and acquire knowledge effectively. This study considers the interactions that happen off line as well as online.

2.3.2 Teacher Support

Teacher support refers to a wide variety of instructional approaches, educational services, counseling in the effort to help them accelerate their learning progress, meet up with their peers, meet learning standards, or generally succeed in school. Teacher support also encompasses a broad array of educational strategies, including tutoring sessions, supplemental courses, after-school programs. According to Anderson (2003), students-teacher interactions are considered as highly valued interactions from the student's point of view.The higher educational institution lecturers must be provided training intensively and consistent courses which can increase their competencies or skills in the flow with the current technology and latest information. Because of inexperienced lecturers, students do not get sufficient inputs in accordance to the outlined curriculum (Hanapi & Nordin, 2013). Yee, Hazlin and Mokhtar (2013), has stated that language is one of the challenges faced by the international students and local lecturers. According to Ali, Zhou, Hussain, Nair and Ragavan (2016), significant factor of creating knowledge value is the quality of curriculum and academic staff including the delivery and structure of high education programs.

2.3.3 Students-content interaction

The student- content interaction is gaining momentum with the availability of digital materials (Anderson, 2003). As such students are able to be independent learners, engage with learning materials that have be provided by the instructors and well as available web-resources. These materials can further be used for student-student and students-teacher interactions (Small, 2012). Woodall, Hiller and Resnick (2014), pointed out that sense making in higher education is a constant motivated effort to understand the connections between places, people and events which aid the formation of situational understanding and awareness and helps students resolve doubts. According to Mark (2013) a customer focus in higher education does not carry authority but to ensure student satisfaction by ingraining quality into the learning process through quality instruction, quality assessment and greater attention to students' needs.

2.4 Technology (Predictor-3)

User friendly technology refers to convenience, connection and control are claimed to be the factors driving the Net Generation's take up of information and communication technologies, and that take up is increasing steadily (ECAR, 2008). Users opt for technology that perfectly accomplishes tasks to their advantage by best reducing their manual efforts. It is, therefore, imperative that any devised technology harbors real world application and organizational scenarios that end-users experience every day. Technologies that students are exposed to should be designed and built in such a way that it is easier even for novices to use the tool. Providing students with interactive technology they are comfortable with, indicates them that their preferences are valued and facilitate them to perform well. According to Samokhvalova (2017), online promotion in Education Malaysia must be more emphasized since internet tool is becoming an important channel for students intake. In the context of system approach model the effective performance appraisal indicates that effective system design, managerial systems practices and system support are the most important perceptions influencing employee's perceived fairness of effective performance appraisal (Phin, 2015). However to contrast student satisfaction can be associated with outcomes of system practices. According to Wei Chong, Yen Yuen and Chew Gan (2014), students are getting more dependent on IT for knowledge sharing and acquisition. In this scenario, user friendly technology integrates four dimensions, which are accessibility, application, customization and innovation.

2.4.1 Accessibility

With the progress of Internet, e-book, e-journal and research papers are abundant and this has provided scope for students to further venture into their areas of interest (Saberi&Abedi,

2012). As such web- resources have become their main way of finding knowledge and information. In this optimistic atmosphere, tools and technology employed at universities must be ensured to be readily available to meet direct and indirect accesses of students and faculty members. It has to provide users a convenient experience with face value.

2.4.2 Applications

Application is the action of putting something into operation and being usable for a particular purpose or in a special way. Students have to realize on how to utilize the latest technology optimally and effectively. The effective utilization of the employed tools has to be frequently measured for its consistency and validity. Newer applications of technology should be thought of for trans-disciplinary approach. For instance, universities could mitigate expenses by integrating an e-library along with lecture presentations in a common portal. Similarly, all departments may be interconnected for information sharing.

2.4.3 Customization

Customization can be defined as "slight variations of standard configurations and are typically developed in a response to a specific order by a customer (Eppinger& Ulrich, 1995, p.22). In this study, customization refers to make, build or alter to individual or personal specification. Software and hardware applications used at universities could be adapted to fit the appropriate needs of the end-users, who can be students, management, faculty members or other staff. Academic institutions could make use of its students to modify the existing configurations according to the specifications required by the end-users.

2.4.4 Innovation

According to De Lano (1994), innovation refers to change, development, novelty or improvement. Innovation requires change from the regular work and demands simple tasks to be performed in an exemplary manner. Academic instructors should periodically update teaching methods, examination patterns, student counselling, technology applications and practical syllabi, which automatically induces novel thinking and personality development among students. In this study, innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful.

2.5 Partnership (Predictor-4)

In an educational institution, maintaining cordial rapport and integrity with one and another is crucial, as it not only accommodates shared responsibilities, but also promotes opportunities for oneself. Being in a partnership instills self-confidence by empowering one's leadership skills and ability to make decisions. Bridging the gap between graduates, academic advisers

and educators creates a vibrant positive platform to widen one's network. Partnership can be established, on a one-to-one or one-to-many arrangement, between student, teacher, department, management, university, industry and general public. There are four dimensions to maintain partnership, which are potential training, industry linkages, social media and research publications.

2.5.1 Potential Training

Relevant training programs by specialized experts in the areas concerned will make students rejuvenate subject knowledge. Students at beginner levels require exposure and experience from seniors. It is the moral responsibility of the academic institution to organize suitable orientations, workshops, conferences and hands-on training schedules to cater to the need of various segments of students. Apart from trainings within the institution, universities could encourage groups of students to participate in training programs and competitions at national and international levels on a rotational basis.

2.5.2 Industry linkages

In the social and commercial educational offerings, unless industrial clients form part and parcel of universities, the industry-institute interaction becomes abridged. Industry linkages are so important for practical exposure, potential job opportunities and career advancement of students who graduate every year. Furthermore, universities could collaborate with other universities, within the country or overseas, to establish joint venture programs that widens prospects for student groups. According to Rahman (2017), industry linkage in Malaysia must progress further in signing memorandums of understanding. It must aim towards quality and depth of collaboration between industry and universities, which guides to product commercialization, innovation, joint research, grants and as well as opportunities for job placements for students.

2.5.3 Social Media

In the current scenario, academic reading alone does not make one professional, unless ideas are taken from, and contributed to the society. Social media plays a key role to get in touch with compatible expert communities, thus allowing students, lecturers and academic organizations to create and exchange information of common interests and ideas. Students' participation in social media is to be encouraged at all levels.

2.5.4 Research Publications

Departments should support and recognize graduates actively participating in conferences, practical workshops, and newsletter, magazine and journal article publications. Moreover, the

education ministry of Malaysia demands each university to produce more number of journals and books for deepening the subject knowledge of students.With the National Economic Policy (NEP) of Malaysia focusing on higher income groups, students could think of becoming individual entrepreneurs by gaining in-house experience at government and private sector industries in collaboration with their alma maters. One among the seven National Key Research Areas (NKRAs), proposed by the Government Transformation Program (GTP), emphasizes the improvement of student outcomes. Educating the youth through Student-Centered Learning Research model as discussed above will definitely pave way to fulfil the objectives posed by NKRA and simultaneously upgrade Malaysian Universities' World Rankings.

2.6 Governance (Predictor-5)

According to Lee, Sirat and Wan (2017), the Ministry of Education in Malaysia is a Central Processing Unit for Universities which deals with the selection of students for admission to the public universities. A research study conducted by Wan et al. (2017) stated that Malaysian faculty members' main sources of concerns are the institutional governance in the form of university bureaucracy. The challenges like unrealistic deadlines, ineffectiveness of university leadership, heavy-handed administrators, top-down control, frustrating university policies, too much oversight, lack of direction, rigidity of civil service career tracks, weak professional staff, retention of non-performers make real problems for higher education success. The government making numerous changes in the governance of private and public higher education institutions, setting-up of the MQA (Malaysia Qualification Agency) for checks and balances. The government is certain that quality education is provided to the students at any cause in higher education institutions in Malaysia with qualified lecturers (Grapragasem, Krishnan, & Mansor, 2014). According to Rahim, Bakar, Nizam and Talib (2013) many of the international activities are operated independently without proper coordination of joint ventures. Conceptualization and reflection of faculty process which took place without the direction of administrative and scholarly expertise in the field of higher education institutions. In the perspectives of faculty, emphasize on decentralized leadership and freedom for academic culture is the need of the hour. The present study deals with three dimensions of governance which are Corporate Social Responsibility, Discipline and Code of conduct for staff and students.

2.6.1 Corporate Social Responsibility

According to Amiri, Ranjbar and Amiri (2015), corporate social responsibility (CSR) is a concept whereby the institution incorporate environmental and social issues in their business operations and in their interactions with their stakeholders on a voluntary basis. There is a strategic importance in education for current era which is as systematic strategy, helps changes to benefit each and every individual in the society, at the same time education creates life chances and liberating individuals from knowledge ignorance. Maintaining green aspects in and around higher education institutions is the primary aspects of corporate social responsibility. Education provides fundamental properties and services for meeting the essential needs of the nation like health, security, defense, technology, communication and cultural development among others.

2.6.2 Code of conduct for staff and students

Student discipline is considered as one of the most important factor in all higher education Institutions. Perhaps no other single subject so dramatically reflects in public opinion on the students' attitude and higher education brand image. Students and staff are strictly expected to adhere to the rules and regulations of the higher education institutions and must maintain proper dress code, punctuality, sincerity and honesty. Ultimately, the reputation and recognition of the higher education institution is based on the student and teacher character build-up not only for the individual career growth but also to create good value system in the society.

Based on the variables and their dimensions discussed in sections 2.1-2.6, the study proposes the following proposition:

Proposition-1:*Smart Classroom, Peers Support/Interactions, User Friendly Technology, Partnership and Governance have positive impact on Higher Education Success.*

2.7 Perceived benefits (Mediating Variable)

According to McMillen et al. (1997) perceived benefits are experience of the positive consequences that caused by specific action. It is used to explain individual's motives of performing behavior and adopting an intervention or treatment. In this study perceived benefits related to four dimensions namely language skills, subject skills, computing skills and rationale thinking.

2.7.1 Language skills

Teaching of any language emphasizes listening, speaking, reading and writing. These skills are deemed pertinent when one is searching for a job. Employers tend to look for someone who has excellent language skills to interact with superiors and workers. Without good language skills, one is considered less competent than what they are and end up disappointed in the job searching. Success in job searching can greatly increase when you are able to communicate in several languages. According to Open University (2016), language skills are important to: Understand and make the most effective use of study materials; Develop the specialized language and vocabulary relevant to subject; Interpret assignment questions and select relevant and appropriate material for response; Write well-structured and coherently presented assignments, without plagiarism; Communicate your needs to tutors; Work productively with other students.

2.7.2 Computing skills

In this digital oriented economy, it is obvious that the use of computer is necessary in all job and not confined to technology-centered position. Computing skill is the ability to use computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. Basic use of computer such as sending emails, word processor, using internet effectively and spread sheet software are some of the skills which is required in most of the current jobs. Those who possess these skills will stand out about those who do not.

2.7.3 Rationale thinking

Rationale thinking is related to conscious reasoning and not affected by emotions. It requires logical, objective and systematic methods in reaching a conclusion or solving a problem. The ability to think effectively to solve problem and make wise decision is admired by many particularly employers as it add value in working environment.

Based on the constructs conceptualized in Sections 2.1-2.7, the present study makes the following three propositions:

Proposition-2: *Perceived Benefits from Higher Education have positive influence on the Higher Education Success*

Proposition-3: *Smart Classroom, Peers Support/Interactions, User Friendly Technology, Partnership and Governance have positive impact on Perceived Benefits from Higher Education.*

Proposition-4: *Perceived Benefits from Higher Education mediates the relationship between Smart Classroom, Peers Support/Interactions, User Friendly Technology, Partnership, Governance and Higher Education Success.*

3.0 Model Description

The proposed research model is displayed in Figure 1 with the identified predictors (independent variables) as discussed in sections 2.2 to 2.6 and the response variable in the form of Higher Education Success (section 2.1). Further, the mediating effect of perceived benefits from higher education points of views (section 2.7) is the real originality of the proposed Research model. Social Cognitive Theory (SCT) supports the proposed research model. SCT claims that individuals cannot be spoon-fed with information. Instead, there is a need for students to make an effort to construct knowledge. A stimulating environment for students to learn effectively is deemed pertinent. The environment that allows learners to explore new ideas, concepts, have hands on experiences and figure out solution to problems. To achieve this, SCT has emphasized on learning that takes place in a social context with fruitful and dynamic interactions with person, environment and behaviour. SCT states that educational programme needs to include cognitive, skills and environmental changes (Lee et. al., 2016). Lent and Brown (2006) states that the social cognitive constructs can often be assessed at satisfactory levels of internal consistency reliability with relatively brief scales. Bandura (1977) terms self-efficacy as the level of confidence that one has in their own ability in completing and reaching goals. In fact, self-efficacy beliefs are task specific, thus one with high self-efficacy tends to portray positive attributes such as persistence, strategic planning and high achievement (Bandura, 1997; Zimmerman, 2000; Hong et. al., 2016; Lent et. al., 2016). Self- efficacy can be viewed as the performance of oneself in the presence of the required skill set (Barling, & Beattie, 1983). Antoncic, Auer Antoncic, and Aaltone (2016) have mentioned that Bandura (1977) introduced the concept of self-efficacy, and was originated from SCT. Comment from peers and experts are disputed and argued which contributes to the development of independence in thinking. In such a situation learning takes place and thinking occurs to discover new knowledge. Therefore, the SCT permits students to construct knowledge, strategized and stay motivated to accomplish their tasks. Such positive attitudes contribute to the development of independence in thinking. This is precisely what the student-centred model attempts to achieve in this study. The model is aligned with the 21st century learning that requires people to think and employ the knowledge for individual and social purposes and not for solely memorizing and recalling facts. As such, developing students' critical thinking is crucial in helping them to master knowledge from different content areas.

Predictors	Mediating Variable	Response Variable

Smart classroom

- Brainstorming
- Articulate
- Reflective Engagement
- Ownership

Peers support

- Student's Interaction
- Teacher Support
- Student-Content interaction

Technology

- Accessibility
- Application
- Customization
- Innovation

Partnership

- Potential Training
- Industry linkages
- Social Media
- Research Publications

Governance

- Corporate Social Responsibility
- Code of conduct for staff and students

Perceived Benefits

- Language Skills
- Computing Skills
- Rationale Thinking

Higher Education Success

- Career Development
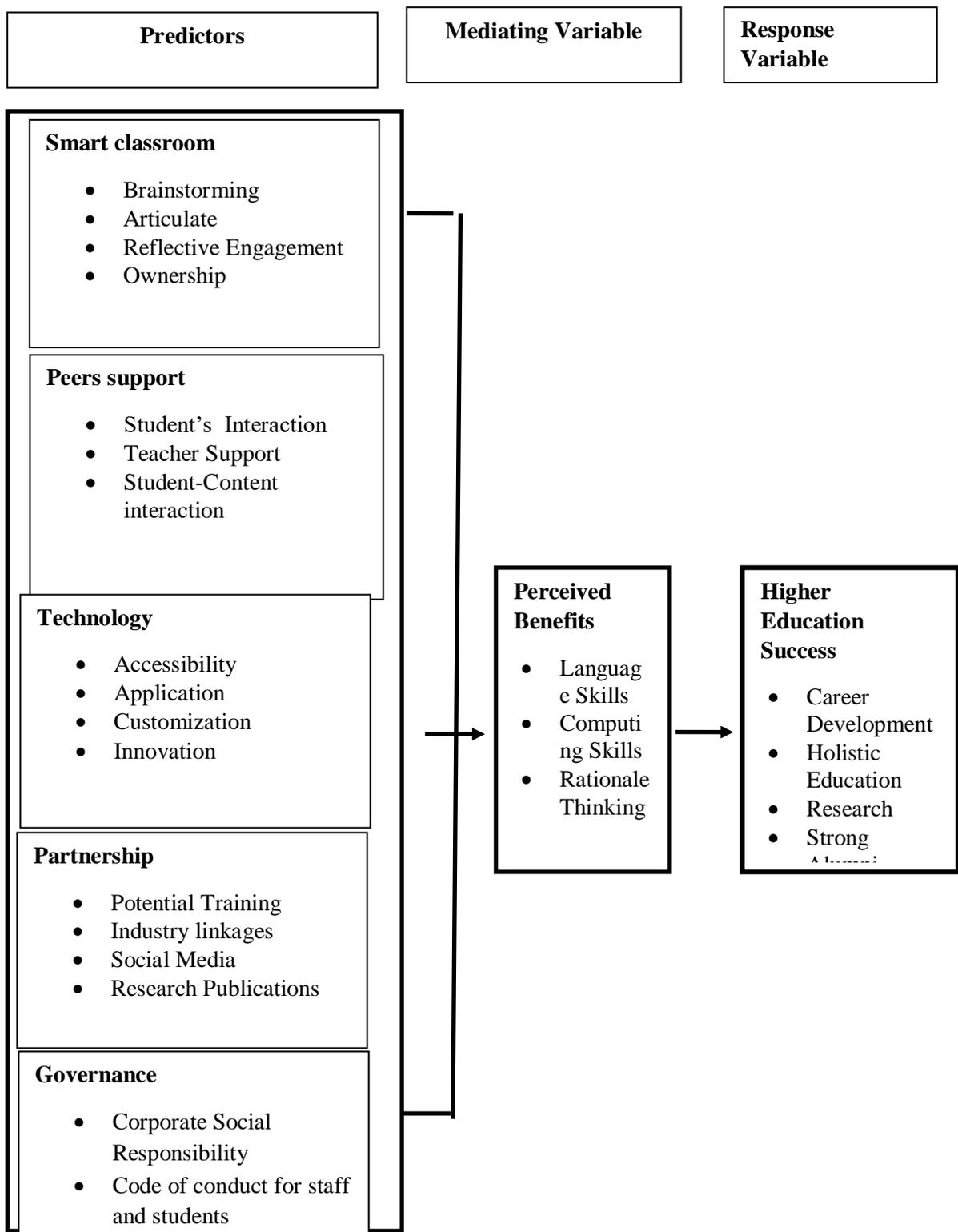- Holistic Education
- Research
- Strong Alumni

Fig:1 Research Model for Higher Educations Suceess

4.0. Concluding Remarks

The present study conceptualize a research model for higher education success for both private and public organizations within the context of developing countries and is a

pioneering research particularly in the context of Malaysian Higher Education Institutions. The research model has the predictors of student-centered learning via smart classroom, peers support/interactions, user friendly technology, partnership and governance. Each of these variables along with their dimensions are elaborated with an extensive review of literature. Furthermore, the ultimate perceived benefits of the predictors of student-centered learning namely the language skills; computing skills and rationale thinking are emphasised. The primary survey questionnaire has been provided in the Appendix. Besides, the nature of the present article is of conceptual research, educationalists should give at most priority for teaching and learning which will go hand in hand with the modern system of learning. Thus, the present study ensures the strategies to be followed for higher education success which will have direct benefits not only for higher educational institutions but also for students' community in general.

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Appendix: Questionnaire Items

Smart Classroom (SC):					
My Higher Education Institution	**Strongly Disagree**	**Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
SC1: has exceeded my expectations	**1**	**2**	**3**	**4**	**5**
SC2: provides smart class room-facilities (TV, Projector, White Board)	**1**	**2**	**3**	**4**	**5**
SC3: provides comfortable seating arrangement	**1**	**2**	**3**	**4**	**5**
SC4: provides quality of timely feedback on assignments (other than grades) received from instructors	**1**	**2**	**3**	**4**	**5**
SC5: provides brainstorming session at timely intervals	**1**	**2**	**3**	**4**	**5**
SC6: provides students, an opportunity to articulate the subject	**1**	**2**	**3**	**4**	**5**
Peer Support (PS):					
My Higher Education Institution	**Strongly Disagree**	**Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
PS1: provides healthy learning atmosphere (such as self-reading, watching videos, using software programs, participating in simulations, exploring resources, and working on course assignments)	**1**	**2**	**3**	**4**	**5**
PS2: teacher provides consistent and sufficient exercise in learning and training skills for the students	**1**	**2**	**3**	**4**	**5**

	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
PS3: teacher provides consistent and effective engagement with students in open-ended questions, discussions, investigations, and/or reflections	1	2	3	4	5
PS4: have class communication which was consistently conversational with student questions often guiding the discussion	1	2	3	4	5
PS5: teacher provides sufficient time to support me in my learning process	1	2	3	4	5
PS6: teacher was able to explain the subject matter effectively with two-way communication	1	2	3	4	5
PS7: encourages project presentation with team work	1	2	3	4	5
PS8: provides interaction between student and teacher often	1	2	3	4	5
PS9: provides scope for student interaction with other student in the class	1	2	3	4	5

User Friendly Technology (UFT):

My Higher Education Institution	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
UFT1: has no difficulty in accessing and using e-learning system	1	2	3	4	5
UFT2: provides e-learning that would increase my academic productivity	1	2	3	4	5
UFT3: has good digital library with all amenities	1	2	3	4	5
UFT4: uses BYOD(Bring your own Device) learning system that would improve my learning performance	1	2	3	4	5
UFT5: has sufficient IT systems and processes to share knowledge	1	2	3	4	5
UFT6: faculty member should often record his lecture through E-podium and upload it in LMS (learning management system)	1	2	3	4	5
UFT7: provides personalized learning hub like e-learning using BYOD(Bring your own Device)	1	2	3	4	5
UFT8: provides implementation of the BYOD initiative to stimulates my desire of exploring course-related e-resources	1	2	3	4	5
UFT9: helps implementation of the BYOD to fosters collaboration in course work	1	2	3	4	5
UFT10: uses advanced software for teaching and learning	1	2	3	4	5

Governance (G):

My Higher Education Institution	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
G1: provides encouragement to participate in community/society activities	1	2	3	4	5
G2: offers financial support for community/society activities	1	2	3	4	5
G3: has no language barrier	1	2	3	4	5
G4: provides formal and informal activities to cultivate knowledge sharing	1	2	3	4	5
G5: Staff are trustworthy	1	2	3	4	5
G6: makes sure that local students behave fairly towards other ethnic groups	1	2	3	4	5
G7: Students are treated fairly by professors/lecturers	1	2	3	4	5
G8: has availability of scholarship / financial support	1	2	3	4	5
G9: manages corporate social responsibility (cleanliness, hygiene, green atmosphere)	1	2	3	4	5

G10: makes sure that students are well disciplined	1	2	3	4	5

Partnership (P):

My Higher Education Institution	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
P1: provides academic curriculum which are relevant with the Job market	1	2	3	4	5
P2: provides career opportunity after graduation	1	2	3	4	5
P3: has recognition by future employers	1	2	3	4	5
P4: provides opportunities to continue higher studies	1	2	3	4	5
P5: provides opportunities to interact with industries	1	2	3	4	5
P6: provides opportunities to interact with other academic institutions	1	2	3	4	5
P7: provides opportunities to develop leadership qualities	1	2	3	4	5
P8: provides opportunities to participate in extracurricular activities	1	2	3	4	5
P9: has links with social media for student participation	1	2	3	4	5

Perceived Benefits (PB):

My higher education Institution	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
PB1: helps me able to seek relevant information through internet	1	2	3	4	5
PB2: helps me able to seek relevant information through many software's/ database	1	2	3	4	5
PB3: improves my command in communication in writing and reading	1	2	3	4	5
PB4: helps me become confident in conversation	1	2	3	4	5
PB5: helps me to gain skills to solve potential problems	1	2	3	4	5
PB6: helps me to be responsive in giving new ideas	1	2	3	4	5
PB7: helps me to generate new thinking	1	2	3	4	5
PB8: helps me to gain subject knowledge	1	2	3	4	5

Higher Education Success (HES):

I am satisfied with my Higher Education Institution because	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
HES1: I developed an accurate picture of what was expected of me	1	2	3	4	5
HES2: it helped me to get good job employment	1	2	3	4	5
HES3: I was involved in research & development leading to publications	1	2	3	4	5
HES4: It provides access to school's alumni to cultivate career opportunities	1	2	3	4	5
HES5: people recognize easily about my institution	1	2	3	4	5
HES6: it has higher scope and openings in the industrial area	1	2	3	4	5
HES7: I developed a strong network with batch mates/senior mates	1	2	3	4	5
HES8: It helped me personal learning towards career development	1	2	3	4	5