

The Responsibility of Research University: Enhance the Student Research Ability: A Case Study Based on UTM Students and Academic Staff Attitude

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Abstract: In the recent study reported by Cahill, et al. (2010), they indicated that, the one crucial issue of Research University is how to enhance the students' research abilities [1]. Student is one of important component in university. Student research ability is significant as same as academic staff. It brings the effective learning method to student and leads the university sustainable development in research field. The University Technology of Malaysia implemented a series of policy to improve students' and staff research abilities. The research strategy in UTM made prodigious change to the climate of research and raised the UTM ranking. This study was to describe how the UTM created opportunities to promote the students and staff research quality and quantity, after it became a research university. The study also focused on the traditional or narrative review that was undertaken. This research utilized a qualitative research methodology to collect data and the interviews based on UTM students and academic lecturers attitude. This research also articulated results and recommendations for effective recruitment and maintenance of the research enhancement program for UTM.

Keywords: Research University, UTM, Enhancement, Student research ability

1. Introduction

From historical view, some researches have been explained the efforts of promotion the students' research potential in doing unsuccessful research. According to previous research, Ward and McCotter (2004)[2] revealed the important reasons were the university did not consider the students research potential and did not practice the reflective thinking research curriculums which designed by academic staff. Contemporary, the world of higher education is becoming ever more competitive for universities. Not just only in attracting students, but also in providing an excellence quality for enhancement the student research ability.

Early Enhance research program only focused on the staff research quality improvement in their special sphere, and required them to publish definite numbers of academic composition in each year. The scientific attainment of lecturers was considered the significant factor and component in instruction method and influencing the university ranking [3].

However, the terms of university research quality standards were recognized insufficient. University was starved for more developmental approach or strategy (Srikanthan and Dalrymple, 2003). Chill, et al. (2010) [4] [1], indicated that, the one crucial issue of Research University is how to enhance the students' research abilities. The empowerment research ability strategy or policy was an essential designed procedure. It brings the efficient learning method to student and leads the university sustainable development in research field. Academic educators needed to think a new discipline to refresh students' research mind and added research atmosphere in classrooms [5]. To approach Research University Standard, the University requires a new reflective thinking and sustainable strategy.

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Universiti Teknologi Malaysia (UTM) is an innovation and creativity Research University. UTM main campus is situated in Johor Bahru, the southern city in Iskandar Malaysia. There were more than 15,000 full-time undergraduate students and more than 8000 students doing master program. In addition, there were more than 2,000 foreign students enrolling different major. Academic staffs working in UTM were around 2,000. UTM continuously strives towards top-ranking around the Asia [6].

Currently, the number of academic compositions from UTM postgraduate students and staffs was growing, benefited by the UTM research policy. In an effort to improve the research climate for staff and postgraduate students at a university of UTM, the directors of UTM established a strategy of enhancement research ability and a encourage research policy. The UTM provided diverse resources to support and encourage academic research. The UTM implemented empowerment research program for research ability after it became a research university. UTM students should prepare to do well in their entire sphere that requires writing academic essay. Some subjects guided the students how to think about research topic, make a plan, draft effective paragraphs, revise, proofread, document sources, and publish. This strategy successfully pushes ahead UTM research quantity and quality in Malay.

The paper explored UTM research mission which created opportunities for the promotion of research quality and learning enhancement activity, and also focused on the traditional or narrative review that was undertaken. This study utilized a qualitative research design to collect data and based on UTM students and academic staff interview and one class observation. This research also articulated results and recommendations for effective recruitment and maintenance of the enhancement research program for UTM.

2. Research methods

This study utilized a qualitative research methodology. A group of 10 postgraduate students and 3 lecturers in different faculty in Universiti Teknologi Malaysia were interviewed. Using a collaborative and participatory approach, the researcher joined some lecturers' research methodology courses, some special topic research courses, and some academic writing workshops to collect information. The researcher explored UTM visions, the experiences of improvement students' academic research, and the instructional pathway of lecturer used. The study also utilized mixed qualitative research methodologies. It contained the class observation, interview, and informal surveys. Using deferent way offered information and feedback with a depth and breadth view.

3. Data collection

There were 10 students to be selected randomly from education faculty, one academic writing workshop and one special topic subject. The one special topic course which related academic research article publishing designed by one associate professor in UTM selected for the class observation. The researcher also observed some critical incidents that occurred during the semester. The study divided interviews into two categories group. One related students (n=10) and the other concern about 3 lecturers' attitudes and concepts. The interview plan was described to the responders before it implemented. The interview contained all information related research objective and concerned the conversational style. For students the interview just focused on the student satisfactions and the opinion about improving research ability. For the lecturers' interview concerned the informants describing their academic experiences. For each of the focus group interviews conducted, a verbatim transcript was recorded as soon as possible after the interviews were conducted.

4. Findings and Discussion

The vision of UTM's is to develop the creative and innovative human capital and advanced technologies. Gaining sustainable development is the UTM vast strategy. UTM try to create a vibrant academic culture and fertile intellectual ecosystem that inspire creativity and innovation. The central of its core value is Innovation, and innovation is also the core for academic research. According to the UTM strategies, one is contribute human capital development by providing quality education, and one is provide leadership and contribution through research and innovation. As a result UTM offer an academic environment for students and staff, and

it has some rules to encourage students to publish article in ISI journals or international conferences. All these efforts lead to UTM lecturer think about how to improve students' research ability.

However, in early period, most of student in UTM are confused about academic research and academic writing. According to interview student group, "I was able to maintain positive attitude toward my own subject learning in early time, but I was frustrated after I do my research dissertation. I have no idea what I should to do, what I should prepare for writing academic thesis (student 1)". Furthermore the same problems happened in PhD students, most of them lack of experience for publication. So UTM shaped its course to improve students' research ability. Here this study call it UTM enhance research program. UTM made several rules for postgraduate students, such as postgraduate students need to publish one article in international journal, must pass one research methodology class, do research and publication is one important standard to achieve scholarship and be a teaching assistant. This university also offered resource to support academic staff open some subject related research or thesis publication. Therefore, in UTM most of lecturers tried to do more effort to improve students' research abilities. From interview of lecture group, "This circumstance was new. I designed this interesting subject. It was the first time that I opened this academic research course, the purpose was to activate students passion of research, and guided them to publish article. I believed that teaching academic research publication could infuse students a lot to experience in academic research. (Lecturer 1). "Mentors experiences can lead their students to achieve the academic goal. Fortunately, the more they learn about the subject related publication skills, the more they have to be specialized (Lecturer 2)." the most significant finding from informal survey was mentors' research experience can be more supportive, comfortable and influence the students study interesting [7]. When the students were asked about what kinds of desired qualities the lecturers needed in initial interviews, majority students frequently mentioned academic experience and the academic writing skill. There were 87% students very satisfied with one special topic course which observed by researcher. The students expressed that they think it was a chance to learn how to prepare one article to register a conference and do presentation. They loved this course and think it was useful.

On the contrary, this study found that few students were so unclear about the type of academic writing after academic writing workshop. And one lecturer felt anxiety about students' English level. One lecturer emphasized the barrier of staff promotion was lack of opportunity and fund to do research. Certainly, if the university accepted research enhancement is a priority, they needed to change the research culture.

5. Conclusions and Recommendations

UTM, as a research university, must think deeply and found the following important recommendations to successful develop. First, the research culture and environment is significant for improvement research ability. The environment must be matched the sustainable strategy, research policy. So higher education managers should ensure that institutional strategies and infrastructures promote the improvement of student learning and the academic staff research environment. Second, lecturers' attitude and experience in academic research is the key to succeed. A radical goal of the research guidance course should be to establish enthusiasm, and to provide a comfortable atmosphere in classroom. Third, the relationship between students and lecturer must be harmony. The lecturers' friendly attitude will influence students' attitude to do research. The students learn experience and the way to publication from harmony relationship between mentors and mentees. With the good relationship, the lecture can easily get the feedback from students and improve the guide way.

With the fast development of high education, the research skill and quality has been rapidly improving in some East Asian universities. UTM aspires to gain competitive advantages in research field and become high-class university in the Asian. It also needs to find more research collaborations fund to activate research projects. For the young academic staff and even students, they expect to obtain research support from external grants. The start-up funds for beginning research are more necessary. The university faculty also needs the fund to change the research facility, improve equip their laboratories and conduct initial research. The funds can be used to students and staff to publish article. All in all, the sustainable development strategies to both staffs and students can lead promotion of university research activity.

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7. References

- [1] Cahill, Jo , Turner, Jan and Barefoot, Helen, Enhancing the student learning experience: the perspective of academic staff, *Educational Research*, 52: 3, 2010, pp 283-295
- [2] Ward, J. R., & McCotter, S.S. Reflection as a visible outcome for preservice teachers. *Teaching and Teacher Education*, 20(3), 2004, pp 243-257
- [3] Stensaker, B. Impact of quality processes. *Embedding Quality Culture in Higher Education: selection of papers from the 1st European Forum for Quality Assurance*. 2007
- [4] Srikanthan, G., and J. Dalrymple. Developing alternatives perspectives for quality in higher education. *International Journal of Educational Management* 17, no. 3: 2003, pp 126–36
- [5] Luehmann, A. Identity development as a lens to science teacher preparation. *Science Education*, 91(5), 2007, pp 822-839.
- [6] UTM Vision and Strategy, from <http://www.utm.my> 2010
- [7] Rose, G.L. Group differences in graduate students' concepts of the ideal mentor. *Research in Higher Education*, 46(1), 2005 pp 53–80