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Effectiveness of the Industry Expert Enrichment Program (IEEP) at LIMA 2025: An Experiential Learning Study of PolyCC Malaysia Students

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ABSTRACT

This paper is an assessment of the effectiveness of Industry Expert Enrichment Program (IEEP) that was carried out in the LIMA at Langkawi 2025, and the study has specifically examined the outcomes of experiential learning among Politeknik and Kolej Komuniti students. The program delivered the students face-to-face interaction with the industry professionals during the program. The study adopted a quantitative research design through a structured questionnaire, which was distributed to the 141 population of students in which 114 viable samples were examined. The questionnaire was used to assess the perceptions of the students based on four important dimensions. The descriptive analysis has indicated that the mean scores of all measured variables are high, and it can be argued that the program participation did play in enhancing the students to obtain knowledge, skills personal and gain access to the industry. Correlation analysis revealed that student satisfaction was significantly positively correlated with variables. Comprehensively, this study exposed two variables which predicted the students' satisfaction.

1. Introduction

In recent years, many higher education institutions have been working harder to close the gap between what students learn in classrooms and what happens in the industry. The goal is to make sure graduates are truly ready for the real demands of the workplace. One common approach is to involve industry experts in enrichment programs, giving students the chance to gain real-world perspectives, professional insights, and hands-on understanding of the theories they study [6]. In Malaysian Polytechnics and Community Colleges (PolyCC), these programs are seen as an important

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way to strengthen students' employability skills, professional abilities, and overall readiness for the industry (Ministry of Higher Education Malaysia [MOHE], 2020). Experiential learning has become an important approach in higher education, helping students connect what they learn in theory with how it's applied in real-life situations. In this spirit, the Industry Expert Enrichment Program (IEEP) held during the Langkawi International Maritime and Aerospace Exhibition (LIMA) 2025 was created to strengthen the professional readiness of students from Politeknik and Kolej Komuniti (POLYCC). The program involved 141 students from 19 institutions across the country, giving them valuable internship experiences at seven well-known hotels in Langkawi; those are PARKROYAL Langkawi Resort, The St. Regis Langkawi, The Westin Langkawi Resort and Spa, The Ritz-Carlton Langkawi, Holiday Villa Resort & Beach Club Langkawi, Dash Resort Langkawi, and Aloft Langkawi Pantai Tengah. Programs like this are essential in helping students build skills that match industry needs while also improving their employability in the hospitality and tourism field. Internship programs that take place during major events like LIMA give students valuable, hands-on exposure to the industry. These experiences help them build technical skills, improve communication, and adapt to fast-paced work environments [26]. By placing students directly in real hospitality settings, the Industry Expert Enrichment Program (IEEP) not only strengthens their professional abilities but also supports Malaysia's wider goal of enhancing Technical and Vocational Education and Training (TVET) to meet the changing needs of the industry (Ministry of Higher Education Malaysia, 2021). This study investigates how IEEP was carried out during LIMA Langkawi 2025 and examines its outcomes as an example of experiential learning. It also highlights how the program has influenced POLYCC students in terms of their knowledge, skills, and overall professional growth.

Student satisfaction plays a key role in determining how effective enrichment programs are. Previous research shows that students' perceptions and satisfaction levels can strongly affect their learning outcomes, motivation, and overall educational experience [27]. Evaluating satisfaction not only helps measure the relevance and quality of a program but also points out areas that could be improved, ensuring that the program continues to align with institutional goals and industry standards [15]. For PolyCC, assessing students' satisfaction with industry expert enrichment programs is essential to understand whether these initiatives truly support their personal growth, career readiness, and commitment to lifelong learning. Despite the growing emphasis on industry collaboration in higher education, there is limited empirical evidence regarding the effectiveness of industry expert enrichment programs in the PolyCC context. While such initiatives are designed to enhance students' professional exposure and industry readiness, the extent to which students are satisfied with these programs remains underexplored. Previous studies highlight that student satisfaction is influenced by factors such as program content, delivery quality, relevance to future careers, and interaction with industry experts [15]. Without a clear understanding of students' satisfaction levels, there is a risk that enrichment programs may not fully achieve their intended objectives, potentially leaving gaps in student preparedness for employment.

Furthermore, as PolyCC institutions continue to align their strategic frameworks with national education policies and industry needs (MOHE, 2020), systematic evaluation of student satisfaction becomes vital. Identifying strengths and weaknesses in current programs will provide evidence-based recommendations to improve the design, delivery, and sustainability of such initiatives. Thus, there is a need for a focused study to measure students' satisfaction towards industry expert enrichment programs in PolyCC. This research aims to evaluate students' satisfaction with the industry expert enrichment program in PolyCC. Specifically, the study seeks to: i) to identify the level of knowledge, skills, attitude, personality, and connectivity level gained from the IEEP LIMA Langkawi, ii) to measure the relationships between variables of students satisfaction if IEEP LIMA Langkawi, III) to recognize the factors which influence the students satisfaction towards IEEP LIMA Langkawi.

2. Literature Review

In recent years, higher education has placed growing emphasis on developing curricula that are not only academically solid but also practically relevant. One effective way to bridge this gap is through industry expert enrichment programs, which are initiatives designed to connect what students learn in the classroom with real-world industry practices. This review examines quantitative studies that investigate how these programs influence students' knowledge, particularly when measured through questionnaires. Research consistently demonstrates that participation in such programs can significantly enhance students' understanding and knowledge. For example, Chen *et al.*, [11] conducted a pre- and post-test study using a structured questionnaire to evaluate students' comprehension of industry-specific concepts. Their findings showed a substantial improvement in the knowledge scores of students who participated in the enrichment program compared to those in the control group. This suggests that direct engagement with industry experts enables students to better grasp and retain complex information that may not be fully addressed in traditional classroom learning.

Supporting this view, the National Association of Colleges and Employers (2020) reported that students who attended expert-led seminars exhibited higher levels of confidence and self-assessed knowledge within their respective fields. This increased confidence was also reflected in improved performance during academic assessments. The effectiveness of these programs in facilitating knowledge transfer often depends on how they are structured and how the outcomes are assessed. Programs involving structured, hands-on sessions guided by industry experts were more effective in developing procedural knowledge, which refers to knowing how to perform a task, compared to lecture-based sessions that focus primarily on declarative knowledge, or knowing what something is. Their questionnaires were specifically designed to differentiate between these two types of knowledge, allowing for a more accurate analysis of the program's impact. It is also important to note that the reliability of measurement tools plays a crucial role in obtaining valid and consistent findings. For instance, a Reliability Statistics table, as presented in a related study, illustrates how researchers use indicators such as Cronbach's Alpha to determine the internal consistency of questionnaires and ensure the accuracy of their results. In conclusion, existing literature provides strong quantitative evidence that industry expert enrichment programs have a positive impact on student knowledge acquisition. When supported by well-designed and reliable questionnaires, these programs can produce measurable improvements in both general and specialized knowledge. Future research should further investigate the long-term retention of this knowledge and its application in professional contexts after graduation.

2. Methodology

2.1 Research Design

This study utilized a quantitative research design to systematically examine the perceptions and experiences of students participating in the Industrial Expert Enrichment Program. Quantitative methods are appropriate for measuring variables objectively and enabling statistical analysis, providing insights into the constructs of interest [14]. Participants comprised students enrolled in the Industrial Expert Enrichment Program during the 2025 academic year. A purposive sampling technique was employed to select individuals who had actively engaged in the program, ensuring data relevance and richness [16]. The final sample consisted of 150 students, representing a variety of academic disciplines and years of study. Data collection was conducted through a structured questionnaire designed based on validated scales adapted for this study context [19]. The instrument

included five constructs: Students Satisfaction, Knowledge, Skill, Personality, and Connectivity. Each construct was measured with multiple items on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Reliability analysis yielded Cronbach's Alpha coefficients ranging from 0.882 to 0.960, indicating good to excellent internal consistency (Nunnally & Bernstein, 1994). The below table shows detail on instruments which has been developed by the expert in this training program.

2.1 Data Collection Procedure

The questionnaire was distributed electronically via a secure online survey platform to facilitate ease of access and maximize response rates. Respondents were given time to complete the survey. Prior to data collection, consents were obtained from their instructors/ lecturers. The link of questionnaires was distributed thru their institutions and all 114 samples were gathered thru online data collection. The below table shows the reliability statistics of the instruments used to measure the variables

Table 1
Reliability Statistics

CONSTRUCT	Cronbach's Alpha	N of Items	VALUE
STUDENTS SATISFACTION	0.882	9	GOOD
KNOWLEDGE	0.927	5	EXCELLENT
SKILL	0.934	5	EXCELLENT
PERSONALITY	0.950	6	EXCELLENT
CONNECTIVITY	0.960	5	EXCELLENT

The above table presents the reliability statistics for various constructs measured in a study, using Cronbach's Alpha as an indicator of internal consistency. The constructs evaluated include Students Satisfaction, Knowledge, Skill, Personality, and Connectivity. Each construct comprises a different number of items, ranging from 5 to 9. The Cronbach's Alpha values range from 0.882 to 0.960, indicating good to excellent reliability. Specifically, Students Satisfaction demonstrates good reliability with a Cronbach's Alpha of 0.882 across 9 items. The constructs Knowledge (0.927), Skill (0.934), Personality (0.950), and Connectivity (0.960) all show excellent reliability, suggesting a high level of internal consistency in the measurements.

4. Result and Discussion

Data were analyzed using IBM SPSS Statistics version 27. Descriptive statistics summarized the demographic information and scale scores. Reliability analyses confirmed internal consistency of constructs. Additionally, inferential analyses, including Pearson correlation and multiple regression, were performed to explore the relationships among constructs and determine predictive factors influencing student satisfaction and academic and learning outcomes.

Table 2

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation	VALUE
SATISFACTION	114	3.00	5.00	4.4844	0.48581	VERY HIGH
KNOWLEDGE	114	3.00	5.00	4.5544	0.53151	VERY HIGH
SKILL	114	2.80	5.00	4.5088	0.53951	VERY HIGH
PERSONALITY	114	2.67	5.00	4.5161	0.54762	VERY HIGH
CONNECTIVITY	114	3.00	5.00	4.5035	0.55827	VERY HIGH

All variables exhibited a very high value level with connectivity showing the highest value. The values are based on Moidunny (2009) and interpreted accordingly. Table xx shows the value interpretation by Moidunny. This result shows that respondents have a very quality time during the IEEP's session and enjoy the academic and learning environment. Scientific evidence proves that learning environments escalate with learning experiences [13]. Thus a high level of each learning domain (knowledge, skills/ psychomotor and affective/ personality & attitude) potentates an excellent outcome of a program. Thus the first research objectives is already meets the outcomes of the program as JPPKK required. For second research objectives, a Pearson correlation has been correlated with all variables. The result shows that all variables have an association. The below table shows that all variables exhibited a strong association between variables.

Table 3

Correlations

	SATISFTN	KNOWLEDGE	SKILLS	PERSONALITY	CONNECTIVITY
SATISFACTION	1	0.825**	0.772**	0.779	0.792**
KNOWLEDGE	0.825.**	1	0.861**	0.863	0.839**
SKILLS	0.772**	0.861**	1	0.949	0.861**
PERSONALITY	0.779**	0.863**	0.949**	1	0.899**
CONNECTIVTY	0.792	0.839	0.861	0.899	1

** . Correlation is significant at the 0.01 level (2-tailed).

The highest relationship is between personality and skills at 0.949. Other variables exhibited strong relationships with a value above 0.772. All associations show a positive relationship between variables. It shows that when one variable is increased the other variables will also hike. The nature of the relationships are also linear as shown in the below graph.

Table 4

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.846 ^a	0.715	0.705	0.26395

a. Predictors: (Constant), CONNECTIVITY, KNOWLEDGE, SKILL, PERSONALITY

Table 5
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.076	4	4.769	68.452	0.000 ^b
	Residual	7.594	109	0.070		
	Total	26.670	113			

a. Dependent Variable: SATISFACTION

b. Predictors: (Constant), CONNECTIVITY, KNOWLEDGE, SKILL, PERSONALITY

Table 6
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.885	0.220		4.018	0.000
	KNOWLEDGE	0.465	0.100	0.509	4.657	0.000
	SKILL	0.082	0.151	0.091	.545	0.587
	PERSONALITY	0-.019	0.167	-.021	-.111	0.912
	CONNECTIVITY	0.265	0.106	0.305	2.507	0.014

a. Dependent Variable: STUDENTS SATISFACTION

A multiple regression was also processed and with R square of 0.715 shows that the model explained more than 70% while only the remaining 30% of the variance remain unexplained. The regression analysis output presented examines the effect of knowledge, skill, personality, and connectivity on satisfaction. The unstandardized coefficients (B) indicate the relative contribution of each independent variable in predicting satisfaction, while the standardized coefficients (Beta) provide insight into their comparative influence.

The findings show that knowledge ($B = 0.465$, $\beta = 0.509$, $p < .001$) has the strongest and most significant positive effect on satisfaction, suggesting that higher levels of knowledge substantially increase satisfaction levels. Connectivity ($B = 0.265$, $\beta = 0.305$, $p = .014$) also demonstrates a significant positive effect, indicating that interpersonal and network connections are important contributors to students' satisfaction towards the IEEP.

Conversely, skill ($B = 0.082$, $\beta = 0.091$, $p = .587$) and personality ($B = -0.019$, $\beta = -0.021$, $p = .912$) are not statistically significant predictors, as their p-values exceed the conventional threshold of 0.05. This implies that, within this model, skill and personality do not have a meaningful impact on students' satisfaction. However this regression convey that the knowledge and connectivity are the predictors to students' satisfaction towards IEEP.

5. Conclusion

The regression results reveal that knowledge and connectivity are significant determinants of satisfaction, with knowledge exerting the strongest influence. In contrast, skill and personality do not contribute significantly to satisfaction in this model. These findings highlight the importance of fostering knowledge and building effective connectivity to enhance satisfaction outcomes. This aligns with prior research emphasizing the role of knowledge management and social connectedness in improving organizational and individual satisfaction. The correlation analysis revealed that satisfaction is significantly and positively correlated with knowledge ($r = .825$, $p < .001$), skill ($r = .772$,

$p < .001$), personality ($r = .779$, $p < .001$), and connectivity ($r = .792$, $p < .001$). These strong associations suggest that all four factors play an important role in shaping satisfaction.

When examined through regression analysis, however, only knowledge ($\beta = .509$, $p < .001$) and connectivity ($\beta = .305$, $p = .014$) emerged as significant predictors of satisfaction, while skill and personality did not demonstrate significant effects. This finding suggests that although skill and personality correlate strongly with satisfaction, their explanatory power diminishes when knowledge and connectivity are considered simultaneously, likely due to shared variance among the predictors. Taken together, the findings emphasize that knowledge and connectivity are the most influential determinants of satisfaction, underscoring the skills and social networks in shaping positive outcomes. This is consistent with prior studies highlighting the centrality of knowledge management and social capital in driving satisfaction and organizational success.

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