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RESEARCH ARTICLE

## Cultivation of Generic Students' Attributes Among Students in A Private Higher Education in Malaysia

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#### **ABSTRACT**

The study aims to investigate the cultivation of Generic Student Attributes (GSA) among students in a private higher education institution in Johor Bahru, Malaysia. Preliminary research indicates that very few private higher education institutions (PHEI) has developed GSA to increase students' generic skills among students that will directly improve graduates' employability level. The research objective addressing 2 different research question. Firstly, to investigate components of GSA for students in Private Higher Education in Johor Bahru. Secondly, to investigate cultivation of GSA among students in PHEI. Qualitative research was conducted among students in Private Higher Education in Johor Bahru to investigate the cultivation of GSA and the research outcome is narrated through Case Study research design. Data saturation achieved through the participation of 9 students. Thematic Technique has been employed to process and analyse the data from semi-structured interview question. Results show that students cultivated components of GSA, namely leadership skills, moral and professional ethics, entrepreneurship skills, continuous teamwork, critical thinking communication skills throughout teaching and learning. Injection of extra curriculum module by Students Affairs Department helps students to improve GSA. Finally, the study suggests that Private Higher Education in Johor Bahru should design and implement framework of GSA across all discipline to improve employability of graduates.

**Contribution/Originality:** This study is one of very few studies which have investigated Generic Student Attributes (GSA) cultivation among students in the scope of Private Higher Education in Johor, Malaysia and has contributed to the very few existing literatures that has been disclosed by the Private Higher Education in

Malaysia.

#### 1. Introduction

The rise in the number of graduates from Malaysian tertiary institutions is a good sign of the establishment of learning opportunities, which adds to the country's development (Billy et al., 2021; Nooriah et al., 2013). According to the data from Aaron (2023), the graduate unemployment rate fluctuated between 2000 and 2023. According to the research, the unemployment range increased rapidly in 2019 from 3.26% to 4.54% in 2020. During the same time period, however, the mismatch rate increased from 15% to over 25% (Aaron, 2023). There has never been a comprehensive examination of this growth, such as one that breaks out unemployment.

According to the most recent Tracer study research (MOHE, 2021a), 14.5% or 41,467 Malaysian graduates remain unemployed, whereas the number of private university graduates is 18,391, which is greater than the number of Malaysian graduates who are unemployed from public institutions. The majority of these jobless graduates have a baccalaureate and a diploma, with the former accounting for 15.5%, or 18,868 persons, and the latter accounting for 14 people.6% or 16,807 (MOHE, 2021b). The top three majors with the biggest number of registered jobless among the eight fields of study examined by the MOHE were social sciences, business, and law (14,665 or 15.6%), engineering, manufacturing, and construction (8,950 or 11.4%), and science, mathematics, and computers (4,113 or 12.8%) (MOHE, 2021b). Although the Department of Statistics Malaysia (MOHE, 2021a) reports that only a few private higher education institutions (PHEIs) have published directed employment rates and precise figures are not yet available, this raises questions about whether graduates possess generic student attributes that eventually correlate to a higher employability level.

Malaysia has 105 public community college campuses, 36 public technical colleges, and 20 public universities, 39 private university institutions and over 395 private colleges, and the private higher education industry is growing (Higher Education Report, 2022). Even if the number of Malaysian HEIs is growing, there are still questions regarding the quality of our education since our educational system lacks a method for assessing progress; for example, even after students have completed their studies, it is hard to establish their degree of proficiency (Wan et al., 2018).

Recognizing the gravity of the issue in Malaysian tertiary institutions, public and private universities are urged to provide their graduates with graduate student attributes to increase workforce quality, ultimately contributing to the nation's economic and social capital. According to the Malaysia Education Blueprint 2015-2025 (Higher Education) (MOHE, 2015), Malaysia wants to enhance the employability rate of recent graduates from 75% to more than 80% by 2025. As a result, the Malaysian Qualifications Framework (MQF) began to promote student development of graduate qualities (Nora et al. 2022). Higher education graduates need to develop graduate student attributes through formal, in-formal, and non-formal courses to get work (Hunter, 2020). However, it remains a mystery since PHEI is unable to successfully execute graduate student attributes due to imprecise regulations created by policymakers.

According to MOHE (2006), graduate student attributes were designed to lead PHEIs and characterize the graduates' attributes, which consist of seven categories of

competence abilities that graduates must acquire before graduation. Communication skills, critical thinking, teamwork, lifelong learning, information technology, work ethics, entrepreneurship, and problem solving are the domains of Graduate Student Attribute (GSA). Even though the curriculum was launched in 2006, MOHE revealed that graduates lacked some soft skills as of 2017 (Tang, 2019). Regardless of whether the government implements the module, it is the role of institutions to create and instill soft skills. Regardless of whether the government implements the module, it is the obligation of the institutions to create and instill soft skills in their graduates.

### 1.1. Research Objectives

The study addresses 2 research objectives.

- i. To investigate components of generic student's attribute for students in PHEI.
- ii. To investigate cultivation of generic student's attribute among students in PHEI.

#### 2. Literature Review

Graduate students attribute is characterized by the talents, skills and understanding acquired through the final product of the higher education institution. The university community recognizes that student development during university is desirable (Tsaoussi, 2020; Bowden et al., 2000) and that this is connected intrinsically to employability (Oliver et al., 2018). Other concepts, including graduation results, graduate talent, graduate traits, and graduate skills are also part of the literature, and they are essentially the same as graduate traits (Fahimirad et al., 2019; Barrie, 2007). The graduate student attribute is intended to teach students the variety of talents and attributes that are required of them following graduation, regardless of their subject (Okolie et al., 2019; Barrie, 2006). According to Tang (2019) and Goyol (2002) had pointed out that adaptation is the process by which individuals adapt to new environments and boost their motivation. However, some students will take some time to acclimatize or adapt to a new learning environment.

Ming et al. (2023) and Zuria et al. (2010) agrees with this statement that students need to adapt as this is a big challenge and transition in a student's life. It involves setting the mindset necessary to think positively, be independent, and set your own goals. However, if students do not react positively to change, it reflects their weak self-management skills. The lack of personality management traits is linked to research showing that poor self-management affects students' careers after employment. This is supported by Norasmah's (2017) study on student resilience involving 1190 students in 15 public and 16 private higher education institutions. This therefore indicates that students are unable to grasp the general characteristics of peers during their studies in private higher education. Graduates do not have interpersonal skills; they cannot work in a team. Graduates do not understand the working environment, such as organizational charts, management aspects and business context, and they do not have enough ICT skills.

A study conducted by Al Asefer and Zainal (2021) and Hossain et al. (2018) support the argument that found most of the graduates could not find employment for at least a year due to their lack of soft skills. Graduates lack communication, technology use and computer skills. These call for a review of the planning and development of generic student attributes for student needs, he added.

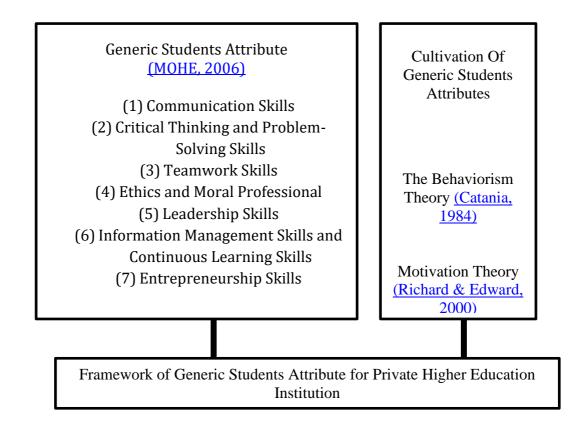
Nooriah et al. (2013) studied the graduate student attribute of students, noting that many undergraduates suffer from poor communication skills, choosing to study in less demanding fields, lacking in skills general and experience. Students who are unable to realize their potential to create their own jobs become entrepreneurs after developing the necessary skills through common student characteristics. Students do not make the connection between the work and the general characteristics of the students and their personal development.

Research by Husain et al. (2010) found that students did not develop the potential for higher-order thinking skills to communicate effectively. Even the students are trained in practical skills, but they are unable to use their abilities during the turmoil. She also said it could be because the program requires students to be nerds and students not able to apply what they have learned rather than just prepare for assessment. So, when unexpected problems arise, the lack of skills can become a big problem for students.

#### 2. 1. Theoretical Framework

The study incorporates Motivation theory by Richard and Edward (2000) that encompasses two forms of motivation: intrinsic and extrinsic motivation. Both forms of motivation promote and enhance understanding of students' learning process of GSA. Whereas Skinner's Behaviorism Theory summarized by Catania (1984) focuses on observable and determinable aspects of student's behaviours on learning generic student's attribute. Figure 1 shows the empirical case study on investigating 7 skills of GSA by MOHE and the cultivation of GSA by integrating Behaviorism Theory and Motivation Theory.

Figure 1: Theoretical Framework for the Research



## 3. Methodology

The research design utilised in this study is a qualitative and robust case study. Case studies provide an opportunity to examine students' implementations of generic students' attributes in their real-world contexts and to compare implementations between cases to identify similarities and differences (Julian et al., 2019). According to Rashid et al. (2019) explained that case studies incorporate different preferences, for example, data is presented in real-life situations, which gives better insight into the specific behaviour of the subject of interest.

The case studies also emphasize that the participants' perspective and experience are at the center of attention; they are mediated by the researchers' own perceptions. The study received ethics approval from the private higher education in Johor Bahru in 2021. Semi-structured interview questions were developed to explore student responses throughout the interview process. Only students selected for multimedia applications interviewed. The multimedia application was chosen for two reasons: (1) it is the most popular program at private higher education in Johor Bahru and (2) more evidence can be found through the implementation of multimedia schools compared to other schools. Each participant was recruited using a snowball sampling technique (Irina & Alexandru, 2021), which allowed researchers to reach potential participants on the recommendation of another participant.

## 4. Findings and Discussion

RS3/2/M

RS4/1/M

RS5/2/M

(Ah Waa)

RS6/1/M

(Kirtish)

RS7/2/M

(Ah Man)

RS8/2/F

(Gayatri)

(Zaris)

(Fikri)

3

4

5

6

7

8

To explore and understand the students background in private higher education in Johor Bahru that has been participating in the research, participants are selected from a broad spectrum of religious background and only students studying Diploma in Multimedia program was selected. Participants are from Year 1 and Year 2 since the Diploma has been offered only for two years at PHEI. The semi-structured interview with the college students helps to investigate the components of generic student's attribute for students in Private Higher Education in Johor Bahru which addresses the first objective of the study. A profile of student's participant has been created and described in the Table 1.

Year of **Participant** Name Code Religion Ethnic Sex Age Study 1 RS1/1/F **Female** 18 1 Islam Malay (Ani) RS2/2/F 2 2 **Female** 20 Hindu Indian (Vijaya)

Male

Male

Male

Male

Male

Female

Table 1: Profile of student's participants for the study

20

19

19

18

21

19

2

1

2

1

2

2

Islam

Islam

Chinese

Hindu

Chinese

Hindu

Malay

Malay

Indian

Indian

Buddhist

Buddhist

9	RS9/1/F	Female	18	1	Islam	Malay
	(Aminah)					

A total of 9 students from Year 1 and Year 2 participated in the research. All students are studying for a Diploma in Multimedia Application in a PHEI. From the data given by the college, majority male students are interested and enrolled studying Multimedia Application. However, the reason behind joining the course merely reflected the student's interest in the subject matter rather gender preferences. Students came from rural and urban areas to study the diploma program offered by the college since it is affordable, and the job guarantee opportunity provided by the private higher education institution. The interview session was conducted through Ms Teams after receiving the participants consent. The session is conducted online due to health issues and to ensure the information is gathered comprehensively while observing the students while the interviewer is conducting the interview session.

## 4.1. Components of generic student's attribute for students in a PHEI

Findings from the semi structured interview revealed that students can grasp components of generic student's attribute in Private Higher Education in Johor Bahru. Highlighted components by Kementerian Pengajian Tinggi (2006), leadership skills, moral and professional ethics, entrepreneurship skills, continuous learning, teamwork, critical thinking skills and communication skills help students to develop GSA.

#### 4.1.1. Leadership Skills

The first attribute of Generic Students Attribute explains the skills that should be acquired by a student to lead a group of people. There are 3 levels; degree of knowledge to lead, ability and competency to lead and competency to play role of a leader. It's crucial for students to acquire leadership experiences during their time in college so that students can master the skills of forming bonds within teams, establishing identities, and successfully completing responsibilities within the established time frame. Thus, the findings from the students had indicated that students had cultivated leadership skills in private higher education. Thus, Anis explains on how she developed on leadership skills:

"when I lead my group it was a lot of issues and matters that I need to tackle ...but at the end I learn how to lead my group members..." (R1/1/F)

This statement is supported by Fikri, saying that:

"Every time when there is assignment sure I will get extra task to be a leader. Earlier I was stressful but now I know how to manage my team members now." (R4/1/M)

Whereas Sham's opinion strengthens the development of leadership skills:

" It is not easy to be a leader, everyone has different idea and perception.... And I must accept all opinions, if I reject then I should give a justification that satisfy my team members, or else I will hurt them, or they won't be in our group in future..." Sham (R2/2/F)

## 4.1.2. Moral & Professional Ethics

There are two levels, ability to understand impact of economy and socio culture and applying a formal working culture aligning with ethics and moral professional. This is important for all students because they will grow as individuals and make sure that their ideals contribute positively to people's well-being. As a result, colleges must instill some key core ethical values that are central to the organization's mission and social culture, as well as help define the institution's requirements for being an ethically accountable student and citizen on campus and being prepared for the working world. The findings from the majority shows that students revealed that they learn and cultivated moral and professional ethics learning in private higher education. Collecting from his experience, Zaris explains that:

"when I have beef.... Arguments I feel it is difficult to communicate with the same person again especially during assignment... but I had to overcome that for the studies sake" Zaris (R3/2/M)

Whilst, Gayatri also speaks the same language as Zaris, by explaining that:

"as a leader I must practise just to all team members and it is tough when suddenly some of the having conflicts... but mmm... I always find a way to settle the issue... it is my responsibility.." (R8/2/F)

While Ah Waa feels that he manage to develop professional behaviour and he explains that:

"sometimes I feel down when my friends tease me as I am introvert, I don't talk much... but for assignment sake I just learn to let go..."Ah Waa (R5/2/M)

### 4.1.3. Entrepreneurship Skills

The third attribute of Generic Students Attribute is Entrepreneurship Skills. There are 3 levels; ability to grab the opportunity in the respective field, ability to do comprehensive planning and ability to create new opportunities to venture. For college students to recognize commercial opportunities, feel more confident in themselves, and have the knowledge and skills to take advantage of them, they must possess entrepreneurship competence. Additionally, it teaches students how to recognize opportunities, commercialize ideas, manage resources, and start businesses. Thus, students' respondents indicate that they did practice entrepreneurship in private higher education institutions. Fikri explains his experience in promoting a product:

"to convince the stakeholders to buy the products is so tough, it takes a lot of effort.." (R4/1/M)

His statement explaining entrepreneurship is not easy also supported by Ah Man:

"It is not easy to market something.... Only when I do internship I realise about this..." (R7/2/M)

While Ani also share her tough experience about entrepreneurship:

"when my lecturer teaching me entrepreneurship sounds so easy but during my internship it was hard" (R1/1/F)

#### 4.1.4. Information Management Skills and Continuous Learning Skills

The fourth attribute of Generic Students Attribute is Information Management Skills and Continuous Learning Skills. The ability to use information technology is crucial for college students because it gives them a simple way to acquire knowledge and allows them to learn more quickly. As a result, students who are proficient in IT can, for instance, save money and time by being able to handle a technological problem on their own. Whereas for Continuous Learning Skills students should be able to be independent to organize information from various resources and able to adapt to new ideas or learning environment. Thus, the majority of the students' response indicates that they have cultivated information management skills and continuous learning skills in private higher learning institutions. Aminah shares her passion on learning design:

"I love designing but I must keep my knowledge updated... there is new version software in the market sometimes even my teacher's aren't aware.." (R9/1/F)

While Gayatri continues by saying that continuous learning is important:

"I love to keep myself updated of the latest software... so that I don't stay outdated and my teachers says the same too....Gayatri (R8/2/F)

The importance of continuous learning is also supported by Kirtish:

"my teacher always urge me to stay updated especially when comes to software's." (R6/1/M)

#### 4.1.5. Teamwork

The fifth attribute of Generic Students Attribute is Teamwork Skills. Teamwork is used to teach essential social and communication skills such as active listening and effective speaking. When students work as a team to complete their respective obligations, they learn to listen to their leaders and coaches. Students learn how to listen to each other as a coherent unit and to work collaboratively as a team, regardless of sociocultural background. Aminah explains the essence of teamwork:

"Especially when we have assignment, as a leader I must cooperate with everyone to make sure the assignment is completed". (R9/1/F)

While Ah Waa explains the challenges, he encountered cultivating teamwork:

"really challenging when some does not listen my opinion, they are stubborn... I must get the leader to advise them orelse our mark for assignment is jeopardise" (R5/2/M)

However, Fikri encounters the positive sides of teamwork and explains that:

"I prefer group assignment, as a team we will have less work to do if we divide and complete the task efficiently" (R4/1/M)

## 4.1.6. Critical Thinking Skills

The next attribute of Generic Students Attribute is Critical Thinking Skills. Critical thinking is crucial for students to think analytically and innovatively. Critical thinking skills are skills that college students comparatively analyse, once they will need to make deliberate decisions as opposed to impulsive ones. It enables individuals to perceive concepts from several angles, which enhances understanding. Furthermore, college students must develop problem-solving abilities since they contribute to the formation of an approach to thinking. Students will analyse the issue, gather data, identify potential solutions, weigh their merits, and offer solutions. The student's response to the interview questions shows that most of them had developed critical thinking skills due to the uncertainties that have been encountered. Sham explains that the uncertainties make her to think more:

"it is really challenging when comes to designing I must crack my head to design uniquely" Sham (R2/2/F)

Kirtish also adds value the importance critical thinking by saying:

"I feel to think and talk.... Specially to discuss current issues in business communication is challenging especially when English is not my mother tongue" (R6/1/M)

While Zaris feels that critical thinking helps him to articulate the right message:

"I must really find the right words to express so that my teachers and friends understand my ideas especially when we encounter conflicts"..(R3/2/M)

## 4.1.7. Communication Skills

The final attribute of Generic Students Attribute is Communication Skills. Effective communication is essential because it increases our knowledge of other people and circumstances. It helps in overcoming differences, generating mutual respect and trust, and creating favorable conditions for exchanging innovative ideas and resolving problems. There are four levels in communication skills; able to articulate thoughts clearly and effectively, listen actively, able to convey feedback and competency to conduct clear presentation to the listener. The student's response shows that they had improved communication skills in private higher education. Ani said that having small group discussion helps her to improve communication skills:

"Whenever we have assignment, group discussion is a must and I improve my communication skills through that" (R1/1/F)

Ah Man also support Ani statement as he manage to brush his own skill sets too:

"I had force myself to talk because I am introvert but by doing that, I manage to improve my communication skills" (R7/2/M)

While Aminah feels the teachers plays a vital role by helping the polish her communication skills:

"my teachers will always ask questions and I have to always ensure I am on track so that able to answer them. but along the way I improve my communication skills a lot" (R9/1/F)

## 4.2. Cultivation of generic student's attribute among students in a PHEI

#### 4.2.1. Assessment

Assessment is a method used to evaluate students learning outcome in private higher education. Thus, teachers design the assessment based on the learning objective of the module. This helps the teachers to understand the level of students understanding throughout learning the module and after learning the module. Teachers therefore designed the assessment mindfully to ensure students achievement can be deliberated throughout the learning process. In private higher institutions, the teacher's assessment comprises of assignment, group work, projects, midterm, and final assessment. Teachers had incorporated the generic students attribute into the lesson plan and the outcome is reflected when the assessment is carried out. Ani, explaining that assignment and gaining good marks has been a pushing factor demanding her to improve her skill sets:

"In order to get good marks for my assignment, I will push myself to search for right materials so that I can write and submit a good assignment for business english" (R1/1/F)

Another student, Ah Man also feels the same urge to thrive:

"The outcome of forcing myself to talk .... is that I manage to get good marks for my business communication paper" (R7/2/M)

Aminah shares the exact opinion too on assignment:

"I try to think out of the box to do designing and I also sometimes will use new software... to make the design looking more attractive; this helps me to gain more marks for my assignment." Aminah (R9/1/F)

Whilst Fikri feels that assignment had helped him to learn more knowledge:

"Group assignment eases my work, as we divide the task but eventually, I learn a lot equally to my formal learning in class as a team". (R4/1/M)

### 4.2.2 Skills Injection Through Extra Curriculum

Students Affairs department plays a vital role in assisting the academics in private higher education in shaping them and creating skillful future leaders. In private higher education in Johor Bahru, the department of student's affairs plan and carry out activities that is directed and coordinated by the Head Quarters. The HQ of private

higher education in Johor Bahru had designed Program Teras to help students to inject skills that are needed by young graduates to improve their employability once graduated. The activities organized by Students Affairs helps students to learn, cultivate and develop the skills further. Fikri, year 1 student feels that field trip organized by Students Affairs helps the students to gain more insights on real working environment:

"Field Trip projects are given to us so that we can choose, plan and coordinate field visit to the relevant industry. This helps us to learn what really industry do in real life in fact, it takes a lot of work for us but at the end we enjoy the field trip together, thanks to Terak Program". Fikri (R4/1/M)

While another year 2 student, Zaris feels that extra effort of hiring external facilitators helps students to gain more knowledge from different experts:

"I usually feel stress and afraid when I am called to the front. Stage fear is real.... for me but when the facilitator came from KL shared the techniques and tips with us ... I feel more relaxed... I understand it is normal for everyone to have such feelings.... then when I come to my turn.... I speak. ok... that is ..unbelieveable... but I am no more scad... I break my fear actually. Thanks for Students Affairs Department for organising this workshop for students." Zaris (R3/2/M)

Kirtish, another year 1 student also support Zaris's statement for having industry experts to help the students to gain more skills:

"When the Student Affairs department organised Industrial talk that is when I realise the latest designing software and how do the experts really do work out there... it looks like I need to learn more and keep myself more updated orelse I will be left of the latest updates in the designing field". Kirtish (R6/1/M)

#### 6. Conclusion

The findings indicate that the respondents were able to grasp the seven generic student attributes aligned by MOHE (2006), communication skills, critical thinking skills and problem-solving skills, teamwork skills, ethics and moral professional skills, leadership skills, information management skills and continuous learning skills and entrepreneurship skills. Students were able to reflect the generic students attribute that they have grasp and to identify the activities that enable them to practice the seven skills. The data shows that teachers play a vital role through teaching and learning process to ensure students can understand generic student attribute through variety of teaching techniques and on – going assessment. By incorporating generic student attributes in curriculum and syllabus, students are able to not only understand but also implement the skills practically too.

Besides the teacher's role, the student's affairs department role showed a significant impact in students understanding. By joining activities coordinated by the student's affairs department and attending TERAK module's program, students improvise and increase students generic attribute skills too. Students' confidence level has increased by joining impromptu speaking session and gained confidence by improving speaking

skills. Students also feels the projects and assignments constructed through TERAK program have benefited them and helped them to improve generic student attribute. However, future study may consider investigating the significant impact of each TERAK module program to understand the relation and contribution towards implementation of student generic attribute.

In conclusion, the study helps to understand the cultivation of generic student attribute among students in a private higher education in Malaysia. Therefore, private higher education should educate the generic student attribute to teachers, students affair department, administrators and for the students to align towards the vision of MOHE to increase students' skill sets that eventually improvise generic students attribute holistically. The interview indicates that students can reflect the generic students attribute and it's important now, despite GSA hasn't been emphasized and explained to the students earlier. It is important for private higher education institutions to increase the understanding of generic student attribute among all stakeholders to ensure a general understanding among them and the impact of GSA is acknowledged. Finally, the study suggests that Private Higher Education in Johor Bahru should design and implement a framework of generic student attribute across all discipline to improve employability of graduates before they complete their studies.

## **Ethics Approval and Consent to Participate**

The researchers used the research ethics provided by the Research Ethics Committee of University Technology Malaysia (UTM). All procedures performed in this study involving human participants were conducted in accordance with the ethical standards of the institutional research committee. Informed consent was obtained from all participants according to the Declaration of Helsinki.

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#### **Conflict of Interest**

The authors declare no conflict of Interest.

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