

# Am I a Good Lecturer? An Exploratory Analysis of Undergraduate Student's Perception of Lecturers' Effectiveness

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## Abstract

Lecturers are essential in the education, teaching, and learning process. Not all educators can provide effective teaching and learning sessions to their students. Several factors influence the lecturer's effectiveness, including the physical arrangement and availability, technology usage, teaching approach and style, communication form, and the interaction pattern he creates in the classroom. This study examines the influence of teaching and learning technology, lecturer character, and supporting facility on a lecturer's teaching effectiveness based on student perception. Employing a systematic sampling, 271 undergraduate students in Universiti Teknologi MARA (UiTM), Seremban, Negeri Sembilan, were selected as a sample using a systematic random sampling. The study's implications are helpful for lecturers to practice those skill elements to make them more excellent in the teaching and learning process. The study's design uses a descriptive survey method, and data were analyzed using Pearson correlation and multiple regression. The study also found significant relationships between teaching and learning technology, lecturer character, supporting facility, and lecturer's teaching effectiveness. Moreover, the lecturer's character was revealed as the most significant predictor. This study implies that several quality factors such as classroom setting and climate, diversifying teaching methods, monitoring student understanding and interest, teaching aids and skills in using technology, and lecturer teaching evaluation and development must be given attention by the universities and faculties management.

*Keywords:* teaching and learning technology; lecturer character; supporting facility; teaching effectiveness

## Abstrak

Pensyarah adalah penting dalam proses pendidikan, pengajaran, dan pembelajaran. Tidak semua pendidik dapat menyediakan sesi pengajaran dan pembelajaran yang berkesan kepada pelajar mereka. Beberapa faktor mempengaruhi keberkesanan pensyarah, termasuk susunan dan ketersediaan fizikal, penggunaan teknologi, pendekatan dan gaya pengajaran, bentuk komunikasi, dan corak interaksi yang diciptanya di dalam kelas. Kajian ini mengkaji pengaruh teknologi pengajaran dan pembelajaran, perwatakan pensyarah, dan kemudahan sokongan terhadap keberkesanan pengajaran pensyarah berdasarkan persepsi pelajar. Menggunakan persampelan sistematik, 271 pelajar sarjana muda di Universiti Teknologi MARA (UiTM), Seremban, Negeri Sembilan, telah dipilih sebagai sampel menggunakan persampelan rawak sistematik. Implikasi kajian adalah membantu pensyarah untuk mempraktikkan elemen kemahiran untuk menjadikannya lebih cemerlang dalam proses pengajaran dan pembelajaran. Reka bentuk kajian menggunakan kaedah tinjauan deskriptif, dan data dianalisis menggunakan korelasi Pearson dan regresi berganda. Kajian juga mendapati hubungan yang signifikan antara teknologi pengajaran dan pembelajaran, perwatakan pensyarah, kemudahan sokongan, dan keberkesanan pengajaran pensyarah. Watak pensyarah didedahkan sebagai peramal yang paling ketara. Kajian ini menunjukkan bahawa beberapa faktor kualiti seperti persekitaran dan iklim kelas, mempelbagaikan kaedah pengajaran, memantau pemahaman dan minat pelajar, alat bantu mengajar dan kemahiran menggunakan teknologi, dan penilaian dan pembangunan pengajaran pensyarah perlu diberi perhatian oleh pihak pengurusan universiti dan fakulti.

*Kata kunci:* teknologi pengajaran dan pembelajaran; watak pensyarah; kemudahan sokongan; keberkesanan pengajaran

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## 1.0 INTRODUCTION

Lecturers are essential in education, teaching, and learning (Wong & Chiu, 2020). Lecturers with good character can successfully implement an integrated education based on the National Education Philosophy that can produce Malaysians with knowledge, skills, noble character, responsibility, and the ability to achieve self-confidence and support the harmony and prosperity of society and the country (Tee, 2023). Lecturers act as educator managers because they perform several management functions in the lecture room to implement the curriculum (Sutoro, 2021). The teaching and learning process involves interaction between lecturers and students (Hanaysha et al., 2023; Tee, 2023). The outcome of this relationship will determine whether the lecturer can teach and whether the students are ready to learn (Purwanto, 2020). Therefore, a lecturer's teaching effectiveness depends on how the lecturer can adapt and understand the students' learning problems (Hanaysha et al., 2023; Rahardja et al., 2020). Effective teaching is teaching that can improve learning in students.

Effective learning can only occur in a healthy, vibrant, and democratic atmosphere (Hanaysha et al., 2023). Learning outcomes will change student behavior because of receiving new knowledge or beliefs. Further, Slåtten et al. (2021) found that effective lecturers have attributes such as deep knowledge, fairness, responsibility, dynamic, open, firm, dedicated, democratic, and good interpersonal relationships. The development of a student includes physical, emotional, spiritual, and intellectual aspects (Abelha et al., 2020). Exciting and effective teaching can produce student learning as society and the country expect. Previous findings found that educators still maintain the traditional approach (Kruszewska et al., 2022). This is seen when the educator gives the students all the lesson details and focuses on teacher-centered teaching. In addition, the problem of educator skills needs to be observed for improvement. The teaching and learning process in the classroom involves two-way communication, and lecturers often interact with students (Selvanathan et al., 2023).

Therefore, this study examined lecturers' effectiveness in the Universiti Teknologi MARA (UiTM), Seremban Campus, Negeri Sembilan. The critical question is, what characteristics and elements must be present to influence the effectiveness of the lecturer's teaching and learning process? This study's objective is to evaluate undergraduate students' perception of the influence of the teaching and learning technology, lecturer character, and supporting facility lecturers on the lecturer's effectiveness. Several factors influence lecturer effectiveness. First, technology plays a vital role in the life of an educator or a student. The teaching delivery process will be more effective with technology mastery among educators. The use of the right technology, together with high-quality content, pedagogy, and design, can improve the learning experience (González Calleros et al., 2022). Educational technology tools such as TikTok, YouTube, and artificial intelligence (AI) can help educators convey information to students more quickly, efficiently, and interestingly and achieve learning objectives (Lynch et al., 2021; Mohd Noor, 2023).

Next, a quality educator must have an excellent personality and character. The task of educating and producing outstanding human capital is a challenging matter. Educators should have a precise identity to show noble character to be an example to their students. In other words, the key to producing quality people depends on the quality of the educator. According to Purwanto (2021), the characteristics of people who become lecturers are divided into three groups, namely: i) a lecturer who is genuinely a lecturer in the sense that he or she is dedicated, likes, and has an interest in his or her work, ii) lecturer who is not a lecturer in the sense that he or she is not interested in his or her profession, and iii) lecturers who lose direction due to frustration and personal problems that cannot be overcome. Sutoro (2021) argues that the quality of the relationship between lecturers and students influences the willingness of students to participate in lectures. A positive relationship between lecturers and students will make students work hard and cooperate with their lecturer (Karpouza & Emvalotis, 2019; Uleanya, 2020). For students, the central role of the lecturer is to teach. Usually, students need a clear explanation from the lecturer about the learning problem and guidance towards solving the problem (Mendzheritskaya & Hansen, 2019).

From the aspect of facilities, Yang and Mak (2020) stated that infrastructure such as classrooms with lighting, good air ventilation, availability of air conditioning, LCD projector, whiteboard, and a complete library and laboratory can affect the academic achievement of students. Infrastructure equipment will positively influence lecturer effectiveness (Lu et al. (2021; Michels et al., 2020). A study by Michels et al. (2020). found that the conducive environment and classes drive students to be passionate about learning. Hanaysha et al. (2023), Lu et al. (2021), Michels et al. (2020), and Soares and Lopes (2020) argued that the leadership of lecturers in the lecture room has a positive effect on learning outcomes, namely in terms of students' behavior, attitudes, and academics. Those studies also revealed that several main factors drive the effectiveness of a lecturer's teaching, namely a learning atmosphere, lecturer skills, sufficient time, sufficient equipment, high appreciation, tracking student progress, and adequate teaching supervision.

Therefore, the study's contribution can be seen from an academic and practical point of view. From an academic point of view, it can further enrich the findings from previous studies about the relationship between lecturers' effectiveness and students' interest in learning. This study examines lecturers' role in teaching and learning activities with students. If the role played by the lecturer is influential, then students may have a more favorable impression and perception. Although previous studies have extensively studied the relationship between teaching methods and students' interest and achievement, they have yet to specifically discuss whether lecturers' active role (i.e., lecturer character) can encourage students' positive perception. Moreover, most studies have examined the issue and context from the perspectives of lecturers and educators (e.g., Rahardja et al., 2020), and limited studies look at the problem from the student's perspective. In practical terms, the results of this study are essential to UiTM and higher learning institutions to ensure that the lecturers have the best knowledge, teaching skills, and character when carrying out teaching and learning activities. In addition, this study finding is important to supply information to help lecturers improve their weaknesses and deficiencies during the teaching process. They can also increase motivation and improve students' perceptions.

## ■ 2.0 LITERATURE REVIEW

### 2.1 Lecturer Effectiveness & Academic Achievement

There are various opinions about the meaning of effective teaching. Effective teaching means an instructor must have broad, deep knowledge and high professional skills (Munna & Kalam, 2021). On the other hand, Karpouza and Emvalotis (2019) think that effective teaching means educators who care about the welfare of students, provide support to students and are knowledgeable about the subjects being taught. Effective teaching can be concluded as teaching that prepares and creates a healthy atmosphere to encourage students to continue learning. This matter is supported by Klassen and Tze (2014), who defines effective teaching as the ability to convey teaching information well and effectively, which can indirectly motivate students to continue to excel and achieve success. Teaching characteristics include teaching plans, lesson objectives, learning places, teaching methods and techniques, and processes involving two-way interaction between students and educators. Previous studies also discovered that teaching effectiveness significantly affects student academic achievement (Khan & Ghosh, 2021; Tee, 2023).

Academic achievement is achieved through individual efforts and perseverance toward the mastery of knowledge or skills (Wu et al., 2021). Academic achievement is significantly influenced by student characteristics such as interest, motivation, and attitude. Excellent student academic achievement provides an overview of a student's success in the academic field. This level of achievement is based on the grades obtained by students from the results of assessments and examinations. Higher education institutions attach great importance to the

level of achievement of their student's academic performance but still face the challenge of declining academic achievement. Based on previous studies, various factors contribute to students' academic achievement. Rafiola et al. (2020) show that learning motivation significantly influences learning achievement. A study by Yu et al. (2021) reported that lack of motivation for subjects and learning affects students' academic achievement. This study also found that appreciation from educators encourages students to spend more time studying and helps them perform better in the subjects.

A study by Tee (2023) states that positive interactions between educators and students increase their commitment and motivation toward their academic assignments. In addition, various studies state that the factors that contribute to students' academic achievement are the result of learning methods, teaching approaches, and students' attitudes (Khan & Ghosh, 2021). Lecturers can increase students' motivation by giving criticism that builds and reduces reasons for fear of failure. They also need to help their students by giving them incentives or rewards for reasonable effort and performance. Therefore, lecturers should be prepared to face challenges and provide quality services and diverse skills. This is emphasized by Soares and Lopes (2020), who state that quality educators are critical in producing quality students. Wong and Chiu (2020) stated that lecturers who are creative in teaching and vary class instruction can attract students to focus on class. This finding is also supported by Tee (2023), who stated that lecturers must improve and pay attention to knowledge, skills, and attitudes to apply creative values in teaching. In creating an active classroom, lecturers should have a learning strategy that involves students in solving a problem (Hanaysha et al., 2023). In addition, a good relationship between lecturers and students can create a creative atmosphere and reduce students' anxiety about the course they are studying. Good communication between teachers and students can increase student confidence (Sutoro, 2021).

## **2.2 Teaching & Learning Technology & Lecturer Effectiveness**

Technology has brought about a change in the field of education, primarily related to teaching and learning (Seifu, 2020). The development and speed of technology in the age of globalization are now demanding that educational institutions make changes to remain relevant from the aspect of preparation and the development of human capital for the country (González Calleros et al., 2022). Technology has become a necessity in education; therefore, technology is essential and needs to be utilized by educators. The need for computers and technology and students' ability to access information at their fingertips is widespread, making the world of education move toward 21st-century education (Sutrisno et al., 2021). Therefore, the learning approach also experienced a change from traditional patterns to modern patterns. Technology usage in teaching and learning involves using hardware such as computers, CPUs, monitors, keyboards, mice, printers, hard disks, modems, CD ROMs, and scanners. It also involves software such as Microsoft Word, Microsoft PowerPoint, databases, graphics performances, and the Internet, including mobile phones, radio, and television. ICT is a teaching aid that can stimulate the development of the individual to the maximum level, open the mind, and provide focus from imagination (Vandeyar, 2020). Technology in education makes learning more accessible and more fun for students to learn something. AI-based tools and AR/VR technology engage students in immersive learning experiences. This will improve their academic performance and grades. One of the most significant advantages of technology in education is that it provides students with a sea of information at their fingertips (Elshareif & Mohamed, 2021). They can access information in the fastest possible time. According to Asad et al. (2021), video streaming in the teaching and learning process has many benefits because it can encourage active engagement, collaboration, and interaction between lecturers and students. This method can reduce the burden on educators and help educators plan teaching materials to be more accessible and efficient (Maatuk et al., 2022; Musleh Al-Sartawi, 2020). Process teaching and learning can be carried out with a more straightforward way of delivering content and enjoyable through screening. Web-based teaching and learning is one medium that can improve the level of student learning and can help students efficiently complete the task given in the time set (Lynch et al., 2021; Mohd Noor, 2023). YouTube, for example, can be linked with other web networking applications such as blogs and wikis and indirectly affect learning effectiveness. Using media technology such as YouTube can improve the learning environment, which is more creative and fun (Mohd Noor, 2023). Therefore, educational institutions must be more competitive in using technology tools to produce quality students and graduates (Rana & Rana, 2020). Based on the above premise, it is hypothesized that:

H1: Teaching and learning technology have a significant relationship with lecturer effectiveness

## **2.3 Lecturer Character & Lecturer Effectiveness**

Quality lecturers have in-depth knowledge of the subject being taught. This is the first criterion for a lecturer. The lecturer's knowledge should always be up to date. A lecturer must be comfortable with the topic he or she wants to teach and can be considered a scholar in that field (Wong & Chiu, 2020). More than mastery of the subject being taught is required; effective lecturers can organize their teaching materials to be easily understood. A good lecturer shows knowledge in his or her field and is very enthusiastic about the subject (Tee, 2023). A good lecturer can present concrete examples of the concepts taught and use metaphors or parables to increase student understanding. A good lecturer uses various teaching techniques and aids to increase the clarity of the intended subject (Sutoro, 2021). Hanaysha et al. (2023) found that students look at the lecturer's personality. Soares and Lopes (2020) support the findings and find that more students tend to judge lecturers based on the lecturer's personality regardless of the effectiveness of formal teaching in the classroom. A gentle lecturer and less assertive often become popular lecturers among students (Slåtten et al., 2021). Students also prefer lecturers who do not give them much workload. Humorous lecturers are also often lecturers of students' choice (Daumiller et al., 2020). A study conducted by Francis et al. (2008) also provided evidence that gender influences student assessment, where students tend to give higher evaluations for male lecturers than female ones. The teaching style of teachers who lecture non-stop is a factor that causes students' lack of concentration in class (Selvanathan et al., 2023). It coincides with the study of Tan et al. (2018), which shows the existence of a positive relationship between the lecturer's quality and characteristics and students' commitment to learning. Quality lecturers will be able to

increase student commitment to their learning activities and encourage students' intellectual involvement in the teaching and learning process. This will indirectly improve the student's achievement. Lecturers who have a good relationship with students can help students increase their active involvement in the teaching and learning process (Mendzheritskaya & Hansen, 2019). This is in line with Selvanathan et al. (2023), who also found that students are more interested in student-centered teaching because they prefer to be involved in the teaching and learning process instead of acting as observers only.

The lecturer is the student's idol throughout their studies. Therefore, lecturers must bridge the learning relationship between their students. The excellence and noble personality of the student is highly dependent on the lecturer's behavior. If the lecturer becomes a mentor and a good role model, the students will absorb and emulate that good effect (Eloff et al., 2021; Tan et al. (2018). Besides, the lecturer's role is vital in motivating students. Lecturers are responsible for delivering advice and motivating students to form good values. In a study conducted by Kite et al. (2020), lecturers were found to be a second factor after the guardian parents who contribute to quality human capital. Uleanya (2020) states that the relationship between students and lecturers as mentors affects students' future career development. Based on the above premise, it is hypothesized that:

H2: Lecturer character has a significant relationship with lecturer effectiveness

#### 2.4 Supporting Facilities & Lecturer Effectiveness

A university is an institution that produces quality students who are capable at the highest and global level. A perfect education system can produce human capital with a first-class attitude and mind. These future leaders will govern and lead the country's progress. In this situation, university leaders should focus on the main areas of education, including teaching and learning, research, innovation, management, and organizational administration (Hanaysha et al., 2023). A comfortable learning atmosphere is the dream of all educators. With this condition, the lecturer will be optimal in performing his or her duties. However, this ideal condition can only be met after some time. An exciting learning atmosphere is one of the indicators of the success of classroom management applied by lecturers. Research by Yang and Mak (2020) has found that classroom management is the most difficult challenge lecturers face in creating an optimal learning environment. It is also widely researched by academics, especially regarding the impact of classroom management on the enthusiasm and motivation of students to learn in the classroom (Michels et al., 2020). Lu et al. (2021) found a significant relationship between the lecturer's ability to manage the class and student learning motivation. A healthy learning environment can create a good teaching atmosphere.

Universities need to provide suitable learning facilities for lecturers. The effectiveness of learning facilities is an essential issue in the era of the COVID-19 epidemic. Focus should be given to learning facilities to ensure that students can create, produce, and develop new and original ideas. The lecturer's creativity uses limited resources to produce blended learning to some extent, attracting the interest of students who expect a learning experience that is fun in gaining knowledge (Hanaysha et al., 2023). The existing learning facilities must be improved to ensure lecturers can effectively deliver student lessons (Michels et al., 2020). For example, they are ensuring the comfort of learning through the facilities of lecture rooms, libraries, and computer labs that encourage students to learn. Optimal learning for students results from physical facilities encourage learning. E-learning readiness depends on facilities that can stimulate students' interest and motivation. This opinion is also supported by Qureshi et al. (2023), who stated that ease of learning is the main factor that contributes to academic achievement. These include buildings, classrooms, lecture rooms, libraries, laboratories, and recreational equipment. The academic environment and the quality of service at the faculty are critical aspects that must be prioritized to produce excellent students. Students need to engage with the faculty. They should be aware of the developments that take place in faculty. Quality services such as learning activities, organized programs, the facilities provided, and the cooperation from the support staff in the faculty are much needed by students (Lu et al., 2021). Based on the above premise, it is hypothesized that:

H3: Supporting facility has a significant relationship with lecturer effectiveness

Figure 1 shows the influence of teaching and learning technology, lecturer character, and supporting facility on lecturer effectiveness. The assumption here is that the lecturer will be performed if he or she can adapt technologies in their teaching and learning and has good personality traits. Moreover, external factors such as learning facilities and conducive classrooms can help them to perform better.

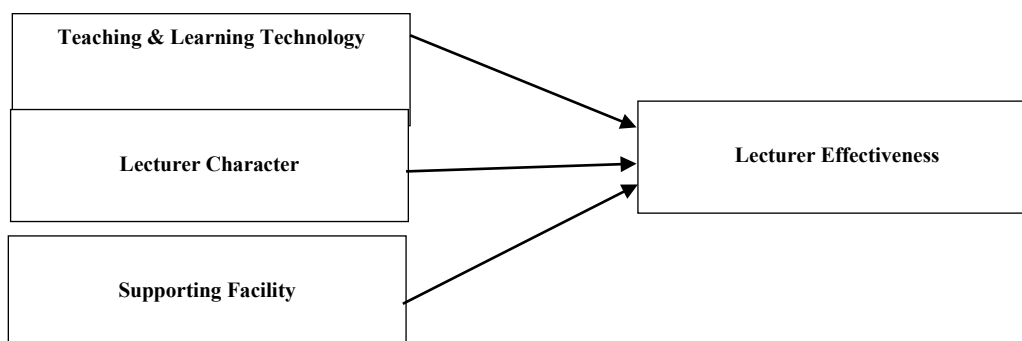


Figure 1 Conceptual Model

### 3.0 METHODOLOGY

This study is cross-sectional, and the data collection uses a questionnaire. A questionnaire is the most appropriate method to collect and follow the views. The questionnaire in this study was answered by undergraduate students at Universiti Teknologi MARA (UiTM), Seremban Campus, Negeri Sembilan. This study involves students from three faculties: Faculty of Sports Science and Recreation, Faculty of Computer and Mathematical Sciences, and Faculty of Administrative Science and Policy Studies. This questionnaire is in the form of closed questions. The rationale for using a closed questionnaire is to obtain varied and easy-to-comparable answers. Permission for data collection was obtained from the university management, and systematic random sampling was employed. In short, the meaning of systematic sampling is a method where the first sample will be determined randomly. Afterward, the sample taken will be based on a specific interval. Each population element will be selected using this technique by applying a predetermined interval distance. According to Green (1991), how many respondents can be determined using the formula of  $N \geq 50 + 8m$  (where  $m$  refers to the number of predictors)? For example, this study has three independent variables. Thus, at least 74 samples are needed for regression analysis ( $50 + 8 \times 3$ ). Thus, 300 questionnaires were distributed, and 271 forms were suitable for further analysis. The variables' measuring items were adapted and modified from Tuamsuk and Subramaniam's (2017) and Waithanji Ngware and Ndirangu's (2005) studies. Table 1 summarises the items used in this study. All of Cronbach's Alpha values have an excellent level of reliability, as indicated by the coefficient value above 0.80. The data from this study was analyzed using the Statistical Package for Social Sciences (SPSS) version 23. The frequency distribution and percentage of nominal data were used to describe the sampling. Next, Cronbach's Alpha reliability technique is used to measure the reliability of the factors, and its reliability will be accepted if the Alpha value is above 0.70 (Hair et al., 2010). Before all hypotheses are tested, the researcher must conduct a normality test to identify whether the analyzed data has extreme data (Monhor & Takemoto, 2005). The primary purpose of the normality test is to ensure that the data is consistent. Kline (2005) suggests a kurtosis value of  $\pm 1$  is excellent for most psychometric uses, but  $\pm 2$  is usually sufficient. This study uses a deviation value of  $\pm 2$ . Kline (2005) suggests the kurtosis range value is  $\pm 10$  for normal data. Intercorrelations among variables were tested using the Pearson Correlation procedure. Finally, a multiple regression analysis was performed to test the most significant predictor of lecturers' effectiveness.

**Table 1** Measurement of Variables

Variable	Items	Cronbach's Alpha
Lecturer Effectiveness	1) My lecturers come to the class with enough preparation. 2) My lecturers relate the topic to real-life situations. 3) My lecturers do not show any discrimination. 4) My lecturers set a stimulating learning atmosphere. 5) My lecturers encourage and appreciate students' participation. 6) My lecturers present content logically and coherently. 7) My lecturers involve students actively (through questioning, answering, discussions, and others). 8) My lecturers use relevant teaching aids (chalkboards, projectors, laboratory apparatus).	0.864
Teaching and learning technology	9) My lecturer's voice is clear and audible. 1) Teaching using technology is a good idea. 2) My lecturers use technology in teaching and learning. 3) Technology enables students to explain concepts in alternative ways. 4) My lecturers are well-trained to be digitally literate for the benefit of teaching and learning activities for students. 5) My lecturers are competent in integrating technology with the courses they teach. 6) My lecturers have good attitudes towards using ICT for learning and creating work in digital environments.	0.818
Lecturer character	1) My lecturers are friendly and approachable. 2) My lecturer has a good attitude and communicates with me equally. 3) My lecturers answer my questions seriously. 4) My lecturers care about me and encourage me. 5) My lecturers share their personal experiences with the class. 6) My lecturers are punctual. 7) My lecturers are available for consultations.	0.902
Supporting facility	1) The layout in the classroom is suitable for my ways of learning. 2) The podium, whiteboard, and projector are in the right place for teaching and learning. 3) No unnecessary noises exist in the classroom. 4) The university supports necessary and adequate infrastructures, resources, and budget for teaching, learning and activities. 5) I have adequate workspace for placing textbooks, tablet PCs, and other resources.	0.815



## 4.0 RESULTS

### 4.1 Demographic Profile

Based on Table 2, most respondents are female, with 236 (88.1%) and 35 (12.9%) being males. A total of 165 (60.9%) respondents were between the ages of 21 and 23. This was followed by 18-20-year-olds ( $n=96$ , 35.4%) and those between 24 and 26 years old ( $n=10$ , 3.7%). Next, most students were from the final year, with 142 respondents (52.4%), and the rest were non-final year students ( $n=129$ , 47.6%). Most respondents were at the bachelor's degree level ( $n=175$ , 64.6%), and the rest were at the Diploma level ( $n=96$ , 35.4%). Finally, most respondents obtained a current CGPA of 3.00 to 3.49 ( $n=150$ , 55.4%). This is followed by 3.50 and above ( $n=75$ , 27.7%) and below 3.00 ( $n=46$ , 17.0%).

**Table 2** Demographic Profiles

Profile		Frequency (n)	Percentage (%)
1. Gender	Male	35	12.9
	Female	236	87.1
2. Age	18-20 years old	96	35.4
	21-23 years old	165	60.9
	24-26 years old	10	3.7
3. Years of Study	Final year	142	52.4
	Non-final year	129	47.6
4. Current Level of Education	Diploma	96	35.4
	Bachelor's Degree	175	64.6
5. Current CGPA	Below 3.00	46	17.0
	3.00 to 3.49	150	55.4
	3.50 and above	75	27.7

### 4.2 Normality Test Results

Table 3 shows a summary of the normality results. Based on the results, the skewness value for the lecturer's effectiveness is -1.074, while the kurtosis value is 1.798. For the first independent variable, which is teaching and learning technology, the skewness value is -0.987, and the kurtosis value is 3.303. Next, the value of skewness for the lecturer character is -0.879. Meanwhile, the kurtosis value is 0.648. Finally, the skewness value for the supporting facility is -0.265, and the value for kurtosis is -0.142. Hence, the data is normally distributed, and the research fulfilled the normality assumption.

**Table 3** Normality Test Results

Variable	Mean	Std. Deviation	Skewness	Kurtosis
<b>Independent Variable:</b>				
Teaching And Learning Technology	4.285	0.567	-0.987	3.303
Lecturer Character	4.304	0.665	-0.879	0.648
Supporting Facility	3.925	0.712	-0.265	-0.142
<b>Dependent Variable:</b>				
Lecturer Effectiveness	4.391	0.598	-1.074	1.798

### 4.3 Correlational Analysis Results

Table 4 shows a significant relationship between teaching and learning technology and lecturer effectiveness ( $r= 0.684$ ,  $p= 0.000$ ,  $p < 0.05$ ). Therefore, this study accepted H1. Next, there is a significant relationship between the lecturer's character and the lecturer's effectiveness ( $r= 0.617$ ,  $p= 0.000$ ,  $p < 0.05$ ). Thus, this study accepted H2. Then, a significant relationship exists between the supporting facility and the lecturer's effectiveness ( $r= 0.617$ ,  $p= 0.000$ ,  $p < 0.05$ ). Hence, this study accepted H3.

**Table 4** Correlational Results

		Lecturer Effectiveness
Teaching and Learning Technology	Pearson correlation	0.684**
	Sig. (2-tailed)	0.000
	N	271
Lecturer Character	Pearson correlation	0.617**
	Sig. (2-tailed)	0.000
	N	271
Supporting Facility	Pearson correlation	0.617**
	Sig. (2-tailed)	0.000
	N	271

#### 4.4 Regression Analysis Results

Based on Table 5, the regression result showed that all factors were identified as predictors of lecturer effectiveness with an adjusted R square value of 65.3%. The ANOVA generated in this test also shows a significant probability value ( $p = 0.000$ ) and signifies that all factors significantly affect the lecturer's effectiveness. Table 5 also shows a high beta value, which depicts that the lecturer character ( $\beta = 0.499, p = 0.000$ ) proves a high degree of lecturer effectiveness. It shows that the lecturer's character is the most significant predictor of the lecturer's effectiveness. Multicollinearity should be given attention when a variable is highly correlated, which indirectly causes logical problems and is also related to statistical problems. In social science studies, two preferred methods are usually used to identify the existence of multicollinearity for a variable. This includes variance inflation factor (VIF) and tolerance. For the VIF test, the value obtained must be less than 10, while for the tolerance test, the variance value between the independent variables is above 0.10. In the context of this study, the multicollinearity problem does not occur as all values are within the predetermined value.

**Table 5** Multiple Regression Results

Variable	Beta	Sig.	Tolerance	VIF
Teaching and Learning Technology	0.268	0.000	0.511	1.958
Lecturer Character	0.499	0.000	0.489	2.046
Supporting Facility	0.147	0.002	0.551	1.813
R <sup>2</sup>		0.656		
Adjusted R <sup>2</sup>		0.653		
F change		171.970		
Sig.		0.000		

#### 5.0 DISCUSSION AND RECOMMENDATION

Teaching quality has become one of the important agendas for universities worldwide. Good and quality teaching is the lecturer's responsibility and critical in determining a university's credibility (Wong & Chiu, 2020). The first finding discovered significant relationships between teaching and learning technology, lecturer character, supporting facility, and lecturer's teaching effectiveness. Moreover, the lecturer's character was revealed as the most significant predictor. From this study, some conclusions about the effective teaching of lecturers can be seen from teaching and learning technology, lecturer character, and supporting facility. For example, the lecturer's teaching will more effectively attract the students' attention if he or she is always energetic, cheerful, and has a clear voice. Lecturers also need to be firm but not fierce with students. The lecturer's skills should be neat and fit (Tee, 2023). In addition, lecturers must be fair and considerate towards every student. Lecturers also need to provide various opportunities to develop potential to meet different needs from aspects of student interest (Sutoro, 2021). In other words, lecturers must diversify their teaching efforts to attract students' interest (Soares & Lopes, 2020). In addition, lecturers need to establish a good relationship with students. This relationship can create understanding, friendship, and healthy personality development among students (Slåtten et al., 2021). Thus, teaching and learning will run smoothly and be fun. Moreover, lecturers who can use technology are seen as effective lecturers. Technologies can facilitate students' learning and continue to improve their performance with appropriate and exciting learning processes and resources (González Calleros et al., 2022; Sutrisno et al., 2021). In addition, from the analysis that has been made, it is seen that students believe the service element and learning facilities positively affect the effectiveness of lecturer teaching and learning, most probably because they need comfort and tranquility in the classroom. In the hybrid or blended learning approach, digital technology is essential in delivering teaching and learning materials. For example, the smart classroom system is equipped with a 4K technology Interactive Television for teaching facilities. It provides interactive facilities between classrooms or from various selected locations using video conferencing applications. This user-friendly classroom management system aims to produce a variety of classroom activities collaboratively or individually. Learning must be supported by teaching, facilitation, assessment, support systems, and various resources and environments that stimulate meaningful learning experiences and achieve the expected learning outcomes.

Nowadays, universities focus more on quantity, such as how they can accommodate the increasing number of students and how to provide infrastructure facilities such as dormitories, lecture halls, laboratories, and educational preparation centers. In addition, the aspect of education quality is also addressed. The focus is also on strengthening teaching and learning approaches other than the lecture and tutorial methods, teaching aids such as media and technology, strategies to improve student performance to overcome their learning problems, and a comprehensive curriculum strategy. UiTM's teaching and learning need to be updated and constantly revised accordingly to adapt to any changes in the learning environment. The UiTM curriculum must be flexible and organic, which is adaptive to future needs. UiTM's top management needs to ensure lecturers are supported by coordinators, administrative and technical staff, and faculty management, who are responsible for ensuring that other teaching and learning are managed effectively.

UiTM lecturers need to know how to use ICT effectively to achieve teaching objectives related to a subject. Then, they need to know how to manage ICT resources inside or outside the lecture room. For example, manage the use of ICT resources according to individuals, pairs, or groups to ensure that every student is involved and collaborates in learning collaboration. Lecturers must select and use the most appropriate ICT to achieve all generic and subject-specific software (Lynch et al., 2021). For example, the lecturers can use YouTube videos to teach statistical analysis since it is a very technical subject.

Moreover, lecturers need to control the learning atmosphere and deliver learning enthusiastically. The lecturer must master the learning environment to stimulate the process of teaching and learning (Vandeyar, 2020). The lecturer should use an enthusiastic speaking style by applying different tones of voice. Every educator should have an assertive attitude. Assertive educators describe the tendency to carry out tasks effectively. When a person is assertive in every job, especially an educator, the educator is said to be a capable educator. Effective learning will occur when an educator behaves assertively and indirectly contributes to the student's academic achievement (Sutoro, 2021). The credibility of the lecturer is one of the catalyst factors for an excellent student.

For the UiTM management side, the information obtained can be used to identify training opportunities for academic staff to improve the quality of their teaching. UiTM should equip all lecturers with both hard and soft skills. Hard skills include any skills or abilities in a particular field that are acquired over time through practice and repetition. Certifications, educational degrees, and transcripts support hard skills. Conversely, soft skills include personal, subjective, and immeasurable skills. The lecturer evaluation, such as Professionalism of Lecturers (PRO-PENS), should be commensurate with hard and soft skills. Those who obtained the marks below should attend compulsory training development. Being a lecturer requires a commitment to continue learning and growing. Joining training courses, attending conferences, and engaging in other academic activities help increase lecturer competencies in the academic field. Becoming a lecturer is a journey that requires dedication and commitment. Success in this profession depends on academic qualifications and the skills and experience they gather.

Awareness of positive characteristics such as competence, dynamism, belief, and behavior during lectures is the main parameter for all lecturers (Hanaysha et al., 2023). To ensure optimal learning, complete infrastructure and facilities must facilitate teaching and learning. For instance, props must be visible and observable to help students understand the studied material. The media must also support the universities in delivering material from lecturers to students so that the material can be delivered well. Lecturers play an essential role in trying to gain knowledge by performing self-learning or attending training programs. At the department and faculty level, initiatives can be taken to make the lecturer's teaching environment more conducive by giving lecturers more autonomy, a reasonable academic load, and a minimal number of students in one class.

## 6.0 CONCLUSION

A dedicated lecturer, committed to the task, highly knowledgeable, and integrity in various fields can contribute to higher student performance (Hanaysha et al., 2023; Tee, 2023; Wong & Chiu, 2020). Intelligent students are born from wise lecturers. Therefore, it is appropriate for every lecturer to prepare themselves with a high level of knowledge to produce brilliant academic students. This study can be used as a guide to improve the quality of teaching and learning. Student evaluation of the lecturer's teaching is essential to maintain the quality of teaching. Spooen et al. (2013) explained three main interests of student assessment of the lecturer's teaching performance. The first is to improve the quality of teaching. The second is to evaluate the lecturer's performance for promotion and reward. Third, to be proof of accountability of universities in offering quality education to the community. However, the findings of this study should be viewed with caution because they are subject to some limitations. First, this study is a quantitative descriptive. Therefore, further research is needed to understand student behavior toward the lecturer's teaching. Second, the study's findings are obtained based on research using a sample of the UiTM Seremban campus. Therefore, further research must be conducted using more samples from other universities or faculties. The findings of this study are only limited to undergraduate students. Thus, this study's result may need to be revised to show the level of student acceptance and perception. Finally, the researchers suggest that a study on students' perceptions of effective teaching should be more comprehensive and involve a more extensive scope, such as gender differences, lecturers' backgrounds, and motivation.

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## Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper

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