

Level of Involvement Leadership among Final Year Students in Education of Engineering and Engineering at the University of Technology Malaysia



Ahmad Fuad Seman, Mohd khata Jabor, Nor Fadilah Amin

Abstract: *The study was conducted to identify the level of involvement of leadership elements in learning among the final year students of Universiti Teknologi Malaysia Education School. In line with the 2013-2025 Education Development Masterplan, it also outlines how leadership skills in each student will help each student reach their full potential by creating a variety of formal and informal opportunities to work in teams and practice leadership qualities. A descriptive study was conducted on 136 students in the fourth year of the School of Education. The study's component focused on the level of student engagement on the elements of leadership in learning. The methodology used during the study was the use of a four-point Likert scale as an instrument for measuring percentages, mean values, and standard deviations. The results show that the level of student engagement is at the mean level of 3.42. This explains that the insurer has successfully implemented the concept of leadership among students who have been in the final year*

Keywords : *Involvement, Leadership, Learning*

I. INTRODUCTION

The concept of school leadership can be defined as the ability to influence, motivate, change the attitudes and behaviors of subordinates or subordinates such as teachers, staff, and students to agree to implement programs and to make changes to achieve school goals (yahya don 2005). This can be applied at the university level where one student may be able to lead and give an example to another student and this is a positive influence. Where each of the students will interact with them and their peers with high leadership values

will be able to engage students indirectly they will be influenced by the leadership attitude shown.

National Education Vision is a concrete step towards achieving the vision of Vision 2020. Among its role is to produce people who can contribute towards achieving the Vision 2020 goal to make our country Malaysia a thriving and prosperous country of education (Mok Soon Sang, 2002). This is a goal that has been set by the country to produce highly skilled and competitive students and not miss students with high leadership qualities. The process of national development is related to the education system. It is a quality education that can produce a generation that is aware and aware of the meaning and life of the individual to achieve the well-being of the family and the nation. Thus, education serves as a tool to meet the needs of the nation in all aspects of political, economic and social life. In the government's efforts to provide quality human capital and know their responsibilities in this leadership can be fostered attitudes of university level because at this stage the adolescent is able to think in a more mature and able to distinguish between the need or not to do. Leadership in this study as well as an opportunity for an individual's shiny skills themselves and allows them to think good even under pressure. The concept of university education is a "teacher-talk" concept and college is still a major part of school and university education (Rosniah Mustafa 2007). In addition, the study in the University also implemented cultural and submit assignments according to a predetermined time. Here most students will manually submit their assignments to the instructor's room and the role of one student to lead another student will greatly facilitate the work and stress of the student while performing the assignment. Leadership Skills is one of the elements of the 2013-2025 education development plan where in an increasingly interconnected world, the ability to lead and work effectively with others is crucial. Therefore, the education system will help each student reach their full potential by creating opportunities for formal and informal work in a team and practice leadership skills. (2013-2025 education development plan)

II. OBJECTIVE

Identify the level of involvement of final year students of Engineering and Engineering Education on leadership in learning.



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III. METHODOLOGY

This study is a descriptive study conducted to obtain quantitative data on the level of leadership skills in learning. The total student sample consisted of 205 fourth year students of the Department of Technical Education & Engineering, University of Technology School of Malaysia. The instrument was a questionnaire divided into two parts, part A devoted questions of demography and part B, which is used to measure the variables in the study, which is the level of student involvement. A pilot study was conducted before the actual study was conducted, with the aim of determining the reliability of the questionnaire. The results of the pilot study showed that the reliability of the questionnaire was 0.914 at the level of awareness

Table 1: Chronbach Alpha

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

The analysis for the study was performed to measure the level of each of the study objectives discussed. Mean levels were measured using the following scale ranges of the mean levels (range 1.00-2.00), medium (range 2.01-3.00) and high (range 3.01-4.00)

Table 2: Interpretation of a Four-point Likert Scale

Interpretation of Mean Score	
1.00-2.00	Low
2.00-3.00	Medium
3.00-4.00	High

IV. FINDINGS

4.1 Respondent Background Distribution

The results showed that the majority of respondents in the study were female students, accounting for 64 percent of the total respondents. The proportion of respondent courses was concluded that the highest percentage of respondents to the questionnaire were 54 Bachelor of Education and Mechanical Engineering Technology students of 54 compared to other courses. While the fewest number of students with a Bachelor of Technology and Education Building due in part taken as a pilot study of 30 respondents. Next, the distribution of the highest education level of respondents who are at the highest level of diploma is 61.5% followed by 32.6% matriculation.

Table 3: Distribution of Respondents Program

Program	Frequency (f)	Percentages (%)

Ijazah Sarjana Muda Teknologi Serta Pendidikan Elektrik dan Elektronik (SPPR)	43	31.1
Ijazah Sarjana Muda Teknologi Serta Pendidikan Binaan Bangunan (SPPQ)	12	8.1
Ijazah Sarjana Muda Teknologi Serta Pendidikan Mekanikal (SPPJ)	54	40
Ijazah Sarjana Muda Teknologi Serta Pendidikan Kemahiran Hidup (SPPH)	28	20.7
Total	136	100

Table 4: Distribution of Higher Education Levels.

Program	Frequency (f)	Percentages (%)
Diploma	84	61.5
Advanced Diploma	5	3.7
Matriculation	44	32.6
Malaysian Higher Education Certificate (STPM)	3	2.2
Total	136	100

Table 5: Distribution of respondents on aspects of leadership awareness among students.

Bil	Item	Mean	Standard Deviation
1	I often represent the class in most of the activities.	2.59	0.53
2	I know the importance of leadership.	3.33	0.53
3	I know how to distinguish good leadership qualities.	3.64	0.52
4	I know that good leadership will produce successful individuals.	3.72	0.5
5	Leadership means individuals who can influence others.	3.61	0.67
6	Showing positive attitude is one of the hallmarks of a good leader.	3.65	0.56
7	Each class must appoint a competent leader as the class representative.	3.76	0.52

8	An individual who can influence others is a leader.	3.76	0.69
9	I know that every student must have leadership skills.	3.16	0.52
10	A good leader will make his followers obey.	2.97	0.58

Based on Table 5, it shows the distribution of respondents' level of involvement in the final year of Engineering and Engineering Education in leading the learning. The results show that the overall mean score is at a high level of 3.42. Items 27 and 28 of which 79.3% of respondents indicated that they were actively involved in each of the activities involved and often provided feedback to team members in an effort to improve their work quality showed the highest mean score readings for all items. Item 21, which I often represent as a class in most of the activities, showed the lowest mean score reading of 2.59 where 40% of respondents said they did not represent the class in the activity.

V. DISCUSSION

Based on the analysis of the study done, the researcher found that the overall level of engagement is at an average mean level that is in line with the vision and mission of the KPT, the Vision of the KPT is to make Malaysia the Center for Higher Learning By 2020 while the KPT Mission is to develop and create an environment of higher education that promotes a high quality and competent, innovative and ethical knowledge center to meet national and international needs (KPT, 2007) In general, there are two items with high meanings in which they involve the active involvement of students in their activities. This is because it complies with the Course Learning Outcome and the Learning Outcome Program issued by the faculty. According to the Learning Outcome Program the measurement items are at PO6 and PO9. Where each is group work and leadership skills. Next, the second item is that students always get feedback from other team members to improve their work quality. This is high among students because students are always involved in group activities and assignments.. Students show that students are highly aware of the concept of leadership. This is supported by a study by Fuziah and Mohd Izham (2011)

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who found that the most commonly used leadership practices in learning organizations are to promote ideal influences, to inspire and inspire and to build teachers' intellectual stimulation. In addition, based on the data obtained, the final year students understand the concept of leadership in accordance with a study conducted by Khalilah Nasution (2016) that leadership is the ability to mobilize, influence, motivate, encourage, direct, advise, guide, enlist, govern, prohibit and punish. With the level of student engagement shown, they clearly understand the function and role of the student in an institution as a leader and know the true meaning and characteristics of leadership. In addition, the high level of student awareness of the leadership element is because most students are among the polytechnic students. According to Huzili, Azman and Muhamad Shurki (2008) These Soft Skills can be practiced well in universities as most of the lecturers in Polytechnics respond well to the application of Soft Skills among Polytechnic students in Malaysia. Soft skills include elements of leadership and team work. The item with the lowest mean is item 8 where an individual who can influence another person is a leader. This definition is based on (Maxwell.1995: 5) where, True Leadership is more than just having fun but being someone that other people are happy to follow. Overall, the level of student engagement indicates a high level of engagement where these items involve active student engagement in the activities they participate in. This is because it complies with the Course Learning Outcome and the Learning Outcome Program issued by the faculty. According to the Learning Outcome Program the measurement items are at PO6 and PO9. Where each is group work and leadership skills.

VI. CONCLUSION

Based on the research conducted, the researcher can conclude that the level of student engagement among the final year students of the Department of Education Technology Engineering School of Education is at a high level. This shows that they have successfully applied leadership skills in learning. Researchers argue that leadership knowledge among students can be effectively implemented with the support of all stakeholders. With the increasing challenges of employment, employers are always looking for competent employees not only in terms of technical and knowledge, but also in their ability to lead their team. With early application at the institution of education, leadership skills can be developed as a set of student skills to face the world of work.

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REFERENCES

1. Fuziah Mat Yakop & Mohd Izham Mohd Hamzah. 2011. A Study Of Relationship Between Leadership Practices And Learning Organization Practices In Cluster Secondary Schools.
2. Khalilah Nasution (2016), Leading Leadership In Risk Learning Effectivity

3. Hudson Leadership Model 2015, <https://au.hudson.com/talent-management/hudson-leadership-model>
4. Rosnah Ishak dan Muhammad Faizal A.Ghani(2012) , Best Leadership Practices for "Learning Organization" Schools
5. Yahya Don. 2005, Educational Leadership In Malaysia Yahya Don : Bentong, Pahang : Pts Professional, 2005
6. Bisland, A (2004). "Developing Leadership Skills in Young Gifted Students." Journal of Vocational Education and Training. Vol 27.No 1. 24-27
7. C.H Cooley (1902), Human Nature and the Social Order, New York: Charles Scribner's Sons.
8. Cress, C. M., Astin, H. S., Zimmerman-Oster, K., & Burkhardt, J. C. (2001). Developmental Outcomes of College Students' Involvement in Leadership Activities. Journal of College Student Development, 42, 15-27.
9. Fuziah Mat Yakop & Mohd Izham Mohd Hamzah. 2011. A study of relationship between leadership practices and learning organization practices in cluster secondary schools.
10. Kementerian Pengajian Tinggi Malaysia. (2006). Modul pembangunan kemahiran insaniah (SOFT SKILLS) untuk Institusi Pengajian Tinggi Malaysia. Serdang: Universiti Putra Malaysia.
11. Pelan pembangunan Pendidikan 2013-2025

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