# PROMOTING RESEARCH CULTURE AMONG POLITECHNIC'S HOSPITALITY STUDENTS

*Mohd Amin Zakaria*
*Dr. Norani Mohd Noor*
*Fakulti Pendidikan*
*Universiti Teknologi Malaysia*

## Abstract

This small-scale study  is grounded on empirical qualitative data deriving from purposive sampling of 10 diploma students in hospitality management course of *Politeknik Johor Bahru.* It is argued that there is a lack of research culture in diploma students. Since there is no research-based module in the 3-year program, these graduates will not be able to use their thinking ability at the maximum. We emphasize the importance of creating a research culture in thinking and learning while in junior college (diploma) to enable students to adapt to the university learning environment in the future. The data collected from the surveys and interview will be calculated using *mode* and (*f*) frequency of score. Student's research activities have become significance of promoting thinking and learning process especially in exploring new things, get feedback on what they have done, improving skills and creativity and finally, in constructing the appropriate decision making. Further, it has also been discussed on how such skills and dispositions are becoming an imperative significant on survival and growth towards student's future life. Some suggestions on the infrastructure and curriculum of the college are made. It is also to look carefully at the neediness of research committees and research unit which are the central of the organization tools for research development, by analysing and describing the range of research culture in the college: from absence to optimal. The paper will hopefully contribute to the basic theoretical and as an applied framework that may support the further development of research culture in the college

## 1.0  Introduction

Tourism plays a big part in the economic and financial health of most economies (Goeldner and Ritchie, 2006). Most countries in Asia for example, are relying on tourism receipts far more than they do on income derived from exports of agriculture or manufactured goods. The growth of tourism industries since the 80's to this period of time correlated with growth of hospitality industry. According to our previous prime minister Dr Mahathir Mohamad:

> *'in the effort to move forward with energetic ambition, development of human capital is a must. Developing on all potential we have by Malaysian populations such as talent, expertise, innovation, creativity will help Malaysian spirit of achievement. Exploitation of natural recourses be able to make better living only if Malaysians know how to benefit from it. Creativity, with healthy mind and  emotion possibly will aid growth of citizen and nation…'*

Human capital emphasis on skill and competency has played a major role in the 9th Malaysian Plan (Rancangan Malaysia ke 9). A huge amount of money has been invested in many programs to boost up the spirit of competency as well as the Malaysian economy in line with good moral of the citizens. The mission could be achieved through collaboration within the government and private sectors. For the citizen of Malaysia, holistic value, rich in knowledge and skill, optimistic moral value are needed over time. For that matter, comprehensive recuperating in educational system, practice, lifelong learning become continuously effort (Dakian, 2008). According to the Ministry of Education and Economic Planning Unit (EPU), the amount allocated for the learning and training for the year 2001 to 2010 is increasing. Government has put some budget for training, industrial training, entrepreneurship training and management training for the Malaysian citizens. The important of human capital development has been implemented in teaching methodology, school's environment, new universities, long life learning, creating innovative thinking in science and technology, social integration and multilevel forum within government and private sectors.

**Table 1** The amount allocated for learning and training (2001 to 2010)

| SCOPE | RMK 8 (million) | RMK 9 (million) |
|---|---|---|
| Education | 37,922 | 40, 356 |
| Pre school | 215.7 | 807.3 |
| Primary school | 5,369 | 4, 837 |
| Secondary school | 8,748 | 6, 792 |
| Government school and government sponsored (academic) | 7,931 | 5,549 |
| Maktab Rendah Sains MARA | 433.1 | 614.5 |
| Government school and government sponsored (Teknik & Vokasional) | 383 | 629 |
| Higher Learning | 13,403 | 16,069 |
| Teachers training | 1,368 | 577 |
| Others Supporting Educational Program | 8,817 | 11,272 |
| Training | 4,450 | 4,792 |
| Industrial training | 3,930 | 4,103 |
| Entrepreneurship training | 159 | 180 |
| Management training | 361 | 509 |
| TOTAL | 42,373 | 45,149 |

Malaysian is one of well-known countries in South East Asia for having allocation of industrial operation as well as research and development. For instance, a National Instrument, an American multimillion industries in design and commissioning of hardware and software for engineers and scientists recently has chosen Malaysia as their investment country. Rm281 million worth of investment has been made. Malaysia has been seen as a potential palace of investment because of availability multi-skill workers, competitive, cost effective and getting full support by domestic/national officers (Othman, 2008). Previously, hundreds of companies such as Hyundai, KIA,

Intel, Seagate, Nestle, Sony, Motorola, Matsuhita, Texas Instrument, Al Rajhi Bank and many more to mention have flourished in many years of investment in Malaysia. Therefore, hundred thousand of highly skilled workers are needed and few thousand of professionals are wanted to join as part of the company successors'. If Malaysia has not allocated an adequate amount of highly skilled local workers to cater the demand of these multimillion companies, foreigners and expatriates will fulfil the vacancies. They require skilful workers, well educated, competent, talented and able to think critically. For that reason, in MERCER HR Conference held on 29 Sep 2005 in Kuala Lumpur has mentioned as below:

> 'Managing a country's HR talent is therefore the key to achieving global competitiveness. As for building of capabilities, this spans both our education system and our ability to continuously upgrade the skills and capabilities of our population. In education, we have our focus on acquiring technical expertise, most recently in the area of engineering, IT, services and biotechnology. We will also need to enhance the soft skills of our graduates, like communications and public relations. The Ministry of Human Resource also undertakes various skills courses at different levels for those who are more talented in vocational skills. In addition, post graduate courses like those for unemployed graduates, are aimed at helping graduates develop broader competencies such as basic marketing and management knowledge as well as language skills'

For this reason, it is estimated that the population of Peninsular Malaysia has been growing at rates higher than 2 percent per year for 150 years (Department of Statistics, 2001)  The 1970 census recorded the population of Malaysia as 10,436,276 and for the year 2000 as 23,274,690, a growth of about 2.7 percent per annum within a period of 30 years. This growth was mainly due to natural increase. (Hassan & Kasim, 2000). Recently, in view to the Malaysian Population Clock on the 4 November 2008 in web page Department of Statistics, has shown up 27,726,311 numbers of Malaysian populations.  By considering 30% of the population are adult workers,  its contribute to 8,317,893 numbers of employees. The numbers of employees are huge but, unfortunately not all of them are competent to meet the needs and standard of the industries.  Unemployment rates still exist even thought GDP is increasing.

**Table 2**  Real GDP growth, labour force, employment, unemployment,
　　　　　　labour force participation rates, 1996-2003

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|---|
| Real GDP Growth (%) | 8.6 | 7.3 | -7.4 | 5.8 | 8.5 | 0.3 | 4.1 | 4.5 |
| Labor Force ('000) | 8641.4 | 9038.2 | 8848.8 | 9177.8 | 9572.5 | 9892.5 | 10198.8 | 10514.9 |
| Employment ('000) | 8426.5 | 8818.8 | 8571.8 | 8869.6 | 9271.2 | 9532.5 | 9840.0 | 10150.0 |
| Unemployment Rate (%) | 2.5 | 2.4 | 3.1 | 3.4 | 3.1 | 3.6 | 3.5 | 3.5 |
| Labor Force Participation Rate (%) | 65.8 | 67.0 | 64.7 | 64.4 | 65.7 | 66.1 | 66.3 | 66.9 |
| **Source: Economic Report, Ministry of Finance** | | | | | | | | |

Work force (10.89 million, 2007): *Services*--57%; *industry*--28% (*manufacturing*--19%, *mining and construction*--9%); *agriculture*--15%.

Looking at the figure in year 1998 during the recession period, real GDP growth in percentage is -7.4 and unemployment rate is 3.1 percent. But, in 2003 during the recovery period, the GDP increase to 4.5 and the unemployment rate still at 3.5 percents and equal to 751,449 out of 25, 048,300 numbers Malaysian of population. Consequently, what went wrong when this phenomenon turn out. It is not the matter level of education. According to Bureau of East Asian and Pacific Affairs June 2008, the level of education of Malaysians compulsory to primary school is at 90.1% and 60% for the secondary. Meanwhile 93.5% is the level of literacy rate. Moreover, Malaysia is considered number 58 out of 191 riches country on earth by CIA World Fact book. In reality, increasing numbers of unemployment rate is discovered when graduates and labor force demand miss-match to the need and standard of the industries (Kamsah, 2008). Other supporting factors that most of Malaysians graduates lacking in few attitudes, knowledge and skills as mentioned by Maggared Lon below:

**Table 3** Graduates lacking in few attitudes, knowledge and skills by Maggaret, Lon E, Critical Thinking In The 21st Century

| 1. The required skill | 2. Critical thinking |
|---|---|
| 3. Knowledge enrichment | 4. Innovative |
| 5. Communication | 6. Creative |
| 7. Self Discipline & Confidence | 8. Reasoning |
| 9. Work Ethic | 10. Vision & Imagination |
| 11. Decisiveness | 12. Problem Solving |
| 13. Physical and Mental Stamina | 14. Tactical Proficiency |
| 15. Conceptual thinking | 16. Conflict management |

In this paper, we are trying to see whether the reason behind lack of research culture among diploma students is related to training, teaching, references and infrastructures in Politeknik Johor Bahru. All of these factors are included in the 16 numbers of questionnaires and divided into Section A, Section B, Section C and Section D. We believe that, many researchers have done some research on the topic about *'research culture'*. The trait is able to change students' perception, skills and has power to demonstrate thinking ability to the maximum. David Ebbutt in his article, *The Development Of Research Culture In Secondary School* has defined his essential anthropological understanding of culture as referring to:

> *'a constellation of both written and unwritten expectations, values, norms, rules, laws, artefacts, rituals and behaviours that permeate a society and influence how people behave socially'*

In a more psychological vein, and writing some thirty years earlier, Stenhouse (1967) viewed culture as:

> *'consisting of a complex of shared understandings which serve as a medium through which individual minds interact. Culture, then is a matter of ideas, thoughts and feelings'*

## 2.0  Research Question

Ever since the opening of the Hospitality Department in Politeknik Johor Bahru, research module has not been considered in their curriculum for the 3-year program. Therefore, it is argued that there is a lack of research culture among diploma students and graduates will not be able to use their thinking ability at the maximum.

## 3.0  Research  Methodology

To measure overall student's performance in research culture while studying in Politeknik Johor Bahru, a self reported experience through a questionnaire survey and interview was chosen as a mean of gathering data. On top of that, some interviews were conducted to see whether research activities have been carried out in the 3-year diploma program in PJB.

## 4.0  Research  Instruments

The instrument was developed by the researchers after reviewing of previous studies done by researcher. The questionnaires are divided into four sections. Section A consisted of 4 questions pertaining to research activities in 3-year diploma program. Section B consisted of 4 questions on teaching process. Meanwhile Section C : phrasing on learning process and finally Section D on the condition of lab or workshop in Hospitality Department. Likert scale of 5 points  (1 = Strongly Disagree, 2  = Disagree, 3 = Neutral, 4= Agree and 5 = Strongly Agree)  being used to analyze sample preferences in promoting research culture among hospitality students. Furthermore, to validate a quantitative result, additional open-ended questionnaires were applied to my samples of 10. In ensuring the validity and reliability of the instrument developed, a pilot study was conducted to the randomly selected 10 diploma students in Hospitality Department.

## 5.0  The Sample and Data Collection Process

The 10 (ten) samples of the populations in my short research are collected only among semester 6 students of Diploma in Hotel and Catering Management course in Politeknik Johor Bahru. The reason behind purposive sampling is to accommodate my research topic on promoting research culture among polytechnic's hospitality students. The samples were able to answer my research questions on the argument regarding *'lack of research culture in diploma students'*. Therefore, graduates of Hospitality Department '*will not be able to use their thinking ability at the maximum*'.

All of the samples were gathered in a meeting room and being briefed on the purpose of the study. The session started with answering questions related to personal information of the samples and move up to the questions on the research culture, teaching and learning process.  Finally, reviews on the workshop/lab status in Hospitality Department. Clarifications on some unclear questions by the samples were explained properly.

## 6.0 Analysis and Results

### 6.1 Characteristic of the samples

The samples comprised of 80% females (n=8) compared to 20% (n=2) of males respondents. The enormous numbers of female students as the samples is not surprising as they dominate the propensity of enrolment to Hospitality Department. Majority of the samples are at age of 21 to 22 years old. Mostly, they are originated from Johor (60% or n=6), 20% from Pahang (n=2), 10% (n=1) from N. Sembilan and 10% (n=1) from P. Pinang.

The level of score in English language test, in the SPM, 50% of the sample getting (n=5) at D grade, 40% at C grade and finally 10% at E grade. Meanwhile the highest number of A's score in SPM is 10% (n=1) for 3A's, secondly 20% (n=2) score 2A's, thirdly 20% score 1A's. The rest of respondents are somewhere at majority of B's and C's scores in SPM. Some of the respondents have had an experience in hospitality courses before entering to the PJB. A few of the samples had chosen management as their future career (n=3), baker (n=2) and teacher (n=1). The rest of the samples are still undecided about their career after graduating from polytechnic.

Most of the samples had under gone six months practical training at five or four stars hotels within Malaysia in different departments such as housekeeping, front office, butchery, hot and cold kitchen, accounting, food and beverage department, sales and marketing department.

### 6.2 Analysis on the overall perception on students' research activities, teaching and learning process, facilities and quality of references In PJB pertaining to research culture and thinking ability

A descriptive statistic, which was intended to look at the mean of the score, was used to examine the overall perception of teaching and learning process, the facilities provided to assist students practical activities and the quality of references mode in the library. The reported respondents' scores are presented in table 1

**Table 4**   Overall perceptions of teaching and learning process, facilities and quality of references in PJB pertaining to the research culture and thinking ability
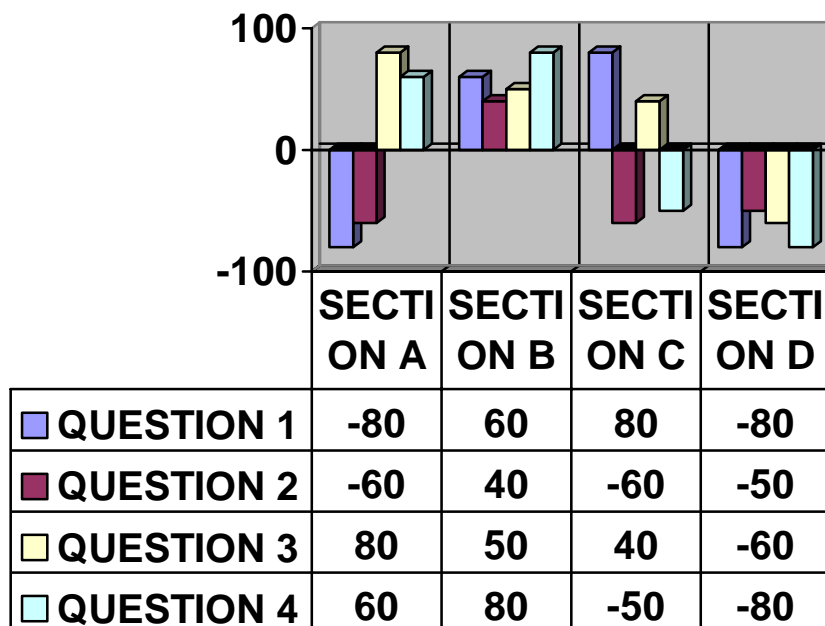
1 = Strongly Disagree 2  = Disagree  3 = Neutral     4= Agree        5 = Strongly Agree

| NO. | Item | n | mode | f | % | Section |
|-----|------|---|------|---|---|---------|
| Q1A | Do you think assignments given by lecturers are sufficient to enhance the research culture among students? | 10 | 2 | 8 | 80 | A |
| Q2A | Hospitality Department Politeknik Johor Bahru  is always organizing research programs for students every semester | 10 | 1 | 6 | 60 | A |
| Q3A | Practical and industrial trainings could help students understand the research | 10 | 4 | 8 | 80 | A |

| | | | | | | |
|---|---|---|---|---|---|---|
| | which is being conducted. | | | | | |
| Q4A | Do you think it is necessary to seek cooperation from other industries for the research process? | 10 | 4 | 6 | 60 | A |
| Q1B | I do not have any difficulty in understanding the language used in teaching and learning process in Politeknik, especially in Hospitality Department? | 10 | 4 | 6 | 60 | B |
| Q2B | If a well-known hospitality figure is invited in the academic activities, does it attract your interest to join in? | 10 | 4 | 4 | 40 | B |
| Q3B | Lecturers in the Hospitality Department are always giving assessments to ensure students' understandings on modules taught. | 10 | 4 | 5 | 50 | B |
| Q4B | Exercises and assignments given by lectures promotes interest in doing research | 10 | 4 | 8 | 80 | B |
| Q1C | Lecturers always encourage students to use reference books in each module taught is classroom | 10 | 4 | 8 | 80 | C |
| Q2C | References such as books, magazines, journals, reports, thesis and others are sufficient in the Politeknik's library. | 10 | 2 | 6 | 60 | C |
| Q3C | Medium of electronics references and ICT are available in Politeknik to assist students in doing their research efficiently. | 10 | 3 | 4 | 40 | C |
| Q4C | Students are able to refer to their lectures regarding assignments and research. | 10 | 2 | 5 | 50 | C |
| Q1D | The computers lab and internet connections in the PJB are functioning and sufficient. | 10 | 2 | 8 | 80 | D |
| Q2D | The equipment in the Hospitality Department's workshop are sufficient for the research activities. | 10 | 1 | 5 | 50 | D |
| Q3D | The classrooms environments are very conducive for the teaching and learning process. | 10 | 1 | 6 | 60 | D |
| Q4D | Equipments in the hospitality's workshop are functioning and up to the current need of the industries. | 10 | 2 | 8 | 80 | D |

**Table 5**   Distribution of Score For Questionnaires

(Negative Percentage means score from 1 to 2 on Likert Scale)



| | SECTION A | SECTION B | SECTION C | SECTION D |
|---|---|---|---|---|
| ▢ QUESTION 1 | -80 | 60 | 80 | -80 |
| ▢ QUESTION 2 | -60 | 40 | -60 | -50 |
| ▢ QUESTION 3 | 80 | 50 | 40 | -60 |
| ▢ QUESTION 4 | 60 | 80 | -50 | -80 |

**Analysis on SECTION : A**  (Students Academic Activities On Research)

Section A is primarily to investigate whether home works, assignments, research programs, industrial training and external cooperation from industries could help in promoting research culture among students in the 3-year program in PJB.

The most significant result came from '*practical and industrial trainings could help students understand the research which is being conducted*'. They agreed (Likert scale no. 4, f=8 at 80%) on the statement and contributed to 80% of the participants' choice. The 6 months practical training in five to four stars hotels within Malaysia in various departments such as housekeeping, front office, butchery, hot and cold kitchen, accounting, food and beverage department, sales and marketing department remarked changes the way students perceive the selected career, broaden their knowledge and enhance their skills.

Students are also interested and agreed (Likert scale mode 4 , f=6 at 60%) in *seeking cooperation from other industries for the research process.* Despite of these positive perceptions, the respondents are sure that working together with the selected industries such as hotels, restaurant, fast food chains, government agencies, small-scale industries and entrepreneurs could benefit them in doing research. The notion is likely true since those industries are depending on PJB in practical trainees and other social affairs.

Unfortunately, the statement on  '*that Hospitality Department  Politeknik Johor Bahru  is always organizing research programs for students every semester',* did not

get a good response from respondents. The lowest score of 1 contributed to 60% above majority of respondents. It is learnt that ever since the opening of the hospitality course in PJB, there is no formal research program was organized. Hence, the research culture is hardly developed as well as the native skill. Therefore, the ability to practise thinking skill at the maximum is not being exercised.

Question asking weather respondents think that assignments given by lecturers are sufficient to enhance the research culture among students also did not get a good result. Mostly, 80% of the respondents disagreed (scale no. 2). Few reasons behind this result, one of them is the level of understanding on assignments related to the modules. Sometimes the topics are not interesting enough to attract disposition of research from students. Finally, students are not given choices on the topics of their interest.

**Analysis on SECTION : B** (Teaching and Learning Process)

By looking to the medium of instruction by lecturers in PJB during teaching and learning process, majority (mode 4, f=6 at 60%) of the respondents do not have any difficulty in understanding the language. Most of the respondents have passed the English and Bahasa Malaysia examinations in SPM. Most of the lectures started implementing medium of instruction in English as advised by the Director of Politeknik recently. In addition, they are also using books as reference in English language.

Only a few agree if inviting a well known figure could attract students participation in the academic activities. Such invitation is rarely conducted in Hospitality Department. Most of the activities are students centred and developed among them. Furthermore, the cost of inviting a well known hospitality figure could be high and difficult to organize The external expert opinion and ideas always help to open mind and bring new dimension of doing and organize things into a quality piece of work. Sometimes, a MOU seeking for cooperation in research to enhance quality and capability within colleges help improving competitiveness among students (Ab Yajid, 2008).

To ensure that students fully understand on modules taught, few assessments have been done. Fairly, the respondents agreed on the statement. By nature of teaching and learning in Politeknik, few quizzes, midterms, final examinations and in class oral questions have always been practised. Student carry marks are constantly monitored. Furthermore, the system of ISO and lecturer FRP as a tool of recording all required activities.

Another interesting result in this section is regarding the exercises and assignments given by lectures promote interest in doing research. High score of agreement of 80% from the respondents wrap up this section. Usually, by in-house assignments and exercises, students will do it in group and chose their own topics of interest. Some lecturers required submission of assignments' progress as a tool of monitoring process. Students are always reminded by their lecturers on the due date of assignments.

In conclusion of Section B, all of the four items asked to the respondents, none of them are getting unsatisfactory result. Proudly to say that they are favourable (mode 4 = Agree at f=23) with the process of teaching and learning conducted by PJB

lectures over time. For that reason, lecturers are advised to enhance knowledge, upgrading skills, promoting new strategies in conducting class and create more activities contributes to promote research culture among students.

**Analysis on SECTION : C** (Availability of References for Research in PJB)

As we inferred from the question 9, most of the participants strongly agreed (mode 4 at 80%) that lecturers are encouraging students to use textbook as reference in each modules taught in PJB. Students are advised to have a copy of text book in line with suggestion of Dato' Haji Imran bin Idris, Director-General, for Jabatan Pengajian Politeknik dan Kolej Komuniti to set the medium of instruction in English. At least by using text books in English, it will create awareness for students to explore deeply on the application of the second language in the learning process.

Almost 60% (n=6) of the respondent disagree (mode =2) regarding references such as books, magazines, journals, reports, thesis and others are sufficient in the Polytechnics' library. Some of the books are torn in few pages by students for their own assignments. Books are not coded systematically. Sometimes the calling numbers do not mach with he books. Many books borrowed were hardly return by students on time. Meanwhile thesis, reports and journals are limited for reference and outdated. It is strongly suggested that proper attention on the quantities and qualities of references should be at par with other libraries.

Many respondents are uncertain with the status of electronics medium as references. Students are unclear with the Information and Communication Technology (ICT) availability in Polytechnic to assist students in doing their research efficiently. The score (mode=3 at f=4) has drawn into conclusion that most of them did not use the medium and are not sure of the existence. Preferably, cyber cafes are the popular place of ICT. Currently, these mediums are widely used as assignment and research references in any higher learning institutions. They spent huge amount of budget for ICT and others electronic devices to retrieve information as references.

Approximately half (50%) of the participants disagree (mode = 2) that students are able to refer to their lecturers regarding assignments and research. The classes schedule for lecturers and students are tight from 8:00 am until 5:00pm. During their spare time, lectures are busy with office work, marking papers, participating in extracurricular, preparing for classes, courses, meetings, outstation and field works. To spend time with students, they have to make proper appointments. Furthermore, during weekend, most of the students are not interested to see their lecturers for discussion.

**Analysis on SECTION : D** (The Classroom and Workshop/lab Condition in PJB)

Respondents are not satisfied (80%, f=8 at mode=2) with the status of the PJB computer lab and the internet connection. Computers and internet connections at present are a must for students to do assignments and for research purposes. Constantly upgrading the quality and the quantity of the ICT technologies helps to attract and encourage students in producing quality academic works.

The equipment in the Hospitality Department's workshop/lab is not sufficient for the research activities. They noted strongly disagree (mode=1 at f=5) on the statement saying that the equipment in the workshop/lab are currently sufficient for research and practical activities. As we can see currently in the workshop/lab, many of the equipment are malfunctioned and the spare parts are hard to find. Shortage of cutleries and broken stoneware happened at all time. Some quick actions should be done to help students getting proper workshop/lab facilities for their learning process.

Respondents are not satisfied (mode=1 at f=60) with the classrooms environment. They do not perceive the classroom as conducive for the teaching and learning process. The nature of the classrooms design is in rectangular shape, trap heavy noise during traffic of changing classes. Nevertheless, some students are still in the classes listening to the lecture. Curtain or shade to eliminate excess sunlight is unavailable. Students sitting nearest to the window will get direct sunlight heat. Some of the ceiling fans create noise and disturbing lectures. Almost all classrooms and workshops/labs do not have OHP or LCD. The quantity of these equipments is limited.

As might be inferred from the question number sixteen, 80% of the respondents disagreed on the equipment in the hospitality's workshop are functioning and up to the current need of the industries. Eight participants voted disagreement on the functionality of the equipment. They are also in doubt whether the quality and standards of equipment in the workshop/lab are at par with the needs of the industries. Most of the participants have successfully undergone practical training for six months. They are used to working with equipment, which could help to increase productivities. The scenario is in contrast with the experience of the participants compared to studying in PJB.

Finally this section uphold the most unsatisfactory result from respondents at the score between 1 = strongly disagree and 2 = disagree verses the positive statements regarding workshop/lab in Hospitality Department. Higher frequency of score within 5 to 8 and comprises of 50% to 80% vote.

## 7.0 Recommendation and Conclusion

Below are few recommendations that could be considered based on respondent's reaction toward the questionnaire and interviews:

## 7.1 The curriculum

Polytechnic should consider offering educational research module as an elective program to enhance research culture among students. Early exposure of this module helps to increase awareness on the importance of the research skill as well as the benefit we could get from the study. Students also are able to practice and test their thinking ability at the junior college before joining the degree or higher program.

**7.2     The infrastructure**

Some of workshops/labs required attentions to make sure all of the equipment are functional and continuously upgrading to meet the standards of the industries. Any equipment, which the spare parts are hard to find, need to be replaced. Equipment which are not functioning well might disrupt the teaching and learning process. Students are unable to practice their skills regularly and this will have a huge impact in their future career.

**7.3     The joint venture (MOU)**

Many universities and colleges have engaged MOU with private companies in exchanging skills and knowledge. The external expert opinion and ideas always help to open mind and bring new dimension of doing and organize things into a quality piece of work. Sometimes, a MOU seeking for cooperation in research to enhance quality and capability within colleges help improving competitiveness among students (Ab Yajid, 2008).

**7.4     The R & D center**

As a start in promoting research culture among students, lecturers have to be trained seriously on proper research methodological and knowledge. When we talk about research, applied statistic knowledge is a must to process the data and organize them into meaningful findings. Series of experiments and tests may involve in the research, therefore funds and grants are needed to sponsor the study. R&D center's responsibilities are to manage and organize any research activities in and out of the Politeknik. The department is also responsible in the development of research activities from absent to optimal.

**7.5     The ICT**

The results of the questionnaires have shown that PJB have inadequate facilities in ICT and any electronic references. Library and ICT center should take some action to bring the standard of these facilities corresponding to the current needs. Some of the computers need to be upgraded in order to install sophisticated software for student's convenience in doing their assignments and research program.

**7.6     The classroom**

The condition of the classroom could be improved by adding OHP and LCD for proper teaching and learning process. Considering air-conditioning in the classrooms might boost up learning spirits and able to bring about conducive learning environments. Any extraneous noise can be reduced when the doors and windows are closed. Students can concentrate and focus on the teaching process by the lecturer.

**7.7     The references**

Bringing new books, journals, thesis, reports, magazines, articles and others resources helps students to conduct their research. Maybe considering **'Inter Library Loan'**, the borrowing medium of articles from other universities may be offered to the students. This might encourage students' interest in their studies and enhancing their knowledge at the maximum.

## 8.0 Limitation

The nature of the Hospitality Department filled with female students as a majority resulted in more female samples. I believe that, some male samples might explain differently and contributes to the new information.  A test on the students thinking ability could not be carried out because the respondents are not familiar with the educational research module. Lastly, this research is done in less than 10 days and limit the numbers of respondents to take part in my survey. It will be better if every class in all semesters could take part in the survey. Then, a clear data on research activities, learning process, teaching process and the workshop/lab conditions could be obtained.

## References

Goeldner, C.R. and Ritchies, B. J. (2006). *Tourism: Principles, practices and philosophies (10$^{th}$ Ed.)* New Jersey: John Wiley and Sons. Inc.

Dakian , Mustafa (2008). *Pembangunan Modal Insan: kayu Ukur Diperlukan*, Kuala Lumpur, Dewan Ekonomi,

Othman, Ahmad Fiesal (2008). *US Firm Intention to Invest in R&D*, Kuala Lumpur, Berita Harian, 4 Nov 2008

Kumpulan Penulis IKIP (2003). *Meningkatkan Nilai Pasaran Graduan Kolej IKIP, Buletin Yayasan Pahang*, Yayasan Pahang, Kuala Lumpur. *(Ms11)*

Hasan, Abdul Rahman.  Kasim, Norfariza Hanim. (2001).  *Population distribution and basic demographic characteristics*, Population and Housing Census Division, Department of Statistics Malaysia, Putra Jaya.

Kamsah, Fadzilah(2008), *10Q Asas Pembangunan Modal Insan, Sewan Ekonomi*, Kuala Lumpur

Maggaret, Lon E, (2000) *Critical Thinking In The 21$^{st}$ Century*, ARI Workshop Proceedings, Kansas, USA

David Ebbutt, (2002) *The development of a research culture in secondary schools*, University of Cambridge, United Kingdom Online Publication Date: 01 March

Stenhouse, L. (1967) *Culture in Education*. London: Nelson's University Paperbacks.

Ab Yajid, Mohd Shukri (2008) *MSU, UN jalin kerjasama laksanakan penyelidikan*, Kuala Lumpur, Berita Harian.

## Internet Resources

Malaysian Population Census: Review of Enumeration Strategies and Topics
http://www.statistics.gov.my/eng/

Bureau of East Asian and Pacific Affairs June 2008
http://www.state.gov/r/pa/ei/bgn/2777.htm

CIA World Factbook

https://www.cia.gov/library/publications/the-world-factbook/