

# Exploring Students' Engagement in An Internship Accounting Degree Program at A Public University in Sarawak: The Application of I-E-O Model

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Received: June 27, 2024    Accepted: August 31, 2024    Published: September 5, 2024

doi:10.5296/ber.v14i3.22230

URL: <https://doi.org/10.5296/ber.v14i3.22230>

## Abstract

The objective of this paper is to explore the factors that promote the effectiveness of students' engagement in an internship accounting program at University X in Sarawak using the Astin's input-environment-output (I-E-O) model. An online open-ended questions survey was distributed to the 74 accounting internship students in February 2024 to gather their reflection on the engagement in the internship program. The inputs element of students' engagement includes academic performance, course curriculum, and internship briefing. The themes identified in this paper related to environment include workplace environment, work assignment and exposure, student learning advancement, self-reward, feedback mechanism, and mentorship program. The findings revealed the outputs/outcomes derived from students' engagement include self-development and enhancement, knowledge enhancement, adaptability to working environment, networking and career opportunities, and exposures. The new insights from this paper includes internship briefing, self-reward, feedback mechanism and cultural diversity exposures. The findings offer significant implications for employers, students and supervisors. This research suggests a revised I-E-O framework that depicts student engagement as a complex construct with a significant impact on various aspects of a student's academic and personal life. Finally, a new I-E-O Framework is presented in this paper.

**Keywords:** Accounting program, Internship, Student engagement, I-E-O model

## 1. Introduction

### *1.1 Introduce the Problem*

Accounting curriculum in Malaysia may face several challenges that necessitate a focus on enhancing student engagement. Employers often express concern regarding the readiness of graduate students as they lack the knowledge, workplace skills, and behavior to achieve employment and career goals (Jeevaratnam, 2022). Lack of practical application of theoretical knowledge gained in the classroom is the primary cause of unsatisfactory graduate students' performance. The accounting profession requires not only the application of knowledge but also cross-disciplinary competencies to enhance graduates' employability. Employers consistently seek adaptability, communication, time management, self-management, and teamwork skills in entry-level roles, yet candidates do not consistently demonstrate these skills (Plant et al., 2019). Therefore, it is crucial to integrate practice-based teaching methods and closer collaboration with industry within the educational curriculum (Twyford & Dean, 2023; Barac et al., 2021).

The effectiveness of student engagement in internship programs, a topic widely debated in higher education, centers on how well students can apply the effort, interest, and attention they exhibit in learning activities in real-world contexts (Cheng & Liu, 2022; Klem &

Connell, 2004). Higher education institutions play a crucial role in promoting this engagement by ensuring that classroom learning aligns with professional practice. This alignment is particularly significant during internship programs, where students are expected to apply academic knowledge and develop practical skills such as critical thinking, problem-solving, communication, teamwork, adaptability, and digital literacy (Imjai et al., 2024a; Herbert et al., 2021). A curriculum that reflects the demands and expectations of the industry further enhances student engagement by making learning experiences relevant and directly applicable to their future careers, ultimately improving career readiness and job placement outcomes after graduation (Twyford & Dean, 2023).

Factors such as mentorship and supervision from employers are instrumental in fostering student engagement, as they provide students with the support needed to effectively deliver tasks and enhance their ability to apply theoretical accounting knowledge in real-world contexts (Soffi & Mohammad, 2021; Zehr & Korte, 2020). Supervising students and assigning relevant tasks enables them to develop confidence in their abilities and gain practical experience that is crucial for their career growth (Bawica, 2021). Additionally, guidance from internship coordinators plays a crucial role in enhancing student engagement, as it allows students to communicate with coordinators for briefing, advice and exposure thereby better preparing them for practical experiences in the workplace (Soffi & Mohammad, 2021). Task clarity also influences students to be engaged more in performing task during internship. The assigned tasks are clearly defined, understood, and communicated to students, with clear instructions, goals, and expectations provided to reduce role ambiguity and encourage self-initiative behavior among the students (To & Jung, 2020).

Many universities including public and private institutions in Malaysia have implemented internship in accounting programs as a compulsory requirement within their academic curriculum according to the standard set by the Malaysian Qualifications Agency (MQA) (Malaysian Qualifications Agency, 2014). Most of public university has offered Accountancy programme to produce highly qualified accounting graduates who fulfill the professional needs of both the public and private sectors. Accounting students are required to undertake their internships during their final year of study for six months and are supervised by professionals in the industry. Completion of an internship has become a prerequisite for students to graduate and receive their degrees. This requirement shows that educational institutions understand how crucial it is for students to get exposure to ethical values and good work practices to prepare them for their future careers. It helps them understand industry safety regulations and fosters teamwork and positive relationships with employees (Mokhtar & Fauzi, 2019). According to Surajit et al. (2021), internships positively impact students' performance and facilitate the development of generic skills and knowledge during the internship period.

This study is motivated by the increasing importance of internships in enhancing students' practical skills and employability, particularly in the context of accounting education. Past studies on accounting internships have primarily focused on aspects such as skills and knowledge developed by students, and the overall satisfaction of students and employers with the internship programs, often covering programs beyond accounting (Soffi & Mohammad,

2021; Imjai et al., 2024b; Sawani et al., 2016; Karim & Hamid, 2016). There is limited research on student engagement in West Malaysia and even fewer studies focusing on East Malaysia, particularly in Sarawak. Therefore, the objective of this study is to explore the factors that promote the students' engagement in an internship accounting program at a public university (University X) in Sarawak, Malaysia which differs from past studies by adopting Astin's input-environment-output (I-E-O) model to identify the factors from three aspects namely the input (I), environment (E) and output (O). By applying the I-E-O model, this research seeks to provide a comprehensive understanding of the factors that contribute to successful internship experiences and offering valuable insights for curriculum development.

## 2. Literature Review

### 2.1 Definition of Student's Engagement

The accounting industry is undergoing rapid changes, requiring institutions of higher learning to equip accounting graduates with knowledge and skills that are relevant to the progressing workplace landscape. Higher education institutions provide the framework and resources for learning; however, students play a significant role in exploiting these opportunities and environments to further their individual learning (Young et al., 2024). The collaborative effort takes place when both institutions and students contribute to the learning process. Therefore, student engagement plays a crucial role in accelerating the acquisition of skills and knowledge throughout the learning process.

Machera (2023) defined student engagement as willingness and enthusiasm to take part in educational activities that are purposeful and meaningful. Programs and teaching approaches are designed to motivate and promote this engagement, ultimately influencing students' behavior positively in learning (Machera, 2023). The definition suggested by Machera (2023) was applied in investigating the factors that enhance student engagement in an internship accounting program at a private higher education institution in Botswana. The study particularly used this meaning to assess how behavioral, emotional, and cognitive engagement among students influence their engagement and learning effects in the internship setting. Therefore, this paper will adopt the definition of student engagement as stated in Machera (2023).

According to Astin (2014), student involvement relates to the extent of physical and psychological energy that the student invests in their academic activities. The study further explained that a highly participated student is the one who gives substantial effort to studying, spends plenty of time on campus, actively involves in student societies, and maintains regular interactions with faculty members and peers (Astin, 2014). Besides, Ali and Hassan (2018) indicated good engagement related to three main factors namely family, peer and school factors. The study also suggested the essential of support from various parties to encourage student engagement in schools. Moreover, Pedler et al. (2020) suggested more comprehensive explanation of student engagement as a flexible and multidimensional concept including behavioral, emotional, and cognitive dimensions. Therefore, the definition of student engagement can be summarized as student's enthusiasm and willingness to involve in beneficial activities that supported by various parties and involves behavioral, emotional,

and cognitive factors.

### *2.2 Review of Students' Engagement in Internship*

Students' engagement in internship is crucial as it develops the learning experience by permitting students to apply theoretical knowledge in real-world situations. Engaged students are more likely to build professional networks, generate practical skills, and obtain a deeper understanding of their chosen field. Internships also foster problem-solving skills, critical thinking, and adaptability, which are needed for career success. This notion is supported by Nghia and My Duyen (2018) who found internships help the students to integrate the obtainable knowledge and skills, shape their career paths, develop relevant professional skills, and change their learning attitudes. The study also highlighted that the level of student engagement and involvement in tasks during internship can significantly influence the learning outcomes they obtained from the internships. Apart from that, Miller et al. (2011) also indicated that internships promoted better student engagement due to perceived job relevance, faculty collaboration, and learning experience intensity.

Machera (2023) revealed that students recognized the internship equipped them with practical, real-world work experience. Nonetheless, attaining the learning outcomes from the internships required combined efforts from various stakeholders, namely students, internship supervisors, lecturers, and institutions of higher learning (Machera, 2023; Sawani et al., 2016). Students are expected to actively participate in educational activities to acquire knowledge, skills, and competencies (Machera, 2023). Internship supervisors are the ones required to show a willingness to train interns and play a significant role in aiding aspiring professional accountants to develop professional skills within the workplace (Machera, 2023; IFAC, 2019). Lecturers are responsible for adjusting teaching pedagogies to align with the real world of work and higher learning institution is required to provide support such as administrative policies and computer resources to enhance teaching and learning processes (Machera, 2023). Herbert et al., (2021) also stressed the significant role of educators in developing students for their future professional identity and become career readiness on graduation. Educators need to balance between technical skills learning and providing accounting students with essential generic knowledge and skills (Lim et al., 2016).

Universities are evaluated based on the capability to furnish graduates with the skills required to success in today's complex working environment. A recent study by Kakkar et al. (2024) found that institutional communication is important for decreasing intern cynicism and enhancing professional efficacy, which boosts overall engagement. Hence, effective students' engagement in internship typically involves active involvement and participation various parties specifically students and organizations to deliver valuable and meaningful internship experience for both student and the organization, and indirectly benefit the higher institution.

### *2.3 Factors Influencing Student's Engagement*

Various studies have discovered the factors that influence student engagement, extensively focusing on the contexts of cognitive, emotional, and behavioral aspects in relation to learning performance (Machera, 2023; Chiu, 2022; Li & Xue, 2023; Pedler et al., 2020; Quin,

2017; Bakker et al, 2015). A study conducted by Shernoff et al. (2016) found that higher levels of environmental complexity correlates with improved student engagement. Explicitly, classrooms that provide interactive teaching method, collaborative activities, and various learning opportunities tend to encourage better student engagement as compared to traditional and fewer dynamic classroom settings. Furthermore, Bonet and Walters (2016) highlighted the significance of incorporating high-impact practices, namely internship, undergraduate research, and study abroad as efficient strategies to increase student engagement and academic achievement. Therefore, these innovative and impactful learning experiences highly contribute to students' engagement and personal development.

A recent study conducted by Li and Xue (2023) using meta-analysis identified several promoting factors that influence student engagement including students' positive emotion, positive teacher behavior, teacher-student relationship, support learning resources, effective instructional practices, and inclusive classroom climates. The finding is consistent with a study conducted by Klem and Connell (2004) that suggested teacher support, specifically caring teachers and a well-structured learning environment, is vital to encourage student engagement. Similarly, Skinner and Belmont (1993) also found that positive teacher behaviors, such as supportiveness and providing clear instructions, tend to improve student engagement. The study also suggested that high student engagement, such as attentiveness and participation in learning stimulate extra positive behaviors from teachers. Besides, Quin (2017) highlighted the significant role of teacher-student relationship in promoting student engagement and academic achievement. Quin (2017) identified main factors that foster positive relationship between teacher and student which include trust, support, communication, and mutual respect. Thus, positive teacher and student behavior and relationship plays important roles in encouraging student's engagement and improved academic attainment.

Bowden et al. (2021) found that involvement is a key factor influencing student engagement, highlighting the importance of the university experience as exciting, relevant, inspiring, and meaningful. Pike et al. (2003) also suggested the institutions that highlight goals and values in their mission statements are likely to have greater level of student engagement. Henrie et al. (2015) proposed that factors such as the nature of face-to-face and online communication, design of the course, and individual student characteristics significantly influence student engagement. The literatures reveal that environment element, such as higher institution settings and policies are important in stimulating student engagement.

#### *2.4 Benefits and Issues in Accounting Internship*

Reassessment Report of the Bachelor of Accounting Program at Higher Education Institutions in Malaysia 2013 issued by the Ministry of Higher Education in 2015 required mandatory six-month industrial training with student performance evaluated by employers and lecturers, which is in line with International Education Standards 3 (IES 3) issued by International Federation of Accountants (IFAC, 2019). International Education Standard (IES) recommends the learning outcomes for professional skills that accountants must achieve, including intellectual, interpersonal and communication, personal, and organizational skills

(IFAC, 2019). IES 3 also recommends a combination of learning and development activities that incorporate structured learning programs with practical experience. The mandatory requirements validate the importance of industrial training in providing hands-on experience and bridging the gap between academic knowledge and practical application.

Ahmad et al. (2021) highlighted the benefits of internships to students, including improved attitudes and soft skills. The study found that female students exhibited better improvement in their attitudes and soft skills compared to male students. Similarly, Sawani et al. (2016) emphasized the benefits of internships to students, comprising the development of skills and competencies required to become employable. The study conducted by Sawani et al. (2016) found that most employers are satisfied with the interns' teamwork skills, punctuality, grooming, and rapport with peers and supervisors.

Purnamasari et al. (2021) emphasized the benefits of internships, highlighting that students can differentiate and incorporate theoretical knowledge gained in class with practical situations in the workplace. Hence, internships play a vital part in preparing students for the working environment. Purnamasari et al. (2021) also recommended the application of modern technology such as a website platform to facilitate the internship execution. The use of a website as a communication platform guides students without the need for face-to-face interaction and allows access to real-time information.

Graduate students are expected to demonstrate broad capabilities and sufficient skills besides the main accounting skills (Lim et al., 2016; Widaningsih et al., 2023). The internship program is one of the initiatives designed to facilitate graduates to attain these skills (Widaningsih et al., 2023). Furthermore, effective communication is also crucial in any profession, including accounting. Employers typically appreciate students who can not only perform work efficiently but also successfully convey their ideas and outcomes to colleagues, clients, and stakeholders (Pernsteiner, 2015). However, majority of accounting interns do not substantially establish their communication skills (Sawani et al., 2016; Pernsteiner, 2015). Most of the interns face difficulties in preparing technical reports and communicating their ideas (Sawani et al., 2016).

A study conducted by Lim et al. (2016) identified main three early employment problems mentioned by employers, namely lack of technical knowledge, lack of English proficiency, and struggle in applying knowledge to practice. Moreover, the study suggested that engaging students in internships is the best solution for the problems. Furthermore, practical training also is the main solution for problems faced by junior auditors that involve difficulty in adjusting to the workstation, lack of technical knowledge, and poor time management (Lim et al., 2016). Hence, the six-month internship program allows the students to develop and enhance essential workplace skills particularly communication, time management, teamwork, and problem-solving that are often difficult to obtain solely through classroom learning.

### *2.5 Astin's (2002) Input-Environment-Output (I-E-O) Model and Accounting Internship*

Astin's Input-Environment-Output (I-E-O) model is a theoretical framework used in educational study to understand and investigate the factors that influence student progress and

outcomes in higher education that contains three main components: input, environment, and output (Norwani, 2005). This I-E-O model permits the researchers to simultaneously assess the effects of both input and environmental variables on student outcomes (House, 1998). The results of a study conducted by House (1998) indicated that input and environmental elements play crucial roles in influencing students' satisfaction with their higher education experience.

Based on Astin's I-E-O model, input (I) component represents the student's backgrounds such as student's abilities, demographics, and pre-university experience (Singh & Jack, 2022; Kuh et al., 2005). Furthermore, Goegan and Daniels (2021) indicated input as student psychosocial characteristics that combine the psychological and social traits demonstrated by students, such as students' emotional, mental and social well-being, containing their attitudes, personality traits, and interpersonal relationship. Similarly, Thomas et al., 2021 detailed input as risk factors connected to individual emotional and behavioral health such as anxiety and depression. Thus, input (I) can be described as attributes, experiences, and characteristics that students bring along into educational journey.

Astin's I-E-O model suggested that environment (E) element include the series of education practices, policies, and institutional settings that students encounter (Kuh et al., 2005). Environment also refers to students' real experiences during a learning program (Astin, 1993). Goegan and Daniels (2021) identified environment as student integration, specifically the process of integrating students into a new environment, such as academic institution to promote participation and attachment among students despite of their backgrounds. In a study by Kim and Sax (2007), they specified environment as student-faculty interaction, including numerous forms of engagement among students and faculty, for example research collaborations, classroom interactions, and informal connections. Accordingly, environment can be viewed as actual experiences, conditions and resources that the students are exposed to during their learning experience, including the curriculum, faculty, teaching methods, interactions with peers.

Outcomes (O) aspect in Astin's I-E-O model are student learning and development outcomes from their learning experiences such as academic grades, critical thinking, degree completion, attitudes, beliefs and values (Singh & Jack, 2022; Kuh et al., 2005; York et al., 2019). Specifically, academic achievement and success consist of attainment of skills, knowledge, and competencies (York et al., 2019; Goegan & Daniels, 2021). Besides, Astin (1993) indicated outcome as talent that educators are attempting to develop in their academic programs. Correspondingly, Kim and Sax (2007) indicated educational outcomes as Grade Point Average (GPA), association with campus community, degree aspirations, social awareness, and self-perceived improvements in critical thinking. In view of that, outcomes (O) are the changes or progress that students develop because of their educational journey.

A study conducted by Machera (2023) used the input-environment-output (I-E-O) model to determine the factors that support students' engagement in an internship accounting program higher education Institution. The study found that the internship provides opportunities for the students to acquire practical and real-world work experience which requires active



participation from the students, internship supervisors, lecturers, and higher learning institutions. The Astin's I-E-O model helps in recognizing different environmental factors such as role of lecturers, supervisors, and higher institution support, influence the engagement and outcomes of accounting students during internships.

A study by Kuh et al. (2005) that employed Astin's I-E-O model explored how institutional environments and student engagement approaches influence educational outcomes. The study suggested that supportive environments, high quality teaching, and dynamic learning opportunities provide higher student engagement and more likely to attain better learning outcomes. Further, a study conducted by Astin (1993) used the I-E-O model to examine data from over 20,000 students, 25,000 faculty members, and 200 institutes to identify factors influencing student outcomes. Astin (1993) revealed that faculty connections, student peer groups, and academic curriculums noticeably affect affective and cognitive development. Moreover, a study by Terenzini and Reason (2005) used Astin's I-E-O model to investigate how the first year of college influences student development. The study highlighted that students' pre-college characteristics and college experiences influence the students' learning and other outcomes. These findings indicate that to optimize educational outcomes (O) using Astin's I-E-O model, educators and higher institutions should carefully consider both the inputs (I) and the environment (E) they offer to students. Therefore, improving the internship environment by providing interesting and relevant tasks, offering better mentorship, and ensuring strong alignment with the academic curriculum can lead to better educational outcomes.

Although there are growing number of studies focusing on student engagement in the broader field (Kakkar, 2024; Machera, 2023; Nghia & My Duyen, 2018; Miller et al., 2011), evidence is limited particularly in public higher institution internship accounting program context. Therefore, the objective of this study is to identify factors that promote students' engagement in an internship accounting program using Astin's Input-Environment-Output (I-E-O) model at a public university (University X) in East Malaysia, specifically in Sarawak.

### **3. Research Methodology**

Internship program is part of the Accountancy requirement stipulated by the Malaysian Institute of Accountants (MIA) (Ahmad et al., 2021). The population of the study is the final year students of the Bachelor of Accountancy program at the University X. The course structure requires the students to undergo an internship program during their eight semesters' (final semester). Once the internship period ends, the student would complete their four years Degree in Accountancy Program. Learning is more effective if a student is able to learn from his or her own learning experiences. The reflection process is important in education because it leads to deeper learning, helps create new relations between initial and acquired knowledge and makes the learning process more effective. Therefore, adding a reflection process to different tasks in university's internship helps support students' learning (Maeots et al., 2016).

An online open-ended questions survey was distributed to the 74 accounting internship students. Open-ended questions are important measures because they allow respondents to answer in their own words without being influenced by the response categories provided

(Holland & Christian, 2009). However, only 57 students responded. The questions are developed based on the study conducted by Machera (2023).

The data collected from the interview were analyzed using open and thematic coding methods. The dataset in this initial study was individually coded to minimize the risk of overlooking important concepts. The codes were then compared collectively and interpreted to identify any shared learning insights (Cord et al., 2010).

#### 4. Findings and Discussion

The purpose of this study is to explore the factors that promote the students' engagement in an internship accounting program at University X. The qualitative analysis indicated emerging themes that consistently appeared within the 57 responses. The data collected from the respondents resulted in the emergence of various themes. The responses have been transcribed and quoted verbatim, i.e. not paraphrased, unedited and without any personal views and opinions.

The analysis of the findings is discussed in the following sections:

- Demographic of respondents
- Emerging themes based on the I-E-O model

The next section discussed the demographic details of the respondents.

##### 4.1 Demographic of Respondents

Table 1 below shows the demographic details of the respondents gathered from the interview.

Table 1. Demographics of the respondents

| Description |             | Frequency | Percentage |
|-------------|-------------|-----------|------------|
| Gender      | Male        | 14        | 25%        |
|             | Female      | 43        | 75%        |
| Ethnicity   | Malay       | 43        | 75%        |
|             | Iban        | 5         | 9%         |
|             | Melanau     | 2         | 4%         |
|             | Bidayuh     | 4         | 7%         |
|             | Bugis       | 1         | 1%         |
| CGPA        | Kedayan     | 2         | 4%         |
|             | 2.51 - 2.99 | 6         | 10%        |
|             | 3.00 - 3.49 | 46        | 81%        |
|             | 3.50 - 4.00 | 5         | 9%         |

As shown in Table 1, out of 57 respondents 14 (25%) are male students while 43 (75%) are female students. The results revealed a gender disparity in internships, with a marginal difference between respondents who are male and female. The findings demonstrated the active involvement of female respondents in internships. In addition, compared to the male respondents, they expressed excitement in gaining real-world experience in order to acquire knowledge and skills relevant to the study's field. According to Chen and Lee (2021), female students benefit more than their male counterparts from the chance to participate in an

internship. In terms of ethnicity, about 43 (75%) of the students are Malays and the remaining 14, (25%) are Iban, Melanau, Bidayuh, Kedayan and Bugis. Internship participants' ethnic composition frequently reflects the demographic distribution of the region or institution Nguyen, & Lee (2022). Malays are expected to make up a higher share of internship participants in locations as Malays make up the majority of the population or in institutions especially this study focused on UiTM students. The majority of students, approximately 46 (81%), had a CGPA between 3.00 and 3.49, while another 6 (10%) had a CGPA between 2.51 and 2.99, and the remaining 5 (9%) achieved a CGPA above 3.50. When considering the perceived value of the internship, students with higher CGPAs outperformed those with lower CGPAs in the workplace (Predovic & Jones, 2021). Students seeking to intern must be adequately prepared, having completed a certain amount of coursework and attained a minimum CGPA (Xu et al., 2021). Additionally, research findings indicated that students with higher cumulative GPAs have a higher likelihood of participating in an internship than students with lower GPAs. It means a higher CGPA is thought to be a sign of superior work performance (Gashaw, 2019). This research is in line with the findings of several researchers (Pike et al., 2003; Bowden et al, 2021) who stated that students' involvement in numerous activities correspond with their academic result.

Table 2. Internship placement

| Description                    |                        | Frequency | Percentage |
|--------------------------------|------------------------|-----------|------------|
| Firms                          | Audit firm             | 52        | 91%        |
|                                | Non-audit firm         | 5         | 9%         |
| Internship Application         | Own selection          | 57        | 100%       |
|                                | University's selection | 0         | 0%         |
| Employer's Internship briefing | Yes                    | 54        | 95%        |
|                                | No                     | 3         | 5%         |

Table 2 above shows the internship placement of the students. The majority of the students, 52 (91%) had their internship in an audit firm, whereas another 5 (9%) in non-audit firms such as District Offices and Small and Medium Enterprises (SME). Students frequently have a strong preference for audit firms because of their reputation, training programs, and chances for career progression. This is especially true for those connected to major professional services networks, such as the Big Four. The high placement rate at audit businesses can be an indication of students' inclination towards these companies due to their perceived prestige and opportunity for skill enhancement (Nguyen & Tran, 2021). All 57 (100%) students applied for their own internship placement. About 54 (95%) employers provided briefing for the students once they joined the organization, while the remaining 3 (5%) did not.

The next section discusses the emerging themes from the interview.

#### *4.2 Emerging Themes Based on Astin's I-E-O Model*

This section presents the themes as presented in Table 3 relevant to the literature. Utilizing Astin's (2002) I-E-O model to examine the relationship between institutional characteristics and student learning and development in higher education, the analysis assesses the influence

of the input characteristics (i.e. student grades, internship briefing), and environmental experiences (workplace environment) on the student output/outcomes (skills, knowledge and competencies). This model is important in this analysis as it demonstrates how students' beginning attributes (Input) and their experiences within the institutional settings (Environment) both impact their learning outcomes (Output). For example, a student's growth and success in the classroom may depend on how effectively the environment of the institution fits their requirements and how their innate qualities combine with the opportunities and challenges presented by the institution.

The analysis of interview data identified key themes related to factors that promote student engagement in an internship accounting program, highlighting specific characteristics that influence participation. By taking into account these variables, internships can be more effectively customized to match the requirements and goals of students, improving their general involvement and academic result. Table 3 depicts the emerging themes based on Astin's I-E-O model.

Table 3. Emerging themes based on I-E-O model

| Element        | Emerging Themes                     | Themes Description   |
|----------------|-------------------------------------|--|
| Input          | Academic performance                | CGPA achievement   |
|                | Skills required                     | Soft and technical skills  |
|                | Course/subjects curriculum          | Top three subjects taught in university  |
|                | Internship briefing                 | Introduction to staff members and work assignments   |
| Environment    | Workplace Environment               | Supportive and inclusive working environment<br>Conducive environment<br>Good facilities and resources   |
|                | Work assignment and exposure        | Exposure of various accounting practices<br>Interesting and relevant tasks<br>Hands on experience<br>Training program/ sessions, workshops, seminars<br>Learning opportunities for skill development and career advancement<br>Access to latest technologies used for audit work |
|                | Feedback Mechanism                  | Regular feedback on assigned tasks   |
|                | Mentorship program                  | Good mentorship and guidance<br>Buddy pair system between employee and trainee<br>Constructive and regular feedbacks   |
| Output/Outcome | Self-development and enhancement    | Communication skills and problem-solving skills<br>Professional and technical skills<br>Critical thinking and analytical skills<br>Confidence level<br>Time management<br>Interaction with others  |
|                | Knowledge enhancement               | Attainment of new knowledge<br>Proficiency in tools and technologies   |
|                | Adaptability to working environment | Fast understanding of tasks<br>Managing and prioritizing tasks<br>Enhanced teamwork  |
|                | Networking and career opportunities | Expand networking and connections<br>Career opportunities  |
|                | Exposures                           | Diverse working exposures<br>Cultural diversity  |

The findings revealed that the elements influencing students' engagement in internship programme can be divided into input, environment and output/outcome. Students input include factors directly affecting students' engagement such as grades, internship briefing, while environment refers to those aspects that are capable of affecting the student's engagement during internship programme (Astin 2002). The student's output are the outcomes of the students' engagement during the internship period. It shows that internship has a good effect on students' performance and helps them gaining general knowledge and abilities during the internship (Surajit, 2021).

#### *4.3 The Input of Student Engagement in an Internship Programme*

The themes that emerged from this study related to inputs of students' engagement include academic performance, course curriculum, and internship briefing. Out of 57 respondents, 41 (72%) stated that CGPA is an important input of students' engagement in an internship programme. Academic performance plays a significant role in students' application process for internship placement. This is because an individual's ability to think analytically, solve problems, and communicate can all be proxied by their academic performance. One can infer these abilities from a student's academic record and they are frequently necessary for success in internship positions. The structure and materials for learning are provided by higher education institutions, but students are largely responsible for taking advantage of these settings and chances to enhance their own learning in ensuring the better academic performance (Young et al., 2024). Prianto et al. (2017) suggested that students should be strongly encouraged to engage in internship programs to gain the experience needed to enter the job market.

Below is the respondent's comment:

*“Academic performance, like CGPA, reflects the student's grasp of accounting principles.”*

*“CGPA of 3.39 in accountancy degree facilitated internship placement with prior knowledge crucial for understanding audit methodology.”*

*“A higher CGPA increases the likelihood of securing a better internship placement and potentially leads to permanent employment opportunities post-internship.”*

The respondents also mentioned skills as an input that is important for the students. Skills include soft skills such as communication skills and technical skills that include proficiency in technologies and applications needed to perform the assigned work. These skills are necessary for students to gain experience in real-world employment situations. This aligns with Machera's (2023) study, which found that students recognize the internship as providing valuable hands-on, real-world work experience. The findings of this research also support the conclusions of Ahmad et al. (2021) and Sawani et al. (2016), which demonstrated that internships significantly enhance students' attitudes and the development of soft skills and competencies.

The following quotes support the above statement.

*“Soft skills such as communication and teamwork are crucial for workplace effectiveness.”*

*“Learned Microsoft Word skills for assignments before internship, applied in editing page numbers, titles, and alignment for audit reports.”*

*“Technical skills and proficiency which show how reliable for a student to complete a task given. Communication skills show the student level on having interaction.”*

Regarding the significance of university courses for students during their internships, respondents identified Auditing, Financial Accounting, and Taxation as the top three subjects essential for their internship experience. A thorough understanding of basic accounting principles is crucial when applying them in the given tasks. With the assistance of lecturers, students can gain mastery of these courses, which can improve their technical competence, allowing them to complete tasks and solve problems more effectively during their internships.

This is consistent with the research conducted by Herbert et al., (2021), who also emphasized the importance of lecturers in preparing students for their future professional identities and career preparation upon graduation. About 51 respondents (89%) mentioned that the organizations conducted briefing for the students on the first week of internship. Internship briefing allows the students to be introduced to staff members of the organization of whom the students would work closely with, and the structure of work that the students will be assigned. This is one of the new insights from this study. Indirectly, it might boost students' confidence and skills in performing their job. This finding is in line with study by Sawani et al. (2016), internships provide students with valuable skills and abilities that help them become employable.

The following are the respondents' remarks:

*“We were provided with a briefing on the first day of internship. This allow us to know the seniors and managers that will be managing us during our internship”*

*“They provide a briefing explaining the process in the workplace and they also give us training notes before we start certain tasks.”*

The next sections discussed the environment elements that promote students' engagement during internship programme.

#### *4.4 The Environment that Promote Students Engagement during Internship Programme*

The themes that emerged from this study related to environment elements include workplace environment, work assignment and exposure, student learning advancement, self-reward, feedback mechanism, and mentorship program.

Workplace environment plays a significant role in students' engagement during an internship period. A total of 44 respondents (77%) agreed that a supportive environment provides comfort for the students and encourages the students to be more active in work engagement. They are more open to ask questions and learn from their supervisors and colleagues at work. This study pointed out that a supportive and inclusive working environment encouraged students' engagement in an organization. This finding is consistent with a study conducted by

Chiu (2022) namely student engagement as a multidimensional concept containing four dimensions: behavioral, cognitive, emotional, and agentic. Students should demonstrate a good attitude in order to develop their skills and confidence in the working environment. In order for students to actively engage in educational activities, it is crucial that they acquire the necessary knowledge, abilities, and competences (Machera, 2023). This research is consistent with previous literature (Li & Xue 2023, Klem & Connell 2004, Skinner & Belmont 1993) which assert that effective instructional practices, supportive and inclusive learning environment, are vital to encourage student engagement.

The following quotes support the above notion that a supporting and inclusive environment motivates the student to perform better during their internship programme.

*“A welcoming and inclusive workplace culture promotes active participation and contribution from interns”.*

*“Good environment and healthy communication by the colleagues motivate me to work harder”.*

Apart from that, proper guidance facilitates learning experiences for the students to understand the work assignments. This is because students must develop professional skills in the workplace. This finding is in line with research conducted by Machera (2023) and the International Federation of Accountants (IFAC, 2019), internship supervisors are expected to demonstrate a readiness to mentor interns and to assist aspiring professional accountants in acquiring professional skills in the workplace.

The following remarks highlight the importance of having proper guidance.

*“A supportive workplace environment enables me to grow and learn from staff members”.*

*“The workplace fosters a supportive environment with detailed guidance for tasks”.*

*“Supportive employees and supervisors for guiding students either for tasks of the workplace or assignment”.*

Other than that, a conducive working environment with good facilities and resources, enables the students to adapt and perform their work assignments efficiently. Resources and facilities such as laptops and workstations are crucial for the interns to perform the assigned tasks diligently. According to Li and Xue (2023), having adequate support resources and facilities can impact student engagements. One of the respondents commented:

*“Good facilities at the workplace can enhance productivity and engagement that support students' learning, productivity and professional development”.*

Another respondent commented:

*“Access to facilities at the workplace such as well-equipped accounting software allows students to efficiently complete tasks”.*

The above findings are in agreement with previous research (Kuh et al., 2005) that suggests supportive environments, high quality teaching, and dynamic learning opportunities provide

higher student engagement and are more likely to attain better learning outcomes.

In terms of work assignment and exposure, the respondent mentioned that the tasks assigned are interesting and relevant. The interns were exposed to various accounting practices such as audit, accounting, taxation, and company secretarial practices. Trainees were given hands-on experiences that enabled them to learn the work processes quickly and effectively. This finding is in line with the study conducted by Machera (2023) which noted that the internship provides students with valuable work experience. According to Ahmad et al. (2021), internships can benefit students by improving their attitudes and soft skills. In support of this, the respondents commented:

*“Hands-on opportunities enable the interns to apply theoretical knowledge in practice, in real-world settings”.*

*“Interns are exposed to diverse aspects of accounting practice that includes audit procedures, financial reporting and tax preparation”.*

*“Giving interns meaningful work that challenges them and lets them use their accounting skills and keeps us engaged”.*

As for students' learning advancement, the findings showed that out of 57 respondents, 18 (32%) were provided with training programs and sessions. The training program or sessions are mostly structured and well-developed. The training sessions help the interns to understand the tasks better and to adapt to the working environment faster. Training sessions also include providing guidelines to the interns to understand the scope of work within the organization. The training also provided the intern with assurance, support, and guidance as part of onboarding programs. This statement supports Machera (2023) findings which stated training programs and instructional practices are designed to stimulate and promote students' involvement, thereby impacting students' behaviors favorably in learning. Furthermore, training programs offer insight into employers' expectations, expand knowledge and skills of the interns, and introduce the company's culture, values and work-related ethics. The following comments from the respondents state the importance of training programs during an internship.

*“Training provided at the beginning of the internship is essential for the learning process, offering insight into employers' expectations and tasks assigned”.*

*“Provide training on how to use different types of software and tools helps students to contribute meaningful to their work”.*

*“A well-organized and structured training program with comprehensive onboarding sessions introduces to the intern the company culture, values and work-related ethics and specifics”.*

In terms of learning opportunities for skill development and career advancement, 13 (23%) out of 57 respondents highlighted that internship programs provide good opportunities for the interns to prepare themselves into the workforce environment. According to Bakker et al. (2015), students who are more open, as evidenced by personality traits such as creativity, curiosity, and a willingness to explore new ideas, have a higher level of involvement in their



learning.

One of the respondents mentioned:

*“Internship provides the opportunity for the interns to learn about the industry best practices and standards”.*

Also, the interns are able to delve into professional development opportunities while doing their internship. The interns are encouraged to pursue professional certificates such as ACCA, CIMA, MICPA, and CPA Australia for the betterment of their knowledge and skills in the accounting profession. With these professional certificates, students can improve their career readiness and job placement prospects. This is consistent with Twyford and Dean's (2023) research, which found that such certifications enhance students' career preparedness and job placement after graduation.

Other than that, interns are provided with access to the latest technologies used for audit work during the internship. This allows the interns to gain exposure to new technologies and develop new skills. Li and Xue (2023) suggested that there should be support for learning resources, effective instructional practices, and inclusive classroom climates in promoting student engagement. Lastly, most of the respondents are more motivated during internship due to the monetary reward in terms of monthly allowance received.

As for self-reward, 19 (33%) out of 57 students indicated that the allowances received is one of the motivating factors for students' engagement within the organization. Having allowances helps the interns to sustain the cost of living especially the cost of rental for accommodation and transportation costs. Almost all the employers provide allowances for the interns' ranges between RM300 - RM1, 000 a month depending on the size of the company. This is another fresh perspective in the paper. All students, irrespective of their financial status, are guaranteed equal opportunities to engage in internships through financial support provided by allowances. Fairness is achieved through this support, which makes it possible for a larger variety of students to obtain valuable experience, good performance and knowledge during internship. According to Surajit (2021), internship positively impacts students' performance and facilitate the development of generic skills and knowledge during the internship period.

Feedback mechanism is another new factor that affects students' engagement directly as regular feedback from the experienced employees of the organization allows the interns to improve on their learning experiences of the work processes. 49 (86%) out of 57 respondents mentioned that the organizations provided performance reviews to the interns. The review allows the interns to identify their weaknesses and learn from their mistakes. The review offers an opportunity for the interns to expand their knowledge into real work scope and to develop their critical thinking. This finding showed that an internship focusing on feedback mechanisms could be a valuable opportunity to explore various aspects of communication, evaluation, and improvement within an organization. This finding is aligned with a study carried out by Sawani et al. (2016) which discovered that employers are satisfied with interns' cooperation abilities, punctuality, grooming, and rapport with peers and supervisors.

Mentorship and professional guidance provide a platform for the interns to seek advice, ask questions and gain insights into the professional world of accounting. Assigning mentors or supervisors who provide support, feedback, and advice, helps interns navigate their roles, understand company culture, and develop essential skills. The findings revealed that 45 (79%) out of 57 respondents agreed that quality mentorship and supervision is needed to keep improving in the internship process. This result is in line with a study conducted by Machera (2023) and IEASB (2019) in which internship supervisors must be willing to train interns and help aspiring accountants build professional abilities in the workplace. The following comments from the students show how effective mentorship programs lead to enhancement of students' engagement in internship.

*“Quality mentorship and supervision is needed to keep improving in the internship process”.*

*“Good guidance and support from experienced staff create a positive learning environment”.*

*“Clear guidance by supervisor or peer during audit engagement to ensure proper understanding of audit scope”.*

*“Organized job planning to assign staff or interns with new engagements”.*

The next section discussed the outputs/outcomes of students' engagement during internship.

#### *4.5 The Outputs/Outcomes of Students' Engagement during Internship Programme*

The findings revealed the outputs/outcomes derived from students' engagement includes self-development and enhancement, knowledge enhancement, adaptability to working environment, networking and career opportunities, and exposures.

The most recognized outputs mentioned by the respondents are self-development and enhancement. It was found that student engagement enabled the students to achieve enhancement in various skill sets such as communication skills, problem solving skills, professional and technical skills, improved critical thinking and analytical skills. It was also revealed that after completing the internship, the students' confidence level increased, and the students can better manage their time. This finding is in line with the Astin I-E-O model, namely educators aim to nurture talent among students through academic programs. This is because the interaction with colleagues and clients helps the students to be more respectful and mindful to others. According to Machera (2023), the students acknowledged that the internship provides them with useful, hands-on learning experiences and effective communication skills among them.

The following quotes from the respondent supports the above statement.

*“Establishing open communication channels between interns and their supervisors, as well as among team members, fosters a collaborative and supportive environment”.*

*“Improved problem-solving skills in analyzing complex situations, proposing solutions, and adapting to changing circumstances”.*

*“Improved professionalism as there is a lot of involvement and communication with few*

*departments during the audit process”.*

*“Enhanced technical skills in accounting, gained through practical experience and exposure to real-world scenarios”.*

*“Developing enhanced analytical skills through navigating difficult and challenging audit processes was one of the most valuable skills I gained during the internship”.*

Apart from that, the students also gained knowledge enhancement by attaining new knowledge in various aspects of auditing, accounting, taxation, and other related work. The requirement to be proficient in technologies allows the students to learn about new software and applications related to auditing, accounting, and taxation. This result is consistent with studies performed by Lee et al., (2016) and Widaningsih et al., (2023) which stated that students are required to have wide competencies and skills beyond accounting. Also, the students are able to adapt to the working environment faster and manage and prioritize the given tasks better. This inevitably enhances teamwork and cooperation amongst the interns and other employees. Below are the comments received from the respondents in relation to the above notion.

*“Broaden knowledge in accounting and professional work ethics”.*

*“New knowledge gained in auditable areas during the internship (i.e. internal audit in the Insurance and Takaful department)*

*“Acquiring a comprehensive understanding of tax regulations and laws through practical exposure during the internship”.*

*“Increased proficiency in tools and technologies for audit work”.*

Furthermore, through students’ engagement in internship, the students are able to build networking and expand connections internally within the organization and externally with other parties such as clients, government agencies and related parties. Through these networking, the students are given the opportunities to further develop their career in the organization as new employee recruitment. Establishing networking with professionals can lead to future career chances or referrals. The findings revealed that students’ knowledge and skills improved through regular training sessions with industry professionals. This result is consistent with study by Ahmad et al. (2021) which showed that internships can help students develop their soft skills and build networking. Below are the comments received from the respondents in relation to the above statement.

*“Improved professional network and connections within the accounting industry, potentially leading to future job opportunities”.*

*“Increased the job opportunities in the accounting field especially for student internships in audit firms”.*

Lastly, students’ engagement allows the students to experience diverse working and cultural exposures such as festive celebrations i.e. a new perspective in the student engagement literature. These exposures instill within the students a sense of belonging and inclusion as

the organization allows them to be involved in managing the events and be treated as part of the organization employees. Employers will indirectly appreciate and value the active students, which will lead to improved job performance in the workplace. This notion supports Pernsteiner (2015) view that employers value students who can effectively communicate their ideas and outcomes with colleagues, clients, and stakeholders.

The following remarks support the above notion.

*“Able to expose diverse work environments, cultures and perspectives, competence and adaptability”.*

*“The company celebrates various celebrations and engages the interns in managing the events. This enables me to experience cultural exchange and understand the cultures of others”.*

The following section discusses the research framework of this research.

#### 4.6 Revised I - E - O Model

Utilizing Astin's I-E-O model, this research formulated the following research framework.

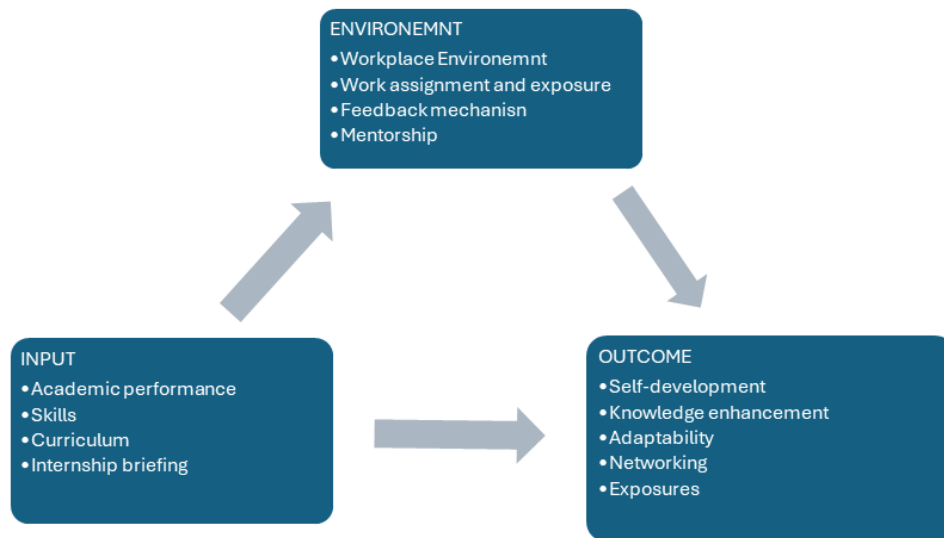


Figure 1. Revised I-E-O model

The relationship between the three I-E-O model components is depicted in Figure 1. According to the concept, learning environments and inputs both affect student development outcomes, but inputs also have an impact on those outcomes. The approach also raises the possibility of the environment serving as a mediator. Furthermore, Astin (1993) explained that it is impossible to comprehend the relationship between the environment and student results without considering the contribution of the students. In a university, a process (environment) will convert a student, the most significant input, into an output. As students possess certain qualities, the quality of these traits may influence procedures and results

(accomplishments). Participating in an academic experience helps students to develop both physical and psychological level (Astin, 1999). Students with high participation levels typically engage more with and are more dedicated to the university community. Conversely, a less involved student is likely to be less engaged and committed to the academic environment.

#### 4.6.1 Input Element

This research supports the above notion based on the findings discussed in the earlier sections. The influence of academic performance, skills, academic curriculum, and internship orientation as input factors is significant in fostering positive student engagement among accountancy students at University X. According to Handelsman et al. (2005), student engagement is a significant predictor of student accomplishment.

Academic performance is often seen as a key indicator of student engagement. Students who perform well academically are typically more engaged in their studies, as their success reinforces their motivation and commitment. High academic performance often results from active participation in class, regular study habits, and a strong understanding of course material, which are all signs of engagement. Conversely, students who struggle academically may become disengaged if they feel overwhelmed or unsupported. Studies have shown that there is a positive correlation between academic achievement and student engagement. For instance, Fredricks, Blumenfeld, and Paris (2004) argued that academic success boosts students' self-efficacy, leading to increased participation and effort in academic tasks.

The development of relevant skills, both soft and hard, plays a crucial role in fostering student engagement. When students perceive that they are acquiring skills that will be useful in their future careers, their engagement level increases. Skills such as critical thinking, problem-solving, communication, and teamwork are particularly valued. For instance, Kuh (2008) asserted that students who participate in skill-building activities like collaborative or problem-based learning are more likely to be engaged, as these activities are seen as directly relevant to real-world situations. This engagement is further enhanced when students can practically apply their skills during internships or other experiential learning opportunities.

The design and relevance of the academic curriculum are fundamental in promoting student engagement. A curriculum that is aligned with students' interests, career goals, and current industry trends is more likely to engage students. Curricula that integrate active learning strategies, such as group projects, case studies, and interactive discussions, tend to enhance engagement by making learning more interactive and relevant. Research by Trowler (2010) indicated that curricula that include elements of choice, relevance, and practical application are more effective in engaging students. Students are more motivated to participate and invest time in learning when they see a clear connection between what they are learning and their future professional goals.

Internship experiences are a critical component of the academic journey, providing students with hands-on experience in their field of study. An effective internship briefing—where students are thoroughly prepared for what to expect, what is expected of them, and how to

maximize their learning opportunities-can significantly enhance engagement. According to Gault, Leach, and Duey (2010), students who are well-briefed and prepared for internships tend to engage more deeply with the experience, as they understand its importance in their career trajectory. These students are more likely to take initiative, seek out learning opportunities, and apply classroom knowledge in a real-world setting.

#### 4.6.2 Environment Element

Exploring the various environmental factors within educational settings, particularly in internship workplaces, reveals the critical components that shape students' engagement experience. These factors include the workplace (learning environment), work assignments and exposure, feedback mechanisms, and mentorship. Each plays a pivotal role in the development of professional skills and knowledge, influencing how effectively students transition from academic to professional settings.

Student engagement is greatly impacted by the learning environment as proven by this research findings. The learning environment of an internship is foundational to the educational experience. This research highlights that a setting that is well-designed promotes learning and interaction between students and supervisors within the organization. Comfort and accessibility, technological integration, diversity, and inclusivity are important factors that further contribute to high student engagement during their internship. All students benefit from and become more involved in a learning environment that is inclusive and values diversity. A supportive and well-structured learning environment can significantly enhance a student's ability to acquire new skills and knowledge. This environment includes the physical space, organizational culture, and social interactions that occur within the workplace. A positive learning environment is characterized by open communication, accessibility to resources, and an atmosphere that encourages curiosity and learning. According to research by Valencia-Forrester et al. (2019), a learning environment that fosters collaboration and inclusivity helps interns feeling more comfortable in taking initiative and seeking out learning opportunities, thereby improving their overall internship experience.

Furthermore, the nature of work assignments and the opportunities for exposure to real-world applications are pivotal in engaging students. Relevance and practical assignments tend to increase student's engagement. As mentioned in the above research findings, a mixture of variety and challenging assignments keeps the students motivated and engaged. Exposure to real-world problems and interdisciplinary projects can also enhance their learning experience. Furthermore, giving the students some level of autonomy and control over their work assignments, significantly increases their engagement and investment in the work. As noted by Sweitzer and King (2013), meaningful work assignments that are aligned with the intern's educational goals can enhance learning and increase job satisfaction, leading to a more enriching internship experience.

One of the key findings from this research is that feedback and mentorship are critical components of the learning process which directly impact student engagement. Constructive and timely feedback helps students understand their progress and areas for improvement. According to Hattie and Timperley (2007), feedback is one of the most powerful influences

on learning and achievement when it is clear and focused on tasks rather than on the individual, promoting a growth mindset and a focus on learning goals. Interns who receive regular and meaningful feedback are better equipped to adapt their strategies and improve their performance. Mentorship on the other hand guides students through their educational journey and can significantly boost engagement. A mentor provides personalized support, advice, and encouragement. As revealed in this research, one-on-one mentorship allows for personalized feedback and support, which can address individual student needs more effectively. According to Allen et al. (2004), mentorship relationships have a significant positive impact on both career and psychosocial outcomes, including increased job satisfaction, career advancement, and personal development. Mentorship also helps interns build a professional network, which is invaluable for future career opportunities.

#### 4.6.3 Outcome Element

In terms of outcomes, this research highlights the following outcomes of students' engagement; self-development, knowledge enhancement, adaptability, networking and exposure.

Student engagement plays a critical role in self-development, particularly in fostering personal growth, self-efficacy, and identity formation. Engaged students are more likely to develop a strong sense of self, which is crucial for their overall well-being and future success. According to Fredricks, Blumenfeld, and Paris (2004), self-development is enhanced when students are actively involved in their learning processes, which helps them to build resilience and self-regulation skills.

Engagement significantly impacts knowledge enhancement, leading to deeper learning and better academic performance. When students are engaged, they are more likely to be motivated to learn, participate in class discussions, and apply critical thinking skills. Kuh (2009) highlights that engagement is directly related to the amount of time and effort students invest in their academic activities, which in turn enhances their knowledge and cognitive development.

Adaptability, or the ability to adjust to new situations and challenges, is another outcome of student engagement. Engaged students are more likely to develop adaptive skills because they are constantly challenged to think creatively and solve problems in dynamic learning environments. Martin et al. (2013) found that students who are more engaged tend to have higher levels of adaptability, which is essential for success in both academic and non-academic contexts.

Networking, or the ability to build and maintain relationships with peers and professionals, is another important outcome of student engagement. Engagement in group activities, clubs, and organizations provides students with opportunities to expand their social networks, which can be valuable for career development and personal growth. Research by Astin (1999) showed that students who are more engaged in campus activities tend to develop stronger social connection and network, which are critical for their future success.

Exposure to diverse ideas, cultures, and experiences is another significant outcome of student

engagement. When students participate in various extracurricular activities, study abroad programs, and interdisciplinary courses, they gain exposure to different perspectives and ways of thinking. This exposure is crucial for developing a well-rounded worldview and enhancing cultural competence. Tinto (2003) emphasized that engaged students are more likely to seek out and benefit from diverse experiences, which enrich their educational journey.

Student engagement is therefore a multifaceted construct that significantly influences various aspects of a student's academic and personal life. The outcomes discussed—self-development, knowledge enhancement, adaptability, networking, and exposure, are all positively impacted by active student engagement. The research underscores the importance of fostering an engaging learning environment to promote these outcomes.

## 5. Conclusion

This paper has successfully achieved its objective i.e. to explore the factors that promote the effectiveness of students' engagement in an internship accounting program at University X using the Astin's input-environment-output (I-E-O) model. By answering the online open-ended survey, this would allow students to have reflection i.e. leads to deeper learning, helps create new relations between initial and acquired knowledge and makes the learning process more effective. The inputs element of students' engagement includes academic performance, course curriculum, and internship briefing. The themes identified in this study in relation to the environment include workplace environment, work assignment and exposure, student learning advancement, self-reward, feedback mechanism, and mentorship program. The findings revealed the outputs/outcomes derived from students' engagement include self-development and enhancement, knowledge enhancement, adaptability to working environment, networking and career opportunities, and exposures. The new insights from this paper are: internship briefing, self-reward, feedback mechanism and cultural diversity exposures.

The findings from this paper provide implications for employers, students and supervisors. From the employer's perspective, the internship briefing at the beginning of internship could be promoted by making a compulsory requirement for the organization to prepare a report to the coordinator of internship at the university. In this manner, the employers would display the sense of responsibility toward the interns.

From the student's perspective, after attending the briefing, indirectly, students feel more welcomed and prepared to work in the organization. This is because students will use their internship experience to generate a resume, develop industry-relevant skills, expand their network of industry connections, and/or earn badges to demonstrate that they are job ready. The findings also suggest that monetary reward could encourage the interns to engage themselves in the organizations. This is especially for students from the low-income group, to cover for their subsistence allowances. In this way, the students may not be depressed about their living allowances during internship period. Finally, exposure to culture diversity during the internship period is a valuable experience for the interns. This is because the interns are given the opportunity to mingle with colleagues as a professional worker during their



internship. As a result, they appreciate more the cultural diversity in a working environment which they never encounter previously.

From the supervisor's point of view, the feedback mechanism is an important student's engagement tool. Regular feedback by the supervisors during the internship is important for students to improve their understanding on the tasks assigned to them as well to prevent repetitive mistakes. Supervisors must be willing to teach the interns, and interns must be willing to accept criticism.

There are several future research opportunities. Firstly, quantitative research could be conducted by testing the new elements found in this paper i.e. internship briefing, self-reward, feedback mechanism and cultural diversity exposures. Secondly, future research could employ interview methods to explore the insights relating students' engagement. In this way, richer insights could be obtained as compared to the open-ended survey in this paper. Finally, other theories could be used to explore the students' engagement for example, Self-Determination Theory, Social Cognitive Theory and Psychological Contract Theory particularly in the accounting internship program.

### **Acknowledgments**

We would like to express our profound appreciation to all the authors who contributed equally to this study. Their unwavering dedication, insightful perspectives, and collaborative spirit have been instrumental in the successful completion of this research. Each author's unique expertise and commitment to excellence have significantly enriched the quality and depth of our work. This study stands as a testament to their hard work and intellectual contributions. Thank you for your invaluable efforts and outstanding teamwork.

### **Authors' contributions**

Corina was in charge for the draft manuscript and revise all part of this article. Siti Maliza and Saifulrizan are responsible for the data collection. All authors read and approved the final manuscript. All authors declare that we contributed equally to this study, with each author participating in all aspects of the research process, from conceptualization to manuscript preparation.

### **Funding**

Not Applicable.

### **Competing interests**

The authors declare that they have no competing interests related to this study.

### **Informed consent**

Obtained.

### **Ethics approval**

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

### **Provenance and peer review**

Not commissioned; externally double-blind peer reviewed.

### **Data availability statement**

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### **Data sharing statement**

No additional data are available.

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