



INTERNATIONAL JOURNAL OF
MODERN EDUCATION
(IJMOE)

www.gaexcellence.com/ijmoe



**ACADEMIC PERFORMANCE AND PROFESSIONAL
PROGRESSION IN AN EMBEDDED ACCA ACCELERATE
PATHWAY: A CASE OF THE FACULTY OF
ACCOUNTANCY, UITM PUNCAK ALAM CAMPUS**

Salsiah Mohd Ali^{1*}, Mohd Munif Yahaya², Mariati Norhashim³

¹Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Cawangan Selangor, Kampus Puncak Alam, Selangor, Malaysia

 salsiahma@uitm.edu.my

 <https://orcid.org/0000-0003-0523-6293>

²Head of Strategic Alliance at Affin Islamic Bank Berhad

 miyarfan@gmail.com

 <https://orcid.org/0009-0007-5787-0161>

³Faculty of Management, Multimedia University, Cyberjaya, Malaysia

 mariati.norhashim@mmu.edu.my

 <https://orcid.org/0000-0002-2812-6807>

*Corresponding Author

Article Info:

Article history:

Received date: 07.08.2026

Revised date: 27.08.2026

Accepted date: 07.09.2026

Published date: 22.09.2026

To cite this document:

Ali, S. M., Yahaya, M. M., & Norhashim, M. (2026). Academic Performance and Professional Progression in An Embedded Acca Accelerate Pathway: A Case of the Faculty of Accountancy, UiTM Puncak Alam Campus. *International Journal of Modern Education*, 8(31), 1067-1085.

Abstract:

This study examines student outcomes in an embedded ACCA Accelerate pathway within the undergraduate accounting programme at the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus. It evaluates the original pathway configuration from Semester 5 to Semester 7 before Advanced Taxation (ATX) was introduced as an alternative elective in 2025. The analysis uses programme data for 55 students across five cohorts; 49 sat ACCA examinations in March 2024, while six deferred their examinations. Descriptive statistics and a Wilcoxon signed-rank test comparing Semester 4 and Semester 5 CGPA were used to examine outcomes at pathway entry in Semester 5, while professional pass rates were compared descriptively with the corresponding March 2024 global benchmarks. Mean CGPA increased from Semester 4 to Semester 5 ($W = 212.50$, adjusted $p = .004$; rank-biserial correlation = 0.549), but subsequently decreased in Semesters 6 and 7. Nevertheless, most students maintained strong academic standing. Three of the four professional papers recorded pass rates comparable with or above the global benchmarks, and 12 students completed all four professional papers during their undergraduate studies. The findings suggest that embedded professional pathways may generate academic and professional benefits, although these benefits are uneven and may coincide with academic performance trade-offs during the intensive stages of the programme. Programme evaluation should therefore

consider academic sustainability, professional progression, student choice and workload.

DOI:10.35631/IJMOE.831061

Keyword:

Academic Performance; ACCA Accelerate; Accounting Education; Embedded Professional Pathway; Human Capital Theory; Professional Accreditation; Professional Examination



© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact ijmoe@gaexcellence.com.

Introduction

A central challenge of accounting education today is to fulfill a variety of purposes that are associated with but that do not necessarily go hand-in-hand. Thus, as well as nurturing students' technical accounting knowledge, their capacity for critical judgment, their ethical awareness, their communication skills, their digital skills, and their ability to continue to learn following their graduation from university, accounting programs are required by a variety of employers and professional bodies to prepare their graduates for work, and for subsequent professional study leading to certification by a professional body (International Federation of Accountants [IFAC], 2019; Tsiligiris & Bowyer, 2021). Accounting jobs today increasingly extend beyond requirements for purely technical accounting knowledge and also include demands for Information and Communication Technology (ICT) skills, for skills that enable analysis, for skills of a strategic nature, and for interpersonal and other “soft” skills (Elo et al., 2025). Thus, as well as facilitating technical accounting knowledge and professional examinations by means of a program of study that can be added to a student's degree, today's accounting curriculum is also extremely challenging.

The well-documented expectation–performance gap in accounting education (Bui & Porter, 2010; Jackling & De Lange, 2009) presents challenges for curriculum design that go beyond professional examination content. Even where there is professional alignment, a degree program with an embedded professional pathway needs to be assessed in terms of more than just professional content and the form of professional ‘integration’ (Bayerlein & Timpson, 2017). For instance, evaluation should consider whether students are able to sustain suitable academic study to remain on a professional pathway while continuing to obtain proper academic credentials. Most importantly, a degree with a professional pathway must remain educationally coherent.

Policy around university education in the accounting discipline has changed recently with a greater involvement from professional bodies, with recent schemes such as ACCA's Accelerate, enabling eligible students on specific undergraduate programs at universities around the world to register as accounting students, while studying for their first degree in accounting, or a related discipline. Such schemes allow students to gain access to study materials, employability resources, claim exemptions from certain papers of professional exams and, in some cases, sit certain Strategic Professional level exams, prior to graduation (ACCA, n.d.-a). Such schemes allow for greater alignment between the output of university programs and the needs of employers and can facilitate early identification by students of career paths within the accounting profession (Mistry, 2021). However, such involvement by professional bodies also means that they have a greater influence on the curriculum, and that the commercial and fiduciary logics of such bodies may dominate, leaving academics in universities with limited scope to develop professional education programs that are as educationally coherent as possible (Duff et al., 2020).

The literature is divided on professional accreditation in higher education. On the one hand there are benefits of relevant curricula, recognized standards, student attraction, exemptions and employability. On the other hand there are potential dangers of maximizing exemptions for universities to deliver professional syllabi and examination through replication. This may stifle academic autonomy, and remove space for broader liberal, critical, interdisciplinary and research-based learning (Ellington & Williams, 2017). For accelerated or embedded programs, this poses significant questions on the additional value of professional accreditation that students gain through their degree. The academic questions extend beyond whether or not students are able to pass the professional papers, to whether the overall program design creates value for students.

This study examines the undergraduate accounting programme at the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus, as the site for evaluating the ACCA Accelerate programme. At this faculty, students commence the professional accounting qualification in Semester 5 of their undergraduate studies. In Semesters 6 and 7, they complete Advanced Audit and Assurance (AAA) and Strategic Business Reporting (SBR) as electives within the undergraduate programme while also preparing for the corresponding ACCA professional examinations. The design of this programme evaluation enables a pre-entry academic baseline to be established, followed by measurement at pathway entry and during the intensive later stage, when the combined requirements of the UiTM degree and ACCA professional qualification are at their highest.

Studies within the Malaysian context that examine students' perceptions and readiness to pursue professional accountancy qualifications, as well as their motivation and awareness towards such programmes of study (Samsuddin et al., 2015), provide limited evidence on the academic performance of students who enter an embedded professional accountancy qualification pathway. Furthermore, there are insufficient relevant data to establish the relationship between the academic performance and professional progression of students enrolled in embedded professional qualification programmes. The body of literature within the international context of professional accountancy qualification programmes (Cordis & Muzatko, 2021; Eames et al., 2018; Espahbodi et al., 2023; Nagle et al., 2018; Shin et al., 2020) supports the view that professional pass rates are influenced by prior academic achievement, programme design and structure, institutional selectivity and quality, faculty credentials, review courses, programme funding, and unequal educational opportunities. Therefore,

professional pass rates should not be used in isolation to evaluate the quality of accounting programmes.

This study evaluates the ACCA Accelerate pathway through three outcomes: (i) students' CGPA before and after pathway entry; (ii) ACCA professional examination performance relative to global benchmarks; and (iii) documented completion of all four papers during undergraduate study. The evaluation considers both the potential benefits of the pathway and possible trade-offs involving student workload and curriculum breadth.

Research Objectives And Questions

The study aims to evaluate participants' academic performance and professional progression within an embedded professional pathway and to identify curriculum implications arising from the observed outcomes. It addresses the following research questions:

- RQ1: How did participants' CGPA change before and after entry into the ACCA Accelerate pathway in Semester 5?
- RQ2: How did participants perform in selected ACCA Strategic Professional examinations relative to the corresponding global pass rates?
- RQ3: What do the combined academic and professional outcomes imply for the design and improvement of embedded professional pathways?

Literature Review

Changing Competence And Employability Expectations

Studies about the employability and competence expectations for accounting students suggest that accounting education purposes have moved from mere transmission of rules to a complex framework. These frameworks outline professional competences as combinations of technical knowledge, professional skills, values, ethics, attitudes, and experiences (IFAC, 2019). In terms of employability, many studies identified the need for accounting students to possess various professional skills including communication, problem solving, ethical decisions, IT skills, and digitalization (Nie & Mastor, 2024). The increasing expectations for professionals who work in environments characterized by digitalization, analytics, automation, and advisory services require graduates to be adaptable, have business understanding, possess effective communication skills, and be committed to lifelong learning to enhance their professional development (Pan & Seow, 2016; Tsiligiris & Bowyer, 2021).

Such an increased focus on professional relevance is important for accounting education. However, the quality of a curriculum cannot be solely assessed by examination alignment. A well-designed accounting curriculum is more than the sum of its parts, with individual components being of little value when taken in isolation. Such a curriculum is not just about acquiring the required knowledge and technical skills. The broader learning experience and a range of employability skills are of equal importance. In other words, a university degree is about more than just preparing students for employment and enhancing their career prospects. The university degree also has a role in fostering a range of intellectual skills which students would not acquire through professional paths alone.

Professional-Body Integration, Identity, And Progression

Professional-body integration is important. It generates material and psychological benefits. The ACCA Accelerate pathway permits eligible university students to benefit from exemptions granted by universities, study support and employability resources provided by ACCA. Moreover, ACCA student members may register for Strategic Professional examinations prior to graduation (ACCA, n.d.-a). This enables candidates to progress more quickly towards professional qualification and gives them earlier visibility of professional status.

Early involvement with professional bodies through their student membership can aid in undergraduates' early identification with a profession and help them develop appropriate employability skills. This was found by Mistry (2021) in her qualitative study of undergraduates' experiences of being members of ACCA while they were studying for their undergraduate accounting degrees. As found by Samsuddin et al. (2015) in their study of Malaysian accounting students' professional-qualification intentions, the students' professional-qualification intentions are influenced by their awareness of the qualifications, their career motivation, the support given by their institutions, their perception of the difficulty of the qualification, and the cost of the qualification. Therefore, an embedded pathway in professional body membership may be able to attract highly motivated students to a university program.

Thus, although the existing evidence offers some support for embedding the professional body within the accounting degree, it does not provide definitive proof that doing so will have a number of positive effects for the student. Indeed, the evidence is largely suggestive. It is necessary to identify the different effects of participation in an embedded pathway for professional body membership, that is, participation benefits, the impact of the curriculum, institutional support, and the prior characteristics of those who opt for such a pathway.

Accreditation: Alignment Benefits And Curricular Risks

Professional accreditation, at a minimum, supports recognition of curriculum quality among key stakeholders, including employers. In addition, by supporting the mapping of desired programme outcomes and the constructive alignment of teaching content with those outcomes through recognition of expected professional competences (IFAC, 2019), professional accountancy bodies can support the development of relevant accounting programmes. Gunarathne et al. (2019) examined outcome-based education in accounting within five years of the programme having been implemented and described ways in which such frameworks and accompanying programmes of study and assessment, developed within 'the confines of higher education', could generate 'numerous benefits' to stakeholders, 'in the academy and in practice', that 'go beyond mere technical capacity'.

However, accreditation can also have the effect of standardizing curricula without them having adequate breadth or depth. Ellington and Williams (2017) found that academics in the UK regarded the influence of accreditation on their programs to be influential and practically unavoidable but in many cases actually to be a constraint. The need to gain exemptions from professional examinations and to cover the syllabus of that profession in their degree program had the effect of pushing them towards the professional syllabus and examinations rather than towards providing a liberal education of adequate breadth and depth. Bayerlein and Timpson

(2017) noted that in Australia a number of accounting programs which were accredited by the main professional bodies were not able to meet the profession's own broader expectations.

The balance of power in terms of curriculum priorities is further skewed in favor of professional accountancy bodies and their employer clients. While these organizations are in the best position to provide expertise and to set professional standards, there is a danger that academic interests, research-informed teaching, critical evaluation, an ethical outlook, interdisciplinary approaches and local needs are neglected. Therefore, while partnership with professional accountancy organizations is desirable, it must be a partnership that is governed by the university in order to ensure that a range of different learning outcomes are achieved by students on accounting programs.

In summary, the literature indicates that embedding professional-body materials within university accounting programmes may produce positive learning outcomes. However, such integration may also create curriculum and workload challenges, including the effects of examination-focused content on student learning.

Accelerated Pathways And Professional Examination Performance

Research on accelerated accounting programmes is limited. In a study which compared graduates of an accelerated certificate program in accounting and those of traditional accounting programs, Eames et al. (2018) found that in terms of attempting the CPA and passing the CPA, there was no significant difference between the two groups of graduates. Instead, they found that accounting GPA was a better predictor of performance on the CPA than program format. The authors concluded that while there are many differences between programs of different lengths of study, none of them are inherently inferior to the others.

Studies of students who take the CPA examination have found that a host of factors, including the graduate programs in which candidates matriculated, the programs' accreditations, the selectivity of the admissions processes at candidate's home institutions, and the percentage of faculty members at candidate's home institutions who hold the CPA certificate, and the forms of university affiliation with review courses, influence candidates' pass rates (Nagle et al., 2018; Shin et al., 2020; Cordis & Muzatko, 2021; Espahbodi et al., 2023). For example, Nagle et al. (2018) found that graduate programs, in general, were positively related to CPA examination performance, while programs that were accredited by bodies recognized by the American Institute of Certified Public Accountants (AICPA) were more strongly related to such performance than were programs that were not thus accredited. Moreover, candidates who matriculated in programs whose admissions processes were selective were more likely to pass the CPA examination than were candidates who matriculated in programs whose admissions processes were not selective, while candidates whose programs were affiliated with review courses offered as part of the candidate's for-credit enrollment in the university offering the review courses were more likely to pass the CPA examination than were candidates whose programs were not so affiliated, regardless of whether or not such programs were affiliated with review courses offered on a non-credit basis. In addition, candidates who matriculated in programs in which a greater percentage of faculty members held the CPA certificate were more likely to pass the CPA examination than were candidates who matriculated in programs in which a smaller percentage of faculty members held the CPA certificate. Finally, as noted above, Espahbodi et al. (2023) found that opportunities for professional licensing affected professional examination performance in a manner that differed among demographic groups.

These findings show that using professional pass rates as outcome measures is appropriate. On the one hand, they are externally assessed and therefore provide a useful indicator of graduates' professional development. On the other hand, professional pass rates are not a pure indicator for program quality, because the performance of graduates is influenced by a wide range of factors, including factors that are outside the control of a program. As a result, professional pass rates of global candidates are not comparable, because candidates globally differ in terms of their level of education, employment status, study mode, attempt history, support, etc. Therefore, global ACCA pass rates can only be used as contextual benchmarks in the present study.

Workload, Constructive Alignment, And Curriculum Sustainability

Biggs (1996) outlined that the intended learning outcomes of a course can be aligned with the teaching and assessment strategies by designing the curriculum as an integrated system. This is referred to as constructive alignment (Biggs & Tang, 2011). Embedding professional papers within academic programs can therefore provide learning in one setting that can reinforce learning in the other where the university syllabus and professional body syllabus overlap.

Cognitive load, and how it can impair learning when there are too many interacting elements, has been a well-established area of research within the Learning Design and Technology (LDT) community for over two decades (e.g., Sweller, 1988; Sweller et al., 2019). Where students are studying an embedded professional pathway, there are a number of potential overload points, i.e., points at which a student's ability to learn is impaired by the demands of learning (e.g., subject matter, university assessments, professional examination practice, differing assessment conventions, and switching between academic assessment and professional examination preparation).

A number of curriculum redesign studies have adopted a staged and evidence-based approach to programme change. Bostwick et al. (2023) described a Master of Accountancy curriculum change that responded to stakeholder needs, CPA examination changes, and available institutional resources. Applying this approach to ACCA Accelerate would require ongoing review of electives, assessment timing, student support, and the choices available to students.

Research Gap And Evaluative Proposition

Recent reviews show continuing international interest in accounting curriculum, student outcomes, technology, and professional preparation, but programme-level evidence remains fragmented and context dependent (Churyk et al., 2024). Much of the professional-pathway literature focuses on perceptions, employability awareness, accreditation structures, or professional examination outcomes. Fewer studies combine longitudinal university performance with professional progression, and fewer still examine the point at which students enter an embedded pathway and the later stage at which university and professional assessments intensify.

This study addresses that gap through a case of the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus. Its empirical scope covers the complete original pathway sequence from Semester 5 to Semester 7, based on programme records available up to 27 April 2024 and before ATX was introduced as an alternative elective from 2025. It does not assume that a successful pathway should produce continuous CGPA growth

or uniformly high pass rates. Instead, effectiveness is evaluated as a balance among four propositions: (1) pathway entry should not disrupt undergraduate performance; (2) professional alignment may produce early motivation or learning benefits; (3) intensified embedding may generate workload costs; and (4) professional progression should be interpreted in light of student selection and institutional opportunity. This balanced approach provides the basis for the theoretical framework that follows.

Theoretical Framework

Human Capital Theory

Human capital theory, which views education and training as investments in an individual's human capital (Becker, 1964; Schultz, 1961), therefore offers a coherent basis for evaluating the ACCA Accelerate embedded professional pathway. In addition to ACCA-oriented learning, students can develop academic capital within their undergraduate degree. Professional examination passes offer evidence of externally assessed professional development. In addition, completing all four papers before graduation provides evidence of professional capital accumulated prior to graduation.

Investment in human capital also involves costs, which in the case of a student include constraints on time and learning resources, while the returns on professional education at different stages of a programme of study may be unequal. A temporary reduction in CGPA at a certain stage does not necessarily mean that the stage was not worthwhile if a student maintains a high academic standing throughout the rest of the undergraduate programme and also makes suitable progress in professional examinations. Human capital theory thus supports a joint evaluation of the main indicators of return on investment.

Application To The Present Study

The original pathway, as implemented, is traced through the three stages of investment in human capital: the pre-entry academic human capital or baseline of Semesters 3 and 4; the professional investment of Semester 5 and the beginning of the program; and the intensive stage of Semesters 6 and 7 during which the two undergraduate electives, AAA and SBR, were studied as part of the normal undergraduate program, alongside preparation for the corresponding external ACCA professional examinations. A favourable transition into the pathway, competitive professional pass rates, and completion of all four Strategic Professional papers during undergraduate study would indicate the accumulation of human capital. A CGPA reduction in the short term indicates a possible cost of the attempt to acquire academic and professional human capital simultaneously.

While the human-capital outcomes provide potential evidence of a professional pathway that can be developed within an undergraduate programme, other variables could influence the findings. These include prior academic performance, student selection, institutional support and unequal opportunity to invest in professional human capital (Marginson, 2019). Thus, while the findings can be interpreted as evidence of the development of professional human capital within an undergraduate programme, they need to be interpreted within the context of the study and using cautious language. There is no non-participant comparison group and no student-level data linkage between CGPA and professional examination results.

Methodology

Research Design And Programme Context

This study used a retrospective quantitative program evaluation design. The study used naturally occurring data from the monitoring of the embedded ACCA Accelerate pathway (ACCA, n.d.-a). The design of this study was appropriate to assess the academic journey and professional development of participants using existing program data instead of manipulating participants' participation or randomly assigning them to treatment and control groups.

This case study is based at the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus. The study followed the natural course of the program and traced the students' academic development and professional growth throughout the study period. The embedded professional pathway commenced in Semester 5. In Semesters 6 and 7, AAA and SBR were embedded as undergraduate electives while students prepared for the corresponding external ACCA professional examinations. Accordingly, the study traced the pre-entry baseline in Semesters 3 and 4, pathway entry in Semester 5, and the intensive stage in Semesters 6 and 7. Programme records were available up to 27 April 2024, while the professional examination outcomes related to the March 2024 sitting.

Data Sources And Sample

Two complementary datasets were analysed. The first contained longitudinal CGPA records from five ACCA Accelerate cohorts. Following data cleaning and removal of one duplicate record, the dataset comprised 55 unique students and 228 available CGPA observations. The records were used to trace academic performance from the pre-entry baseline through Semester 7 under the original pathway configuration. The number of observations declined in later semesters because not all cohorts had reached Semesters 6 and 7 at the time of data collection. Of the 55 students, 49 sat the March 2024 ACCA examinations, while six deferred their examinations.

The second dataset contained aggregated March 2024 ACCA examination results for the 49 candidates who sat the examinations across AFM, SBL, SBR, and AAA. The professional examination dataset was organised by paper and did not contain candidate-level identifiers. Programme status information was current as of 27 April 2024. Individual CGPA records could not therefore be linked to pass or fail outcomes. The two datasets were treated as complementary indicators of academic performance and professional progression during the pre-ATX implementation period; none of the reported outcomes reflects the revised elective arrangement introduced from 2025.

Measures

Academic performance was measured using semester-level CGPA. The main transition of interest was the change from Semester 4 to Semester 5 because Semester 5 marked entry into ACCA Accelerate. The full programme scope then extended through Semesters 6 and 7, capturing the original embedded AAA-SBR structure before ATX was introduced from 2025. Additional descriptive trends through Semester 7 were therefore used to assess whether students sustained their academic standing across the complete original pathway sequence.

Professional examination performance was measured using the number and percentage of candidates passing each ACCA paper. The March 2024 global rates were verified against ACCA's published Strategic Professional pass-rate table (ACCA, n.d.-b). The comparison was descriptive because global candidates do not constitute a matched control group and differ in prior education, employment, attempt history, preparation mode, and institutional support.

Data Analysis

The analysis was deliberately focused on tests directly aligned with the research questions. Descriptive statistics summarised CGPA means, standard deviations, medians, ranges, and proportions above selected thresholds. The principal inferential test was the Wilcoxon signed-rank comparison of Semester 4 and Semester 5 because this transition corresponded to pathway entry. The adjusted p-value and rank-biserial effect size from the programme analysis were retained. ACCA pass rates and completion counts were reported descriptively. No causal model was estimated because there were no non-participant comparison group and professional outcomes could not be linked to individual CGPA records.

Results

Academic Performance Across Semesters

Table 1: Descriptive Statistics Of CGPA Across Academic Semesters

Semester	n	Mean	SD	Media n	Minim um	Maxim um	CGPA ≥ 3.00	CGPA ≥ 3.50
Semester 3	55	3.72	0.19	3.73	3.13	4.00	100.0%	94.5%
Semester 4	55	3.71	0.18	3.72	3.17	4.00	100.0%	94.5%
Semester 5	47	3.75	0.15	3.75	3.39	4.00	100.0%	100.0%
Semester 6	32	3.69	0.18	3.70	3.29	4.00	100.0%	93.8%
Semester 7	23	3.58	0.24	3.60	2.95	3.94	95.7%	78.3%

Note: Percentages are based on students with available CGPA data in each semester.

Participants' academic performance is presented in Table 1. The average CGPA of participants across Semesters 3 to 7 was above 3.50. In particular, the mean CGPA in Semester 3, before entry into ACCA Accelerate, was 3.72. This average slightly decreased to 3.71 in Semester 4. It then increased to 3.75 in Semester 5 (i.e. the first semester in which the participants formally entered ACCA Accelerate). Moreover, 47 out of 47 students in Semester 5 achieved a CGPA of at least 3.50. However, after pathway entry, students' CGPA began to decline. The mean CGPA for Semester 6 was 3.69 and for Semester 7 was 3.58. In Semester 7, 95.7% of students had a CGPA of 3.00 or above, while 78.3% had a CGPA of 3.50 or above. This means that students remained in good academic standing, although mean CGPA was lower in Semesters 6 and 7 than at pathway entry.

*Academic Change At Pathway Entry***Table 2: Wilcoxon Signed-Rank Test For The Semester 4 To Semester 5 Transition**

Period	n	S4 mean	S5 mean	Mean Δ	Higher	Same	Lower	W	Adj. p	Effect r
S4-S5	47	3.71	3.75	+0.037	30	3	14	212.50	.004	0.549

Note: A positive change indicates a higher CGPA in Semester 5. The adjusted p-value was obtained from a Holm correction applied to the original set of adjacent-semester comparisons conducted during the programme analysis. Effect r = rank-biserial correlation.

The Wilcoxon signed-rank test showed a statistically significant increase in CGPA from Semester 4 to Semester 5, $W = 212.50$, adjusted $p = .004$. Mean CGPA increased by 0.037 points, with 30 of 47 students improving, three remaining unchanged, and 14 declining. The rank-biserial correlation of 0.549 indicates a moderate-to-large positive effect. The timing is important because the change occurred when students entered ACCA Accelerate and began ACCA-oriented learning. The result is therefore consistent with a favourable early pathway transition. However, because the study does not include a non-participant comparison group, the improvement should be interpreted as a temporal association rather than a definitive causal effect of the programme.

CGPA performance during Semesters 6 and 7

The decline in mean CGPA from Semester 6 to Semester 7 occurred when AAA and SBR were embedded as undergraduate electives. During this time, students were also preparing for the corresponding external ACCA professional examinations. This would have meant that, in addition to their undergraduate studies and the various assessments associated with these, students were also studying for professional examinations. Importantly for interpretation, Sweller (1988) noted that cognitive resources may be affected by a range of competing demands. Thus, students who are enrolled in AAA and SBR as electives may find that they are affected by the requirement to complete these papers as part of their undergraduate degree, whilst at the same time preparing for external examinations for professional-level qualifications (i.e. ACCA). In this respect, the decline coincided with the embedded papers and may indicate a programme pressure point, rather than proving that the embedded papers themselves caused students' performance to decline. Despite these concurrent demands, the students displayed resilience and maintained good academic standing. By the end of Semester 7, students achieved a mean CGPA of 3.58 and 95.7% of students had achieved a CGPA of 3.00 or better and 78.3% of students had achieved a CGPA of 3.50 or better. Following the implementation experience, ATX was introduced from 2025 as an alternative professional elective, preserving the intention of the embedded pathway while increasing student choice.

ACCA Professional Examination Outcomes

Table 3: ACCA Professional Examination Performance Compared With Global Benchmarks

Paper	Passed	Candidates	Programme Rate	Global Rate	Difference	Interpretation
AFM	12	25	48.0%	46.0%	+2.0 pp	Comparable with global rate
SBL	10	16	62.5%	52.0%	+10.5 pp	Above global rate
SBR	4	4	100.0%	49.0%	+51.0 pp	Strong result; small sample
AAA	0	4	0.0%	38.0%	-38.0 pp	Below global rate
Overall	26	49	53.1%	47.6%	+5.5 pp	Positive descriptive advantage

Note: pp = percentage points. The overall global benchmark is weighted by the number of candidates sitting for each paper. Comparisons are descriptive because candidate-level data were unavailable and paper-level sample sizes were small.

Overall, 26 of 49 candidates passed their respective professional papers, representing a programme pass rate of 53.1%. This exceeded the weighted global benchmark of 47.6% by 5.5 percentage points. Three of the four papers recorded outcomes comparable with or above the global rates. AFM achieved 48.0% compared with 46.0% globally, SBL achieved 62.5% compared with 52.0%, and all four SBR candidates passed compared with a global rate of 49.0%.

The SBR result is encouraging but should be interpreted cautiously because only four candidates sat the paper. AAA also involved four candidates and recorded no passes, identifying a specific area for programme support. The overall pattern is therefore more informative than any single small-sample percentage: participants performed favourably in most papers despite preparing for professional examinations alongside their undergraduate studies.

Completion Of Professional Papers

Table 4: Documented Completion Of All Four ACCA Professional Papers During Undergraduate Study

Cohort	Number completing	Additional information
Cohort 1	3	Students had graduated
Cohort 2	4	Students had graduated; one achieved straight passes
Cohort 3	1	Completion recorded
Cohort 4	4	Three completed by December 2023 and one by March 2024
Total	12	—

Note: The available report did not provide a consistently verified denominator of eligible students for each cohort; therefore, completion percentages were not calculated.

The programme records documented 12 students from Cohorts 1 to 4 who completed all four professional papers during undergraduate study, including one student reported to have achieved straight passes. This is an important progression outcome because it reflects actual completion rather than registration or intention. In human capital terms, these students accumulated both academic and professional credentials before graduation, shortening their subsequent route towards full professional qualification.

Discussion

Academic Performance Across The Original Pathway

Table 1 illustrates the mean CGPA for Faculty of Accountancy students at the UiTM Puncak Alam Campus before and after they entered the ACCA Accelerate pathway in Semester 5. Mean CGPA increased from 3.71 in Semester 4 to 3.75 in Semester 5, before decreasing to 3.69 in Semester 6 and 3.58 in Semester 7. This pattern indicates that entry into the ACCA Accelerate pathway did not coincide with an immediate academic penalty and is consistent with the initial accumulation of academic and professional capital among these students.

The findings above indicate that there was a favourable temporal association between the students' entry into the ACCA Accelerate pathway in Semester 5 and the increase in mean CGPA from Semester 4 to Semester 5. However, it is crucial to note that this improvement cannot be attributed causally to the ACCA Accelerate program. Students who opted for the pathway may already have been academically prepared and professionally motivated. Moreover, there were other factors that could have contributed to the findings above, such as the students' maturation, the composition of their cohorts, and the specific assessment patterns in individual semesters.

As Table 1 shows, the mean CGPA for ACCA students decreased in Semester 6 (to 3.69) and by a greater margin in Semester 7 (to 3.58) when they were studying AAA and SBR as electives. Importantly, however, the majority of students continued to perform strongly in terms of academic achievement, with 95.7% of Semester 7 students recording a CGPA of 3.00 or greater and 78.3% a CGPA of 3.50 or greater. As such, the findings are consistent with possible short-term academic performance trade-offs while students were preparing for external professional examinations alongside their undergraduate accounting studies, but there was no evidence of academic collapse.

Professional Examination And Progression Outcomes

Forty-nine candidates sat four ACCA Strategic Professional papers. The program pass rate across all candidates was 53.1% against a weighted global benchmark of 47.6%. Separate pass rates for the four papers were: Advanced Financial Management (AFM), 48.0%; Strategic Business Leader (SBL), 62.5%; Strategic Business Reporting (SBR), 100.0%; and Advanced Audit and Assurance (AAA), 0.0%.

The results for the SBR and AAA papers need to be viewed with some caution because the numbers of candidates sitting for these papers were very low (four in each case). SBR recorded a pass rate above the global benchmark, whereas AAA recorded a pass rate below the global benchmark. It is therefore not possible to draw firm conclusions from either small-sample percentage, although the AAA outcome identifies an area for additional programme support.

For the 12 documented students who completed all four professional papers during their undergraduate studies, human capital was accumulated in the form of professional credentials that these students can utilize in order to complete their remaining qualification in a shorter period of time. However, due to the lack of a consistently verified denominator of eligible students, a completion rate cannot be provided.

Overall Interpretation And Curriculum Implications

Overall, the findings from UiTM Puncak Alam revealed promising but uneven returns from the academic and professional outcomes of the original Semester 5-to-Semester 7 pathway of study. The mean CGPA of the students increased from 3.71 in Semester 4 to 3.75 in Semester 5 and then decreased to 3.69 in Semester 6 and 3.58 in Semester 7. In the external ACCA professional papers, three of the four papers recorded pass rates comparable with or above the global benchmarks. In addition, 12 students completed all four of the professional papers during their undergraduate studies.

The alternative elective of ATX was introduced from 2025 as part of the curriculum at the Faculty of Accountancy. Hence, findings from this study provide a baseline for evaluation of the curriculum change. It is imperative to monitor students' academic progress by means of their CGPA, choice of papers, attempts at professional examinations, type of support required, level of academic workload and completion status.

In sum, this single case study contributed to the existing body of knowledge on accounting education by offering evidence of how an embedded professional pathway could be evaluated through a balanced view of the students' academic capital as well as their professional capital. The theoretical lens of human capital explained both the early professional progression as well as the potential short-term costs of acquiring two types of educational capital. The study had several practical implications for the various stakeholders involved in the education of future accounting professionals.

Practical Implications

Accounting faculties should retain professional pathways as part of the overall curriculum and use a stage-based evaluation dashboard rather than a single indicator to assess programme performance. Data monitored at the student level could include students' CGPA prior to entry into the programme, change in CGPA at entry, and later-semester performance, as well as the number of professional papers attempted and passed, withdrawals, and repeat attempts. Other indicators could include support utilisation, students' self-reported wellbeing, the time taken to complete professional examinations, and overall completion status.

These additional indicators can provide valuable insight in terms of student readiness to sit professional exams and can assist in identifying key areas of support for students who are struggling. Diagnostic readiness assessment, structured question practice, feedback on exam technique, peer mentoring and support for referral to wellbeing and workload support are all examples of support that could be provided on a paper-by-paper basis. Research into the impact of institutional resources and review support has highlighted the impact that these can have on students sitting professional exams (Cordis & Muzatko, 2021; Shin et al., 2020).

Finally, for the curriculum committees, professional alignment of degree programs should be governed rather than maximized. That is, while some degree of professional alignment is needed through accreditation and exemptions, the main body of degree work should still deliver a range of intellectual, ethical, digital, communication and research-informed outcomes. A periodic review, involving academics, students, alumni, employers and the professional body, should then determine what still needs to be delivered as distinctly university-level learning. Such a review would address concerns regarding the impact of accreditation on the curriculum and professional alignment (Bayerlein & Timpson, 2017; Ellington & Williams, 2017).

ATX was introduced from 2025 as an alternative to the existing embedded elective arrangement. A prospective evaluation of the new option, in terms of the students' baseline CGPA, the reasons that they selected particular papers, the preparations that they made for the papers, whether it was their first or subsequent attempt at the paper and their resultant examination outcomes, would ensure that any observed improvements are genuine and not as a result of self-selection.

Limitations and Future Research

The findings must be interpreted within several limitations. First, the study did not include a matched group of non-ACCAS Accelerate students. Changes in CGPA therefore cannot be attributed solely to programme participation. A future design should match participants and non-participants on prior CGPA, cohort, demographic characteristics, and career intention, or use interrupted time-series and difference-in-differences methods where assumptions can be satisfied.

Second, the professional examination data were aggregated by paper and could not be linked to individual CGPA records. Student-level data would permit analysis of whether prior achievement predicts examination success, whether professional preparation affects university results, and whether the same students account for both academic and professional outcomes. Attempt status, marks, examination dates, withdrawals, and completion time should also be recorded.

Third, sample sizes for SBR and AAA were small, and later-semester CGPA data were available only for cohorts that had progressed to these stages of the program. Consequently, the paper-specific percentages for SBR and AAA are unstable, while the later-semester CGPA findings represent selected subsets of all participants. Therefore, replication using additional cohorts of candidates from additional institutions is needed.

Fourth, workload, motivation, professional identity, cognitive load, study hours, financial cost, teaching quality, review support, English proficiency, employment and student wellbeing were not measured for this study. Therefore, the proposed mechanisms were inferred from programme timing and the existing literature and require mixed-methods research using workload diaries, validated scales, in-depth interviews, and focus groups for further testing.

Fifth, the global ACCA pass rates serve as contextual benchmarks rather than a control group of students. These pass rates are influenced by a number of factors including candidate composition, attempt history, employment status, jurisdiction and review support. While program outcomes are generally competitive with these global pass rates, the design of this study does not enable the determination of relative program effectiveness. Instead,

benchmarking using similar universities or even students with equivalent entry achievement and attempt status would be more meaningful.

Furthermore, the present study only captured a set of measures of academic achievement and professional progress, which did not extend to human capital such as employability, and other measures of value such as workplace competence, salary, professional identity, and issues of equity and access. Future research, therefore, should examine graduate employment and other related outcomes, using the perspectives of both employers and graduates, as well as examine issues of degree outcomes and of sustainability, and of how an increased degree of curriculum flexibility such as provided by the alternate elective ATX, could enhance sustainability while not compromising on other important degree outcomes, and avoiding issues of selection.

Conclusion

The ACCA Accelerate pathway provided within the Faculty of Accountancy at UiTM Puncak Alam Campus was evaluated using programme data collected prior to the introduction of Advanced Taxation (ATX) as an alternative elective from 2025. The embedded ACCA pathway within the existing curriculum design allowed students to embark on the professional programme from Semester 5 onwards. Students recorded a significant rise in CGPA from Semester 4 to Semester 5, followed by a decline in the intensive Semesters 6 and 7 when students took two embedded professional electives, AAA and SBR, alongside other degree requirements and professional examination preparation.

However, most students were able to retain good academic standing. Professional outcomes were generally favourable but uneven. Three of the four ACCA papers recorded pass rates comparable with or above the global benchmarks, and 12 students completed all four ACCA papers during their undergraduate studies.

However, from a Human Capital Theory perspective, such investment may also involve short-term costs as university requirements intensify alongside professional requirements during the intensive stages in Semesters 6 and 7. Thus, the Faculty's professional pathway may produce promising but uneven academic outcomes.

Overall, the findings from this study support the continued use of embedded professional pathways, provided that both academic sustainability and professional progression are monitored. The use of ATX as an alternative elective from 2025 onwards needs to be evaluated using post-2025 data. Future research using a design similar to this study would benefit from the use of matched comparison students, candidate-level examination results, and direct measures of workload and student experience.

Acknowledgements:	The authors gratefully acknowledge the financial support provided by the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus.
Funding Statement:	This research received financial support from the Faculty of Accountancy, Universiti Teknologi MARA (UiTM), Puncak Alam Campus.
Conflict of Interest Statement:	The authors declare that there is no conflict of interest regarding the publication of this paper.
Ethics Statement:	This study used secondary administrative student data collected for programme monitoring. No direct interaction with students occurred, and no personally identifiable information is reported. The data were analysed and presented in aggregated form to protect confidentiality.
Data Availability Statement:	The administrative data contain student records and are not publicly available. Aggregated data may be made available subject to institutional approval.
Author Contribution Statement:	Salsiah Mohd Ali was responsible for the conceptualisation, methodology, data curation, formal analysis, investigation, literature review, preparation of the original draft, review and editing, project administration, and overall supervision of the study. Mariati Norhashim contributed to the interpretation of the findings, development and critical review of the discussion, and review and editing of the manuscript. Mohd Munif bin Yahaya contributed practitioner perspectives, verified the practical relevance of the study, and provided insights on banking-sector and labour-market expectations. All authors read and approved the final manuscript.

References

- Association of Chartered Certified Accountants. (n.d.-a). ACCA Accelerate. Retrieved July 30, 2026, from <https://www.accaglobal.com/my/en/study-with-acca/campaigns/accelerate.html>
- Association of Chartered Certified Accountants. (n.d.-b). Pass rates for ACCA qualifications. Retrieved July 30, 2026, from <https://www.accaglobal.com/africa/en/student/exam-support-resources/pass-rates-for-acca-qualifications.html>
- Bayerlein, L., & Timpson, M. (2017). Do accredited undergraduate accounting programmes in Australia meet the needs and expectations of the accounting profession? *Education + Training*, 59(3), 305-322. <https://doi.org/10.1108/ET-04-2016-0074>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32, 347-364. <https://doi.org/10.1007/BF00138871>
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). Open University Press.
- Bostwick, E. D., Grant, D. M., Lambert, S. L., Lucas, P., & Prescott, G. L. (2023). Updating the MAcc curriculum in response to stakeholder needs and CPA exam changes: Resources and results from one school's journey. *Journal of Accounting Education*, 64, 100857. <https://doi.org/10.1016/j.jaccedu.2023.100857>
- Bui, B., & Porter, B. (2010). The expectation-performance gap in accounting education: An exploratory study. *Accounting Education*, 19(1-2), 23-50. <https://doi.org/10.1080/09639280902875556>
- Churyk, N. T., Eaton, T. V., & Matuszewski, L. J. (2024). Accounting education literature review (2023). *Journal of Accounting Education*, 67, 100901. <https://doi.org/10.1016/j.jaccedu.2024.100901>
- Cordis, A. S., & Muzatko, S. (2021). Higher education spending and CPA exam performance. *Journal of Accounting Education*, 55, 100727. <https://doi.org/10.1016/j.jaccedu.2021.100727>
- Duff, A., Hancock, P., & Marriott, N. (2020). The role and impact of professional accountancy associations on accounting education research: An international study. *The British Accounting Review*, 52(5), 100829. <https://doi.org/10.1016/j.bar.2019.03.004>
- Eames, M., Luttman, S., & Parker, S. (2018). Accelerated vs. traditional accounting education and CPA exam performance. *Journal of Accounting Education*, 44, 1-13. <https://doi.org/10.1016/j.jaccedu.2018.04.004>
- Ellington, P., & Williams, A. (2017). Accounting academics' perceptions of the effect of accreditation on UK accounting degrees. *Accounting Education*, 26(5-6), 501-521. <https://doi.org/10.1080/09639284.2017.1361845>
- Elo, T., Kimpimäki, J.-P., Puumalainen, K., Sjögrén, H., & Pätäri, S. (2025). Mapping the skill landscape: Insights from accounting job advertisements. *Accounting Education*. Advance online publication. <https://doi.org/10.1080/09639284.2025.2488979>
- Espahbodi, A., Espahbodi, L., Espahbodi, R., Walker, R., & White, G. T. (2023). Determinants of CPA exam performance. *Journal of Accounting Education*, 64, 100859. <https://doi.org/10.1016/j.jaccedu.2023.100859>
- Gunarathne, N., Senaratne, S., & Senanayake, S. (2019). Outcome-based education in accounting: The case of an accountancy degree program in Sri Lanka. *Journal of Economic and Administrative Sciences*, 36(1), 16-37. <https://doi.org/10.1108/JEAS-08-2018-0093>

- International Federation of Accountants. (2019). Handbook of international education standards. <https://www.ifac.org/education/publications/2019-handbook-international-education-standards>
- Jackling, B., & De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education*, 18(4-5), 369-385. <https://doi.org/10.1080/09639280902719341>
- Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287-301. <https://doi.org/10.1080/03075079.2017.1359823>
- Mistry, U. (2021). Enhancing students' employability skills awareness through the accounting professional body on an undergraduate accounting degree. *Accounting Education*, 30(6), 578-600. <https://doi.org/10.1080/09639284.2021.1950016>
- Nagle, B. M., Menk, K. B., & Rau, S. E. (2018). Which accounting program characteristics contribute to CPA exam success? A study of institutional factors and graduate education. *Journal of Accounting Education*, 45, 20-31. <https://doi.org/10.1016/j.jaccedu.2018.09.003>
- Nie, Y., & Mastor, N. H. (2024). Accounting employability: A systematic review of skills, challenges, and initiatives. *Cogent Business & Management*, 11(1), 2433161. <https://doi.org/10.1080/23311975.2024.2433161>
- Pan, G., & Seow, P.-S. (2016). Preparing accounting graduates for digital revolution: A critical review of information technology competencies and skills development. *Journal of Education for Business*, 91(3), 166-175. <https://doi.org/10.1080/08832323.2016.1145622>
- Samsuddin, M. E., Khairani, N. S., Wahid, E. A., & Abd Sata, F. H. (2015). Awareness, motivations and readiness for professional accounting education: A case of accounting students in UiTM Johor. *Procedia Economics and Finance*, 31, 124-133. [https://doi.org/10.1016/S2212-5671\(15\)01139-9](https://doi.org/10.1016/S2212-5671(15)01139-9)
- Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1-17.
- Shin, H., Lacina, M., Lee, B. B., & Pan, S. (2020). Schools' CPA review course affiliations and success on the uniform CPA examination. *Journal of Accounting Education*, 50, 100642. <https://doi.org/10.1016/j.jaccedu.2019.100642>
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285. https://doi.org/10.1207/s15516709cog1202_4
- Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*, 31, 261-292. <https://doi.org/10.1007/s10648-019-09465-5>
- Tsiligiris, V., & Bowyer, D. (2021). Exploring the impact of 4IR on skills and personal qualities for future accountants: A proposed conceptual framework for university accounting education. *Accounting Education*, 30(6), 621-649. <https://doi.org/10.1080/09639284.2021.1938616>