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## **Editorial**

Journal of Education and Vocational Research (JEVR) provides avenue for quality research in the everchanging fields of Education and Vocational Research and related disciplines. The research should not be limited by any narrow conceptualisation of educaton and vocational research, but comprise interdisciplinary and multi-facet approaches to education and vocational theories and practices as well as general transformations in the fileds. Scope of the JEVR includes to subjects of educational technology, educational administration, educational planning, measurement and evaluation in education, developmental psychology, special education, distance learning, vocational education, technology-based learning, environmental education, business education, educational psychology, physical education, innovation, vocational training, knowledge management. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to JEVR. It is JEVR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of JEVR comprises of papers of scholars from Indonesia, Vietnam, Australia, Brunei, Malaysia and Thailand. Internal control, corporate governance, risk management, vocational training, educational training, statisitcail techniques, teaching & learning aids, performance measurement models, work responsibilities & stress, undegratuate needs, mass communication, academic achievements and social & entrepreneurial education were some of the major practices and concepts were examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity for the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

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# **PAPERS**

## Internal Control and Risk Management in Ensuring Good University Governance

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**Abstract:** Human resources development has been a crucial issue in the emerging economies of Indonesia. The growth of Universities and other form of Higher Education in Indonesia indicates the raise of public and government awareness of educational quality. This awareness must be followed by higher education management ability for designing strategies and implementing them to produce high quality graduates. This study is expected to have contribution to enhance the management quality of Private Higher Education. This research aims to evaluate the implementation of Internal Control and Risk Management in ensuring Good University Governance. The data were collected from leaders of all Private Higher Education located at Special Province of Yogyakarta, the destination for most prospective students who will pursue further studies. Descriptive qualitative and regression analysis were performed to analyze the data. Research finding revealed that most of Private Higher Education had sufficient information and knowledge in implementing Internal Control, Risk Management, and Good University Governance. Other result showed that Internal Control and Risk Management positively influenced the implementation of Good University Governance. Limitation of this study was the respondents' comprehension of the risk management terms that were not very well understood by some of the Higher Educational Institution's Leaders.

**Keywords:** Accounting, Internal Control, Risk Management, Good University Governance, Higher Education

## 1. Introduction

Young generation is an important investment for a nation. This generation will determine the direction of progress or setbacks of a nation. Education is a means to form young people; therefore the presence of Higher education institution is very important for the future of Indonesia. Besides having a very strategic role, there is also a very tight competition among universities within Indonesia as well as universities overseas. Currently in Indonesia, there were around 3,200 public and private universities with varieties of education quality. To be able to face local and global competition, universities must be able to provide programs that meet the market requirement, excel in the development of science, have an effective internal control, able to manage the potential risks and have good corporate governance. Universities require a system that is capable of ensuring the passage of their accountability process through effective internal control in educational organizations.

Reliable and effective internal control systems are not only necessary and intended for profit-oriented organizations but also for non-profit organizations including universities. Through the implementation of reliable internal control, universities will be able to effectively and efficiently improve the achievement of organizational objectives and to adapt in the organizational operating environment. In general, internal control is defined as a process that is influenced by the board of directors, management and other personnel, designed to provide reasonable assurance of achieving the objectives related to operations, reporting, and compliance (COSO, 2013). The term Internal Control in this study refers to the definition of the Committee of Sponsoring Organizations of Tread way Commission (COSO), which is a joint initiative of five private sector organizations, which was founded in the United States. Since 1992, COSO published an integrated internal control framework that continues to change in accordance with the development of the organization's operating environment. The rapid changes today that demand transparency and greater accountability systems such as the complexity of the environment surrounding the organization, technological advances, globalization, stakeholder engagement, require a reliable internal control to support effective management decision-making (COSO, 2013).

Besides the issue of accountability, universities also face a variety of challenges and risks. Risk is defined here as the likelihood that an event will occur and will affect the achievement of the goals set by the organization (COSO, 2013). Because the risk cannot be eliminated, the organization should design assessment and risk analysis in various fields (teaching and learning, finance, research, student, etc.) in order to minimize or avoid these risks. One study by the University of Sydney (2008) mentions that the educational organization has four risk groups, namely the risks associated with the activities of teaching and learning, innovation and research, student experience, and relationships with external parties.

Improper risk management will have a significant impact on the development of educational organizations in the future. All organizations face the risk that comes from within and outside the organization, although not all educational organizations face the same types of risks. It is necessary to identify potential risks that possibly faced by an organization. A research by Vancouver Island University (2013) divided the risk of education organization into four categories: strategic risk, operational risk, risk reporting and compliance risks. IBM (2010), for example, has the concept of risk identification and possible solutions for higher education institution. One of the identified risks is the unavailability of an adequate analysis of the risk management system for educational organization. Educational organization also requires good governance, especially in increasing public confidence to hand over the task of educating the them. Good University Governance becomes an obligation for educational organization. Application of Good University Governance is expected to improve the quality of education.

Yogyakarta is the barometer of the higher education institution governance in Indonesia. A total of six State Universities and 117 private universities and colleges are established in Yogyakarta. The existence of many universities and colleges has implication for Yogyakarta as a gathering place for young people from various regions with which Yogyakarta is also known as mini Indonesia. The conditions that have been described in the previous paragraphs attracted researchers to look at the implementation of internal control, risk management implementation and practice of Good University Governance in private universities and colleges in Yogyakarta. Furthermore, the researchers are also required to identify the relationship between the implementation of internal control and risk management to the implementation of Good University Governance. This research is important to map-out the management of private universities and colleges in the province of the city of education. The results of the research will provide input and contribute to the improvement of the quality management of these universities and colleges.

## 2. Literature Review

Governance can be defined as a process when organizations take important decisions, determine the parties involved in the process, and how the responsibility thereof (Graham et al., 2003). Thus, Good University Governance can be defined as a process conducted by the College for decision-making. There is various opinions on the Good University Governance. Some of them are transparancy and disclosure; accountability; responsibility; independency; and fairness. Benefits of Good Governance for Universities. In general, the application of Good University Governance has benefits for universities and colleges. First, the institution's internal communication patterns are more qualified as to lead to openness. Second, Good University Governance is rising college's image as an institution of professional kind. Third, it is obtaining the trust from outsiders as a credible institution. Internal Control is defined as a process that is influenced by the board of directors, management and other personnel, designed to provide reasonable assurance of achieving the objectives related to operations, reporting, and compliance (COSO, 2013). With reference to the internal control integrated framework issued by COSO, the organization is expected to be able to develop a system of internal control that can adapt to changes in the operating environment and business, to reduce the risk to some extent and to support decision-making and management of a good organization.

Meanwhile, the organizations that implement the COSO Internal Control system will get benefit in the form of, among others: the direction to the achievement of organizational goals in the areas of operations, reporting, and compliance (laws and regulations referred to); availability of manual procedures and policies, systems, and documents simultaneously affects people who are involved in the management of the organization to act according to its capacity; the flexibility of the system that adapt to the organizational structure. (COSO, 2013). According to the COSO, there are five Internal Control Components (2013). First component is environmental control. It is a set of standards, processes, and structures as the basis for control within the organization. Second component is risk assessment. Risk is defined as the chances of events that will affect the achievement of objectives. Risk assessment aims to identify and assess risks through a series of dynamic processes. Third, control activity. These activities are defined as actions that help management to control risk through a series of activities in accordance with policies and procedures. Information and Communication are the fourth component. They are very important as controlling measures because good information must be supported by proper communication. The last component is Monitoring. This monitoring activity is used to ensure that the components of other control goes well.

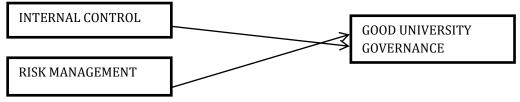
Risk is defined as the likelihood that an event will occur and will affect the achievement of the goals set by the organization (COSO, 2013). Furthermore, COSO describes risk management as a process, which is influenced by the board of directors, managers, and other personnel, applied at strategic level and throughout the organization, which is designed to identify potential events that may have an impact on society together, and manage risk within a certain tolerance limit so that the organization still able to achieve organizational goals. The National Association of College and University Business Officers (NACUBO) published a report on risk management in the universities in 2003 (Tufano, 2011) which encourages university leaders to implement and improve the effective management programs. This study found that there are five levels of how institutions manage the risks (Tufano, 2011). Good Governance is an issue that is widely discussed in various studies. In general, research on good governance focuses on good corporate governance. Research from Suyono and Hariyanto (2012) found that the internal control, internal audit, and organizational commitment positively influenced good corporate governance practices. The study states that the Internal Control is able to assure the reliability of financial reporting, operations are efficient and effective, as well as compliance with applicable rules and policies. In other words, if the Internal Control goes well, then good corporate governance can be applied with good anyway. Companies and universities have the same thing in common, that is, managing the funds. Improper management of funds will lead to ineffective use of funds. This can be caused by the long procedure of services and open the posibility of fraud. Good Internal Control will provide the basis for the formation of a good management of higher education institution. Based on these reviews, it can be formulated hypotheses as follows:

# H1: Implementation of Internal Control has a positive effect on the implementation of Good University Governance

Research associates with the good university governance is not many, especially in Indonesia. Adamov et al. (2010) conducted a study that discussed the relationship between good governance with Management Information System of Higher education institution. This study is based on the understanding that the technology will support the implementation of Good Governance in higher education institution. The conclusion of this study indicates that a good management information system will support the implementation of Good Governance in higher education institution. Research discusses the implementation of good governance in universities and institutions in Pakistan. The study tried to determine the relationship between management and good governance. The results showed there was a positive relationship between them. Based on the findings above, the hypothesis can be formulated as follows.

# H2: Risk Management has a positive effect on the implementation of Good University Governance

Both of these hypotheses can be described as follows:



## 3. Methodology

The population of this research is all universities and colleges in Yogyakarta Special Region Province. The entire population will be made as respondents in this study. Data was collected by distributing questionnaires to all universities and colleges located at in Yogyakarta Special Region Province. The questionnaire was addressed to the head of higher education institutions (Rector / Director / Chairman, or vice-chairman). Internal control is a process that is influenced by the board of directors, management and other personnel, designed to provide reasonable assurance of achieving the objectives related to operations, reporting, and compliance (COSO, 2013). Internal Control variables will be measured using the instrument according to COSO (2013), that consisted of the control environment, risk assessment, control activities, information and communication, and monitoring activities. Risk Management is defined as a process, which is influenced by the board of directors, managers, and other personnel, applied at strategic level and throughout the organization, which is designed to identify potential events that may have an impact on organization, and manage risks within certain tolerance limits so that the organization is still able to achieve organizational goals (COSO, 2013). Risk management variables will be measured using the instrument according to the National Association of College and University Business Officers

(NACUBO) related to students, education and teaching, research, governance, financial, health, safety, and security, human resources, asset management, information technology, environment.

Good University Governance can be defined as a process conducted by the university for decision-making. Good University Governance variables were measured using instruments transparency, accountability, responsibility, independency, equality and fairness. First, the data will be analysed to describe the respondent profiles and explain the implementation of internal control, risk management and the implementation of Good University Governance. Further, the data will be analysed/examined in the form of testing the effect of the implementation of the Internal Control to the implementation of Good University Governance and examine the effect of the implementation of the Risk Management to the implementation of Good University Governance. Tests are carried out using simple linear regression and multiple linear regression.

## 4. Results and Discussion

The number of private universities in Yogyakarta Special Region as listed in the Directory of Higher education institution in Yogyakarta in 2013 (Dikpora, 2013) were 117 universities and colleges with the following details:

Table 1: Type of Higher Education Institution and Response Rate

Type of Higher Education Institution	Number of Quesionnaires Distributed	Number of Quesionnaires Processed	Response Rate
University	18	12	67%
Institute	57	42	74%
Colleges	42	29	69%
TOTAl	117	83	71%

From Table 1, it is noted that the population were 117 universities and colleges located at Yogyakarta Special Region. There were 96 respondents (82%) who completed and returned their questionnaire and only 83 respondents (71%) who responded with completed data that can be processed further. With a response rate of 71%, it can be concluded that the data may represent the the population. Respondents in this study include the leaders of higher education institutions comprising of 68 respondents (81.93%) who were chairman or vice-chairman, three respondents (3.61%) who were the heads of the bureau and 12 respondents (14.46%) who did not mention their position (see Table 2).

Table 2: Respondents' Profile

Type of Education Institution	Higher	Rector/ Director/ Chairman	Vice Rector/ Director/ Chairman	Head of Bureau	the No Identity
University Institute		5 27	3 8	1 1	3 6
Colleges		20	5	1	3
TOTAl		52	16	3	12

According to the respondents, their stakeholders'levels of satisfaction to their service are as follows. It was stated that 70 respondents/84.33% were satisfied), 3 respondents/3, 61% were very satisfied, and only3 respondents /3.61%were not satisfied. There were 6 respondents (7.23%) who did not provide their answers. Implementation of Internal Control in higher education institution was divided into five components: Internal Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring. The results of the study in general and for each component can be described below. In general, the respondents stated that they have 79% of all statements relating to the five components of the COSO internal control (see Table 3).

**Table 3: Implementation of Internal Control** 

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Type of Higher Education	% Yes	% No	% N/A
Institution			
University	84.2	10.6	5.2
Institute	78.3	17.1	4.6
Colleges	78.1	16.2	5.7
Total	79.1	15.8	5.1

The 79.1% yes answer means that the Higher Education Institution has had 79.1% of the requirements documents, designs, as well as good organizational management procedures that will encourage the organization to achieve its goals in a healthy, effective and accountable manner. Universities have more complete documents and procedures when compared with those of institute and colleges. To provide further details of the implementation of each component of internal control-, the first component is the Internal Control Environment that includes a code of conduct, performance appraisal system, the design of recruitment and career development, organizational structure, clarity of function and authority, as well as the quality manual and procedures activity. The results of the research for this component showed that 84.17% of the respondents claimed to have and implement various policies that will provide a good foundation for the management of higher education institution. This means that 84.17% of respondents have already designed the work and the governance system of their organizations. The second component of internal control is a risk assessment that indicates the extent to which the organization has a process of identifying risks, the design process reduces the incidence of risk, as well as its risk management documents. The results of the study have shown that only about 53% of respondents had a planning and designing risk management. The initial design of risk management is an important issue because of the emergence or the risk will affect the achievement of the organizational goals. When the potential risk are not being prepared and anticipated well, this organization will unlikely be able to achieve the goals of the organization as it has been formulated in the vision and mission statements.

The third component of internal control is the control activities. Control activities comprise a separation of duties and authority within organization. Next, the higher educational institution must present controlling function. It must also record, document, and manage assets as well as determinate the value of assets. Finally, the higher educational institution has good system which constantly update employee data and organize cash spending well. The results showed that on average, 80.22% statements that describes good internal control has been implemented, and only 14% of the components of internal control are not yet implemented. The next component of internal control is information and communication that is reflected on the protection and data security systems, the use of a password to access certain applications (such as finance), backing up data regularly, and maintaining the security of documents from fire and flood. The results showed that 82.83% of respondents said that they had those components. The last component is monitoring. Management periodically reviews the ongoing projects, the follow-up lead on the recommendations of the internal and external audit results. The results showed that 83.13% of respondents have already conductedmonitoring activities, especially at universities (97, 22%). However, there were 20% of Institution and Colleges that didnot conduct monitoring of ongoing projects and/ or did not follow the recommendations of the internal and external audit reports.

The potensial risks listed in this reseach were students, education and teaching, research, governance, finance, health and safety and security, human resources, asset management, information technology, and the environment. The average score of the risk management obtained was 129.1 out of 198. The higher this score, the better the risk management was applied. This score is associated with the handling of a variety of potential problems that would arise. The 129.1 was equivalent to the value of 3.39 according to the Likert scale (between value enough (3) and good (4). Further fundings showed that the lowest score was the financial condition and research. This showed that the financial problems was still one of the risks that not yet be managed properly. The mean score of it was 2.67. It indicates in the value of lack (2) and sufficient (3). Financial component covers the diversity of sources of operational funds, loans from external parties, control budgeting and financial management, abuse/manipulation, monitoring and financial audit. The second lowest risk score was research. The average score was 2.83. This suggests that the amount, quality, funding and research cooperation with other parties (industry, universities, government) were still low (under sufficient). In the meantime, it is well understood that research is the heart of any educational institution. Further analysis on the impact of this various risks to the achievement of the vision and mission has the value of 3.32 (between moderate impact value (3) and

large (4). The results of testing the impact of the potential risks to the achievement of Vision Mission showed a significant positive impact. (see Table 4).

Table 4: The Influence of Risk to the Achieving of Organization's Vision and Mission

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	51.398	21.251		2.419	0.018
Risks	0.578	0.163	0.366	3.541	0.001

Good organization's governance will certainly provide a significant difference to the progress of the organization, whether it is a for-profit organization or a non-profit one, (Society of Corporate Secretaries and Governance Professionals, 2008). In this study, GUG was measured using the statements that must be answered with alternative (1) if the higher education institution does not yet have any document of provisions/regulations and good practices have not been implemented, while alternative (5) when the higher education institution has document of provisions/regulations completely, and the implementation has been going well. Based on the respondents' answers, the results showed that the average value obtained from all respondents was 3.7. It means that the answer was between alternative (3)document of provisions/regulations provided partially and implementation is not fully completed and alternative (4) document of provisions/ regulations was complete but the implementation has not conducted completely. In general, it means that the Higher education institutions have already had most of the documents but the implementation thereof has been partially done. The Indonesian institutional accreditation bodies have demanded and encouraged education institutions in Indonesia to prepare and implement various documented rules/regulations as a reference for good university governance. This research also found that there was influence of internal control to good university governance (GUG). The results showed that there was a significant positive effect of internal control to GUG (see Table 5).

Table 5: The Regression Analysis of Internal Control and GUG

Model	Unstandardiz	Unstandardized Coefficients		t	Sig.
	В	Std. Error	Beta		
(Constant)	41.630	7.134		5.835	.000
Internal Control	2.077	0.305	0.604	6.818	.000

Analysis of the influence of Risk Management Implementation to GUG showed a significant positive effect of the risk management to GUG. It means that when the risk management shows a high value (which means that the Higher Education Institution has been well prepared in managing potential risks), the better the implementation of GUG will be.

## 5. Conclusion and Recommendations

The research found that the majority (79.1%) Higher Education Institutions in Yogyakarta Special Region have implemented internal control system which is related to internal control environment, risk assessment, control activities, information and communicaton, and monitoring. Control environment consists of a code of conduct, performance appraisal, career development, organizational structure, quality manual and procedures. Risk assessment includes identification of organizational risk, the design process to reduce the risk and risk management documents. Control activities involves the separation of powers and duties between functions within the organization, asset management, accountable of registration and payment system, and financial accountability. Information and communication includes computer-based data security. Monitoring includes a review of ongoing projects as well as the follow-up on the recommendations of internal auditors. We can understand that the Higher Education Institutions' condition relating to the implementation of risk management in general is still at sufficient category. Risk management that need special attention was related with finance and research.

Next, we can conclude that implementation of Good University Governance is quite comprehensive but its implementation has not been engaged completely. However, there is a positive effect of internal control to the implementation of Good University Governance. In addition, there is a positive influence on the implementation of risk management implementation to Good University Governance. Hence, this research is expected to encourage higher education leaders to continue their exploration of modern management for higher education institution especially related to the risk management. This research

has limitations with regard to the understanding of the respondents that varied especially related to risk management that could possibly influence the results. Therefore, Association of Higher Education Institutions and the Directorate of Educational and Culture should pay special attention to small private colleges and institutions as well as provide adequate assistance to them due to their limited resources. Proper assistance to them is expected to enhance their education quality. It becomes the responsibility of the faculty members, educators and their leaders to promote qualified researchs and partnership with industry, government or other universities. Further research can be done by taking different samples from different regions in Indonesia or abroad.

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# Using the Nominal Group Technique to Explore Key Stakeholders' Perceptions towards Vocational Education Training in Vietnam

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Abstract: The Nominal Group Technique (NGT) is a structured process to gather information from a group. The technique was first described in early 1970s and has since become a widely-used standard to facilitate working groups. The NGT is effective for generating large numbers of creative new ideas and for group priority setting. This article reports on a case study carried out in Vietnam on exploring the perceptions of key stakeholders towards the vocational education training (VET) sector where the study will apply the NGT. Therefore, this article has two purposes: (1) describing what NGT is and outlines how to use it; and (2) describing the case study findings by providing an analysis of data generated during a workshop led by the author. The findings of the case study indicated that the Government policy factor or the roles of Government on the VET sector are ranked as the most important force impacting upon the quality of VET programs in Vietnam. Both the established research technique used to collect data and present the findings of the case study have particular significance as they contribute to a major problem which has not been researched seriously in Vietnam in the past as has happened in many other countries. Importantly, the study provides an overview of the Vietnamese VET system which both VET experts in Vietnam and international scholars will be able to understand.

**Keywords:** Nominal group technique, case study, key stakeholders, and vocational education training sector

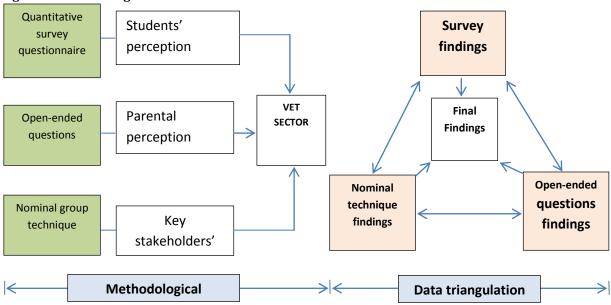
## 1. Introduction

The Vocational Education Training (VET) sector in Vietnam has a pivotal role in national development and is identified as potentially of equal importance as the university sector. Currently, the VET system has 1337 VET providers appearing in all 63 provinces and big cities of Vietnam. It attracts over 1.3 million enrolled students annually and is a priority sector of the Government of Vietnam (GDVT, 2011). In order to enhance the effectiveness and find out the factors impacting the quality of the VET programs in the context of the numbers of secondary students enrolling to VET sector decreasing, the author has undertaken research into the perceptions of students, parents and other key stakeholders. This paper is the third phase of a study to explore the key stakeholders' perceptions towards the VET sector in Vietnam. In the first phase, quantitative survey questionnaire data were statistically analysed using SPSS software version 19 to explore current students' perception about the VET sector that was quantified by seven dimensions, namely: entry requirements, facility and equipment, teacher's ability, recognition of qualification, student career and job potential, quality of curriculum, social values and soft skills. The findings of the first phase indicated that students' positive perceptions of the VET sector included facility and equipment, teachers' ability, quality of curriculum, and social values and soft skills (Dang & Tanya, 2014). The results also revealed the dimensions of curriculum quality and entry requirements significantly impacted on students' intention to enrol and complete the VET programs.

The second phase was six open-ended interview questions exploring the parental perspectives of the six issues, namely (1) quality and types of VET input; (2) VET teachers' ability; (3) VET facility and equipment; (4) linkages between VET providers and industries; (5) recognition of VET qualifications; and (6) job potential of the VET sector. These questions were designed based on the seven dimensions that represented the VET in the first phase. The results of second phase indicated two main positive and negative themes emerging on five of the issues, the exception being the dimension of the relationship between VET providers and enterprises. The findings revealed that the issue of job potential was evaluated positively by parents' viewpoints. However, it pointed out that there was wastage of trained manpower due to the weak and fragile relationship between VET providers and industries (Dang, 2015). The third phase (this study) used the nominal group technique (NGT) approach to unpack key stakeholders' perceptions towards VET sector to find out the factors impact the quality of VET programs. Therefore, this article has two purposes: (1) describing what NGT is and outlines how to use it; and (2) describing the case study findings by providing an analysis of data generated during a workshop led by the author. The key question discussed in the workshop was: What do you think the factors impact the quality of vocational education training programs? At the end of the workshop, the factors that emerged

as influencing the quality of VET programs are ranked. Both the established research technique used to collect data and present the findings of the case study have particular significance as they contribute to a major problem which has not been researched seriously in Vietnam in the past as has happened in many other countries. Importantly, the study provides an overview of the Vietnamese VET system which both VET experts in Vietnam and international scholars will be able to understand. The pending next paper of the research will present the triangulation method to triangulate or cross check the results from the initial three phases and provide the final conclusions of the whole project. The results from the surveys, open-ended interview questions, and nominal group technique will be compared to see if similar results emerge. If the conclusions from each of the methods are the same, then validity is established (Mays & Pope, 2000). Figure 1 describes how data will be triangulated.

**Figure 1: Data Triangulation Method** 



In the third phase of the study, six stakeholders were formally invited based on their roles, the close relationship and a clear understanding on the VET sector. The roles of two policy makers from vocational education training sector and technical education training field will make policies and generate the mechanisms. The roles of principals of secondary schools will help students in advices and guiding career choice in the future. The appearance of manager of industry at the workshop will contribute the ideas on the roles of building up curriculum, evaluations and recruit VET graduates. The VET lecturer will present their understanding and experiences insights the VET sector.

# 2. Nominal Group Technique

**Definition:** Nominal (meaning in name only) Group Technique (NGT) is a structured variation of a small-group discussion to reach consensus (Van de Den & Delbecq, 1971). Originally, the NGT was introduced by (Van de Den &Delbecq, 1971) as a tool that helps disadvantaged citizens in community settings. The technique includes two main stages namely focus group discussion, and voting phase. It produces semi quantitative data and its format is used to promote meaningful, interpersonal disclosures among participants by gathering equally weighted responses. NGT evaluation tends to offer valid representation of group views and is well suited to group evaluation activities (Pokorny & Lyle, 1988). The technique has been widely applied in health, social services, education and government organisations. The contributors taking focus group can be whole cohorts or representative groups of participants.

**Development:** Since its original development, researchers have modified and adapted the process of the NGT, but basic tenets remain central to the NGT process which comprises of two core stages (1) identification the problems by discussion and (2) voting to make decisions quickly. Nominal Group Technique requires direct participant involvement, in a way that is non-hierarchical, and where all participants have an equal voice and all responses to the posed question have equal validity (Harvey & Holmes 2012). The generation of the responses to the posed question takes place in silence, with no

conferring with other participants, nor seeking elucidation or clarification from the researcher. This silent approach to ideas generation enables participants to develop their own thoughts and ideas, without interference or pressure from others, lessening group dynamics that may be unhelpful or undermining to the overall process (McMurray 1994). Valuing of participants individual contributions is enhanced by the fact that through the NGT process, the collection of data and the analysis following ranking of responses, all participants remain anonymous (Steward, 2001), thus allowing all involved to be heard, regardless of position held outside of the participant group

Participants: There has been debate as to what constitutes the optimal size of group for NGT. Van de Ven and Delbecq (1971) suggest that NGT groups should be made up of no more than 5-9 participants, but that large group (9-more than 200) can be accommodated within this process. Whereas, Horton (1980) identified his groups as ranging from 7-10 individuals, whilst Steward (2001) in her work with Occupational Therapy and Physiotherapy students had groups of between 5 and 8. Allen et al. (2004) worked on a number of participants between 9 and 12, noting that this afforded the researcher a group that would be manageable, but that would also allow for the generation of a range of opinions, whilst Harvey and Holmes (2012) suggested that a group of between 6 and 12 would have been ideal. Interestingly, Carney et al. (1996) noted that from their pilot project findings, that a minimum of six participants was required, in order to engender a sense of 'safety' within the group, illustrating this point by outlining that one of the pilot groups in the study had only contained five members and it was perceived that this could be felt as 'mildly threatening'.

NGT versus focus group discussion: A number of authors provide reviews of qualitative research methods (Bellenger, Bernhardt, and Goldstucker, 1976; Bogdan and Taylor, 1975; Higginbotham and Cox, 1979). One of the most insightful of these reviews has been presented by Calder (1977) in which he distinguishes among the exploratory, clinical, and phenomenological dimensions of qualitative research. Although NGT possesses some characteristics of each of these dimensions, it is perhaps closest to what Calder defines as exploratory research. As he points out, a major strength of exploratory methods is the ability to identify major issues or attributes associated with a particular research problem. However, there are several characteristics of standard focus groups that restrict this method to exploratory applications. First, the output of the session is relatively unstructured. Although the session can provide an extensive list of attributes, the process does not facilitate establishing attribute priorities. Second, a small subset of the participants may be outspoken and dominate or intimidate the rest of the group. Third, to minimize this potential domination and to ensure the desired depth of coverage, a highly trained session leader is required. Finally, the necessity to bring participants to a meeting room virtually precludes the use of probability sampling procedures. However, the quota sampling methods usually adopted are entirely consistent with the exploratory nature of the focus group process.

Nominal Group Technique shares with exploratory focus groups the facility for identifying issues relevant to target consumers, and also adds a number of other very useful features. First, in addition to providing an extensive listing of issues or attributes, NGT enables the researcher to identify priorities for each individual session participant. Second, an advantage of NGT is that the structuring and establishing of priorities makes it possible to analyse similarities and differences across multiple NGT sessions. Third, because of the procedural rules established at the outset of the session, the NGT session leader is able to ensure that all participants have an equal voice in the session. Fourth, the authors' experience indicates that the added structure of NGT sessions simplifies the process of training session leaders. In other words, session leadership is somewhat less of an art than appears to be the case with focus group sessions. Despite these advantages, it must be remembered that NGT shares with focus groups the need to assemble participants in the meeting room, and, hence, the necessity to adopt quota sampling procedures.

## How to prepare for NGT workshop

**The Meeting Room:** Prepare a room large enough to accommodate from five to nine participants. Organize the tables in a U-shape, with a flip chart at the open end of the U.

**Supplies:** The U-shaped table set up will need a flip chart; a large felt-tip pen; masking tape; paper, pencil, and 3" x 5" sticky notes for each participant.

**Opening Statement:** The opening statements have four main parts namely (1) warm welcome to all participants to take part the workshop followed by the purposes of the workshop or the importance of the task, (2) introducing the role of each participant and mention of the importance of each member's

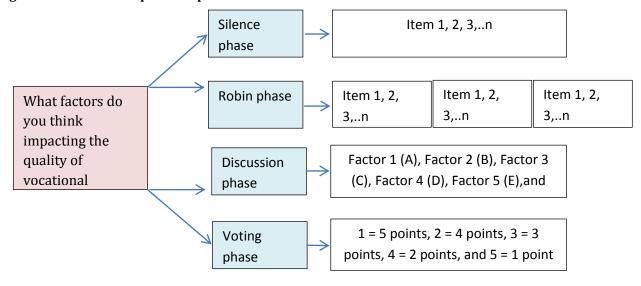
contribution, (3) Moderator presents details the guidelines of the NGT process until to all members of the group fully understand, and (4) an indication of how the group's outputs will be used.

The Process of NGT: This section details the NGT process which was applied to the workshop in Vietnam. The process is a combination of the focus group discussion and voting phase that was developed by (Varga-Atkins, 2011) and supported by (James et al., 2004; Alison et al., 2004; Anthony, 2013) studies. It has5phasesnamely: (1) Present key question to the participants; (2) Silent phase; (3) Round Robins phase; (4) Discussion/item clarification phase, and (5) Voting phase. It is noted that all members of group were handed out the instructions of technique one week before the workshop opening so that all participants have time to review the guidelines of the technique. The reason of handing out early instructions of the technique was the majority of the participants who had not used the technique before. Before the first step of discussion, the instructions of the NFGT are explained one more time by author to make sure all participants understand fully and clearly. Table 1 and Figure 2 below describe the instructions of the technique including five steps.

**Table 1: Instructions for performing the Nominal Group Technique** 

Phases	Activities
Phase 1	Present key question on the flip chart and read loudly to the participants for feedback
	What factors do you think impact the quality of vocational education training?
Phase 2	Silent phase
	Participants will be formed a group of six with a flip chart and pens.
	Issue the pink sticky notes to each participant.
	Without conferring or group discussion, based on the knowledge and experience of participants, they
	write down all factors that they think impact to the quality of vocational education on the pink sticky
	notes (one factor per one pink sticky note).
Phase 3	Round-robin phase
	In turn, participants stick one pink sticky on the flip chart without comment or discussion until all ideas
	or pink sticky notes are exhausted or run out. No comment and discussion in this phase because of
	preventing some participants from advocating for their position and influencing other members in the group.
	If one idea (factor) of the participant on the stick note is the same or similar to another's, then facilitator
	comments and sticks or groups these together.
Phase 4	Discussion/item clarification to make themes
	All members of the group clarify and discuss the unclear factors or items until everything is understandable
	All these items are grouped, edited and named into themes, without discarding any item.
	The facilitator list sand letters A, B, C, and so on these themes in order of popularity on the flip chart.
Phase 5	Voting phase
	Based on the list of the themes, participants write down all themes with the letters on the paper, and rank
	their top five factors from 1 to 5.
	Participants award 5 points to their top item, 4 to the second, and so on.
	The facilitator collects these papers for data analysis.

Figure 2: Nominal Group Technique Process



## 3. Advantages and disadvantages of NGT

**Advantages:** The primary advantage of the NGT over other strategies is the enhanced opportunity for all participants to contribute ideas and to minimize the domination of the process by more confident or outspoken individuals (Vella, Goldfrad, Rowan, Bion & Black, 2000). Other advantages (Nelson, Jayanthi, Brittain, Epstein & Bursuck, 2002; de Ruyter, 1996; Brahm & Kleiner, 1996) include:

- The generation of a greater number of ideas than other group processes.
- The generation of more creative ideas than other group processes.
- The ease of interpreting the results (as ideas are generated, voted on/ranked, and evaluated at the session itself).
- A greater sense of accomplishment for members (as the results are available immediately after the session).
- The minimal resource requirements (a venue, facilitator, whiteboard, paper, sticky notes and pens).
- The comparatively efficient use of time.

*Disadvantages:* However, it is important to recognise the disadvantages or limitations of nominal groups (de Ruyter 1996; Brahm & Kleiner 1996). These include:

- The limited number of topics and issues that can be covered (tend to be single-topic sessions).
- The limitation of idea generation to the meeting itself (i.e., no opportunity for participants to think about the issue in depth and generate additional ideas in their own time.
- The need for participants to feel comfortable with, and remain within, a very structured group process.
- The lack of anonymity, which may limit participants' willingness to express their views.
- The necessity for all members to be capable of, and comfortable with, expressing their ideas in writing and then communicating them verbally to the group.
- The time commitment required from participants, and the necessity for them to attend a specific location at a given time, which may limit participant numbers.
- The lack of generalizability of the results to the wider population due to the specific characteristics of the participants (both in terms of who is nominated to attend, and who agrees to participate.
- The limited nature of the data (i.e, in terms of number of respondents) often requires a follow-up survey or other quantitative methodology prior to making final decisions about an issue.

Case study in Vietnam: It is noted that this section provides an overview of VET sector from the perspectives of six key stakeholders who have a clear understanding on, and close relationship with the VET sector. The references in this section were cited and quoted by Vietnamese VET experts and officers from Government who have direct responsibilities, and are in charge of the VET sector. It is acknowledged that a major limitation on the findings is the small sample size but given the exploratory nature of the study, the input of the chosen stakeholders was nevertheless valuable. The views from the six key stakeholders and references from reports by the organizations such as the General Directorate of Vocational Training (GDVT), the Asian Development Bank (ADB) and the World Bank are the main official sources to portray the workings of the whole VET sector in this case study. This section provides a series of items to impact upon the quality of VET sector and to point out the weaknesses are exist in the VET system. Six key stakeholders contributed total of 43 individual items and these were generated into 5 themes or factors namely Government policies, Curriculum, The teachers' ability, Facility and equipment, and Perception of society on the VET sector in answering the research question. At the end of the workshop, they voted the factor of Government policies or the role of Government as the most important issue impacting the quality of VET programs. Table 2 shows the results of Nominal group technique.

Facilitator: Vi Hoang Dang Date: 26 March 2014

Numbers of participants to participate the workshop: 6

Numbers of factors for voting: 5

Topic or question: Please find out what factors do you think impact the quality of vocational education training?

**Table 2: Results of Nominal Group Technique** 

Factors	Voted received 1 is most important = 5 points 5 is least = 1 point	Total Score (points)	Ranking
Government policies on the VET sector	1+1+1+1+2+3	27	1
Curriculum	1+2+2+3+3+5	20	2
The teacher's ability	1+2+2+4+4+5	18	3
Facility and equipment	2+3+4+4+5+5	13	4
Perception of society on the VET sector	3+3+4+4+5+5	12	5

The Government policies and mechanism on the VET sector: Based on the analysis and discussions of six key stakeholders, the factor of Government policies on the VET sector has been ranked as the most important force to impact the quality of VET programs. Stakeholders indicated the policies need to be changed, updated or edited. Regarding the micro level policies on the VET sector such as the policies on the VET system, six stakeholders have pointed out that the complexity of the skilled trained human resource system is the main reason impacting the quality of vocational education training programs. Currently, Vocational Education Training is under the management of the Ministry of Labour Invalid Social Affairs (MOLISA), and Technical Education (TE) belonging the Ministry of Education and Training (MOET) are both responsible for producing the skilled and technical workforce of the country. According to the statistics from MOLISA (2013), at the moment, there were 1337 VET providers, and 500 Technical schools (MOET, 2007). As result, the investment from Government on VET sector appears dilute, and not efficient (Vu, 2015). Thus, six key stakeholders suggested Government should merge the two systems mentioned above into one system to be called Technical and Vocational Education Training system (TVET). This idea is in accordance with the decision of the Prime Minister (630/QD-TTg dated 29-05-2012) to assign to the concerned ministries responsibility to design the National Qualification Framework (NQF). Such action would result in the merging of the two systems (VET and TE), and help with the recognition of the skills and qualifications of the workforce among the countries in the South East Asian region and other nations in the world. Interestingly, the Vietnam Congress passed the Occupation Education Law dated 27-11-2014 to unify and merge VET and TE to become one Occupation Education system under the direct management by the Prime Minister. In addition, six key stakeholders suggested that the Government should issue more preferential policies to attract and encourage the domestic and international investors to take part in the field of VET. Currently, the policies of the Government just stand at tax breaks for investors (Vocational Law, 2006). As reported by (GDVT, 2011), only 2.4% of domestic and overseas companies participate in vocational training activities. The companies have established the VET providers for the purpose of training the skilled workforces in order to achieve growth and development of these companies.

In relation with the autonomy policies and mechanism, the participants at the workshop also recommended that Government approve the full autonomy of public VET schools. This would allow VET providers to decide issues such as curriculum, training time, admissions, scientific research, productionbusiness, organization, personnel, and finance. However these decisions must be accountable to the society especially school activities related to the quality of vocational training (Vu, 2015). In fact, Government just only encourages VET providers autonomously but the detail policies and full instructions for this are not still available. Regarding the policies related to VET students and VET lecturers, six stakeholders also proposed to change, modify and supplement VET policies in order to attract and encourage students to participate the VET programs. VET policy maker who joined the workshop argued that currently the Government has issued the policies to encourage students to participate VET sector by the 50% reduction of tuition fee. However, the reduction has not been effective to increase enrolments. The solutions to attract secondary students to enrol in VET programs are pointed out by Vice minister of MOLISA (Nguyen, 2014) who suggested that graduated year 9 students who enrol in VET programs receive 100% reduction of tuition fee. He also reminded that the VET institutions must look for the enterprises for cooperation in vocational education. The ultimate goal is to make the best opportunities for students to find the job. At the workshop, six key stakeholders indicated that, the Government need to promulgated wage framework at each level such as vocational college and vocational secondary. Based on the salary bracket, the enterprises will pay salary to VET graduates suitable with their qualification, knowledge's and experiences. Another disadvantage for VET graduates currently, the Government has no policies and mechanisms to encourage and stimulate employers and enterprises to recruit skilled employees and VET graduates. There are some small and medium businesses employing

unskilled workers to work in the company. These businesses only train some employees to meet the needs of the production process in order to make employees to remain with the business for the long term. Presently, businesses are benefiting from the recruitment of skilled workers at no cost including not paying taxes which may be directed to the VET providers (Cao, 2015).

In relation with the policies on the remuneration and salary of the VET lecturers, six key stakeholders have indicated that these policies for VET trainers have many shortcomings. The policies do not encourage or attract potential people to become VET lecturers nor create their loyalty and dedication to the occupation. The requirement to be a VET lecturer necessitates candidates to be a teacher and have technical skills and expertises. However, the wage policies do not show the preferential distinctiveness of being a VET lecturer. In addition VET lecturers do not have their own the salary framework. Their salary is paid according to the salary of the high school teachers (Decree No. 204/2004 / ND-CP, dated 14-12-2004) and is not equal to the salary of lecturers in the higher education sector. Vice director of the VET research department (Pham, 2015) indicated that the unattractive salary for VET teacher is one of the main reasons for the failure to attract qualified, skilled and experienced people to become VET lecturer. He warned that many skilled and qualified people who work in the VET sector want to move out to other sectors to get higher incomes. In addition, there are no policies to encourage VET teachers to improve their qualifications including the absence of mechanisms for businesses and vocational training institutions to facilitate the VET lecturers for engagement with industries in order to annually improve their knowledge and experiences. According to the Asian Development Bank (ADB, 2014), the present salary level of vocational teachers is comparatively low, and does not encourage or reward improvement of professional and technical skills. These low salary levels make it difficult to recruit skilled technicians or production managers from industry to become VET teachers. There is no incentive program to attract people with extensive industry experience into the teaching profession. Viet Nam does place a high value on teaching and the role of teachers in society, which may explain the absence of policies to improve the status of technical teaching.

One of the problems which six key stakeholders discussed was the policies and mechanisms related to the relationship between VET providers and businesses. According to the Vocational Law (2006), the Vietnamese Government has no specific policies to determine the rights and responsibilities of both organizations involved in this relationship. Enterprises have not seen any advantages in this link whereas VET institutions provide what programs they have available. This relationship does not generate common points between VET providers and enterprises thus leading to VET graduates being disadvantaged because they do not meet the requirements of employers. On the industrial side, enterprises have to invest money and efforts to retrain VET graduates. They are also passive in the process of personnel recruitment (Hoang, 2014). Whereas, VET providers face the difficulties of raising the numbers of student to enrol in VET programs while subjected to the impact of negative social strata (Cao, 2015). For the Government there is wastage of trained manpower. According to the (GDVT, 2011) report, there was 34.27% of VET graduates did not find a job after 6 months of graduation from VET providers. In other words, the VET graduates do not meet the requirements of industries due to the weak relationship between VET providers and industries. It was the consensus of the key stakeholders at the workshop that the Government has not developed detail policies and mechanisms to identify the rights and responsibilities of the two stakeholders in this relationship. The absence of necessary policies is identified as the reason why the VET outputs are not been recognized by society and industry.

Another issue discussed was the implementation of a streaming policy for year 9 and year 12 students. According to GOVT (2011) report and Hoang (2012) the implementation of a streaming policy of year 9 students was failure. "There were only 2% of year 9 students enrolled to VET providers" (GDVT, 2011). According to the Vice Minister of MOET (Bui, 2013), there are four main explanations for the failure of the streaming policy. Firstly, knowledge about VET programs by individuals, schools and society is generally limited. Secondly, students and their families do not fully understand the ramifications of the academic ability of neither their children nor their economic potential. If they understood these situations, they would see that vocational education may be an attractive way for them to reduce their financial stress and be able to enter the labour market earlier. Thirdly, the labour market information system is poor, not transparency and not regularly updated, whereas the employment potential for VET graduates is positive (Dang, 2015). Lastly, the diversity of the upper secondary school such as public high schools, semi-public high schools and continuing education centres make the implementation of streaming policy difficulty (Bui, 2014). For example, 2014 enrolment in grades 10 at the public upper secondary level in Hanoi city occupied approximately 70 % of the total of 71,278 the year 9 students. This does not include the intakes

of enrolment of the semi-public schools and continuous education centres (GDDT Hanoi, 2014). This example reveals that the VET pathway has few year 9 student graduates to enrol.

Curriculum: The second important factor affecting the quality of VET programs comes from the VET curriculum. Three weak points in the design of the VET curriculum were pointed out. Firstly, the VET curriculum currently is not designed based on the output standards or learning outcomes. In other words, the requirements from society especially from industries must be the foundations for the designing of VET curriculum. This statement is in line with the results of the conference title "Development the skilled manpower to meet the needs of society" hosted by MOLISA. The focus was upon the importance of the VET meeting the needs of industries. It is argued that VET providers provide their available programs which are based upon a curriculum not designed to pay attention to the requirements of industries and the realities of manufacture (Cao, 2015). Secondly, the key stakeholders recommended the VET curriculum should be developed to equip students with the theory plus practical and soft skills. In addition, it should be linked to other academic streams to ensure students and VET graduates recognise the need for long life learning. Currently, Vietnam has no national qualification framework (NQF) which identifies the links with other educational pathways. However, the NQF is in the process of designing and is expected to finish at the end of 2015 (Hoang, 2014).

Thirdly, VET curriculum should be designed based on the training of relationship between VET schools and enterprises. The six key stakeholders suggested that the model of Germany's dual vocational training system should be applied to the Vietnamese context. The German VET system provides opportunities for students to be practiced and have the skills to immediately apply their theatrical knowledge in the manufacture environment. Also, students are immersed in a real professional working environment, thus promoting a sense of responsibility and instilling the culture of the company. For students, any mistakes at the enterprise will make a real actual loss, therefore it is lessons for them to self-adjust and improve their skills quickly in the future. On the industrial side, they can control the human workforce in the future and identify the numbers of workers to meet the needs of the company and enterprises can evaluate exactly the quality of each graduated student.

**Teacher's ability:** One of the factors of the six key stakeholders concerning to impact the quality of VET programs was the ability of VET lecturers. At the workshops, they identified three weak points of VET lecturers that need to be improved. Firstly, basically VET lecturers have a good theatrical knowledge but their practical experiences in industry and teaching methods are limited. This evaluation from six key stakeholders is in line with the Vu (2013) study results which revealed that only 7.05% of teachers who teach at vocational college institutions possess a high level of practical skills, and 0.04% of artisans joining the VET sector were competent in the teaching area. The proportion of VET teachers with high practical skills and artisans at the secondary vocational schools were 5.4% and 0.32% respectively, whereas the ratio of VET teachers teaching academic units was a high 63.4% at vocational college level, and 53.9% at secondary vocational levels. In addition, there are few institutions training VET teachers (GDVT, 2011). According to a report (2011) from the General Directorate of Vocational Training, vocational teachers are currently sourced from three sectors. The main source of VET teachers is from university. They have the responsibility of the transmission of academic knowledge to students but unfortunately their practical skills and teaching methods are limited through inexperience. The second, VET teacher source is from five vocational teacher training institutions (four universities and one at college level). They have studied and are equipped with knowledge in the areas of teaching method, academic knowledge and have practical skills acquired in the industry. Their weakest point is limited or insufficient experience in industry. The last, VET teacher source is from highly skilled workers and artisans. They are strong in the practical area and highly skilled in their particular field by contrast; however, they are inexperienced in teaching method and lack academic knowledge. This finding from the workshops also was in line with the report from (GDVT, 2011, p.47). "Vocational teachers had limitations in occupational skills and competences".

Another weakness of vocational lecturers was the poor response to the updating of information technology skills and the learning of a foreign language. The report from (GDVT, 2011, p.47) documented that "science research, foreign language and applied information technology competences among vocational teachers are still limited. Therefore, their ability to keep themselves updated of new knowledge and technology is yet to be satisfactory". The last issue impacting upon the quality of VET programs identified by the six key stakeholders was the ratio of VET teacher to meet the standard requirements of the General Directorate Vocational Training. According to the report from GDVT (2011,

p.45), only 57.8% of VET teachers met the standards of occupational skill (level 4 per 7, or equivalent and higher). In regards to the academic skills, the ratio of vocational teachers in vocational colleges was 80.8%, in secondary vocational schools 71.2%, and at the vocational centres 53.5%.

*Facility and equipment:* The next factor that impact to quality of VET programs was the 21infrastructure and equipment at VET providers. Six key stakeholders listed a series of weaknesses.

- The theoretical studying room and practical workshop have small and insufficient space for practise.
- The place for recreation and sport is not enough.
- The infrastructure such as water system, electricity and toilets to serve at dorm are poor and bad services.
- The equipment for teaching and practising is not enough.
- The equipments for practical lessons are outdated. They always are the old versions compared with the machines and technology of industries. They are not compatible with, nor suitable for the reality of modern manufacturing.
- The materials for practical lessons are not enough, especially with the mechanical occupations such as welding and automobile.

The main reason for the negative evaluations from the key stakeholders on the issue of facility and equipment is the spread and extensive investment by the Government on the public VET providers (Vu, 2015). According to a report from the Institute for Scientific Research Vocational Education (2013), by the end of September 2013, VET network had 1,337 vocational training institutions, including 159 vocational colleges, 305 vocational secondary schools and 873 vocational training centres, increasing 1.5 times more than in 2006. Thus the government cannot have sufficient financial resources to invest in all of the VET providers mentioned above (Vu, 2015). Besides, the vocational socialization is also facing difficulties due to the lack of specific policies and support mechanisms for investors in the VET sector (Cao, 2015). Interestingly, Vietnamese Government has considered these problems and Vice Prime Minister Vu Duc Dam stressed that the VET sector must be reformed and innovated. He said that "VET sector must look into the facts, review all VET providers and reorganization whole the VET system. Government cannot continue to cover all the ineffective schools."

Perception of society on VET sector: The last factor to impact the quality of VET programs was the perceptions in society of the VET sector. At the meeting, six key stakeholders were in consensus and admitted that the perception of society towards VET pathway was that it had disadvantages in comparison with other academic streams. The most negative view to the VET sector comes from perceptions of parents and students. Vice minister of MOLISA Nguyen (2015) said that "The biggest difficulty for the VET system now is the thinking and perception of parents. Parents always want their children to become the manager. They will not accept if their children working in an industrial environment or becoming blue collar level. Besides, the students do not understand clearly their real capabilities and preferences. They only enrol in VET programs if they have no other studying options". Also at the conference, he indicates the solution to improve parents' perceptions towards VET programs was that "Communication is the powerful tool to change the perception of not only students but also parents and other classes in society. Along with consulting the career choice at the high schools and marketing VET programs on the media, we have to make the mechanisms and policies more attractive to encourage young people going to VET programs such as no tuition fee for VET students whereas if students go to university pathway, they must pay huge tuition fee". The following negative view is from the industrial side. The manager of Information Technology Company (one of the members in the panel of the discussion) said that currently, enterprises have priorities or prefer to employ academic graduates, although the jobs require VET graduates. The director explained that the quality of VET inputs (weak academic results at secondary schools) is low. Furthermore, the quality of vocational education training at the VET providers is not highly appreciated. While, annually there over 162,000 bachelors, engineers, even master graduates who do not find a job (MOLISA, 2014).

Another negative view was the knowledge of guidance counsellors at secondary schools on the VET programs is limitation. The principal of lower secondary school (one of the member at the workshop) said that "the understanding of the VET system by guidance counsellors at secondary schools is weak and confused". This statement was in line with the recognition of the Vice director of GDVT (Cao, 2015). He has recognized that the staff and teachers at vocational training institutions and guidance counsellors at

secondary schools do not understand fully, nor know clearly, the content of VET programs necessary to advise and inform their students. Moreover, schools want their students to achieve good results at the end of academic year as illustrated by the percentages of students to enrol to year 10 (lower secondary school) and the ratio of high school student who pass the university examination. Teachers at these schools are normally unhappy if their students do not enter the academic pathways. The next negative view is the role of the media on the VET sector. Six key stakeholders pointed out that the media favoured the mainstream educational pathways, whereas the programs of vocational education training have not received adequate attention, commensurate with its role in the industrialization and modernization of the country. In addition, according to Hoang (2014), currently, the educational system of Vietnam is too complicated with unclear definition of the educational levels such as the technical education level, vocational education levels, academic college level and higher educational levels. Also, the connection between other levels of education pathways is limitation, as results it has created the confusion as to the TVET system and does not create confidence in students, parents and employers.

The last negative view from six key stakeholders is the responsibilities of Government towards VET sector. They blamed to the role of Government on opening too many universities in a short period. In this context, VET programs have been disadvantaged in comparison with others academic streams and lack the skilled human resources to serve industry to 2020. According to (MOET, 2014) statistic in the period from 1999 to 2013, 222 universities and colleges were established and up gradated. As result, VET pathway always is the last choice of student to enrol, leading to low recruitment. According to Cao (2015) pointed out that the opening of the both public and private universities has absorbed almost all potential secondary students resulting in few potential students to enrol in the VET programs. As far as the massive establishment of the universities in the short time is concerned, Professor Thuyet (2014) argued that the series of university development in recent times is not reasonable. He said that "In my opinion, to solve the right problem to develop the higher education size, it must be based on at least three parameters. Firstly, it is the demand for manpower in the period of industrialization and modernization of the country. Secondly, it depends on the current capacity of the national economy. Thirdly, it is the ability of the university to meet the requirements of industries and society. In other words, it is the health of the higher education system such as facility and equipment for teaching and learning, and the lecturers' ability". However, the plan of Government on the establishment the higher education system does not rely on these parameters (Nguyen, 2014). According to decision 121/2007/QĐ-TTg of Prime Minister, the development plan of higher education size in 2020 will be 467 universities and colleges not including the institutions in four big cities Hanoi, Ho Chi Minh, Danang and Can Tho. At the moment, the opening too many universities in the short time resulting in three first months of 2014, there were over 162,000 bachelors and masters do not find a job(MOLISA, 2014) whereas lack of high skilled workforce to serve for industries.

## 4. Conclusion

This study presents the history, development, preparation and process of the NGT approach as well as the advantages and disadvantages of the technique in investigating six key stakeholders' perceptions towards VET sector. The use of the nominal group technique enabled six key stakeholders to obtain an extensive and varied list of factors that impact the quality of VET. Five most important factors namely Government policies on the VET sector; Curriculum; the teacher's ability; Linking between VET providers and industries; Facility and equipment; Perception of society on VET sector emerged; and Government policies on the VET sector was ranked firstly impacting to the quality of VET programs. The explanation why six key stakeholders voted the factor of Government policies on VET sector as the most important is linked to the definition of perception. The reality changes, the individual's perceptions and attitudes on a phenomenon will be changed (Steven & Mary, 2003). In other words, Government policies or the roles of Government are key and conclusive factor to make reality changing, as result leading to change the perception. The finding from this study indicates that the current policies of Government on the field of vocational education training such as the policies and mechanisms on the relationship between VET providers and enterprises or the policies on the salary of VET teachers are not strong enough to change the perception of the social strata, especially from students, parents and industries.

The second most important factor: Curriculum impacting the quality of VET programs is linked to the Hoang (2014) statement. "The current TVET curriculum has a big jump of changing towards associated with the capacity standards or skill standards. However, a training program is built well and linked to the needs of the labour market. It just stops in the blueprints". He argued that the quality of VET is related

with the activities such as the implementation of teaching and learning process, the assessment, the ability of lecturer, the facilities and equipment, the monitor on the quality of Government and the motivations and attitudes of the learner that they are the key factors. He employed the metaphor of the theatre to explain, that is, a well designed curriculum that is actor poor (lecturers) plus lack of props (facilities and equipment) will not perform well as the script.

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# Evaluating Students' Perception of Teaching/Learning Computer Programming: A Study in a Bruneian Technological University

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**Abstract:** The present study is part of one of the pioneering government funded research, conducted in one of the institutions of higher learning in Brunei Darussalam. The study validates the existing instrument through survey (factor analysis) among cohort of students in a programming class. The study results not only endorse the reasons of declining the art and science of teaching/learning computer programming but also have brought an interesting finding of pedagogy. The results indicate that teaching and learning strategies are more teacher-centered (mean=3.85) rather than student-centered (mean = 2.87). This is in contrast to modern approach of teaching-learning, where problem-based or constructivist approach dominates. Further 67% of the students considered lack of motivation, 80% considered the curriculum is less practical and 50% thought it was more teacher-centered, as key reasons of this decline. Based on the findings some recommendations were made to the relevant authorities to improve the practice.

**Keywords:** Teaching/learning pedagogies, computer programming, technical institutions, higher learning, Brunei Darussalam

## 1. Introduction

In today's competitive world, academic institutions of higher learning are striving hard to deliver the excellence in teaching and learning; not only meeting the quality but also to gain a competitive advantage. In this regards, the institutions of higher learning are facing a surmountable task of devising the right pedagogies that can foster the institution's image and improve their ranking. The task has become more challenging for the technical institutions especially in delivering the technical knowledge such as in the field of computing and information technology, where the task to impart knowledge but also develop the required marketable skill. One of the challenges in this area is to cope with the declining performance and skill of the computing students in the fundamental area of computer programming. The overall results in the subject of computer programming have endorsed this as a sensitive matter. Researchers have further made this an interesting topic to research with several reasons including the selection of right pedagogy. This is also portrayed in technical institutions of higher learning in Brunei Darussalam. There is no doubt in saying that learning computer programming as a subject is a matter of not only conceptual understanding but also requires necessary skill to master the art and science of computer programming. Computer science students are expected to be well familiar on programming skills. In fact, most science, mathematics, engineering and technology programs in higher academic institutions require students to acquire programming skills as a part of their curriculum (McCracken et al., 2001; Norwawi et al., 2009).

However, the teaching and learning pedagogy in the technical institutions is based on traditional method of teacher-centered approach. Whereas, the success of this method is dependent mainly upon the teachers' attitudes as how positive attitude he or she has towards teaching the subject of computer programming. The traditional teacher-centered approach still prevail in the majority of the secondary, post secondary and vocational institutions that prohibits students to think critically beyond the text book (Hamid, 2014). During the past two decades the development in the educational sector urged for research into teacher's teaching style, students' learning abilities, students' learning style, cognitive level and learning paradigm underpinning them (Byrne & Lyons, 2001; Goold and Rimmer, 2005; Gomes and Mendes, 2008). The evidence suggested that research on the role of a teacher and students' learning using different methodologies were already well established in some areas such as teaching science and mathematics (Finson et al., 2006). Chetty and Jones (2014) studied the teaching and learning of computer programming at universities within South Africa and found that they often make use of the traditional teacher-centric pedagogies. These pedagogies focus on teacher-centric activities such as lecturing, questioning and demonstration. The major disadvantage is that students are passive learning and they had very little time to interact with peers, tutors or lecturers and at the end emphasis was on knowledge itself rather than developing students' learning skill on writing the programs. They suggested adopting an alternative pedagogy called social constructivism to assist students in cultivating the skills needed for computer programming. Literature has provided several study examples of teaching and learning

computer programming i.e. to develop skills such as discipline, critical thinking and problem solving (Preston, 2006; Sprankle, 2009).

However, as stated that in practice there exist a greater discrepancy and gap as what is being researched and what is being practiced especially in the area of teaching/learning computer programming especially in the Vocational and Technical Institutions (VTIs) so there need to be conducted more studies to examine the influence of varies teaching/learning approaches on students' cognition and perceptions among VTEs. Motivated by these concerns this study was conducted in one of the technical institutions of higher learning in Brunei Darussalam in 2014 with the following objectives:

- To examine the current pedagogies of teaching learning computer programming in technical institution.
- To suggest pedagogy to improve teaching learning computer programming in technical institution.

## 2. Literature Review

Conti, (2004) defined the term teaching style refers to the distinct qualities displayed by a teacher that are consistent from situation to situation regardless of the material being taught. Whereas, according to Kember's (1997) definition and description, there are two kinds of broad orientations in teaching: the teacher-centered conception and the student-centered conception.

Teacher-Centered Approach: Teacher-centered pedagogy is an education style that focuses on how the teacher delivers information rather than how the students absorb it. It tends to involve more passive learning by the students; such as: lecturing in which the teacher disseminates the information and it is up to the student to absorb and process it (Henriksen, 2010). An activity that best describes teachercentered pedagogy is lecturing, where teacher directs the classroom that doesn't meet diverse needs of students. However, teaching styles conflict with student's learning style. Brown, (2003) stressed that "the premise "one size fits all", which is attributed to a teacher-centered instructional approach, is not working for a growing number of diverse student populations. Teacher-centered instruction is supported by a strong set of empirical results conducted over several decades. And yet, these approaches are ignored by the leaders of the profession, as evidenced by the content in textbooks used to train teachers and in authoritative reviews of research. To discuss teacher-centered instruction is not even considered polite conversation. Nevertheless, now is the time for social studies leaders as well as legislators and parents to acknowledge the obvious weaknesses of student-centered approaches and begin to correct the excesses. We should acknowledge that poor teaching and learning do indeed create discomfort among students. Results from the National Assessment of Educational Progress have shown repeatedly that U.S. students have scant understanding of mathematics and programming. It is likely that this dismal state of affairs is the result of a century of ignoring content and promoting instructional practices with little chance of classroom success. The failure to improve academic achievement should be placed at the doorstep of the progressive reforms and perhaps an emphasis on results-oriented reforms can create a new energy in teaching-learning computer programming and to help us focus our attention on academic achievement rather than prolonging the endless debate between the advocates of teacher-centered and studentcentered approaches in computer programming.

Student-Centered Approach: In the literature, there are two approaches to learning: a surface approach of learning and a deep approach (Entwistle and Ramsden, 1983; Biggs, 1987). The surface approach to learning involves attempting to memorize the information that is considered to be important. The deep approach, on the other hand, involves developing an understanding of the content. Gibbs and Coffey (2004) explain that "students who take a deep approach have been shown, in a wide range of studies, to have superior learning outcomes, particularly in terms of understanding and developing new and more sophisticated conceptions of the subject". Besides these two separate continuums, there are alternative approaches to teaching. Postareff et al. (2008) provide an overview of the literature on approaches to teaching. To them, academic teachers have different conceptions of teaching. Some teachers conceive of teaching as the transmission of knowledge from themselves or the textbook to the learners. Other teachers focus on the learners, viewing their own role as a facilitator of learning. The conception of teaching which teachers adopt has been shown to relate to the teaching approaches that they adopt: a teacher-centered approach or student-centered approach (Prosser et al., 1994). They said that teachers with an information-transmission conception of teaching often take a teacher-centered approach to

teaching. This approach views students as passive recipients of the teacher's already-constructed knowledge. Teachers who view themselves as facilitators of learning will often take a student-centered approach to learning, helping students as they construct their own knowledge and understanding. We need to add that these two approaches are not necessarily independent of each other for example, teachers taking a student-centered approach might at times attempt to transmit knowledge as part of their overall instructional method. However, Trigwell et al. (1999) found that "an information transmission/teacher-focused approach to teaching is strongly associated with surface and non-deep approaches to learning and that a student-focused approach is associated less strongly, with a non-surface approach to learning. It is interesting to state that several other researchers like; Spoon and Schell, (1998); Conti, (2004) and Liu et al. (2006) in their USA based studies found that most instructors still use traditional teacher-centered styles in university setting despite the call for a paradigm shift to learner-centered ones.

Student-Centered Approach in Teaching-Learning Computer Programming: There is no doubt about the notion that teaching-learning computer programming is a fundamental part of computer science curriculum and is stated as a problematic in the studies (McCracken et al., 2001; Milne and Rowe, 2002). The literature has reported this as a universal problem (ibid) that have motivated many researchers to propose various methodologies, tools and pedagogies to help students. Among these tools some reported to have positive effect on teaching-learning, however, in most of the cases the problem remains unsolved (Ala-Mukta, 2004). Some studies reported several reasons that caused this learning problem (Gomes and Mendes, 2008). One of them is the students' disability in problem-solving approach coupled with lack of critical thinking. Many students don't know how to program because they fail to demonstrate their ability to create algorithms. Gomes and Mendes, (2008) identified the problem within teaching methodology with the following pedagogical weaknesses: 1) Teaching is not personalized, 2) Teaching strategies don't support all students' learning style, 3) The teaching of dynamic concepts through static material, 4) Teachers are more centered on teaching a programming language and its syntactic details instead of practicing problem solving techniques using a programming language. In short teaching programming is more teacher-oriented.

Ala-Mukta, (2004) along with several other studies (Kay et al., 2000; Robins et al., 2003) has identified problems in Learning and Teaching Programming. Winslow (1996) noticed that students may know the syntax and semantics of individual statements, but they do not know how to combine these features into valid programs. Deek et al. (1998) developed a problem-solving approach for a programming course that focuses on more experiential learning techniques. Rahmat et al. (2012) conducted a study at Malaysian Institute of Information Technology and found the major barriers and problems faced by the students in learning programming. To them lack of student-centered pedagogy, majority of the students memorize the processes without understanding them that leads the students to get low grade in their programming subjects. In another study in Malaysia, Higher Learning Institute, Suliman et al. (2011) noticed a higher rate of under achievers and suggested the right pedagogical approach of teaching-learning programming in schools would reduced the problem. Xiaohui, (2006) conducted a study in China and discussed the current conditions and characteristics of computer programming in Ocean University of China was discussed then he discussed the advantages and disadvantages of traditional teacher-centered learning strategies were discussed and finally the teacher-centered approach was modified with student-centered approach of teaching-learning such as concept mapping, peer learning and e-learning was discussed. The result showed a big difference in student achievement in results with new pedagogy. Govender and Grayson, (2006) studied learning to program and learning to teach programming in one of the South African universities and found a link between mathematics and computer programming, the students' problem solving ability and facilitation of problem solving in classroom teaching. Similarly Hawi, (2010) conducted a study in Lebanon and found that with the implementation of student-centered approaches the students migrated from the state of passive receivers to constructors of computer programming concepts. Students learned exploration, individuality and autonomous thinking that promoted the learner-centered approach.

In Brunei there is limited number of studies are available. In recent past, two studies were undertaken to find out the reasons of students' decline in programming in technical institution of higher learning. Seyal et al. (2015) found the not understanding the students' learning style will affect their performance in subject of computer programming. Similarly, in another study Looi and Seyal (2014) discussed the role of problem-based learning in analyzing the students' performance in subject of computer programming. They found that problem-solving and soft skills gained through PBL enhanced students' employability after they graduate. In summary it is evident that revising pedagogy from teacher-centered environment

to learner or student-centered environment has more potential and if implemented carefully could further improve the students' learning of computer programming.

## 3. Methodology

**Design of instrument:** From the review of the literature and on the basis of the study design, the questionnaire was adapted after Gilis et al. (2008). The multidimensional instrument was developed in two parts to capture the information. Part 1 contained demographic and information about students learning skills and result in the programming assignment consisting of questions with nominal and ordinal measurements. Part 2 captured the information on ten about two different types of methodologies multi-dimensional constructs using 5-point Likert scale (1-strongly disagree to 5 for strongly agree). Table 1 provides details of the sources of constructs and the number of items used in this study.

**Sampling & Data collection:** Inorder to achieve this convenience sampling method techniques was conducted with the selection of two government offices close to the authors' workplace. The questionnaire was distributed to fortystudents that were currently retained as control group. The study was conducted in Aug-Sept 2014. The basic statistics and reliability coefficient are provided in the Table 1.

Limitation of the Study: The study is not free from its weaknesses. The small sample size used for this pilot study is subject of standard error. Secondly, all data measuring the students' learning pedagogy for programming class came from self-report so it is possible that common method variance influence the results and those data collected on different time or through different methodologies could produce different results. So, any attempt to generalize the results based upon small sample size of this study is used with caution and advisable to be used with other methodologies. Finally, the study does not include any demographics such as gender, age and prior experience in making comparison of both teachercentered and student-centered approaches. Future study with the inclusion of these variables might identify the difference.

*Validity and Reliability:* In order to assess the validity and reliability, tests were performed in this study. To get the reliability of the questionnaire, the coefficient of Cronbach's alpha (1951) was taken into account. Minimum Cronbach's alpha value of above 0.70 indicates reliability of the instrument (Nunnally, 1978). During the initial screening of conducting reliability tests, the items were dropped because of low corrected-item total correlation which was less than .40, the cut-off value suggested (Hair et al., 1998). The remaining items were applied where the factor analysis was subjected to principal component analysis using varimax rotation. In addition, we applied the criteria of Kaiser-Normalization as techniques of rotation to examine both the individual items and the relationship among them (Hair et al., 1998). All the items that were loaded on more than one factor at cut-off value of .40 were eliminated from the constructs. In addition, two types of validity were assessed to validate: convergent and discriminant validities. Churchill, (1979) has suggested that convergent and discriminant validities should be examined for construct validity. Therefore, we assessed convergent validity by examining composite reliability (CR) and average variance extracted (AVE) from the two constructs (Hair et al., 1998). CR is calculated by squaring the sum of loadings, and then dividing it by the sum of squared loadings, plus the sum of the measurement error whereas, the AVE is measured with the variance captured by the indicators relative to measurement error. Table 1 provides the quality control; statistics with internal consistency and CR values. The CR values of both the constructs were between the suggested minimum of 0.70 (Hair et al., 1998). Table 1 also represents the variance. The average variance extracted above 0.50 suggests a further evidence of convergent validity (Fornell and Larcker, 1981) These AVE values could also be used to assess discriminant validity which occurs when the AVE exceed the square pair wise correlation between the construct (Espinoza, 1999). Table 3also shows the inter-constructs correlation.

**Table 1: Quality Control Statistics** 

Constructs	No of original items	No of items retained	Alpha value (.60 and above)	Mean	Variance explained <.50	CR	Source
Student-centered	6	4	.77	2.87	.55	.72	Gilis et al. (2008)
Teacher-centered	4	3	.70	3.85	.60	.75	Gibbs & Coffey, (2004)
Total	10	7					, ,

## 4. Data Analysis and Results

Data obtained from the survey were analyzed using descriptive statistics, factor analysis as well as correlation and regression analysis by using SPSS version 20, a well-known statistical package.

**Background profile:** The background data of users as well as their organizational profile is summarized in Table 2. The Table describes the characteristics of respondents. Majority of the users is relatively young female (57%) within age group of 21-23years (47%). Majority of the learners (82%) are beginner level. It is strange to notice that 60% of the learners have average programming knowledge. Lack of motivation and low practical values are most cited reasons for lower programming learning.

Table 2: Demographical data

Variable	Description	Percentage
Gender	Male	43%
	Female	57%
Age	Between 18-20	20%
	Between 21-23	47%
	Between 24-26	30%
	Above 26	3%
Level of Programming	Beginners	82%
	Advanced level	14%
Level of Programming knowledge & skill	Very little	10%
	Average	60%
	Above average	30%
Performance	Marginal pass	27%
	Credit	30%
	Merit	34%
	Distinction	9%
Reason of low performance*	Lack of motivation	67%
	Less practical value	80%
	Teacher-centered	45%

<sup>\*</sup>Multiple responses

\* P<0.05

**Correlation Analysis:** Prior to the testing for the exploratory factor analysis, we conducted a zero order correlation between the various independent variables as shown in Table 3. The correlation provides directional support for the predicted relationship and shows that co-linearity among the independent variables are within the acceptable range (Hair et al., 1998). Result shows a significant correlation between teacher-centered approach and students' result.

**Table 3: Correlation Matrix** 

Constructs	TC	SC	RES
Teacher-Centered (TC)	1.00		
Student-Centered (SC)	.103	1.00	
Student Result (RES)	.211*	.019	1.00

Exploratory Factor Analysis: The ten instructional behavior variables were further analyzed to the exploratory factor analysis techniques (EPA), where principle component factor analysis method was used to determine and confirm the underlying pattern. Varimax rotation procedure was employed for obtaining any simplified structure pattern. The rotated matrix has produced two factor solutions. Factor 1 is named as Student-centered teaching; and Factor 2 as Teacher-oriented teaching. Three items were dropped that have the corrected-item correlation less than recommended value of .40 prior to running the factor analysis. All retained seven items have factor loading that are above the cut-off value of 0.60 thus full-filling the criteria of Hair et al. (1998). In addition, examination of the initial statistics reveals that two factors account for 71.60% of the variance. Finally the Bartlett test of sphericity is significant and the Kaiser-Meyer-Olkin measure of sampling adequacy is greater than .6. Therefore, it is appropriate to proceed with factor analysis.

Table	4: Exploratory Factor Analysis		
Item No	Items	Factor1 Student- centered	Factor 2 Teacher- oriented
3	We choose the topics we want to study in programming	.87	
4	The lecturer uses our ideas and suggestions when	.77	
	planning programming lecture		
9	We have do practical's-programming exercises	.77	
	ourselves as a part of programming learning		
10	The class breaks into small groups to do programming	.78	
	exercises, assignments and practical during		
	programming learning		
5	We watch the lecturer doing the programming		.71
	examples during our programming lecturer/tutorial		
6	The lecturer makes programming lectures interesting		.77
	for us.		
7	We copy the lecturer's notes from power point /white		.86
	board during our programming lecture/tutorial		
	% of Variance	56.1%	14.5%
	Cumulative Variance (%)	56.1%	71.60%

Kaiser-Meyer-Olkin measures of sampling adequacy = .82 Bartlett's test of sphericity: App Chi-square = 44.47, df = 21, P = .002

**Discussions:** The study has fulfilled the objectives. The teaching-learning of computer programming was analyzed through factor analysis (Table 4) and has confirmed the two factors solution: teacher-centered and student-centered. However, the higher mean as shown in Table 1 that predominant style of teaching learning the computer programming to the student in technical institution of higher learning is teacher-centered. The findings concur with many previous studies that reported instructors are following the traditional approach of teaching computer programming. The results further support the findings of Spoon and Schell, (1998) and Liu et al. (2004) who reported a moderate preference for a teacher-centered approach by both teachers and learners. Conti, (2004) concludes and confirms that teacher-centered style remained dominant at all level of education in North America till 2004. The study also supports the previous work of Henriksen, (2010) and Brown, (2003). The study provides further support to the identification of teacher-centered style in practice in university setting especially teaching-learning the computer programming. In another research Seyal et al. (2015) have confirmed that pedagogy based on teacher-centered significantly contribute towards low performance of the students in their computer programming class.

In compliance with our second objective as to suggest pedagogy to improve teaching-learning computer programming, we agree with various research theories that have always advocated strategies, methods and activities that are associated with learner-centered teaching style. The learner-centered style is regarded as an effective and democratic way of improving students' motivation, participation and final achievement in teaching-learning computer programming. Our results further identify the gap in theory and practice as it further indicates that in one hand the traditional teacher-learner paradigm are being questioned as one of the barriers towards university mission of delivering the best pedagogy for competitive advantage, on the other hand, more detailed analysis should be conducted at Board's level to specify what are genuine learner-centered action and what are teacher-centered approach (Liu et al., 2006). The results are in contrast with Looi and Seyal (2014) who have selected a cohort of students that were identified as weakest students in a class of computer programming in a single institution of higher learning. Their probability of passing based on their test results were at the minimum level. They were given problem-based learning (PBL) approach. The result showed the significant improvement in the students' result and performance.

## 5. Conclusion

The study results confirm that in technical institution the teacher-centered are dominant teaching-learning style to teach computer programming. This is contrary to the research in learner-centered approach that is praised in the research and practice to address individual learner's needs and to

capitalize on students' performance in providing a better teaching-learning platform. The study also concluded in the discrepancy between theory and practice emphasizing that student-centered approach is not widely practiced especially teaching computer programming. The study thus provides an insight and awareness of this discrepancy by encouraging university's administration to address this issue accordingly and to look into the matter prudently in enhancing the teaching-learning as how more training workshop can promote learner-centered approach.

**Recommendation for the Practice:** It is obvious from the review of literature that studies have fostered the dynamic believe that a student-centered classroom provides a more efficient learning environment and most of the institutions are capitalizing to support this at their end. The same is true for the technical institution of higher learning (IHL) in Brunei Darussalam. A positive response to student concerns can result in student-centered environment. There are several approaches are available such as constructivism as a paradigm for teaching and learning, problem-based learning, collaborative learning and critical thinking approach, however, the successful implications require careful planning and meeting the various challenges. Employing student-centered approaches has no end. It makes the course subject to revision and reframing. Problem-solving sessions helped the students to construct their own meaning in a discovery-learning setting. All these methodologies bring a daunting challenge of change at every level not only at course design, the classroom management, technology support, assessment procedures, and team building but also in shifting the mind-set as well. Secondly, in order for student-centered learning to be implemented the policy makers and designers must be aware of the key issues and belief of the teachers about these issues such as: 1) why would the instructors/teachers need to adopt a learnercentered approach? 2) How could this approach be adopted. 3) Can learner-centered approach be used within large classrooms? 4) Can learner-centered approach be implemented in various stages? and 5) how to respond to students' resistance while introducing learner-centered environment. Considering issues similar to these will resolve many ambiguities and would enhance the process of student-centered teaching-learning computer programming at IHL1.We also suggest learning from best practices such as in Malaysia many universities began to implement PBL in their curricula in an effort to improve the quality of education. With collaboration with Aalborg University of Denmark, PBL was introduced at University Tun Hussein Onn Malaysia (UTHM) (Berhannudin et al., 2007). Similarly, Monash University in Australia university to adopt PBL within its medical (www.med.monash.edu.au/srh/medical-education/.../issue10red.pdf).

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 $^1$ Readers are encouraged to refer: Froyd, J., and Simpson, N. 2008. Student-centered learning addressing faculty questions about student-centered learning (www.ccliconference.org/files/2010/03/froyd-stu-centeredlearning.pdf) for more reading.

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## Current Practice Performance Measurement Model: A Case Study in Indonesia

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**Abstract:** Understanding performance measurement in the public sector organization is very important in looking into the early performance of local governments. This is because having a good performance measurement model in place serves as part of the accountability to stakeholders (e.g., society as taxpayers). Choosing the right model of performance measurement will have an impact on the performance of the government. In this research, preliminary literature study conducted found that the model of performance measurement, which was used in Indonesia in the old order as well as the new order, was an old model (traditional). The traditional model tends to be input-oriented, causingthe model to be unfit or unsuitable with the current situation. In this concept paper, which also initially analyzing the contents of documents associated with Government Performance Accountability Report (LAKIP) for several years were reviewed and reveals that after the LAKIP model was applied in Indonesia, the local government performance which now focuses on the output level helps overcoming the disadvantages of the previous models in place.

**Keywords:** Performance measurement, Performance measurement model, Traditional model, Accountability, and Local Governments

## 1. Introduction

Indonesia is a republic, which was officially independent on 17 August 1945. To date, Indonesia has gone through three reigns in terms of government administrative, namely the old order, the new order, and the reformation eras. During the eras of old order and the new order, a centralized system was applied (Law No. 05/1974), whereas in the reformation era, local governments (i.e., provinces and districts) have been given greater authority through the implementation of the local autonomy systems (Law No. 22/1999). In the context of governance, the success of a central government or local government can be assessed from the ability of the governments to use the budget efficiently, effectively, and economically to achieve the desired goals (Govindarajan, 1984). In line with that, during the old order, the new order, and also the reformation, the local government performance was assessed based on the government's ability to maximize the use of the budget to improve the quality of public services. Accordingly, every year the central and local governments are required to account for and report on the use of resources, both financial and non-financial resources as a way of executing the accountability process and ensuring that public funds were used according to what was intended for. The report serves asevidence of accountability and transparency to all government stakeholders, especially the public as the taxpayers (Mulyadi, 2000).

In supporting the accountability and transparency of the annual government performance, it is necessary to set an appropriate performance measurement model, to prevent the government officials from mis allocating or mis using the public funds collected through taxes and levies. In line with this, the government has used several performance measurement models to assess the success of the government in providing services to the public. Some of performance measurement models used are1) Model of Cash Systems; and 2) Regional Financial Administration Manual (MAKUDA). With these models, the budgeting systems were developed based the line item budgeting and incremental budgeting. However, as the models were applied, several weaknesses were identified. The main weakness is that the model tends to be short-term-oriented and input-oriented. Hence, it hindered the local government from obtaining and determining long-term performance achievements. Later on, during the reformation era, in which the regional autonomy started to be applied; local governments were required to start implementing a performance measurement model that is not only input-oriented, but also focus on output and outcome oriented.

Due to the flaws found in the traditional models, reformation era took place with the implementation of the regional autonomy system of government, where the local government has implemented a performance measurement model based on President Instruction Number 7/1999 about using the LAKIP model, which is based on performance-based budgeting. In this context, the LAKIP model can be used to measure the performance of local governments in a more comprehensive manner taking into account

both financial and non-financial aspects. The model also gives attention to output and outcomes in a short term period as well as having impacts and benefits orientation in a long term. Based on the background on the changes that took place over the period impacting local governments' performance, this study intends to look into the extent of the effectiveness of performance measurement model (LAKIP) application during the regional autonomy in Indonesia. As such, this paper plans to account for of the application of performance measurement model used in Indonesia more specifically the local governments after decentralization. This introduction part will be followed by some literature review; a methodology section, a discussion, including on advantages and disadvantages of the traditional model with input orientation and advantages of outputs and outcomes-oriented measurement model and lastly, some conclusion remarks.

## 2. Literature Review

**Performance:** Basically, performance is an achievement obtained from a process that begins with planning, and continued by execution, leading to finally producing a valuable output. Armstrong and Baron (1998) argued that performance is the result of work that has a relationship with the organization's goals. Meanwhile, Dubnick (2005) proposed that performance is the result obtained by an organization that has competence, and it must be in line with the quality of the actions orderto get quality achievement (Bouckaert and Halligan, 2008). From the explanation and in relation to the public sector, it can be understood that performance is thus defined as the ability to provide a quality service to the community at large. Fenwick (1995) stated that performance is achievements that have the value of efficient, effective and economical. In relation to this, the State Administration Institute (2006) explained that performance is basically the result of a process in achieving goals that could have a positive impact on an organization. However, it should be understood that performance of a public sector organization is normally referred to the quality service to the community, while the performance of the private sector is reflected via high profit earned.

Performance Measurement: Public sector organizations manage their financial resources generated from local revenues such astaxes and levies, which were charged to the community (Law No. 33/2004). Correspondingly, local government performance measurement should be done as a reporting and as a prove that accountability of government to the community regarding the use of available resources has been served. This measurement is done at the end of the fiscal year. The government accountability to the people in the form of organizational performance report is expected to be a guideline for organizations in providing services to stakeholders, especially to the public. The use of government finances obtained from the public must be managed effectively and efficiently. So that, the outputs and outcomes may benefit the community. Hood (1995), Bouckaert and Pollitt (2000), Alexander et al. (2010), and Mitchell (2012) stated that the local government performance can be measured from the effectivity and efficiency of the objectives' achievement, as well as attention to the concept of accountability in the report of performance measurement. In addition, LeRoux and Wright (2010) suggested that there is a need to consider the workload and productivity. The opinions mentioned above indicated that the effectivity and efficiency of the use of local government resources affect the performance of the local governments. Not only in the input level but also in the output and outcome levels. This situation is in line with the explanation from Wallis and Gregory (2009), Packard (2010), and Thomson (2010), who said that any change in the work achievement (from the stage input, output and outcome) of local government also finally affects the community.

Rutgers and van-der-Meer (2010) and Chan and Rosenbloom (2010) in their studies explained that the performance measurement of public sector with orientation of the inputs, outputs, and outcomes, can be improved up to the stage of accountability and transparency of organization to the community. The above description shows that every reporting and accountability outcomes will generate information that can be used by local government in making decisions. Correspondingly, Marr (2009); Aaron (2009); and David et al. (2013) suggested that proper performance measurement in place will produce appropriate information, in the hope that such information be clearly stated and usable for decision-making purpose. Meanwhile, Sanger (2013), Bente and Fleming (2014), and Majuta (2014) are ofthe opinion that reporting and accountability of performance is an indispensable information needed by the government in making decision. Based on the above description, it can be concluded that the performance measurement in the public sector is need not only be up to the output level but can be extended or upgraded to the level of impacts and benefits to the community. In line with this, to have a good performance measurement model

that will enhanced the accountability and transparency of local government performance is highly required.

Model of Performance Measurement: As part of their accountability process, the local governments need to account for their performance at least annually. Hence, Lane (2000) and Fryer et al. (2009) explained that the local governments are required to establish appropriate model of performance measurement so that the results of performance measurement could be more credible and usable, including being used as information for management decision making (Kennerley and Neely, 2002). This suggests that the expected performance measurement model must be in line with the needs of the organization. Consequently, the indispensable information expected to be supplied for the society in the preparation of government accountability reports include programmes and the use the budget, and whether they are in accordance with the organization's vision (Cavalluzzo and Ittner, 2004; Chenhall, 2005). The change in performance measurement models in the public sector from the input orientation into the output and outcome orientation is the basic concept of performance measurement model based on the New Public Management (NPM). The NPM generates performance reports that consider the aspect of accountability and transparency. This is as expressed by (Herawaty and Hoque, 2007; Hoque and Adams, 2011). They explained that the current performance measurement model is more transparent to meet the needs of internal and external to the organization. Meanwhile, Morgan (2013) explained that the goal of reporting on the performance of public sector organizations with the concept of NPM is to fulfill the information needs of the organizational stakeholders. It should contain the extent to which the organization has achieved the expected performance.

The description above is in line with the study of Andrews (2011) and Carol et al. (2014); that says that the performance measurement is intended to get the effective, and efficient performance, and have impact to society because at the end of the day, organization needs to report on the achievements. However, in addition to aspects of effectiveness, efficiency and impact, it is important to pay attention to the quality aspects of a program (Queeneville et al., 2010; Zafra-Gomes et al., 2012). In summary, based on description of the performance measurement models above, it can be understood that any model of performance measurement is expected to be in line with the needs of the organization and also serves the information need of stakeholders. Local government performance measurement model developed must take into considerations the concept of NPM that pays attention to the financial aspects and non-financial aspects and also considers the aspect of output, outcome, impacts and also benefits.

# 3. Methodology

This study reviewed the work of others on performance measurement models as well as in Indonesia. It was intended to obtain information on the effectiveness of the application of performance measurement model used by local government in Indonesia after the regional autonomy was implemented. This is in line with the view of Weber (1985) that content analysis is valuable in understanding the meaning behind the text. Similarly, Miles and Huberman (1994) not much different from Patton (2002) suggested that the data obtained from document needs to be reviewed, coded, and analyzed so that, the key words for a thought and concept can be generated, enabling analysis and offering meanings to the matters understudy.

## 4. Discussion

**Traditional Model:** Basically, the Model of Cash System Performance Measurement and the Model of Regional Financial Administration Manual (MAKUDA) were used during the old order and new order. These two models have a characteristic that use the determination of the government budget by following line items budgeting approach. In doing so, the budget was established by following each budget items in the previous year's record. Budgets were annually rementalism concept, by adding or reducing a certain amount of dollars for some items by using the financial data in the previous year. With regards to this, the application of performance measurement models in Indonesia during the old order had been in line with several previous studies. For example, Wildavsky (1964) stated that the budgeting model created based on the line item budgeting was a "budget history", and is not appropriate to use in assessing the success of a program, because it is an input-oriented and tends to be short-term oriented. In line with the above study, Shah and Shen (2007) revealed that the main characteristic of the line item budgeting system is an upper limit. The upper limit is set during the budget allocation process. Expenditures were not allowed to exceed the upper limit. Furthermore, Rubin (2007) argued that since the line item budgeting model has

limited resources (input controlled), it was expected to effectively control the level of expenditures. Also, it was expected that good allocation of resources would help to improve the budget efficiency. Based on the above opinions on the performance measurement models, it is concluded that these models cannot be used optimally for sustainable management of government budgets, because the models accommodate for only short-term input and expenditures and tends to be financial oriented. In addition, the models seem to have minimal considerations on performance from the human resources aspect.

Advantages of Traditional Performance Measurement Model: The applications of performance measurement model used during the Old Order and the New Order, either in the form of Cash Systems or MAKUDA as described in the Traditional Budgetary System have several advantages in its implementation in Indonesia. The study by Halim (2002) found that the implementation of performance measurement model based on the traditional budget has several advantages, namely; 1) the model is easy to arrange, 2) it does not require a lot of human resources, and ) the conflict between divisions is the very low. In line with the above view, the same perspective was offered by Mulyadi (2002) who stated that some of the advantages are as follows; 1) a very simple model, 2) easy to understand, 3) a tight budget control, 4) more flexible in the supervision of the use of resources 5) can be used as a basis for determining the budget for the next stage. The same opinion was also expressed by Jones and Pendlebury (1996) and Ulum (2004). In addition to what was highlighted before, they stated that the advantages of traditional measurement models included 1) easy to be implemented 2) easy to control because it is centralized, and 3) ongoing government programs can be performed. In summary, the traditional performance measurement model, which was prepared under the line item budgeting and incremental budget that was applied in Indonesia has advantages in terms of the ease of applying and understanding. This is in line with the study by Rubin (2007) and Shah and Shen (2007), who quoted this model as not requiring excessive resources in carrying out the activities with strict or minimal supervision.

Disadvantages of Traditional Performance Measurement Model: The application of Traditional Performance Measurement models (i.e., cash system and MAKUDA models) carries many advantages. Nevertheless, studies also pointed out a number of weaknesses in its implementation. Mardiasmo (2002) found some disadvantages of the traditional performance measurement models as follows; 1) the effectiveness of spending is less scalable because of the use of incremental system, 2) the nature of the budget is disjointed 3) having input orientation, so that there is a tendency to finish the budget, 4) the competition between the units in organization in performance assessment, 5) there is a separation between the regular budget and development budget, 6) it is an annual budget, 7) it is centralized, 8) approval of the budget is often delayed due to waiting for approval from the central government, and 9) flow of information is inadequate. In line with Mardiasmo (2002), the results of the analysis of the Apostle (2003) also showed some weaknesses in the traditional model. The weaknesses are the model namely, 1) accountability of performance achievement is not transparent because its orientation is only on expenditures' control, 2) the base of budget is not clear, and 3) it is less flexible. Based on the views above, it is concluded that the Traditional Performance Measurement models (Cash system or MAKUDA) need some improvements. This input-oriented performance measures can be developed into a better model with the orientation being focus on theoutputs and outcomes instead.

Performance Measurement Model with Output and Outcome Orientation: A number of literatures have demonstrated that the performance measurement models used by the government during theOld Order and the New Order carried some weaknesses. This led to conclusion that the models need to be replaced, because the models are no longer compatible with current scenario, practices as well as the expectations of society. Accordingly, after the regional autonomy policy was established through the Law No. 32/1999, the centralized government was applying a decentralized system whereby the local government authority, either at the provincial level or district level, was administered by the local governments. The government is supported by the financial sourced from local revenues and the allocation of funds from the central government (Law No. 25/1999). Based on the law, local governments are given the authority to set their own area with financial support comes from local revenues in the form of taxes, retribution, and the allocation of funds from the central government. However, the submission of such authority does not intend to give full freedom to the local government because they still have to obey the rules of the central government, through the Performance Accountability Report (LAKIP) based on the Presidential Decree No. 7 of 1999, to the central government every year (LAN, 1999). The basic concept of LAKIP model is to amend the traditional Performance Measurement Model, which used the principle that the balanced of budget (between revenues and expenses) must be zero at the end of the year, into a performance-based budgeting. The LAKIP model begins with the elements of strategic planning and

organizational objectives. In addition, the performance measurement elements include the elements of the organization's objectives, performance indicators to be achieved, target, realization, and achievement.

The above description shows that the LAKIP model of local government performance, designed based on a performance-based budgeting, has a clearer planning and performance indicators compared to the Traditional Performance Measurement model (stewart, 1994; Young, 2003). Buschor (2013) in his study cited that the use of organizational resources is expected to reach the stage of output, outcome, impact as well as benefits. By accommodating all these elements, the impact from the use of public funds to execute activities can be felt by the community at large. The above description shows that the LAKIP performance measurement model used by the government at the regional autonomygives more emphasis on quality than quantity gains from the program implemented because focus were given beyond financial performance but extend to the outcome and impact of the money spent. This is consistent with Carlin (2004), Diamond (2005), Robinson and Brumby (2005), shah and Shen (2007), Robinson and Last (2009), and Hou (2010) who in their studies stated that the performance measurement models like LAKIP is a form of local government accountability in managing financial sourced from the public. Meanwhile, Rubin (2007) in support of the model said that the local government finance should be used with clear performance targets in order to provide benefits to the community.

In summary, the views on LAKIP is that the orientation of organizational performance measurement is expected to reach the stage of outcome in the short-term, and it is also expected to reach the stage of the impact and benefits in the long-term in order to ensure that the performance of local governments can be more effective and efficient. This is in line with the opinion of Robinson and the Last (2009), and Taylor et al. (2011) who stated that the use of the budget must always be associated with the results to be achieved, and can be measured from the aspects of effectiveness and efficiency. Similarly, studies of Sandalgaard et al. (2011) who postulated that the budgeting-based model of performance measurement needs to be adjusted periodically following the development of public purposes, so that local government spending becomes more effective. Afterall, the local governments are the closest to the public at large in terms of providing public services and amenities by government administration. From this study, it was gathered that budgeting-based performance measurement is more effective than the traditional model which focused on input orientation. In line with that, some researchers found that LAKIP model is more suitable to be applied in Indonesia. In the government regulation number 58 of 2005, it was described that performance of local governments should be reported annually and need to be publicly presented to the stakeholders, especially to the public.

In support of that, Simbolon (2003) for example stated that the LAKIP performance measurement model has an advantage because 1) the model LAKIP has a principle of accountability, 2) it has the priority principle, and 3) it has the benefit principle. Similarly Darise (2008) also gave the opinion that the application of the LAKIP performance measurement model in Indonesia carries several advantages which include 1) the model is based on performance-based budgeting, 2) it considers the relationship between program and output, and 3) it emphasizes the quality and not only the quantity of achievements. The above opinions shows that the LAKIP performance measurement model has a clear planning in determining the performance to be achieved, so as it can be reported back as a form of government accountability to the public. This is in line with the view of Mardiasmo (2002), who said that after the LAKIP model has been effectively applied, it brings a number benefits, such as 1) the model is arranged based on the activity, 2) it prioritize outputs than inputs 3) and it is based on value for money, and 4) the model is flexible. From the above discussion, it seems that local government performance measurement in Indonesia in regional autonomy era has been implemented based on the concept of NPM because as prescribed by NPM, the model currently in place in Indonesia is characterized by measurement orientation focusing on outputs and outcomes. Hence, it can be understood that the performance of local governments in Indonesia during the reform era has been reported and presented based on the principles of accountability and transparency because input, output, outcome and impacts are clearly defined and later on aligned in order to know whether planning and performance expected has been achieved.

## 5. Conclusion

Based on past studies conducted and a few available local documents reviewed on the change in the performance measurement models and gradually the implementation of LAKIP, it can be said that the previous performance measurement model that is traditionally applied to the new order has various weaknesses, giving way to the introduction of LAKIP, which have an output and outcome. The new model

(LAKIP) also promote the elements of strategic long-term planning, a concerns for outcome and impacts, and also accountability and transparency. Since this paper only covers a preliminary study on the development of the previous models to what is currently in practice in Indonesia (LAKIP) through literature reviewed, further studies need to look not only into its establishment but also into the implementation of the new model (LAKIP) as well as whether it is successfully applied to the local government.

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## Work Responsibilities Stress among Academicians in Private Universities in Malaysia

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**Abstract:** Increasing numbers of private universities in Malaysia has caused a great competition and expectation that forces the education providers to offer synergy and value-added services to their students. High expectation form students, financial constraint, countless job responsibilities and 'education as business' orientation adopted by private universities, are among stressors to its academicians. Thus cause dangerous health complication; hypertension, heart attack, migraine, depression, eating disorder, besides some consider migrating and leaving their job. This study aims to explore the causes and main contributor of stress among these academicians with regards to job responsibilities of teaching, researching and administrative task. The gained result at the end of this study is not entirely purpose to change the whole academician job scope in the industry, but as a guide be it university or the government, in designing or developing new policy for their respective institutions.

**Keywords:** Stress, private university, academic staff, teaching, research

#### 1. Introduction

Stiff competition among private universities in Malaysia has force the education providers to offer synergy and value-added services to their students (Halim et al., 2014). Besides focusing on getting student enrolment to ensure revenue generation, private universities are also required to build up prestige by offering advance and relevant courses to cater with industrial demand (Bunoti, 2011). With more expectation towards these private universities, academician, who act as education medium are expected to play more dynamic role in the provision of education, training and research facilities to meet the arising demand for professional and skilled manpower, also the demand to uphold university status through quality teaching and research (Pey, 2009). Since the dramatic changes in socio-economic life, academic profession has become highly demanding (Nazari & Emami, 2012). Academician's job responsibility in most university's has surpass a paradigm shift, where they are no longer required to do only teaching but to produce research, seeking research grant, publish papers for conferences and journals, supervising students, consulting and guiding students and not to mention the growing demand for administrative work such invigilating exams, committees for student affair, research, course management, reporting, syllabus enhancement as well as attend numbers of meeting that take up most of their times thus caused work-life imbalance (Levin, 1991; Jaschik, 2013). While in the teaching environment, researchers have created concern on the role stress among teachers where many role demands are at present. This the role demand may become stressful to teacher when expectation of organizational member towards teacher is unclear (role ambiguity), with excessive work load (role overload), or meeting led to expectations more difficult because of too many role conflict.

Even in private universities following the culture in public universities, academicians are emphasized not to only to teach but also to produce research paper in accordance to its university management structure and nature (Pey, 2009). Although private universities are less bound by governmental and bureaucratic regulations, financial constraint has often become the greatest challenge to these institutions and its academicians, where they have to creatively seeking fund through enhancement of program quality and delivery. At the same with more demand from the faculty to produce a research with commercial value. Beyond teaching and research duties, academicians are also responsible to participate in numerous committee in university such research, student affairs, computer lab, course management and many more, as this will affect the merit given during yearly assessment (Pey, 2009). This creates competition with public higher learning which was treated as major challenge for academicians in private universities as stated by Arokiasamy et al. (2009) that;

"the prestige and appropriate standardize policy system in public university has somehow build a challenge towards academician in newly developed private universities as they encounter the pressure to be productive by maintaining high quality standard. Besides having to work independently in terms of funding with limited resources, these academicians in private universities are also expected to produce outstanding research publication".

#### 2. Literature Review

Stress is uncommonly difficult to define, even though the word itself is universally understood (Simha et al., 2011). Stress and its adverse effects have been studied since the era of Aristotle, Hippocrates and other ancient scholars (Fink, 2010). Greek physicians of the school of Hippocrates (460 - 377 BCE) recognized a disorder characterized by symptoms commonly seen in stress illness today: palpitations, migrating pain, difficulty breathing, a lump in the throat and others (Porter, 1997). The stress concept was then being formally explained by Claude Bernard (1813 - 1878) a French physiology, in a concept called 'Milieu Interieur' or 'The Internal Environment of Body' in 1859 which suggested that constancy or a steady state (situation) in internal body is essential to survival and external changes in environment or external forces could lead to the changes in the internal body system (Fink, 2010). According to Smith (1997) and Kalleberg (2001) role stress can be contributed by switching or changing of organizational focus, flexibility and employee empowerment which led to changing of job specifications and uncertainty, moreover, losing job stability is a subsequently increase potential for job role stress (Cooper & Dewe, 2004). Roles stress is viewed as detrimental to employee as well as organizational outcome such job tension, job dissatisfaction, employee turnover and employee burnout also diminishing of organizational commitment and burnout (Fisher & Gitelson, 1983; Jackson & Schuler, 1985; Van Sell et al., 1981; Lee, 1997; Johnson et al., 1990).

Generally, stress according to Oxford dictionary is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances (Oxford University Press, 2014). According to a famous psychology scholar, Professor Richard S. Lazarus (2000) stress occurs when an individual perceives demand of an external situation beyond his or her perceived ability to cope with them. Stress level among academician has started to indicate a worrisome trending with the evidence of these academician experience a dangerous health complication such hypertension, heart attack, migraine, depression, eating disorder (Juliana & NurAqilah, 2012) besides some consider to migrate and leaving job (Hurtado et al., 2012) and even worst; commit suicide (Times News Network, 2013; Odisha, 2014). Richard S. Lazarus Professor of Psychology from University of Berkeley in United States stated that stress occurs when an individual perceives demands of an external situation beyond his or her perceived ability to cope. He suggested that stress definition is neither the environmental event, nor the person's response; rather describe the individual's perception of the psychological situation is the critical factor in defining his stress theories. Lazarus theory and definition of stress is widely use and commonly accepted in defining theory of stress (Cassim, 2013). Lazarus worked largely on human in testing his stress theory. According to Lazarus (2000), the ability of human to think and evaluate future events makes them more vulnerable to stress than animals. Lazarus also explained that human encounter stress because they have high level of cognitive abilities that other animal lack. Lazarus together with Folkman (1984) was prominently recognized for their *Coping Mechanism* theory. This theory is defined as amount of cognitive and behavioral efforts, that constantly changing which aims to handle particular demands, internally or externally that are viewed as challenging and demanding. Simply, coping is the activity we do to seek and apply solutions to stressful situations or problems emerge due to the stressors.

Stress has been largely covered and extended in multiple fields of study and by numbers of scholars from psychobiology, sociology, psychiatry as well as anthropology (Weber, 2011). In sociology, stress is best described by a theoretical framework that explains health disparities called social paradigm. Social paradigm defines social condition as a cause of stress for members of disadvantage social group (social group disadvantage which derived from prejudice, discrimination and stigma (Meyer et al., 2008). Sociology stress studied the inequalities exists in physical and psychological well-being in a particular society. For example, the study of how woman live significantly longer than men but they suffer more serious acute transient illnesses, more chronic health condition, and more serious functional disabilities that men (Thoits, 2010). Meanwhile, besides in sociology, stress also occurs in organization. Organizational stress is a state of tension experienced by individuals facing extraordinary demands, constrains or opportunities (Brief et al., 1981). Manning & Preston (2003) from University of Idaho define stress in organization as stress faced by employee as a result from decisions and implications made by organization which later could bring negative consequences to organization itself. The example of organization implication that cause stress to employee are staff incapable for coping up with organizational change, poor leadership quality from the managers or imbalance work-life style issues due to existence of technology (Manning & Preston, 2003).

Stress studies in Malaysia: There has been few studies of stress in Malaysia context, among the studies were done in safety and security sectors (Barhem et al., 2004), educational sector (Al-Dubai et al., 2011; Yusoff et al., 2011; Faleel et al., 2012; Yusoff, 2011; Zawawi & Jye, 2012) production sectors such manufacturing and infrastructure (Salleh at el., 2008; Nasarudin et al., 2005; Yahaya et al., 2011), military (Bokti & Talib, 2009), stress among the retirees (Al-Naggar & Chen, 2011) and the study on the source of stress among women work force (Bakar & Abdullah, 2007) (Ortega et al., 2013). For stress in safety and security sectors, Barhemet al. (2004) observed the role stressors among Malaysian and Jordanian Customs Department employees. The major findings in this study showed that *role ambiguity* is the main source of work stress among the Malaysian and Jordanian customs employee. In educational sector, several studies were done and many of these studies examining stressors among medical students in public and private universities as well as stress perceived between low-and-high achieving students (Yasin & Dzulkifli, 2011). One of the studies investigated the stress level among undergraduates' medical students in Management and Science University of Malaysia (MSU). The study showed that among 376 respondents, 174 students reported to experience some and too much stress while 23 students reported to experience no stress at all. From 174 students who stress, 71% of the stressor was contributed by future worries whilst conflict with teachers contributed the least number with only 22.6% (Al-Dubai et al., 2011). The other study that examining medical students in public universities showed that academic matter such test and examinations, too much learning content, poor marks, study expectations and insufficient medical skills are the top-most stressors among these medical students (Yusoff et al., 2011).

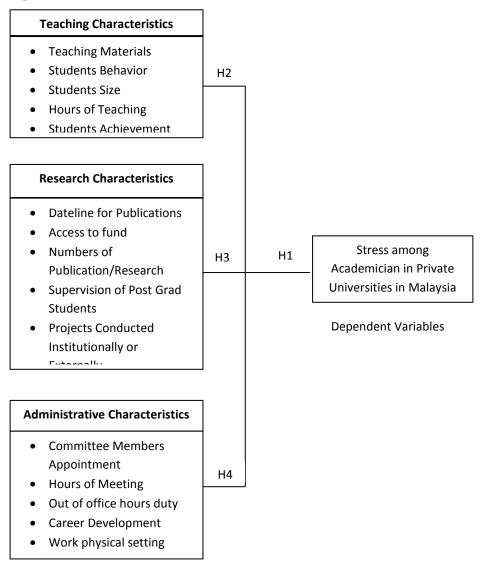
In higher learning institutions, a study from University Putra Malaysia investigated the stressors and coping strategies among MBA students in renowned Business School in Malaysia. Three major stressors were identified; academic related stress, time related stress and social/environment related stress with academic related stress is a major contributor towards stress among 150 respondents of MBA students (Zawawi & Jye, 2012). With regards to stress among managers and workers of manufacturing and infrastructure industries, few studies were conducted. Salleh et al. (2008) did the study to investigate the source of stress among executives in furniture industry and later identified that 35.8% of respondents felt very stressful at work due to unrealistic objectives, issue of incompetent boss, time pressure and deadlines. Other study of stress with regards to examine organizational stressors and job stress among managers in electronic firms in Island of Penang, found that conflict blocked career and alienation has positive relationship to job stress. However, according to these managers, work overload, has no significant relationship with job stress (Nasarudin et al., 2005).

**Theoretical Framework:** Teaching, research and administrative work are 3 important components in academician's job in academic industry nowadays, therefore these components were selected as dimensions to be studied in measuring work responsibility stress among academicians in private universities. The lists of elements listed on the framework are attributes which will be included and examined in this study. These dimensions were taken from literature review and academicians' key performance indicators in public university as guidance. Proposed Theoretical Framework of the relationship between stress and academician job responsibility in private universities is represented on the following page as Figure 1:-

## 3. Methodology

The sampling frame or unit of population in this study is academicians in private universities in Malaysia, with the total populations of academicians of about 26, 438 (MOHE, 2012). There are 37 private universities in Malaysia. A total of 200 respondents consist of academicians from private universities in Malaysia will be identified to respond to this study. The survey questions will be designed and distributed physically by the researcher to the respective academicians in order to get higher response rate. This research will adapt only quantitative approach. This survey will include 4 sections, where section (1), (2) and (3) use close – ended questions and section (4) contains open- ended questions. Open-ended question is design to allow the respondents to give their own opinion and answers. In order to validate and explore the framework, an interview will be done on selected educators to justify the relevance of selected attributes and dimensions. The aim of the interview is to determine the finalized dimension of stress as perceived by educators

Figure 1: Proposed Theoretical Frameworks



**Independent Variables** 

## 4. Conclusion

There are small numbers of a study with regards to stress among academician in private universities in Malaysia unlike academic stress in public university. This study will infer on how stress is perceived by academicians in private universities as they receive more pressure working in an organization which independent, profit-oriented and highly dependent to fees as source of funding. The study of contributing stress factor in terms of academician's job responsibility is also a new topic yet to be discovered by any previous scholars; therefore this study is prominent contribution to the knowledge in academic world nationally and internationally. Also, it is hope that this study has the value of replicability in near future; for adaptation and further exploration purposes in order to provide broader perspective on stress.

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## Undergraduates' Needs and Seeking Behaviour: A Preliminary Study

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Abstract: Information seeking behaviour refers to the process of how individual identify their information needs, search and use the information identified to support their work. Understanding the needs and seeking for information from different types of information sources is very important to student in completing their research activities. This paper presents findings from a preliminary study of undergraduate students' information seeking behaviour and their need of information for their research project. The aim of this study is to identify their information seeking behaviour in finding the required information that meet their information needs. A survey was carried out and thirty nine final year students from two related Information Technology (IT) programs in a Higher Learning Institution in Malaysia returns the questionnaires. Findings indicate that information about development tools was the most important information needed by the students for finishing research project. In searching for required information, Google search engine was found to be the most widely used by the students. Furthermore, most students preferred to use the electronic information sources to search information due to the variety of information available on the Web.

**Keywords:** Information needs, information seeking, information behaviour, information search, undergraduate

#### 1. Introduction

Information is important for students' academic achievement. They required the information in order to fulfil their knowledge gaps and academic needs. However, the increase of information on the Web has affected students' behaviour in seeking information. In seeking for information effectively and efficiently, students' understanding of their information needs and different types of information sources that can be utilized is very important. "The approach involved in retrieving the relevant information or also known as the information seeking behaviour should begin with identifying the needed information. This is followed by selecting the appropriate sources of information and finding the required information by using selected strategies" (Nadzir & Salim, 2013: p168). However, there are students who are unfamiliar with this approach. The problem must be addressed and a study on students' information seeking behaviour need to be conducted in order to assist students in finding the required information that meet their information needs. This paper discusses past research on information seeking behaviour and a preliminary study that was conducted to explore undergraduate students' information seeking behaviour.

**Information seeking behaviour:** Information seeking behaviour includes information needs, the use of information sources to retrieve information and ends with the use of the retrieved information (Williamson et al., 2007). George et al. (2006) defines information seeking behaviour as graduate students' behaviour when obtaining and using information for their research processes. According to Shakeel and Vinayagamoorthy (2013), information seeking behaviour relates with determining information needs, information searching behaviour and use of information. In the context of this study, the term, information seeking behaviour refers to the behaviour of undergraduate students during the processes of seeking information for their research project. The term refer to the processes of identifying the needed information for the research project, using selected information sources to search for the required information and using the required information accordingly in finishing the research project.

**Related works:** A survey on students' information-seeking behaviour in digital environment was conducted by Bhatia and Rao (2011). It was found that less than fifty percent of the respondents at Dev Samaj College were not aware of the availability of e-resources. The students, who were aware of e-resources, accessed the e-resources for updating their knowledge and seeking information for academic assignments. According to Che Rusuli et al. (2013), majority of undergraduate students at Universiti Tun Hussein Onn preferred library books, lecture notes and handouts and textbooks as references in their studies. The study showed that the students "probably did not know how to utilize the information available on the Internet which might be useful and related to their assignments." A survey by Shakeel and Vinayagamoorthy (2013) examine the information seeking behaviour of business students in Academic City, Dubai. The survey showed that academic related information was the main reason for

students' information needs. The survey revealed that the most important sources of the academic information were Internet and electronic resources. Therefore, the digital resources have a significant impact on information seeking behaviour of the majority of students. A recent study on students' information seeking behaviour has been conducted by Oyadeyi (2014) at Ondo State University of Science and Technology revealed that assignment, examination, seminars and workshops were among the factors that influence students' information seeking behaviour. The study also found that the most preferred and used information sources were Internet, lecture notes, text books and handout.

Information literacy skills have been identified as important skills in information seeking activities. Some information seeking behaviour studies have been conducted to investigate the level of information skills among undergraduate students. For example, Kimani (2014) examines information literacy skills and competencies among new undergraduate students in Catholic University of Eastern Africa. The findings of survey indicated that new undergraduate students have limited knowledge of strategies used to search for information, possess computer skills to use word processing applications, statistical package and internet applications. The study also found that majority of new undergraduate students was not familiar with various retrieval tools and their applications. Another study by Wu & Yeh (2012) looked at the relationships between computer competences and usage of library electronic collections. The computer competences was measured using four constructs: internet connection (ability to set up internet connection); software installation (ability to install software); document management (ability to manage document); current awareness (ability to use subscribe to current awareness service). Careful analysis and findings indicate that students were not confident that they could master the competences needed to use library electronic resources. Furthermore, the findings show that computer science students possessed more computer competences to use library electronic resources than Literature and Sociology students. This was due to their daily internet usage and their subject backgrounds (Wu & Yeh, 2012).

## 2. Methodology

The participants in this preliminary study comprised of 39, 2014/2015 session final year students from Bachelor of Science in Information Technology with Honours [B.Sc.(Hons) (IT)] and Bachelor of Science in Multimedia with Honours [B.Sc.(Hons) (Multimedia)] at Universiti Utara Malaysia (UUM). Students from both programs take a two-semester project based module to fulfil their credit hours for graduation. The objective of the module is to equip students with the theoretical and practical knowledge in information system development. At the end of the two-semester module, the students are required to produce an information system. In the first semester, the students are expected to write a proposal for the proposed system and produce a paper prototype while in the second semester, the students will continue with developing a complete system. A self-administered questionnaire was developed to collect data for this study. The questionnaires comprise of three sections: (i) demographic information; (ii) information skills, and (iii) information seeking behaviour. Information skills are measured by the ability to: a) recognise the type of information needed; b) determine appropriate information sources; c) use online public access catalogues (OPAC); d) use online databases; e) use search engine; f) use keywords for searching; g) determine the relevancy of information; and h) selecting relevant information. The following Likert scale representing the degree of agreement has been used: 1 = strongly disagree; 2 = disagree; 3 = somewhat agree; 4 = agree, and 5 = strongly agree. The total score is calculated and converted to percentages. The following formula is used to calculate the percentages of the total score for each respondent:

Total score (percentage) = 
$$\left(\left(\sum_{i=1}^{n} Si\right)/4\right) \times 100$$

Where *Si* is the perspective value given by the respondents for each measure and *n* represent the number of measure. The percentage is then compared to the following competency level:

Table 1: Information skills competency level (adopted from: Szarina et al., 2006)

Total Score (percentages)	Competency level
< 60%	Beginner
< 75%	Intermediate
> 75%	Advanced

The questionnaires were given to course representatives to be distributed to the respondents at the end of a compulsory lecture enrolled by them. Then, the data obtained from the survey were analysed using

Statistical Package for Social Sciences (SPSS) for Windows version 19.0. Finally, descriptive statistics analysis was used to analyse the data in the study.

#### 3. Results and Discussion

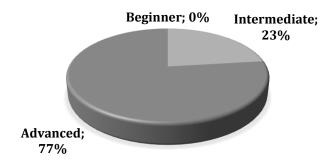
The survey involves 39 undergraduate students, comprising of 37 females and 2 males. As shown in Table 2, the majority of the respondents were Malays (n=29 or 74.4%) and most of the respondents were [B.Sc.(Hons) (IT)] students (n=24 or 61.5%) while the others were [B.Sc.(Hons) (Multimedia)] students (n=15 or 38.5%).

**Table 2: Demographic information** 

Demographic item	Frequency ( <i>n</i> = 39)	Percentage (n = 39)
Gender		
Female	37	94.9
Male	2	5.1
Race		
Malay	29	74.4
Chinese	2	5.1
Indian	2	5.1
Bumiputra (Sabah/Sarawak)	5	12.8
International student	1	2.6
Programme		
B.Sc. (Hons) (IT)	24	61.5
B.Sc.(Hons)(Multimedia)	15	38.5

In this study, analysis to identify information skills competency among the survey respondents has been conducted. The analysis, illustrated in Figure 1 revealed that most of the students (77%) surveyed are those with advanced level of information skills while the others (23%) can be categorized as having intermediate competency.

Figure 1: Information skills



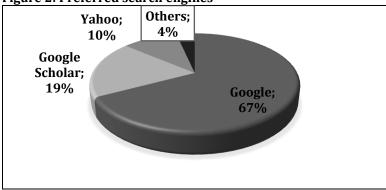
**Undergraduates' Information Needs:** The types of information needed by the undergraduate students are identified based on analysis of the feedback from the questionnaire. As shown in Table 3, 51.3% students responded that information about development tools is very important and 43.6% of them considered the same information as important. Therefore, the information considered as the most important information needed by the students was information about development tools. On the other hand, the type of information that received the lowest percentage and is considered less important by the students is information on how to do literature review. Only 38.5% of the students responded that the information is very important for them in order to carry out their research project. One explanation for these findings might be related to the activities involved in the project-based module. Since the main activity in the module is to develop an information system, students might spend more time looking for information about development tools; hence perceive that this information is important. On the other hand, student might think that literature review activity in an information system development project is less demanding, hence perceive that this information is less important. However, to get a clear picture of the issues, a qualitative study will be conducted to explore this issue in more depth.

Table	9.	Inform	ation	noode
Table	.5:	ıntorm	iarion	neeas

Types of information	The importance of the type of information needed					
	not	least	somewhat	important	very	
	important	important	important		important	
Information on how to do literature review	0	0	3	21	15 (38.5%)	
	(0.0%)	(0.0%)	(7.7%)	(53.8%)		
Information on how to prepare a project	0	0	4	17	18	
proposal	(0.0%)	(0.0%)	(10.3%)	(43.6%)	(46.2%)	
Information on how to do citations	0	0	3	20	16	
	(0.0%)	(0.0%)	(7.7%)	(51.3%)	(41.0%)	
Information on how to do data collection	0	0	4	15	20	
	(0.0%)	(0.0%)	(10.3%)	(38.5%)	(51.3%)	
Information on how to do data analysis	0	0	2	19	18	
	(0.0%)	(0.0%)	(5.1%)	(48.7%)	(46.2%)	
Information on how to develop a system	0	1	2	16	20	
	(0.0%)	(2.6%)	(5.1%)	(41.0%)	(51.3%)	
Information about development tools	0	1	1	17	20	
	(0.0%)	(2.6%)	(2.6%)	(43.6%)	(51.3%)	
Information about preparing a project	0	0	3	16	20	
report	(0.0%)	(0.0%)	(7.7%)	(41.0%)	(51.3%)	

**Undergraduates' Seeking Behaviours:** As illustrated in Figure 2, most students prefer to use Google as the main search engine when searching for information. Another two search engines and tools mostly used by the students were Google Scholar (19%) and Yahoo (10%). These findings were consistent with the results of previous studies which found that Google and Google Scholar were the search engines mostly used by students in order to find information on the Web (Vezzosi, 2009).

Figure 2: Preferred search engines



Final year undergraduate student are expected to be an active information seekers in order to find information relevant to their research needs for completing their research project. Figure 3 shows the findings of this study on the frequency of searching information for research project. As expected, majority of the students (24 students) searching for the required information daily to fulfil their research needs.

Figure 3: Frequency of searching information for research project

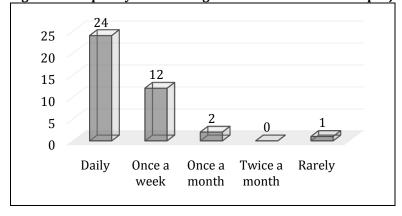


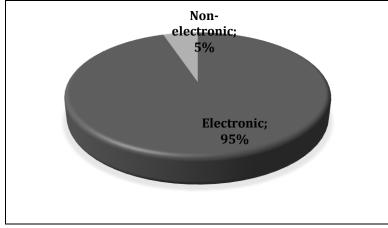
Table 4 indicates that the most problematic searching situation for the students when searching information for research project is when the materials are not available at UUM library. As shown in the table, 15.4% students responded that materials are not available as very problematic situation and 30.8% of them considered the same situation as problematic. The least problematic searching situation is when the students unable to retrieve search results from Online Public Access Catalogue (OPAC).

**Table 4: Information search problems** 

Searching problems	The seriousness of the searching problems							
	not problematic	least problematic	somewhat problematic	problematic	very problematic			
Incomplete information	1	4	19	10	5			
materials	(2.6%)	(10.3%)	(48.7%)	(25.6%)	(12.8%)			
Unable to retrieve	1	6	19	11	2			
search results from OPAC	(2.6%)	(15.4%)	(48.7%)	(28.2%)	(5.1%)			
Unable to retrieve	3	6	16	12	2			
information from online databases	(7.7%)	(15.4%)	(41.0%)	(30.8%)	(5.1%)			
Limited knowledge on	2	8	14	11	4			
how to use electronic information sources	(5.1%)	(20.5%)	(35.9%)	(28.2%)	(10.3%)			
Materials are not	2	7	12	12	6			
available	(5.1%)	(17.9%)	(30.8%)	(30.8%)	(15.4%)			
Information scattered	5	8	15	6	5			
in too many sources	(12.8%)	(20.5%)	(38.5)	(15.4%)	(12.8%)			
Out dated information	2	11	10	11	5			
materials	(5.1%)	(28.2%)	(25.6%)	(28.2%)	(12.8%)			
Too much information	9	10	15	2	3			
on the Internet	(23.1%)	(25.6%)	(38.5)	(5.1%)	(7.7%)			

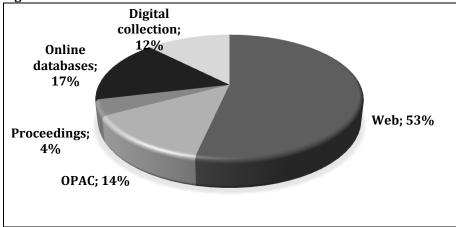
The finding of this study is similar with Singh and Kumari (2013) who identified that the main problem faced by students when searching for information was the unavailability of required materials in the library. There are a variety of information sources that have the potential to be used in assisting students to solve problems and get new ideas for research project. Students should be aware of various sources of information available and the type or feature of its content. The findings of this study revealed that students are aware of the variety of information sources available. However, most of them (95%) prefer to use electronic information sources to search information. Students prefer electronic information sources because of its convenience and availability of comprehensive and up to date information.





The students were also asked about their preferred electronic information sources. As shown in Figure 5, the Web was the most utilized information sources. The students preferred to use the Web because of it accessibility and ease of use. They can use the Web anywhere, anytime as long as there is an Internet connection. The findings of this study support previous studies results which showed that the Web is one of the electronic information sources most frequently used in the process of searching for information.

**Figure 5: Preferred information sources** 



### 4. Conclusion

In this study, information seeking behaviour comprises of identifying the needed information for a research project, finding the required information using selected information sources and using the retrieved information with the intention of finishing the research project. The findings of this study revealed that information about development tools was the most important information needed by the students for finishing research project. In searching for the required information, most of the students prefer to use Google search engine to search through the Web due to the variety of information available on the Web.It is anticipated that the findings of this study could shed light into further research on modelling undergraduate students' information seeking behaviour in the electronic environment. The findings can also be used as initial guidelines for lecturers and librarians to develop a training program for new undergraduates.

#### Recommendations

The present study is a preliminary survey which aims of understanding undergraduate students' information seeking behaviour. Therefore, the results should be interpreted with cautious since the size of the respondents is small and most of them are females. Further research need to be conducted with a bigger sample size and representative respondents' gender for better understanding students' information seeking behaviour. Further research can be conducted to study students' information seeking behaviour among different types of academic programmes. Then, comparison of the students' behaviour can be performed. Finally, detailed analysis can be taken to identify the factors influencing students' behaviour in seeking information for a research project.

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# Utilization of Balinese Folklore as Source of Value for the Social Studies: Perspective of Critical Education

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**Abstract:** This paper is based on research study with the same title. Research is motivated by the existence of Bali as one of the islands in Indonesia, which is rich with various aspects of traditional culture, including a wide variety of folklore. Even Bali is also known as one of the saviors of Nusantara literary texts, especially from Java, Bali, and Lombok stored or written in the form of books or manuscripts (*lontar*). One of oral folklore is *satua* or Balinese folktale. It has many functions and strategic role, such as an endorsement tool for regulations and cultural institutions; as a compeller and supervisor to ensure the norms of society will always be adhered to collective members; and as a pedagogical device and learning for children, both in the family, the community as well as the school as a media, sources and learning agency. With qualitative approach, the text study toward three stories (*satua*), it was found the classical Balinese wisdom is very important for the students' character development. Balinese folktales (*satua*) are also loaded with the Balinese dominant ideology such as *Tri Hita Karana*, the ideology of patriarchy and ideology of gender. Through perspective of critical education, these values can be utilized as source of social science learning in Junior High School.

**Keywords:** Balinese folklore, social science education, character development

#### 1. Introduction

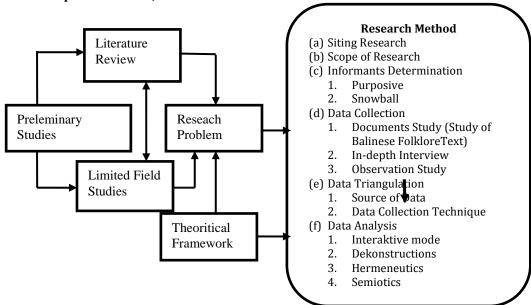
Indonesia is rich in literary heritage in various contents such as government system record, history, chronicle, art and culture, traditions, customs, traditional literary art such as prose, etc which some of it are classified into folklore. Alan Dundes in Danandjaya (1984: 1-3) defines folklore as collective culture inherited from generation to generation, in any kind of collectives in different versions, either verbally or in the form of mnemonic devise. Various forms of Indonesian folklore are still alive as an art and cultural heritage and even stored both in forms of original manuscripts or its translations. One of the islands in Indonesia, which has a wide variety of folklore with various forms and genres, is Bali. Bali is also known as one of the saviors of "Nusantara" literary texts, especially from Java, Bali, and Lombok written on books or lontar. A lot of manuscripts from Java were brought to Bali in 15th century when Islam came followed by the fall of Majapahit kingdom. Since that time, Java as the centers of literary activity was no more growing. Similarly, Hindu religious atmosphere that inspired the birth of a large number of "kakawin", from the point of doctrine and practice had disappeared (Zoetmulder, 1983: 24; Naryana, Mayun and Rupa, 1993: 2; Department of Culture and Tourism Buleleng, 2011: 2). Since the fall of Majapahit, palaces or castles in Bali remain loyal guards of Javanese literature. Among the Brahmana (the highest caste in Bali) and palaces, Javanese literary works still read, studied, and even re-copied, while the new works are also being created. We can say that the literary arts in Bali were a continuation of the Javanese literature tradition. Balinese society continues to develop the ancient Javanese literary, and reached its glory during the reign of Gelgel kingdom in Klungkung in the 16th century (Agastia, 1980; Naryana, Mayun and Rupa, 1993; Department of Culture and Tourism Buleleng, 2011).

One of the places that store manuscripts in Bali is Gedong Kirtya Library under the Department of Culture and Tourism, Buleleng Regency. Gedong Kirtya was originally a Foundation of Kirtya Liefrinck-Van der Tuk, which was founded in 1928 in order to collect and archive the Balinese folklore. A manuscript in the form of palm leaves (*lontar*) collection in Gedong Kirtya was originally belong to noblemen and was direct transcription of folklore materials obtained through the speech of the informants. The languages used in this *lontar* are Balinese and Javanese and written in Balinese/Javanese letter called *hanacaraka*. This article will discuss the use of folklore as a source of value for social science education in junior high school. Folklore materials used for this subject were collected from folk prose such as *Satua*, *Tantri* and folk cult. In addition the materials are also taken from the script that has been transcripted, from Balinese letter to Latin in Balinese language. One of the scripts used as source is the collection of Balineses Folklore taken from *Lontar Bhawaba Kosa*. This collection consists of thirty-one popular *satua* Bali and loaded with the values of wisdom that can build the character of students and learning materials of social science education in junior high school.

#### 2. Literature Review

Some of the literature reviews used as references and preliminary study is a book by Danandjaya (1984) entitled Folklore Indonesia: Ilmu Gosip, Dongeng, dan lain-lain, published by PT. Grafiti Pers, Jakarta. This book becomes the main reference of folklore, both Indonesian, Asian, America and Europe folklore. Another book about folklore is Pendidikan Karakter dalam Folklor: Konsep, Bentuk dan Model by Endraswara (2013), which discusses the folklore as character education media, published by the *Pustaka* Rumah Suluh, Yogyakarta, Noor (2011) writes a book entitle Pendidikan Karakter Berbasis Sastra Solusi Pendidikan Moral yang Efektif published by ARR-RUZZ MEDIA, Jogjakarta, tell us about the importance of literature including fairy tales as a means of character education, meanwhile Sukatman (2012), in his book Butir-butir Tradisi Lisan di Indonesia Pengantar Teori dan Pembelajarannya published by LaksBang PRESSindo, Yogyakarta discusses about any kind of oral folklore in Indonesia and its practice for learning process. Another topic about Balinese folklore is also written by Udayana (2010) in his book entitle Pesan-pesan Kebijaksanaan Bali Klasik Dalam Dongeng, Lagu, Syair dan Petuah published by Pustaka Bali Post, Denpasar. Research on Balinese folklore had been done by Naryana, Mayun and Rupa (1992/1993) with the title "Kajian Nilai Geguritan Cupak Gerantang". This study examines the geguritan Cupak Gerantang by using the theory of structuralism. Geguritan Cupak Gerantang is one of the popular literary works among the lovers of Balinese traditional literature and also studied a lot, in the form of research, translation, classical drama script in Indonesian language, and also used as the name of Arja art associations, namely "Sekaa Arja Cupak Gerantang". Studies on Balinese traditional literature also conducted by Putra (2008) in his article entitled "Sastra dan Masyarakat Multikultural: Pengalaman Bali". This article discusses various traditional literary works like geguritan in the context of multicultural society in Bali. Study of folklore from the critical viewpoint also performed by Artika (2006: 113-128) in his article entitled "Tuung Kuning" dan "Men Brayut" Kajian Kritis tentang Perempuan Bali dan KDRT" (Journal of Cultural Studies, Vol. 3 No. 6 July 2006), which depicts the past Balinese women as victims of the patriarchal ideology power.

Chart 1: Steps of Research, Method and Product Plan



#### Output:

Critical Ethnography deals with the study of values contained in the texts of *satua* (Balinese folklore) based on critical education perspective, regarding to the source of value of character education, *Tri Hita Karana* ideology, patriarchy ideology and gender ideology behind the texts of *satua*.

The design of community service with theme "Training on Software Development for Social Science Learning at SMP / MTs Based on Folklore (Local Wisdom)".

### 3. Methodology

This study used a critical qualitative approach with the goal of seeking understanding or meaning and description context deconstructively on issues that were examined (Mulyana, 2001; Irawan, 2006). Data were analyzed using descriptive-qualitative analysis techniques. Since this research uses the paradigm of critical social theory, data analysis was interaction model combined with semiotics, deconstruction and hermenutika. Data analysis used the model of Miles and Haberman (1992). The steps of the research can be observed in the chart 1.

#### 4. Result

This study focused on text analysis of *satua* Bali. Three *satua* from *Lontar Bhawaba Kosa* that is already transcripted from Balinese to Latin in Balinese language used as samples. The sample is chosen based on certain criteria, such as the popularity of *satua* and the values in it. The results of the analysis are as follows.

## Text Analysis and Character Value in Satua Bali

Story of I Cupak Teken I Gerantang-Sinopsis: Satua I Cupak teken I Gerantang punika nyeritayang indik jatma masemeton sane wenten ring desa. Cupak punika beline lan Gerantang adinne. Kekakih pasemetonan puniki madue pikoneh sane matiyosan pisan. Cupak punika loba, mayus, iriati, gobane jele, awakne mokoh tur dekil mekade sesai jailina teken anake di desa. Metiyosan teken adine I Gerantang sane mabikas alus, demen megae, satinut teken pitutur rerama, lan demenina pesan teken anake di desa. Kaceritang sedek dina anu di puri wenten sayembara ngerereh raksasa sane megal putrine. Gerantang mresidayang mademang raksasa punika. Nepukin kejegean putri punika pesu dayane Cupak kar nyuang dadiang kurenan. Disubane putrine kapesuang uli goane lantas I Gerantang kaundebang tur kakutang ditengah goane. Ditu lantas Cupak mewali ke puri ngakuin ya sane mresidang maketang putrine. Nanging kasuen-suen Gerantang nyidang pesu uli goane tur mewali ke puri. Gerantang kecenduk sareng tuan putrid lan Ida Anak Agung ditu lantas uningange indike Cupak sane nguluk-uluk laut Cupak kapenjara ulian piolas I Gerantang lantas ya tusing kepademang tur kaicen memanjang ring Puri. Gerantang selantungrne nganten sareng putrine tur madeg agung ring puri punika.

## The values used as a Source of Value for Social Science Education

- **a. Character value:** From the story of I Cupak and I Gerantang we can imitate I Gerantang character that's filled with honesty, compassion, courtesy, hardworking, obey the parents, and other virtues. Characters of I Gerantang are symbol of kind and thoughtful person, while I Cupak is greedy, lazy, justifies any means to achieve the goal, a liar, and other vices which in turn would bring him to the problems and sufferings of life. Such character is a symbol of evil character. This is also reflected in its name "cupak" which in Balinese language means greedy, shameless.
- **b. Wisdom in the Story:** Precious message of the values espoused Balinese contained in this story is the nature of goodness and virtue will bring prosperity and happiness in life. Instead greed, envy, liar, etc will bring misfortune on in life.
- **c.** The Balinese ideology Contained in this Story: The story above also contains the values of ideology or philosophy of Balinese life, ideology of *Tri Hita Karana*. The ideology of *Tri Hita Karana* or three (*Tri*), cause (Karana) and peace or happiness (Hita), which teaches the principles of living in harmony, harmony between human and the Creator (*Parhyangan*), human with human beings (*Pawongan*) and humans with their environment (*Palemahan*).

# Satua Ni Bawang teken Ni Kesuna (Story of Ni Bawang and Ni Kesuna)

Sinopsis: Satua Puniki medaging cerita indik anak masemetonan Ni Bawang lan Ni Kesuna. Makekalih madua pikoneh sane metiyoas pesan Mbokne Ni Bawang punika becik, anteng, bakti ring rerama lan nenten bobab. Sakewanten adine medue pikoneh sane demen misuna, bobab, lan iriati teken mbokne. Sedekk dina anu Ni Bawang masiram ke tukade rika lantas kapisuna ipun kyeh sarenag anak munai sareng adinne I Kesuna. Sawireh ngugu rawos Ni Suna ne Lantas reramane nigtig tur undung Ni Bawang mangde magedi uli jumahne. Sawireh sampun katundung mejalan lantas Ni Bawang ke umah dadongne, ring margine lantas kecunduk sareng Kedis Crukcuk Kuning sane olas ngicen panugrahan marupa emas-emasan lan kejegegan. Kasuen-suen Ni Kesuna uning unduk punika lantas ngorahin reramane mangda niktig tur nundung ipun.

Usan punika Ni Kesuna ngalih kedis Crukcuk Kuning manggda ngicen perhiasan lan kejegegan. Nanging sane kapolihang wantah berana ngantos ipun ngemasin padem.

#### The values used as a Source of Value for Social Science Education

- **a. Character value:** Ni Bawang and Ni Kesuna tells the story of two sisters, Bawang is elder sister. These two sisters have the opposite character. Ni Bawang has a good character, diligent, likes to help parents, dutiful and honest. Instead Ni Kesuna is a naughty child, mendacious, gossipy and always jealous of her sister. The character of Ni Bawang is a symbol of good and virtuous, while Ni Kesuna is bad people and gossipy. This is also reflected in its name, "Ni Kesuna" are often spoofed as "pisuna", which in Balinese language means slander.
- **b. Wisdom in the Story:** Messages that can be imitated through the story is good nature, affectionate, helpful, obedient and honesty belong to Ni Bawang should be followed because in the end it will bring virtue and happiness. But the nature of gossipy, envious, and mendacious is inappropriate and should be avoided because it will create misery. Moreover, in the story also contains a message of gratitude for what has been obtained, as Ni Bawang is given the gift of healing from illness, given jewelry and beauty of God through the bird of "Cerukcuk Kuning" that has helped her from bad luck. We must be grateful our beauty by doing good behavior.
- **c.** The Balinese ideology Contained in this Story: The story above also contains the values of ideology or philosophy of Balinese life, ideology of *Tri Hita Karana*. The ideology of *Tri Hita Karana* or three (*Tri*), cause (Karana) and peace or happiness (Hita), which teaches the principles of living in harmony, harmony between human and the Creator (*Parhyangan*), human with human beings (*Pawongan*) and humans with their environment (*Palemahan*).

## Satua I Tuwung Kuning (The Story of I Tuwung Kuning)

Sinopsis: Satua puniki macerita keluarga I Pudak sane demen mamotoh (mebotoh=berjudi. I Pudak liu ngelah siap kurungan. Sedek dina anu iya metajen (sabung ayam) tur ngalahin kurenane ane beling tutug. Pudak mabesen yen panakne luh apang matiang, bene tektek baang siap kurungane yen muani mara pelihara. Gelisan satua men Pudak ngelah pianak luh, sawireh pedaleme tuah ari-arine genan baang siapne tur panakne kaajak di umah dadongne tur ke adanin I Tuwung Kuning. Makudang tiban salantur I Pudak teka uli matajen siapne lantas makeceh ngorahang men Pudak ngelah panak luh tur tusing matiange. I Pudak gedeg pesan, lantas ngalih I Tuwung Kuning ke umah dadongne, lakar matianga. Sawireh bakti ring rerama I Tuwung Kuning nuutang pituduh bapane. Satundene I Tuwung kamatian, dedarine ring Kahyangan medalem I Tuwung Kuning tur katukar ya baan gedebong. I Pudak sane tusing nawang, nyahcah gedebong tur baang siapne, siapne sane baange mekejang mati. Sasubane siapne mati, mara I Pudak nyesel, inget teken panak, bakat kamatian panakne. I Tuwung Kuning sane nawang unduke, nunas ring dedarine mangda kaicen mewali ring reramane. Pinunasne kadagingin oleh Dedarine, lantas I Tuwung Kuning mewali ke reramane. Indike punika ngantos masih ring puri. Anake Agung dot nawang caritane punika lantas ngandikaang mangda I Tuwung Kuning lan reramane nangkil ka Puri. Sasampune nyaritayang indike punika lantas Ida Anake Agung ngarsayang mangda I Tuwung Kuning nyak dados rabine. I Pudak kadadiang perbekel. Sapunika indike I Tuwung Kuning sane polos tur bakti hidup bagia dados rabine anake Agung.

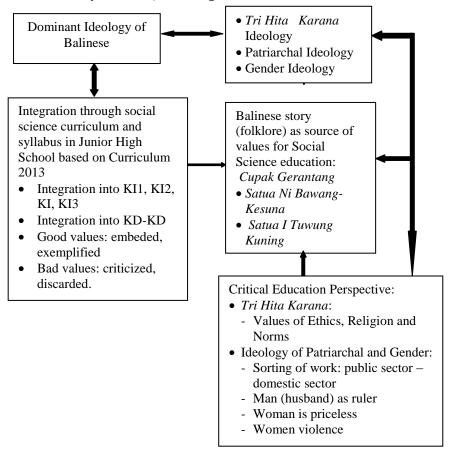
## The values used as a Source of Value for Social Science Education

- **a. Character Value:** The main character in the story above, I Tuwung Kuning, has a very good character, full of devotion to parents, although her father is very bad. Even her father loves his fighting cock more than everything. The father, I Pudak, was an evil character, a gambler, and even willing to kill his baby girl.
- **b. Wisdom in the Story:** Messages that can be imparted to students are the nature of good and full devotion to parents must serve as the foundation of our lives. However, it should also be criticized that the attitude of parents who do not love and neglect their children is bad behavior. Similarly, habits such as gambling will lead us to a lifetime of suffering.
- **c. The Ideology in the Story:** The story of *I Tuwung Kuning* contains the values of *Tri Hita Karana* ideology and also loaded with the ideology of gender and patriarchal ideology (ideology of *purusa*). Both of these ideologies are very dominant and hegemonize the past Balinese women through the mastery of men against women. This power is represented in the form of violence against women (domestic

violence) and the placement of women (also daughters) in a very low position even her "price" is lower than the "price" of rooster.

**Integrating Character Values as Source of Social Science Education Value:** Integrating character values Balinese story as a source of social science learning can be observed in the chart 2.

Bagan 2: Dominant Ideology of Balinese Underlying the Story Values and Its Integration Into Social Science Curriculum and Syllabus in Junior High School based on Critical Education Perspective



The above chart shows the dominant ideology of the Balinese people, which is the ideology of *Tri Hita Karana*, the ideology of patriarchy and gender underlying the Balinese story (folklore). It can be observed and critically analyzed through the text study of the story content. With an approach of critical educational perspective, these values can be used as a source of value for social science education in schools, but there are also the values that need to be criticized in order not to have to be emulated by the students.

As refer to the chart, the utilization of *satua* as a source of value for social studies education in junior high school can be done by integrating the values of good character existed at *satua* into learning devices or Learning Implementation Plan and in Indonesia known as *Rencana Pelaksanaan Pembelajaran* (RPP) IPS. Through Curriculum 2013, which focuses on implementation of eighteen (18) characters, character values in *satua* is integrated into core competencies (Kompetensi Inti-KI), both KI 1 (spiritual attitude), KI 2 (social attitudes), KI 3 (development of knowledge) and KI 4 (skills development) (Kemendikbud, 2013; Widyastono, 2014). This is in line with what was raised by Noor (2012), that the character development of children can effectively be done jointly, both at home and school.

#### 5. Conclusion

*Satua* or Balinese story as a part of folklore has many functions and strategic role, among others, as a pedagogical device and learning for children, both in the family, the community and the school. Inside the stories contain a lot of Balinese philosophy of life that also functions as a local genius and local wisdom.

Through critical educational approach, *satua* Bali can be integrated into the curriculum of social science education in junior high school.

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# An Improvement of Content and Teaching Methods for Codes of Conduct and Ethics in Mass Communication Courses of Thailand's Universities

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Abstract: This research examines the content about ethical issues in Thailand's mass communication courses, teaching methods and guidelines for improving the content and teaching methods about codes of conduct cultivation. This research uses 3 methods in collecting data: content analysis of syllabus in mass communication courses, focus group of experts and in-depth interviews of instructors and professionals. The results show that most media courses emphasize every-day life and professional ethics. Their main content focuses on principles law and ethics which are taught by lecture in classes without any professional organizations' collaboration. Most instructors and students do not aware of the significance of mass communication ethics' courses. Guidelines for improving content and teaching methods which suggested by experts and instructors are: 1) collaborating of third parties—mass communication/professional organizations, institutions and enterprises 2) emphasizing practices in real-life situations/scenarios and discussions 3) training and adjusting instructors' attitudes toward mass communication's ethics including a role model 4) updating ethical courses' content and interposing it in every course.

**Keywords:** Code of conduct, ethics, teaching and learning and mass communication course

#### 1. Introduction

Media play an important role in cultivating and protecting society's ethics via unveiling the fact, truth and knowledge to the public. Media reflect the truth openly which affect on individual, group and state authority. In the mean time, media are part of social problems such as causing of conflict and violence. This is because media are under the market mechanisms which focus on audience's curiosity for advertizing and popularity competition without concerning of the negative impact on public interest in the long term. Additionally, the public criticize media conducts, especially pornography publishing or broadcasting. Hence, the public question about the media's ethics. However, media argue about this criticism by raising the freedom of expressing and writing. When media are treated by law and order, they often claim it as a threat (Subhunthad, 2009). Ethics violation of media in Thailand is available in many forms such as receiving bribe, privacy/human rights abuse and news report distortion, etc. Moreover, news reporting and comments often control by advertisers. These are the problems of media works which affect societies and country development because they don't do their job. This is a challenge of media works in these days to prove that they are the professionals and maintain their indignity as the fourth state of the society. Therefore, the media in Thailand need to improve and cultivate the ethics to their staff and people who are going to be journalists, especially the institutes and universities which produce media professionals.

The media professional development is one of the Council Press of Thailand's important functions. As the professional organization, the Council Press is the first media organization to have the codes of conduct after the self –regulation using did not work well. This is because most journalists think that they should not check themselves. It was not their duty. However, the Council press of Thailand cannot control or take care of all media regarding of a high competition in business. In this sense, the cultivation of ethics and codes of conduct should not depend on only the media professional organizations. It should be the corporation of educational institutes and media organizations to promote the awareness of media ethics especially, in the universities. Thongpao, a Thai famous journalist (2009) suggested that the significant ways to cultivate the media ethical aspects and practices to the journalists are to improve the content of ethical and related courses and the management of learning in the class. Among the variety of media platform today, the problems of the media ethics and codes of conduct in Thailand are increasing and becoming a hot issue in Thai society. It is also a responsibility of Thailand's educational institutes/universities to explore the ways of teaching and learning for supporting a better quality of media professional.

### 2. Methodology

This research used qualitative approach in order to collect primary and secondary data. Primary data are collected from 1) 75 curriculums and 20 course syllabi of media ethics and related subjects which are available in bachelor degree of Thailand's universities and 2) in-depth interviews and focus group. Secondary data are collected from documents, books, texts and the internet. Key informants are selected purposively in the area of mass communication. They are 5 people who are instructors and professionals in journalism for focus group or group interview and 10 people for in-depth interviews. All key informants have experienced in mass media academic and professional at least years. Data collection from key informants, curriculums and course syllabi are analyzed by content analysis which employed interpretation, instant comparison, synthesis and generalization.

#### 3. Results and Discussion

In the content analysis of curriculums and course syllabi of media ethics and related subjects, the result shows that most of mass communication curriculums provide and emphasize both basic media ethics and codes of conducts. They aim to cultivate public awareness and develop students or learners to be opinion leaders. The content of course syllabi of media ethics and related subjects comprises of principles, media law, ethics and codes of conduct. In the focus group of mass media experts, the result shows that most ethics and codes of conduct classes in Thailand's universities focus on only lecture. The instructors and students do not aware of the significance of this kind of subject. The lectures do not relate to the law and mass media context. Most media professionals do not pay attention to the ethics and codes of conduct violation increasingly. The increasing of hours in media ethics and codes of conduct teaching classes are limited by the amount of subject credits. There is less collaboration between universities and media organizations. An improving of media ethics and codes of conduct classes should use mixed method teaching by brainstorming both professionals and lecturers in universities to set up a standard curriculum and course syllabus as a model. Meanwhile, lecturers can develop it for their own experiences and context.

In the in-depth interview of 10 lecturers and professionals, most of them stated that:

- Most cases that people who work in mass media organizations violated ethics and codes of conduct came from a high competition in media businesses and a lack of ethical consciousness or media responsibility.
- A problem of teaching media ethics courses came from instructors and teaching method or technique. Most instructors did not pay attention in the significance of media ethics and codes of conduct. They were not a role model and often have fixed ideas, did not raise the cases which linked to the lesson. Also, most of them used only lectures without discussions.
- Several media professional institutions in Thailand should join together and collaborate with
  academics institutions or businesses in order to develop a qualified seminar or workshop about
  media ethics and codes of conduct. The professional institutions should give the rewards and
  compliments to the journalists who are keeping the codes of conduct. In the same way,
  journalists who violate code of conduct and ethical issues should be punished according to the
  rules and orders.
- A guideline for improving teaching class should focus on 4 main points: 1) making a network between professional organizations and academic institutions/media business. 2) Focusing on practical parts in order to influence students to learn from case study, discussion, situation and phenomenon. 3) Developing instructors to have a positive attitude towards media ethics and codes of conduct. Meanwhile, instructors would become a role model for students. 4) Always updating the content of the media ethics and inserting the media ethics content in every course.

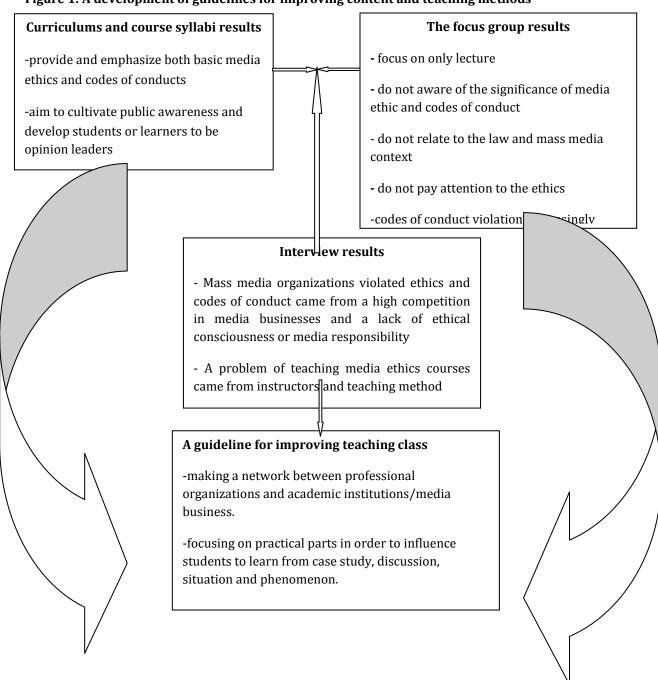
Regarding the result of the in-depth interview about professional institutions should give the rewards and compliments to the journalists who are keeping the codes of conduct. In the same way, journalists who violate code of conduct and ethical issues should be punished according to the rules and orders. This is relevant to Chitdamrongchai's result (2003) and Virawongchai's result (2006). Chitdamrongchai found that the protection of codes of conduct violation can be successful by promoting engineers to participate in the ethics training session. It is the same as engineering professional codes of conduct. While Virawongchai suggested that journalists who violated the codes of conduct should be punished by the The National Council Press of Thailand. Due to the result about the method of teaching by letting students learn from the real situation and model of situation will encourage students to be interested and pay

attention on media ethics and codes of conducts, it is relevant to Wattana's result (2001) and Kohlberg's moral development theory (Kohlberg in Crain, 1985). Wattana found that academic achievement of students who learned from ethic model was higher than the other groups significantly including learning discipline and ethical thinking. This finding can be explained by the Kohlberg's moral development. Kohlberg's theory of moral development suggested six stages within three different levels. Kohlberg extended Piaget's theory, proposing that moral development is a continual process that occurs throughout the lifespan. The six stages are 1) obedience and Punishment 2) Individualism and Exchange 3) Interpersonal Relationships 4) maintaining social Order 5) social contract and individual rights and 6) universal principles.

#### 4. Conclusion

The content analysis of curriculums, course syllabi, focus group and in-depth interviews of key informants can be concluded as Figure  $\bf 1$ 

Figure 1: A development of guidelines for improving content and teaching methods



#### Recommendations

- Acknowledge and train instructors to have a negative attitude towards media ethics and codes of conducts including promoting them to be a role model of keeping ethical practices.
- Improve teaching technique by adopting mixed-method and emphasize discussion and practices.
- Update the content of the content of the media ethics and putting the media ethics content in every course for cultivating students' awareness.
- Support good network between media professional organizations, academic institution and media corporations continually

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# The Effects of Group Guidance Peer Mentoring Module on Grade Performance of Low Academic Achievement Students in a Higher Education Institution

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**Abstract:** This study is to evaluate the effects of group guidance on academic mentoring group intervention among foundation students in Private Higher Education Institutions (PHEIS), Whereas, the objective is to measure the effects of peer mentor group guidance on a group of mentor trained under Peer Mentoring Module for academic achievement of students in the Foundation Engineering Program. A total of forty subjects (mentee) have undergone academic mentoring program with forty trained peer mentors, and subjects are low academic achievement of Engineering Foundation Program students in Universiti Tenaga Nasional (UNITEN) who obtained a Cumulative Grade Point Average (CGPA) below 2:00 points, failed subject Calculus 1 (MATF 115) and did not engage in any other mentoring program. Subjects were grouped in 2 groups; Control and Treatment group for a period of 10 weeks by using control studies, the tests before and after (pre and post-test). Component of grade performance is based on achieving results for Calculus 1. Apart from descriptive statistical analysis, nonparametric test are applied to determine its effectiveness in increasing the average difference for the group. Results showed that subjects in the intervention group experienced a positive improvement over the objectives of the study. Interestingly, treatment group showed a significant difference in performance grade for Calculus 1 with a difference of (M=54.5500, SD=8.1336) with the impact strength of 12%. In summary, the intervention of group guidance on Peer Mentoring Module have contributed positively to the findings of the grade performance of students with low academic achievement who have successfully completed their studies in Private Higher Education Institutions and Public Higher Education Institutions in general.

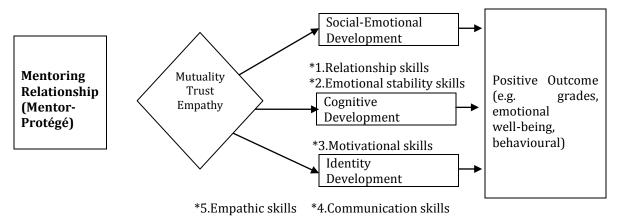
**Keywords:** Group guidance, peer mentoring module, grade performance, academic achievement and higher education institutions

#### 1. Introduction

Studies in Private Higher Education Institutions (PHEIs) for university levels include programs like Foundation, Diploma, Degree and Graduate Studies. Foundation programs are important because successful students at this level will be determined to the next level and emblem the quality for the institutions. Moreover, the number of students increased for Degree programs will make the institutions more quality and will be recognized as world class university. For students to reach self-development with high achievement, a few programs such as guidance and mentoring should be implemented in higher learning institutions. The mentoring process catogerized by friendly and ethical relationship between protege and experienced mentor, capable to show positive role towards mentee's positive development. Anderson and Shannon (1988) defined mentoring as a nurturing process in which a more skilled and a more experienced person, serving as a role model, teaches, sponsors, encourages, counsels and befriends a less skilled or a less experienced person for the purpose of promoting the latter's personal and/or personal development. Mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and associate. The real strength of mentoring comes from the social relationship based connections, focused towards desired outcomes, meeting the needs of both the mentor and protégé (mentee). Mentoring relationship between peers can be based on trust and empathy.

In Model of Youth Mentoring by DuBois and Karcher (2005), it shows that this kind of special relationship on trust and empathy will lead to social-emotional, identity, and cognitive development. This model assumed that positive result can be achieved through grade performance, emotional stability and good behavior. Therefore, the Peer Mentoring Module (PMM) is developed to train future peer mentors with soft skills that will make them more confidence, more caring and make them realize that the more knowledge they share, the more knowledge they will gain. The PMM is built systematically and provides skills namely; interpersonal relationship, communication, motivation, empathy and emotional stability for peer mentors to give opinions and constructive responses within group cohesiveness. As a result, the existence of mentoring relationship will be very strong among them and their protégé. Figure 1 below refers the PMM which is based from the Model of Youth Mentoring by DuBois and Karcher (2005).

Figure 1: Peer Mentor Module based on the Model of Youth Mentoring



\*Five Skills in Peer Mentoring Module (PMM)

*Sources:* Model of Youth Mentoring: DuBois & Karcher. (2005). Handbook of Youth Mentoring: Sage Publication, Inc. California, USA, (3), 30-38.

The Peer Mentoring Module (PMM) is also developed with various soft skills related to Big Five Personality Dimensions consists of agreeableness, conscientiousness, extraversion, openness and neuroticism by Oliver and Sanjay (1999) along with Person Centered Theory including aspects of unconditional positive regard, self actualization, active listening, empathy and genuine by Rogers (1959). In addition, Kolb Model of Experiential Learning by Wolf and Kolb (1984) is used to relate the activities regarding the PMM with types of experience faced by both mentor and protégé (mentee) during their weekly academic mentoring sessions.

#### 2. Methodology

Validity of content has been tested towards the Peer Mentoring Module (PMM) on statements or items regarding activities from the module in paper presented at UPSI-UPI conference at Shah Alam, Malaysia by Haizan and Fauziah (2012). The outcome shows that maximum coefficient value of content validity made by 5 experts from local universities is 0.87 (87%) and total coefficient validity is 0.84 (84%). Therefore, a study has been carried out to look at the effectiveness of the module on helping the low academic achievement students or the underachievers. Two groups (Control and Treatment) of Engineering Foundation Program students (mentee) in University Tenaga Nasional (UNITEN) consists of 40 people; 20 for each group with Cumulative Grade Point Average (CGPA) < 2.00 points has been tutored by 40 trained mentors; 20 for each group, using established Peer Guidance Module (Control Group) and Peer Mentoring Module (Treatment Group) for 10 sessions/weeks. The mentees went through tutoring sessions for repeated subject; Calculus 1 (MATF 115) during their Trimester 2 2012/2013 session. Towards the end of the trimester, results for Calculus 1 will be analyzed on grade performance of both groups.

## 3. Findings

A pretest-posttest control research design was utilized to look at the difference of grade performance for Calculus 1 (MATF 115) for both groups; Control and Treatment group of the students (mentees) with low achievement (CGPA below 2.00 points). The Engineering Foundation Program students were categorized specifically by their major namely: 25% Electrical Electronic (AE), 30% Mechanical (AM), 20% Power (AP) and 25% Civil (AS) as in Figure 2 for Engineering Foundation Program and Figure 3 for distribution of gender.

Figure 2: Frequency distribution of Engineering Foundation Program for Control and Treatment Groups

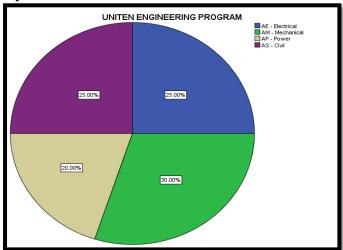
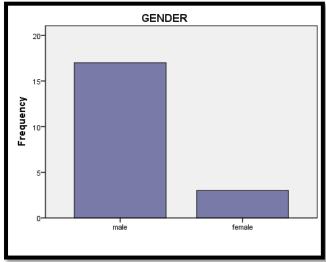


Figure 3: Distribution of gender for each group.



The results for grade performance of Calculus 1 obtained from the preliminary analysis of the frequency distribution are shown in Table 1. Levene's Test on homogeneity of variance showed no level of significance through data analysis of grade performance pre-test for Calculus 1 where there is no assuming violation on variance. This is because all respondents (mentees) failed their Calculus 1 for the first time (during Trimester 1). Whereas, Levene's Test on homogeneity of variance showed level of significance more than .05 (p > .05) of grade performance post-test for Calculus 1 where there is assuming violation on variance. However, through nonparametric test, p = .032 (p < .05), by using One-Sample Kolmogorov Smirnov test; researcher concluded that there is significance effect statistically for grade performance post-test on Calculus 1. Further to that, it shows that all respondents have passed Calculus 1 final exam for the second time during Trimester 2 (> 40 marks) on the repeated subject. As shown in Table 1, 40 respondents; 20 mentees for each Control group (Peer Guidance Module) and Treatment group (Peer Mentoring Module). Mean outcome showed that grade performance pre-test on Calculus 1 for both groups mentors and protégés in Academic Mentoring Program (M=39.00, SD=.000). Whereas, mean outcome for grade performance on Calculus 1 for post-test showed that for Control group (M=62.2500, SD=9.6348) and Treatment group (M=54.5500, SD=8.1336).

Table 1: Descriptive Statistic on Pre-Test and Post-Test towards Grade Performance for Calculus 1

Variables	Group	N	Mean	Std. Deviation	_	neity of Variances df2 Sig
Pre-Test	Treatment	20	39.0000	.0000	2	
Calculus 1	Control	20	39.0000	.0000		
	Total	40	39.0000	.0000		
Post-Test	Treatment	20	54.5500	8.1336	2	57 .150
Calculus 1	Control	20	62.2500	9.6348		
	Total	40	57.4500	9.9463		

Note: \* The mean difference is significant at the .05 level.

In addition, the findings on impact strength subject within-group towards grade performance post-test on Calculus 1 F (2, 37) = 3.891, p < .05, eta square = .120. Because of p value is less than .05, then the main effect for the group is statistically significance. Eta square value is .120, which indicates a major impact that shows from variability in grade performance for Calculus 1 relates with the intervention group. Table 2 shows the statistical finding on grade performance for Calculus 1.

Table 2: Statistical Findings on Grade Performance for Calculus 1

Variables	Statistic	Df	F	Sig. Eta Sq
Pre-Test	Between Group	2	•	
Calculus 1	Within Group	37		
	Total	39		
Post-Test	Between Group	2	3.891	.026 .120
Calculus 1	Within Group	37		
	Total	39		

## 4. Conclusion

The overall findings support the objective that Peer Mentoring Module (PMM) intervention to train peer mentors in academic mentoring program shows positive effects on increasing the passing percentage of grade performance for Calculus 1 in Trimester 2 2012/2013. After 10 weeks during the post-test, there was statistically improved in Calculus 1 scores (p < 0.05), using nonparametric test. The findings clearly stated that passing level of Calculus 1 has increased 100% with passing marks more than 40 marks. Mean outcome for Calculus 1 is 54.55 of the protégé (mentees) or the underachievers which has increased tremendously. The results suggest that the Peer Mentoring Module (PMM) would be best practised on every trimester for foundation program. Hence, with good academic achievement and best attitude, the Engineering Foundation Program students especially the underachievers will be well prepared to start their degree in Engineering Program. The research outcome may help researchers to proof that PMM through academic mentoring program can increase the attitude and confidence of the mentees. Therefore, a more positive learning perspective among the low achievers will be one of the important aspects in implementing the guidance group practice in the academic mentoring.

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# Perceived Effective Entrepreneurship Education and Entrepreneurial Intention: The Role of the Perception of University Support and Perceived Creativity Disposition

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**Abstract:** In order to increase our understanding of the factors that underlie entrepreneurial intention formation, this article investigates the roles of individual creativity disposition and the perception of university support. The study considers how the personal characteristic may mediate students' perception of effectiveness of entrepreneurship education and entrepreneurial intention. The study also aims to determine the perception of university support that could moderate the relationship between perception of the effectiveness of entrepreneurship education and creativity disposition. Using a survey of 158 university students and employing Structural Equation Modelling (SEM) with AMOS version 22, the results show that perceived creativity disposition facilitate our understanding on the entrepreneurship education and entrepreneurial intention relationship. However, in our analysis, university support does not invigorate the role of entrepreneurship education in enhancing perceived creativity disposition. Implications for research and practice are provided.

**Keywords:** Entrepreneurial intention, perceived effectiveness of entrepreneurship education, perceived creativity disposition and perception of university support

#### 1. Introduction

As a prerequisite to new venture formation entrepreneurial intention is continually receiving increasing attention, most especially from a social psychological viewpoint (Edelman & Yli-Renko, 2010; Krueger Jr, Reilly, & Carsrud, 2000; Shapero & Sokol, 1982; Shook, Priem, & McGee, 2003). Entrepreneurial intention is an important factor for providing good predictive power for engaging in entrepreneurship (Ajzen, 1987; Brush, Manolova, & Edelman, 2008; Kolvereid & Isaksen, 2006; Shook et al., 2003). Earlier contributions show that intentions have the ability to predict both individual behaviours (Ajzen, 1991), and organizational results in terms of survival, development and growth (Mitchel, 1981). Consequently, managers and entrepreneurs are appreciating and predicting intentions as an important element to succeed (Tubbs & Ekeberg, 1991). Even though some ventures are commenced for solving some problems of need and then growing to serve a bigger market, many are as a result of a planned process (Ajzen, 1987; Bird, 1988; Edelman & Yli-Renko, 2010; Kautonen, Luoto, & Tornikoski, 2010; Krueger Jr et al., 2000; Lee, Wong, Foo, & Leung, 2011; Shapero & Sokol, 1982). According to some scholars' entrepreneurial intention is the interest to undertake entrepreneurial activity (Fitzsimmons & Douglas, 2011; Gurbuz & Aykol, 2008; Krueger Jr et al., 2000), which usually involves inner guts, desire and the feeling to be independent (Ayobami & Ofoegbu, 2011). As a result, entrepreneurial intention can be employed to envisage participation among students in entrepreneurship and could clarify the reason for students' decision to venture into business (Ariff, Bidin, Sharif, & Ahmad, 2010). Understand the real factors responsible for shaping intention of students' to start a new venture is crucial for building the programmes and policies aim at promoting entrepreneurial behaviour (Bakotić & Kružić, 2010).

It is also important that potential entrepreneurs are identified and developed at their early stage while in school (Chen & Lai, 2010), while, instructors must understand the factors that motivate or hinder entrepreneurial activity (Tajeddini & Mueller, 2009). In order to design effective programmes, the factors that influence students' career choice towards self-employment should be identified; since good understanding of these factors are useful for encouraging entrepreneurial behaviour and entrepreneurial success (Lüthje & Franke, 2003). Thus, individual entrepreneurial intention will possibly remain an important construct in research area involving enterprising persons, their recognition of business opportunities and the choice to exploit various risks in establishing new ventures (Palich & Ray Bagby, 1995). In prior study, personal and environment determinants of entrepreneurial intention such as attitudes toward entrepreneurship, personality traits and social environment are widely discussed (Brandstätter, 1997; Davidsson, 1995; Franke & Lüthje, 2004; Robinson & Haynes, 1991; Segal, Borgia & Schoenfeld, 2005). Accordingly, entrepreneurial potential will motivate individuals if they believe they poses the ability, the environmental hold some potentialities and there are available social support (Kirby, 2006). The motivation to achieve and self-image have equally become known as key contributing factors (de Pillis & Reardon, 2007). Other scholars, studying the role of contextual dimensions, indicate

that environmental influences (Morris & Lewis, 1995) and environmental support (Lüthje & Franke, 2003) impact entrepreneurial intentions.

In order to extend the literature in entrepreneurship study, this study investigates the interplay among effectiveness of entrepreneurship education and individual characteristic as well as environmental support that have received less attention in entrepreneurship research: perceived creativity disposition and perception of university support. Hence, the principal research question that drives this study is how the perception of university support might affect the potency with which student's perceived effectiveness of entrepreneurship education, will inform the perception of creativity disposition on one hand, and how the perception of their creativity disposition on the other hand will explain why the student's perception of effectiveness of the entrepreneurship education, will inform entrepreneurial intention. Thus, our contribution is in the following direction; that by examining the influence of individual students' creativity disposition on entrepreneurial intentions, we address an important factor that has hardly been considered in intention based models (Hamidi, Wennberg, & Berglund, 2008).It is also believe that the important factors of personality and good supporting environment could influence a person's creative ability (Fritsch & Sorgner, 2013), so, training becomes a focal point for creative ability enhancement (Cropley & Cropley, 2000), which this study consider the university to deliver in that direction. Furthermore, this study will clarify more on the interplay among both personal and contextual/environmental factors, as little is known about the interaction between university environment and personality or other factors said to influence entrepreneurial intention (Schwarz, Wdowiak, Almer-Jarz, & Breitenecker, 2009).

#### 2. Literature Review and Hypothesis Development

Entrepreneurship education and creativity: Entrepreneurial education has been defined by Iones and English (2004) as a way of developing individuals' ability to recognise business opportunities and cash on them, to develop self-esteem and to develop knowledge and skills in commencing a business venture in the event of risk. Their definition however, emphasize on the kind of knowledge that is action based, encouraging practical learning, problem-solving type, project based, creative and allowing peer evaluation. They further argued that such learning process offers enterprising skill behaviour that is required to create and manage ventures. Similarly, this study conceptualize effective entrepreneurship education as that which provides individuals with practical sense of business, building self-confidence and developing skill for a successful business venture (Wilson, Kickul, & Marlino, 2007). It is understood from history that educational process design has certain implications for the capabilities of individuals engaged in innovative activities (Baumol, 2004). Baumol (2004) went further to explain that education on one hand provide to future entrepreneurs analytical tools necessary for engaging in innovative related activities, and on the other hand encouraged creativity and imagination in a simplified manner. Hence, it is generally agreed that creativity is a skilled that can be learned (Runco, 2004) and taught through support activities, encouragement and support to individuals (Williamson, 2001). Literature has also shown that creativity and innovation capacity can only be enhanced through continually generating knowledge and its applications (Williamson, 2001), hence, the strong dependency between the creation of knowledge and creativity (Chen, Hu, Wang, & Chen, 2011). Studies in the past have also long indicated that education should emphasize the development of creativity, believing creativity can be so influenced, and hence so many kinds of training programmes have been suggested to develop creative thought processes (Craft, 2001). In addition, creativity training programmes available in schools are said to be more effective with high involvement of teachers (Benjamin, 1984).

In a report by Tepper and Kuh (2011), the authors believe that creativity can be nurtured by training and developing specific skill over time. Hence, effective enterprise/entrepreneurship education must develop enterprising skills (Pittaway, Hannon, Gibb, & Thompson, 2009) and the key enterprising skill is the creative thinking (Gibb, 2002; A. A. Gibb, 1993). That is why creativity development among students in business schools has become a matter of priority (Ghosh, 2014). DeTienne and Chandler (2004) asserted that creativity enhancing training was found to significantly improve university students' ability to think creatively. In addition, Feng (2013), emphasised that education in creativity increases students creative ability; enhance their problem-solving ability and their discipline aptitude. Consequent to past literatures' emphases that entrepreneurial education is vital in increasing creativity development in people, especially the effectiveness of the programme, this study proposed the following hypothesis:

H1: Perceived effective entrepreneurship education is positively related to perceived creativity disposition

Creativity and entrepreneurial intention: Creativity is defined as creating something that is novel and useful (Amabile, 1996), it is also regarded and conceptually accepted in this study as the combination and rearrangement of knowledge in the minds of people that allows flexible thinking in the creation of the novel ideas that are unexpected but rather useful (Chen, Li, Li, Zhang, & Dong, 2013). Godfrey (1996) Considers creativity necessary for continuing reinventing businesses and suggests unleashing imagination of people through playfulness and fun. He also considers innovation as necessary to turn ideas into goods and services that are useful and beneficial to the market. Creativity, thus, is the basis of innovation (Almog-Bareket, 2011; Dewett & Gruys, 2007) and key to organizational growth. Hamidi, Wennberg & Berglund (2008) employed social cognitive theory to clearly indicate the need for considering creativity in entrepreneurial intention based models. The researcher believe strongly that creativity disposition will built enormous amount of confidence that is very likely to yield expected result of becoming self-employed. In a related study, Zampetakis, Gotsi, Andriopoulos and Moustakis (2011) shows that the more creative the students think they are, the higher their entrepreneurial intentions. Furthermore, Fatoki (2010) identified in a study of entrepreneurial intention of south African final year graduating students that creativity was a motivator of entrepreneurial intention. Moreover, several studies have supported self-assessment of creativity disposition, for example, Batey & Furnham (2008) argue that individuals understand themselves better when it comes to their own creative ability. Therefore, people should be allowed to make effort to judge themselves as capable of generating new and valuable ideas necessary to succeed as entrepreneurs (Darini, Pazhouhesh, & Moshiri, 2011). This study will therefore investigate further the influence of individual students creativity disposition on entrepreneurial intentions, which has hardly been considered in intention based models (Hamidi et al., 2008). Hence, the following hypothesis is proposed:

H2: Perceived creativity disposition is positively related to entrepreneurial intention

University support and entrepreneurial intention: As Drucker (1993) relates, what makes entrepreneurship effective may not be economical, but changes that are institutional. Universities are therefore seen as promoters of entrepreneurship by providing entrepreneurship education and complimentary supports that are necessary to boost the potential intentions of venture creation and subsequent growth, hence they are key players in the provision of training (OECD, 2010; Romero, Petrescu, & Balalia, 2011). When high quality entrepreneurship programmes are delivered, then higher number of entrepreneurs will emerge (Wang & Verzat, 2011). Accordingly the university environment is the right place to mould and influence students to build entrepreneurial intention (Franke & Lüthje, 2004). Therefore, environmental perception guides individual behaviour (OECD, 2010). For example, Luthje and Franke (2003)showed that barriers and support factors in the entrepreneurship setting directly affects entrepreneurial intention. Similarly, Turker and Selcuk (2009) indicated that educational and structural supports have impact on entrepreneurial intention of students. Hence, in their quest to determine the essential factors influencing students' intention to create new venture, Schwarz et al. (2009) found university environment as influencing students' entrepreneurial intention. Accordingly, universities play significant role in entrepreneurial curriculum and content development as well as making entrepreneurship appealing to students (Keat, Selvarajah, & Meyer, 2011; Wang & Verzat, 2011). Following these findings, the hypothesis is developed:

H3. Perception of university support is positively related to entrepreneurial intention

The mediating role of perceived creativity disposition: We argue that perceived creativity disposition will explain the relationship between the perceived effectiveness of entrepreneurship education and entrepreneurial intention. Entrepreneurship programmes is shown to increases attitudes and the overall entrepreneurial intention (Souitaris, Zerbinati, & Al-Laham, 2007). Also, Dohse and Walter (2010) revealed that intentions and attitudes are directly affected by the active modes of entrepreneurship education, while the influence of the reflective modes depends on the environmental area. Hence the study provides implication for delivering of entrepreneurship education. More literature has also established a considerable change in perception and the positiveness as a result of the experience obtained from the enterprise education program (Peterman & Kennedy, 2003). Other results revealed considerable changes in attitudes in response to entrepreneurship education (Byabashaija & Katono, 2011). The findings present lessons for policy makers and raise more questions for researchers, probably on how effective such courses in entrepreneurship education can be and the mechanism that can explain its effectiveness. Zainuddin and Rejab (2010) also believed that specialized entrepreneurship education contributes to increasing entrepreneurial self-efficacy and subsequently towards their self-employment intention, and therefore increases their employability value. This study therefore highlighted that,

introducing specific entrepreneurship education targeted and suitable to a particular group could yield a desire result. Hence, the following hypothesis is formulated:

H4. Perceived creativity disposition mediates the positive relationship between perceived effective entrepreneurship education and entrepreneurial intention

The moderating role of the perception of university support: In addition, we argue that perception of university support amplifies the positive relationship between perceived effective entrepreneurship education and perceived creativity disposition. Personality traits are said to lose their strength in affecting entrepreneurial intentions because individuals are operating within a particular environmental situation that may be responsible for the weak efficacy of personality characteristics (Franke & Lüthje, 2004; Schwarz et al., 2009). According to Bechard & Toulouse (1998) what is responsible for influencing students' decision to become entrepreneurs are embedded in the universities. In affirmation, Franke and Luthje (2004) emphasised that universities do have control over some factors that can enhance students' entrepreneurial intentions; they initiate entrepreneurial spirit by arranging and providing a conducive, creative and supportive atmosphere that is necessary for imaginative thinking that is useful and applicable. Moreover, entrepreneurship career development can be supported by universities (Turker & Selcuk, 2009) by employing role models in training, providing entrepreneurial support network and encouraging business plan competitions among students (Lüthje & Franke, 2003). Other studies have also shown the relevance of some factors in developing entrepreneurship, some of which are; environmental culture, established dedicated facilities meant for entrepreneurship related activities and other resources to aid idea generation and innovation among students (Autio, Keeley, Klofsten, & Ulfstedt, 1997; Fayolle, 2000). In a qualitative study Maina (2011) examined the role of colleges in influencing entrepreneurial intentions among young people. The study found that the college environment and exposure to entrepreneurship experiences impacted on entrepreneurial intentions by impacting on self-efficacy and perceptions of desirability. A study by Ayob, Hussain, Mustafa, & Shaarani (2011) concluded that supportive learning environment is capable of developing creativity. While, other important factors of personality and good supporting environment could also influence a person's creative ability (Fritsch & Sorgner, 2013). Based on these assertions, we proposed the following hypothesis:

H5. An increase in the perception of university support will strengthen the positive relationship between perceived effective entrepreneurship education and perceived creativity disposition, such that the relationship is amplified for a stronger perception of university support.

#### 3. Methodology

Sample and data collection: The hypotheses of the study were tested with quantitative data obtained from a sample of university. Since our focus is on the entrepreneurial intentions, university students are ideally suited for the study as they are yet to perform the actual entrepreneurial behaviours (Krueger Jr et al., 2000). Students cutting across various academic backgrounds (e.g. social sciences, humanities, sciences) and those whom have offered or are offering the entrepreneurship education as a course from Bayero University Kano in Nigeria completed the self-administered survey questionnaires. The university's entrepreneurship coordinators employed the service of the entrepreneurship education course lecturers to distribute and collect the questionnaires. The final sample consisted of 158 respondents.

#### Construct measures

Effective entrepreneurship Education: This section adapted 5 items with a 7-point Likert-scales of 1-strongly disagree to 7= strongly agree to measure perception of the effectiveness of entrepreneurship education from Souitaris et al. (2007). These items were initially developed as a perceptual scale to measure learning. Example of the questions are; "to what extent did the entrepreneurship education increase your understanding of the attitudes, values and motivation of entrepreneurs"?, "to what extent did the entrepreneurship education increase your understanding of the actions someone has to take in order to start a business"? ( $\alpha$  = .84).

**Perceive Creativity Disposition:** The perception of creativity disposition is measured by using 8 items that is adapted from Zhou and George (2001). This construct is employed in order to assess students' perception of their capability of producing novel and useful ideas. Examples of the items are: "I come up with creative solutions to problems", "I am a good source of creative ideas" and etc. ( $\alpha$ = .87).

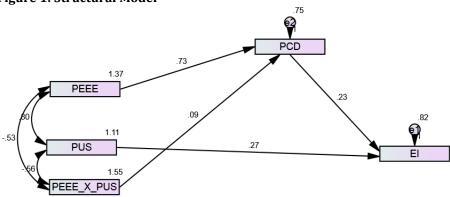
**Perception of University Support:** The measurement for the perceived university support is adapted from Autio et al. (1997). The instrument consists of 4 items and the example of the items included: "The courses provide students with the knowledge required to start a new company" ( $\alpha = .81$ ).

**Entrepreneurial Intention:** The 6 items measuring entrepreneurial intention is adapted from Linan and Chen (2009). Some of the sample items are: "I am ready to do anything to be an entrepreneur", "I am determined to create a firm in the future" and etc. ( $\alpha = .88$ ).

#### 4. Structural Model

*Creating Composites from factor scores:* Composite variables were created from the factor score in AMOS; this was to avoid using the full structural model with all the individual items attached (see figure 1). The interaction terms were computed by multiplying the standardized variables of interest.

Figure 1: Structural Model



*Model Fit (of initial structural model after fitting – i.e., not during moderation tests).* 

The fitted structural model shows a close fit; in other word it had a very good fit. Table 1 presents the goodness of fit index of the structural model.

Table 1: Goodness of fit for structural model

Metric	Observed value	Recommended
cmin/df	1.028	Between 1 and 3
CFI	1.000	>0.950
RMSEA	.013	< 0.060
PCLOSE	.489	>0.050
SRMR	.021	< 0.090

*Hypothesis testing:* All the direct paths in our model were tested after the model fit. In addition, the Mediation was tested using 5000 bias corrected bootstrapping resampling in AMOS. The indirect effect was analysed to establish the mediation. As also earlier pointed out, the independent variables were standardized before creating the product variable to test the interaction hypothesis. The results are summarised in Table 2. Furthermore, we observed that the model fit for the final moderated model was good (cmin/df = .542; CFI = 1.000; RMSEA = .000; PCLOSE = .772).

Table 2: Hypothesis Testing Results (Direct and Moderating relationships)

Relationship	Estimate	S.E.	C.R.	P	Decision
PEEE> PCD	.681	.060	11.663	***	Supported
PCD> EI	.272	.067	3.461	***	Supported
PUS> EI	.276	.076	3.504	***	Supported
PEEE_X_PUS> PCD	.093	.060	1.488	.137	Not supported

<sup>\*\*\*</sup>p<.001

We found a positive relationship between the perceived effective entrepreneurship education and perceived creativity disposition ( $\beta$  = .681, p<.001). We also observed a direct positive relationship of perceived creativity disposition ( $\beta$  = .272, p<.001) and entrepreneurial intention. Furthermore, it is also indicated a direct positive relationship of the perception of university support ( $\beta$  = .276, p<.001) with entrepreneurial intention. However, we do not found a positive interactions between the perception of university support and the perceived effective entrepreneurship education to increase intention ( $\beta$  = .093, ns).

The mediation test was performed after 5000 bootstrapping in AMOS and the result is presented in Table 3

**Table 3: Standardized Indirect Effects - Two Tailed Significance (BC)** (Group number 1 - Default model)

	PEEE	PCD	Upper Bounds (BC)	Lower Bounds (BC)
PCD			0	0
EI	0.000		0.319	0.083

The results indicate that perceived creativity disposition mediates the positive relationship between perceived effective entrepreneurship education and entrepreneurial intention.

#### 5. Discussion

Entrepreneurial intention is an important factor for providing good predictive power for engaging in entrepreneurship (Ajzen, 1987; Brush et al., 2008; Kolvereid & Isaksen, 2006; Shook et al., 2003). This study investigates the interplay among effectiveness of entrepreneurship education and individual characteristic as well as environmental support that have received less attention in entrepreneurship research: perceived creativity disposition and perception of university support. Hence, the study considers how the perception of university support might affect the potency in which student's perceived effectiveness of entrepreneurship education will influence the perception of their creativity disposition on one hand, and how the perception of this creativity disposition will explain the student's perception of effectiveness of the entrepreneurship education on the other hand. We, therefore, argue that entrepreneurial knowledge with environmental support will motivate students to believe they possess the ability to undertake entrepreneurial activity. Our results indicate empirical support for most of our expectations. We found that there is a positive relationship between perceived effective entrepreneurship education and perceived creativity disposition. The study also indicates a positive relationship between perceived creativity disposition and entrepreneurial intention. University support has a direct positive relationship with entrepreneurial intention. Furthermore, perceived creativity disposition mediates the positive relationship between perceived effective entrepreneurship education and entrepreneurial intention. However, the positive interactions proposed between the perceptions of university support and perceived effective entrepreneurship education was not upheld.

This results support previous research about the relationships in our model. For example, creativity enhancing training was found to significantly improve university students' ability to think creatively (DeTienne & Chandler, 2004; Feng, 2013), while creative ability of students is also believed to be a motivator of entrepreneurial intention (Fatoki, 2010; Zampetakis et al., 2011). Previous studies have also indicated that support factors in an entrepreneurship setting can influence entrepreneurial intention (see Lüthje & Franke, 2003; Schwarz et al., 2009; Turker & Selcuk, 2009). Finally, self-efficacy is shown to be a mechanism that can translate the effect of entrepreneurship programmes on entrepreneurial intention (Souitaris et al., 2007; Zainuddin & Rejab, 2010). This study offers some important practical implications. Our consideration of the interplay between effectiveness of entrepreneurship education and individual characteristic as well as environmental support shows that these factors should be considered simultaneously to better understand entrepreneurial intention formation. Entrepreneurship programmes in universities should recognise that career-specific skills development as well as structural support from the university management will work together to have effects on the development of students interest to start their own business. In addition, educators should understand that their high involvement in creativity training programmes will make it effective. Moreover, it is also important that the assessment of this training programme allow for individual student's self-assessment of their creativity disposition, as individuals understand themselves better when it comes to their own creative ability (Batey &

Furnham, 2008). This allows the instructors to judge the level of the capability of the students in generating new and valuable ideas necessary to succeed as entrepreneurs. University should also recognize it role as promoters of entrepreneurship, and thus, should provide entrepreneurship education and complimentary supports that are necessary to boost the potential intentions of venture creation. Owing also to the fact that delivery of high quality entrepreneurship programs will result to emergence of higher number of entrepreneurs (Wang & Verzat, 2011). Hence, this study has clarified more on the interplay between personal and contextual/environmental factors, as little is known about the interaction between university environment and personality.

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# Developing Discipline among Students through Social-Emotional Learning: A New Model to Prevent and Reduce Behavior Problems

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**Abstract:** The disciplinary problem in schools is a major concern for government, educators, parents and society in Malaysia. Knowing that discipline problems will be dealt with fairly and consistently has been shown to have a dramatic impact on student well-being and achievement. This study discussed the discipline issues in Malaysia; the affects of reactive and punitive approach; root cause attributing to the students discipline problems; how to cope with the disciplinary problems; and using social-emotional learning (SEL) to develop discipline among students. SEL is a promising approach that is able to reduce risky behaviours, increase desirable behaviours and promoting positive development.

**Keywords:** Discipline; Reactive and Punitive Approach; Social-Emotional Skills; Mental Health; Social-Emotional Learning

#### 1. Introduction

Our education is at a critical juncture, parents and educators focus on the cognitive elements of education, while other life skills are often has been underemphasized or altogether forgotten from the in-school experience (Buffett & Shriver, 2012). Both parents and educators want young peoples to succeed in academic, personal, and social lives (Payton, Wardlaw, Graczyk, Bloodworth, Tompsett, & Weissberg, 2000), but in school across the country, there is a missing critical piece in education to build a holistic and healthy student - social-emotional skills. Therefore, many children become less connected to school, thus negatively affects their academic performance, behaviour and health (Blum & Libbey, 2004). Following by this, conduct problems such as behavior problems, are externalizing problems in mental health difficulties, and a manifestation of psychological difficulties. Behavior problems take the form of discipline problem that is a common phenomenon in many schools in Malaysia. Disciplinary problem is a prevailing problem affecting the schools in Malaysia and also across the nations around the world. Disciplinary problems have a dramatically impact on students' academic performance and wellbeing, furthermore, it also interferes the teaching and learning process in classrooms. Developing discipline among students is a long-standing challenge for educators. At the heart of this challenge is the use of reactive and punitive versus supportive disciplinary practices in curbing the disciplinary problems (NASP, 2002). The legislation and research always study for best practice strategies to reduce the disciplinary problems. Such effective discipline practice can increase students' desirable behaviour, create conducive and supportive learning environment in school and classroom, build relationship among teachers and students, ensure the safety and dignity of students (NASP, 2002) and educators and develop selfdiscipline or self-management, with an aim to have long-term outcomes.

In this recent years, discipline issues has made a major concern to all party including parents, educators, government and the public alike. From minor and common discipline issues like littering to juvenile cases like rape, incest, robbery and such. Minister of Education of Malaysia reported in 2013 that, there were 107,191 students were caught for indiscipline in 2012, included truancy (17,343, or 16.18%), crime and delinquency (1432, or 13.36%), misbehavior (9926, or 9.26%), pornography (3778, or 3.52%), vandalism (3630, or 3.39%), personal neatness (13926, or 12.99%), time wasting (10403, or 9.71%), bullying (4159, or 3.88%), smoking (14298, or 13.34%) and so forth. The statistics comprised of 26.91 percent from primary schools and 73.09 percent from secondary schools. In the same year of 2012, MOE of Malaysia revealed that a total of 1811 students were expelled, 6746 students were suspended, and, 16189 students were caned. Truancy showed the highest rate among the disciplinary problems of students. While bullying problems are escalating and draw attention from government and public in these recent years. According to De Voe, Kaffenberger, and Chandler (2005), bullying can be categorized as a breach of discipline in school. It is a disciplinary issue that has attracted attention from the society and mass media (Norshidah & Khalim, 2014). Bullying is aggressive behavior and an issue that continues to draw attention from government, researchers, educators, parents and society. The increase in reported incidents of behavioral problems and delinquency clearly reflects that violations of human rights are rampant among students. Violence is a common occurrence in schools as indicated by numerous

incidences of vandalism, gang fights, assaults, extortion, molestation, bullying and arson. Students' security, both physical and sexual, is threatened by these acts of violence (Suhakam, 2005).

There are a considerable number of studies on the disciplinary issues of students in Malaysia, however, most of these studies were carried out to identify the positive and negative behaviors in students (See, 2009), to determine the level and the factors contributing to the students discipline problems (Mastthurhah, Puteri Rohani Megat, & Muhammad Sufi, 2013). This indicated the gap as lacks of research relate the root cause of discipline problems to mental health difficulties, and a new paradigm namely supportive disciplinary practice by using social-emotional learning (SEL) was introduced in this study to prevent and reduce the discipline problems. It is imperative that we stop to look at what is happening in school and the country, in terms of providing positive environment and quality experiences for children. In view of this, this study aims to examine some key issues in this area. This study is to view the disciplinary problems among students from the social-emotional perspective as well as to provide an alternative approach to tackle the problems. Besides, the researcher would like to raise the attention of Ministry of Education in this effort, to understand the root cause of discipline problems and thus enhance the students' inner part. This research might lead educators and parents to understand how critical these SEL and school environments are to the development of children. The study begins by exploring the call to rethink the current disciplinary practice which is based on reactive/punitive approach that underpins much of the contention. Following by discussion of the literature, focusing on three key questions: What is the root cause of discipline problems? What are the strategies to cope with the discipline problem? How SEL as a supportive disciplinary practice can help? These are the key issues to be discussed and as the consideration in developing practices, policy, and further research in this area.

#### 2. Rethinking School Discipline: An Overview of Current Disciplinary Practices

The word discipline can be described into two distinct categories (American Heritage Dictionary of the English Language, 2000). The first category of definitions described discipline as a focus on a reliance on external controls, submission to authority and punishment. The punishment in first category of definition aimed to correct or train; to teach to obey rules or accept authority; to punish in order to gain control or enforce obedience; to impose order on; and a state of order based on submission to rules and authority (Dupper, 2010). This definition is cruel, coercive and reactive. The second category of definitions reflects the original Latin root of the word discipline - "to learn" (Morrison & Skiba, 2001). This definition put in place which teaching and learning can take place. The definition can be described as the strategies that can be used to teach, train, coordinate, regulate and organize individuals and their activities in the school (Thornberg, 2008). This definition focused on development of self-control through teaching the problemsolving skills and learning more productive ways to express feelings. The training in this definition expected to produce specific character or pattern of behaviour, especially training that produces moral or mental improvement (Dupper, 2010). This definition is comprehensive, nurturing, liberating (Bechuke & Debeila, 2012) and democratic. How have these disparate definitions of discipline impacted discipline policies and practices in Malaysia public schools over time? To curb the disciplinary issues, the Ministry of Education (MOE) of Malaysia introduce the punish-based disciplinary practice, and disseminates and enforces a comprehensive set of school rules and regulations. Schools provide learners with a copy of the school rules and regulations (Tie, 2014). School rules are enforced by means of a system of surveillance, penalties and punishments, which include demerit points, corporal punishment, alternative school placement, suspension and expulsion (Tie, 2014). At present, the method for maintaining school discipline is prescribed in the "School Disciplinary Procedure Handbook for Headmasters and Teachers". Schools and their teachers are expected to follow the guidelines outlined in the guidelines, especially in handing out punishments to misbehaving students.

Reactive and punitive approach is a common practice in handling the discipline problems in Malaysia. It is a negative discipline which describes a system where children are not allowed to participate in their own discipline. Children are seldom involved in procedures for complaints and reform (UNICEF Malaysia Communications, 2008). In fact, children have to be able to understand what their mistakes are and how they can make amends. Reactive and punitive approach in schools usually in the form of corporal (physical) or emotional punishment which carried out by teachers and other school staff, with the belief that this approach holds the correct means of disciplining, correcting, controlling, educating, or modifying the behavior of a student. However, research tells us that increasingly common in recent years, reliance on punitive approaches to discipline has proven largely ineffective, even counterproductive (NASP, 2002).

Corporal punishment is allowed in Malaysia, although the MOE of Malaysia has issued a clear set of guidelines regarding the application of corporal punishment. However, it is generally acknowledged, and has been demonstrated through research, that such punishment would result in emotional and psychological scarring due to humiliation, stigmatization, denigration, fear and ridicule (UNICEF Malaysia Communications, 2008). Studies have also shown that children who have experienced cruel, inhumane treatment are more susceptible to subject others to similar degrading actions. Many studies have shown that corporal punishment is positively related to bullying behaviors. Children who live in punitive environments rate higher on aggressive behaviors. Therefore, if corporal punishment is to prevail, so will bullying, and the vicious cycle of violence is perpetuated (UNICEF Malaysia Communications, 2008).

Many schools have adopted the punitive disciplinary practice approach to school discipline that usually entails the expulsion or suspension of students as an automatic consequence of serious acts of misconduct, particularly the fighting, delinquency and so forth. Furthermore, when practice the punitive approach, without consideration of the severity of the misbehavior involved, negative impact on student, and the school climate, harsh consequences are invoked automatically (NASP, 2002). Sprague and Horner (2006) also stated that using the reactive and punitive approaches to respond to problem behaviors is ineffective. The problems will reoccur and increase when punishing students with disruptive behavior without teaching them with the expected behavior and coping skills (Tran, 2007). Research repeatedly has demonstrated that suspension, expulsion and other punitive consequences are not the solution to dangerous and disruptive student behaviors (NASP, 2002). Research shows that getting suspended or expelled increases students' risk for falling into unproductive behavior, affecting their social-emotional development, academic performance, and life trajectories. According to American Institute of Research, evidence shows that students who are suspended or expelled from school as a means of punishment may be more vulnerable to the involvement in the delinquency.

Studies also find that positive approaches to school discipline at all ages can actually improve students' academic performance, and those students are less likely to become involved in the juvenile justice system or have need for behavioral services. In fact evidence, indicates that dangerous students do not become less dangerous to others when they are excluded from appropriate school settings; quite often they become more so. Some local authorities claimed that discipline should be taught, and need to have the enforcement of discipline rules in schools. As Bennathan (1992)'s statement above, schools who practices punishments when address students' discipline problems can increase the problems. Reactionary approaches, such as school suspension or expulsion briefly eliminate the problem in the school context, provide immediate and short relief of the problem, but consequently is ineffective as the problem is displaced to somewhere else, such as the home (Sprague & Horner, 2006; Tran, 2007). As a whole, the punish-based disciplinary practices do not increase school safety. Schools rely too heavily on suspension and expulsion, and the practices neither improve school climate nor address the source of student alienation (NASP, 2002). Besides, the practices are related to a number of negative consequences, including increased rates of school dropout and discriminatory application of school discipline.

According to Bear (2011), there are multiple limitations of punish-based disciplinary practice. The effectiveness of this practice for the disciplinary problems is short-term but not the long-term, and punishment elicits short-term compliance but does not develop long-term self-discipline. Besides, this approach actually teaches students not to get caught, but not teaches them to differentiate the good and bad behaviors. Punishment fails to address the multiple factors that typically contribute to a student's misbehavior. It is regarded as using the simple, fast, and short-term solution to suppress or control a complex and long-term problem. Centre for Mental Health in Schools (2008) states that this approach is kind of approach that consists of a form of "social control aimed directly at reducing disruptive behavior" (p. 6-4), while doing little to improve student motivation and engagement in learning or to develop intrinsic motivation." Although the researches tell us the truth of ineffectiveness and consequences of reactive and punitive approach in curbing the disciplinary problems, our government, educators, parents and society still show their over-reliance on it. This indicates the disparity between educational research and practice, as the evidence based effective methods for curbing the problems are not being implemented. All the related parties must rethink their discipline policies and seek new paradigm to address students' behavior problems. A possible new paradigm is looking at the use of SEL in managing discipline in schools.

**Other Initiatives of Government in Curbing Disciplinary Problems:** Other than reactive and punitive approach in curbing the disciplinary issues, government of Malaysia also introduced some other strategies. The government has called ten ministries to form a special body named Main Committee in

Handling Student Discipline Symptoms ("Jawatankuasa Induk Menangani Gejala Disiplin") to plan strategies in reducing the disciplinary problems. The collaborations among those ministries could tell the discipline problems in Malaysia are alarming. Besides, there is collaboration among police and MOE in reducing the discipline problems, especially the truancy and delinquency problems. Some mass media portrayed the disciplinary issues as criminal cases. In fact, the discipline problems are kind of educational problems and should be curbed through educational strategies to cure the root instead of criminalized the behavior problem students. According to Deputy Minister of Health, YB Dato' Seri Dr. Hilmi Bin Haji Yahaya mentioned that MOH is cooperating with MOE to implement Healthy Mind Program (Program Minda Sihat) in schools. The program is conducted to determine the state of mental health of secondary school students by conducting mental health screening on symptoms of stress, anxiety and depression. The students who are detected to have severe symptoms of stress, anxiety or depression, appropriate interventions will be given. The Healthy Mind Program is a good initiative by the MOH to assess students' mental health states as many health problems may pass unnoticed in schools. It is also aimed to promote mental health among secondary school students in facing any life challenges and reduce the disciplinary issues. But prevention should be started in early stage of children, and there is a need to develop a well comprehensive plan in promoting the prevention and early intervention program from preschool, continues through to tertiary education.

Besides, MOE implements some strategies in education system to produce moral improvement and promote mental health wellbeing for students, and with an aim to reduce the disciplinary problems. One of the strategies is to integrate social and emotional elements into the curriculum through Moral Education ("Pendidikan Moral") and Health Education subjects ("Pendidikan Kesihatan"). But the implementation of this is still far from satisfactory due to the implementation plan is not well design, there is no real implementation and the teachers do not receive any training regarding social and emotional skills to teach. One study which carried out to investigate the teachers' attitudes and practices on SEL found that the teachers were not aware about the SEL integration in Health Education. Majority of them did not have SEL practices in their classroom (Lee, Yeo & Hadijah, 2015). MOE also press on with school counselors to play a vital role in helping the students with discipline problems, through psychosocial and mental welfare program included hysteria case program, healthy mind program and sexual symptoms program. Other than these are the counseling sessions for students.

Our government has indeed called on schools to intervene through single educational programs such as anti-drugs campaign, exhibitions, seminars, campaigns and quizzes which contribute to discipline students, or promote moral, civic, and mental health for students, and some involving school clubs and Parent-Teacher Association (PTAs). However, those programs focus on one single problem or issue such as preventing substance use. But addressing single problem or issue is not efficient, and is not effective in reducing social-emotional problems or mental health difficulties (Merrell, Ervin, & Gimpel, 2006). In addition, the problems associated with schools implementing multiple specific topic programs are typically very short; are not supported or reinforced in the home or daily lessons in schools; do not have chance to have consistent practice in daily life; and are often not regarded as important as the academic curriculum in schools (Payton et al., 2000). Furthermore, all the programs are interrelated, but they are scatter without systematic approaches in implementation. Instead of using traditional approaches, research has indicated a need and an understanding for more systematic preventative and proactive approaches for addressing school problems in terms of discipline problems, and how school problems or dysfunction is related to the larger system (Sheridan & Gutkin, 2000). Consequently, schools need a proactive, inclusive approach, systematic, educative prevention and early intervention program that target all students to prevent and reduce behavior problems, while enhancing their social-emotional functioning and creating supportive school climate.

**Understanding the Root Causes: Meeting the Developmental Needs of Children:** Typically, government, educators, parents and society focused on discussing the contributing factors for disciplinary problems such as low socioeconomic status, peer influence, lack of parental guidance and religious instruction, school problems, and a shortage of schools and teachers. However, the parents, educators, government and public might not realize that the discipline problem is type of mental health difficulties and its root cause is the lacking of social-emotional competencies, and therefore without this awareness, they continue to encourage for the punish-based disciplinary practices. When parents and teachers expect children to conform to all the rules and regulations and work to their expectations especially academically and behaviourally, some children may just "disappoint" the adults. Any inappropriate strategies by the adults may end up bigger disappointments. Reactive and punitive

approach is actually trying to suppress the symptoms instead of treating the root cause. Hence, there is a pressing need to replace punish-based disciplinary practices with supportive disciplinary practices or known as positive discipline strategies, which encourages children to develop self-control, confidence and respect for others through an ongoing educational process using non-violent approaches.

According to Goleman (1995), enormous researches claimed that emotional intelligence is critically important to children's psychosocial development. In contrast, lacking of emotional intelligence in children could be associated with various internalizing and externalizing behaviors. With lacking of emotional intelligence, one will develop lower levels of empathy, inability to manage emotion (Ciarrochi, Chan, & Caputi, 2000), higher levels of alexithymia which is unable to express the emotion (Parker, William & Aldridge, 2001), as well as higher levels of depression, somatic symptomatology, neuroticism, anxiety and stress (Dawda & Hart, 2000). Consequently, for externalizing behavior, emotional intelligence deficiency are associated with poor academic performance (Bar-On, 1997), higher levels of tobacco and alcohol use (Trinidad & Johnson, 2002), and higher levels of sexual offending. A student who possesses the social-emotional competencies able to cope with the challenges in life, despite the problems comes from his/her family, peer, school or society.

Besides, children who lack of appropriate social-emotional skills to cope with their life challenges are at risk for developing mental health difficulties or social-emotional problems (Kavale, Mathur, & Mostert, 2004), and may have a negative attributional style that they interpret ambiguous social situations as threatening (De Castro, Veerman, Koops, Bosch & Monshouwer, 2002). Besides, when they lack of the SE skills, they might have limited behavioural repertoires and might possess limited or no ability to control reactions to stressful situations when their emotion was provoke. Aggression is always the reactions in such instances, and therefore cause discipline problems in schools and place the children at particular risk of exclusion from schools (Cassen, Feinstein, & Graham, 2009) and subsequently, from society (Christle, Jolivette, & Nelson, 2005). Understand that the disciplinary problems are kind of the mental health difficulties in fact, the mental health issues, undoubtedly, to be gained critical attention. Mental health issues, including school children are a serious concern to our nation, but the prevalence of mental health problems in children can often co-occur or go unnoticed. Mental health issues are now a serious issue and the related problems in Malaysia are alarming. According to National Health and Morbidity Survey (2011), 12 percent of Malaysians with age 18 to 60 are suffering with some forms of mental illness, and the suicide rate increased from eight in the 1980s to nowadays nine to 12 persons for every 100,000 population. Besides, the mental health issues involving adolescence and children with age 15 and below showed mental health problems rose from 13 percent in year 1996 to 20 percent in year 2011. There is urgency and need to address in order to minimize the mental disorders occur (Che Rozaniza, Asbah, & Rajalingam, 2013).

#### 3. Basic Philosophy and Approach: Coping Disciplinary Problems

We need to understand the basic principles drawn from the theories, and realize evidence based and research based methods to cure from the root. According to Ministry of Education of Singapore, effective discipline is based on a consistent philosophy. Some basic philosophy and approach for developing positive discipline in students are:

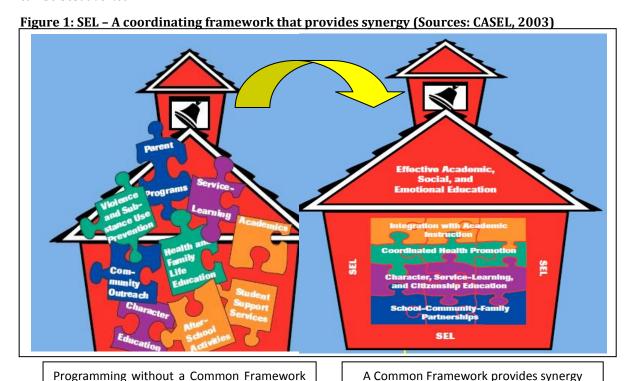
- The goal of discipline is to teach or develop student self-control or self-discipline which is more student-centered and the goal is more long-term (Bear, 2011);
- Discipline is a learning process to develop students' thinking and moral faculties (MOE of Singapore);
- Focus is on the behavior, not the student as a bad person (centre for social and emotional education);
- A whole-school, multi-faceted, comprehensive, systematic approach is required.

Self-discipline consists of five social-emotional competencies, and developing self discipline is important, as it connotes the critical notion of internalization. Through learning the self-discipline from SEL, the children are able to actively transform and endorse the internalized the values, standards, beliefs, and attitudes of their parents, teachers, and others in this society as their own (Bear, 2011). Many strategies focused solely on decreasing disruptive behavior, and reducing the disciplinary problems. In fact, a comprehensive program also emphasize on increasing the desirable behaviors, healthy emotion and mental health status, and improvements in cognitive thinking, skills and performance. There is a need to replace punitive in-school suspensions with discipline that focuses on student needs and helps students learn self-discipline. The students need to learn to develop intrinsic discipline, motivation and inner strength. The children need to enhance their social-emotional competencies through teaching the social-

emotional skills in classroom by teachers via a holistic approach that includes a focus on affect, behaviour and cognitions, creating a supportive environment, and providing opportunities for students to practice good behaviour in their daily life.

According to NASP (2002), safer schools are more effective learning environments and students improve their behavior and performance when they are given an appropriate education in a conducive environment. And opportunities to forge relationships with caring adults, coupled with engaging curriculum, can prevent discipline problems. Positive solutions address student needs, environmental conditions, teacher interactions and matching students with curriculum. Social and emotional learning promotes the mental health of all children by helping schools focus on addressing children's skill development and creating a safe and caring school climate (Lynn, McKay & Atkins, 2003). Social-emotional learning (SEL) contains the characteristics mentioned above, and thus is strongly recommended by the research to use in curbing the disciplinary problems.

A New Paradigm of School Discipline: Supportive-Preventive Model: The current discipline paradigm in Malaysia's public schools is ineffective and responds to student misbehavior by punishing and criminalizing students. Indeed, there is a pressing need for a fundamental paradigmatic shift in the way that we think about school discipline and the ways in which schools develop discipline policies and practices (Dupper, 2010). A new paradigm based on supportive-preventive model which is comprehensive, proactive, systematic, nurturing, and liberating namely SEL is thus introduced in this study. SEL is perhaps more important than ever as an essential component of school reform (Zins, Weissberg, Bloodworth, &Walberg, 2004). SEL emphasizes relationships and the long-term goal of developing self-discipline (Bear, 2011). SEL addresses the social and emotional variables that place youth at risk for school failure in terms of lack of attachment to a significant adult and inability to regulate emotions; or promote school success such as ability to empathize with and work with others and effective conflict resolution skills (CASEL). As shown in Figure 1, SEL provides a common language and coordinating framework for communicating not just about SEL, but about a wide range of programs and teaching approaches commonly found in today's schools (Wilson, Gottfredson, & Naiaka, 2001), Once there is enhancement of social-emotional competencies and skills, positive relationship among teacherstudent and positive learning environment in classroom, discipline problems can be reduced or prevented. Research also tells us that SEL promotes young people's academic success, engagement, good behavior, cooperation with others, problem-solving abilities, health, and well being, while also preventing a variety of problems such as truancy, alcohol and drug use, bullying, and violence. Hence, discipline problems connected to mental health difficulties or problems, which can be alleviated if local authorities and educators can understand and address the root cause and come to a consensus recognizing that SEL can be best averted.



SEL is the process for the children to acquire the fundamental skills for life effectiveness. There are five core skills namely social-emotional competencies such as self-awareness, social-awareness, self management, relationship skills and responsible decision making. These skills provide fundamental in building emotion understanding and managing; empathy and developing caring for others; establishing and maintaining positive relationships; problem solving skills and making responsible decisions; and handling challenging situations effectively. SEL provides prerequisite skills necessary for children to be active and successful learners in school and positive peer and teacher interactions (CASEL, 2007). In SEL, thoughts, emotions, and behavior are viewed as equally important. SEL addresses social-emotional variables are related to students who are at risk for school failure, and provides educators with a common language and framework to organize their activities (Wilson et al., 2001). SEL, however, is an inclusive approach that covers the entire spectrum of SEC that helps children to be resilient and successful learners. SEL place more emphasis on active learning techniques, the generalization of skills across settings, and the development of social decision-making and problem solving skills that can be applied in many situations in life.

SEL targets the development of social and emotional competence in order to build children's protective factors and decrease the risk of behavioral and social problems. It is designed to promote social and emotional competence, prevent violence, aggression and other behavioral problems, lower externalizing (acting out) and internalizing (depression) problems, improve critical thinking skills and enhance the classroom climate. In addition, social-emotional wellbeing is interrelated to mental health and have a significant impact on mental health (Elder, Evans & Nizette, 2013), as healthy emotion regulation is a cornerstone or basis of mental health (Vingerhoets, Nyklicek & Denollet, 2008). SEL also helps children in preventing and reducing behavioral problems and mental health problems (NICE, 2013). Furthermore, SEL supports positive mental health and the abilities to develop psychologically, emotionally, intellectually, socially and spiritually (Barry, 2012). In other words, when children enhanced their social-emotional skills and developed social-emotional wellbeing through SEL, their mental health problems will be reduced and wellbeing will be thus promoted as well. SEL is a promising approach to lead the children to mental health wellbeing.

On the other hand, Merrell and Gueldner (2010) also suggested that SEL programs may be conceptualized as efforts at the primary prevention level to promote mental health and social-emotional development in schools. Social-emotional learning (SEL) promotes mental health and resilience, social-emotional and life skills, and to prevent negative life outcomes, through a broad range of methods and techniques in effective curricular programming, as an integral part of school program (Zins, Weissberg, Wang, & Walberg, 2004). Besides, SEL can promote the mental health of all children by helping schools focus on addressing children's skill development and creating a safe and caring school climate (Lynn, et al., 2003). Past researches indicates that SEL programming for primary and secondary school students is a very promising approach in reducing behavior problems, discipline problems, promoting positive adjustment, and enhancing academic performance (Diekstra, 2008; Zins et al., 2004).

Durlak, Weissberg, Dymnicki, Taylor, and Schellinger (2011) completed a most recent and comprehensive analysis of the impact of universal SEL programs. Their research presents findings from a meta-analysis of 213 school-based and universal SEL programs, involving 270,034 students from kindergartens through high schools of different ages, from schools in urban, suburban, and rural settings, and from schools primarily serving ethnically and socio-economically diverse student bodies. Examined student outcomes in six areas:

- social and emotional skills
- · attitudes toward self and others
- · positive social behavior
- conduct problems
- emotional distress
- academic performance

Positive findings with statistically significant were obtained in all six outcome categories at post (Payton et al, 2008). SEL programs have the potential to improve feelings of self-confidence and self-esteem, promote school bonding with positive attitudes and feelings toward school, improve school grades, reduce aggression, non-compliance, fewer conduct problems such as aggression, disruptiveness; lower levels of emotional distress such as anxiety, depressive symptoms, and reduce recreational drug use.

Durlak et al. (2011) concluded that SEL programs demonstrated significant improvement in social-emotional skills, attitudes, behavior, emotional stress and academic performance. Effect sizes were largest for social and emotional skills. Their findings support the growing empirical evidence for the positive impact of SEL programs. Thus, noting the importance of SEL programs on student's capacities for learning (Thomas, Bierman & Power, 2011), the policy-makers should recognize SEL as an important part of curriculum and integrate SEL in it as core subject or as important elements in subjects. Zins and Elias (2006) found that eight of the 11 most influential categories involved social and emotional factors, for instance, student-teacher social interactions, peer group, and classroom climate. Direct intervention in the psychological determinants of learning promises the most effective avenues of reform, which supports providing SEL in schools. Schools are such important central arena for health promotion and primary prevention, and SEL is a must addition to the education of students (Panju, 2008).

Reliable research revealed that SEL can be enhanced through the regular classroom teaching and learning process by teachers for every type of school and socio-culturally diverse children (CASEL, 2007). Through systematic instruction, SEL can be taught, modelled, practiced, and applied to diverse situations. Schools are a highly effective setting for teaching SEL skills (CASEL, 2007), as school and classroom environment is another inherently environmental variable other than home environment. Schools are increasingly seen as places for promoting good mental health through SEL, an enterprise that straddles the border between psychology and teaching (Shute, Slee, Murray-Harvey, & Dix, 2012). Collaborative for Academic, Social, and Emotional Learning (CASEL) strongly recommended that schools use evidence-based classroom SEL programs as a core component of their efforts to promote students' social, emotional and academic learning. These programs such as PATHS, Caring School Community, 4Rs, Positive Action, and etc, have documented record of significantly improving school climate as well as students' behavior and academic performance. SEL programs with carefully evaluated to determine their quality and impact are effective to improve attitudes about school, prosocial behavior, and academic achievement, and reductions in substance use, mental health problems and aggression (Durlak et al., 2011).

School and classroom environment is another inherently environmental variable other than home environment. Students spend long hours in school to learn. It examines surroundings of student and school, including physical, sociocultural habits, patterns, and pressure that shape the social-emotional practice in the school. Within the school setting, SEL can best be accomplished through a layered approach of skills lesson, infusion into the curricula and classroom practices, and an environment of safety, respect, and caring which models SEL values. Systematic SEL programs begin in preschool, continues through high school, is intentionally linked to academics, and is an integral component of the school curriculum (Elias, 2003). Embedding social and emotional competence directly into academic curricula and make it as core subject, to train students through a holistic child development method will address social-emotional and academic achievement of students (Humphrey, Lendrum, & Wigelsworth, 2010). There is urgency to have the SEL instruction, and the teachers need training in how to address SEL to manage their classroom effectively, to teach better, and to cope successfully with students who are challenging and reduces the amount of time spent on disciplinary action because the root of the problem is dealt with. Moreover, these teachers with such skills will be able to manage their own stress and solving problem with effectively and skilfully in their own lives (Zins, Bloodworth, Weissberg & Walberg, 2004).

#### 4. Conclusion

The type of intelligence required to handle this latter set of questions and problems is not acquired by memorizing rules and regulations, or through the use of technology. These challenges call for the development of students' social-emotional competencies. In fact, in facilitating social-emotional growth, the concern with one's awareness and how one intervenes should be emphasized. Reflection and understanding are the core basis for doing. But in Malaysia, the effort of developing positive discipline through SEL still lags behind. Nowadays, students are facing a more complex, economically challenging, and globally connected world. It is time for our country to move past false choices and ensure SEL is a core aspect of every child's education (Civic Enterprise, Bridgeland, Bruce & Hariharan, 2013). By doing so, we can support teachers in their critical work that helps children develop self-discipline to curb the disciplinary problems and thrive not just as students, but also as leaders, dreamers, entrepreneurs, and citizens.

The researcher would like to raise the attention of MOH and MOE in this effort, to understand and enhance the students' inner part. In sum, we need to help children to successfully develop social-emotional competencies and mental health wellbeing, reduce behavioural problems, increase desirable behaviours by increasing protective factors, and lead to success in school and adult life. Thus, for long-term effects with the goal to develop self-discipline to curb the disciplinary problems, it is urging to understand the children's mental health state, and help them to live with healthy mental health through SEL. Effective mental health promotion, prevention and early intervention strategies play a key role in improving mental health in the country and that reducing the prevalence and impact of mental health problem and the disciplinary problems. In the research presented in this study has ideally gone some way toward elucidating the chances and challenges presented by the prospect of developing a SEL classroom or school. It is therefore important for further research to continue in this area.

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