

The Degree of Alignment Between Finance and Accounting Courses in Algerian Universities and the Job Market Requirements

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Summary: This study seeks to elucidate the significance of aligning finance and accounting curricula in Algerian universities with labour market demands to ascertain discrepancies between the curricula and market requirements. A field investigation was executed by randomly distributing a questionnaire to 83 participants. Their comments led us to conclude that the curricula in Algerian institutions do not correspond with the demands of the job market, indicating a disparity between academic instruction and employment requirements. Furthermore, the sample members said that training in financial and accounting software packages, including Elbassit, Compta PC, and PC Paie, was not a fundamental component of the curricula in Algerian colleges. Moreover, Algerian Universities fail to offer field training for students that sufficiently equips them for the labour market, highlighting a substantial disparity between practical training and market demands.

Keywords: Accounting, Finance; Teaching Methods; Algerian University; Job Market.

Jel Classification Codes : M41; G10; I23 ; A22 ; J23.

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I- Introduction :

Due to the rapid technological advancements across various sectors, educational leaders at all levels must develop curricula that align with the demands of the labour market, both locally and globally. This necessitates an analysis of the current labour market landscape, ongoing evaluation of educational efficacy, and identification of educational priorities to ensure the production of graduates who can adapt to swift labour market changes that jeopardise numerous jobs. Formulating educational curricula is essential for achieving sustainable economic development rates, as the interconnectedness of global labour markets underscores that the human element is fundamental to the advancement of every nation. Numerous nations and enterprises have concentrated on developing curricula aligned with the demands of the general labour market, explicitly incorporating distinct specialisations and degrees. The validation of this interest is evidenced by a series of reports released by international or regional organisations, presented as follows:

- A 2019 article from Sada magazine, Issue 10, titled "The Fourth Industrial Revolution: An Ally or Foe of Jobs?" A new professional development course has been established at the American University of Sharjah to align university curricula and specialism content with labour market demands in response to initiatives from several nations, notably the United Arab Emirates. The course addresses big data, machine learning, cyber-physical systems, the Internet of Things, and cloud computing, facilitating the application of artificial intelligence in innovative city projects. The university established a Smart Cities Research Institute dedicated to smart cities to optimise the application of artificial intelligence and associated technologies. A course has been created within the same framework, related to finance and economics, to elucidate cryptocurrencies, thereby aiding professionals in banking, insurance, finance, and investment sectors. The report emphasised that the training and education provided during the academic journey are insufficient, as the teaching and learning process is perpetually evolving and requires continual professional development) Magazine (Issue 10, 2019).
- The 2022 Gulf Cooperation Council paper titled "Aligning Higher Education Curricula with the Fields of the Fourth Industrial Revolution and Labour Market Requirements" highlighted that the employment of graduating students poses a substantial challenge for institutions. Artificial intelligence and automation-driven technologies will fundamentally transform the concepts of labour, employment, and job requirements. In light of current developments, future universities will not adapt to the transformations of the Fourth Industrial Revolution but will instead facilitate and actualise them. The study underscores the necessity of substantially revising university and educational institution curricula—especially in science and technology—to enable students to enhance their competencies and understanding of artificial intelligence, robotics, and nanotechnology. In the era of artificial intelligence, all intelligent and creative competencies—encompassing emotional intelligence and cognitive flexibility—are the most sought-after abilities in the labour market. Universities requiring transformative changes in educational objectives and methodologies should assess these competencies.)Council(2022 ‘.
- The United Nations ESCWA report asserts that "the Arab region is missing out on the Fourth Industrial Revolution." Arab capabilities remain entrenched in antiquity, as This analysis utilises the newly established ESCWA Skills Monitor, analysing nearly 1.2 million online job vacancies from June 2020 to September 2021. Utilising Skills Monitor statistics, we examine whether the skills and job types required in the Arab area align with the demands of the Fourth Industrial Revolution and the contemporary economic development landscape. We examine the types of skills and occupations required in the Arab region, their interrelations, and the opportunities for reskilling and upskilling, including emerging capabilities. This paper illustrates the ease with which people can acquire skills and transition between jobs, utilising the ESCWA Skills Forest. This analysis seeks to determine if the Arab region's labour market requires future skills, is inclusive of gender and youth, and whether the demanded occupations align with the 2030 Agenda for Sustainable Development by connecting available jobs to their corresponding SDGs (ESCWA, June 2022)
- The Vision 2030 report published by the Kingdom of Saudi Arabia asserted that the Kingdom's commitment to enhancing its technical and vocational training system had resulted in its ranking as the world's leading nation in the proportion of students enrolled in non-university

post-secondary education in vocational and technical programs, as per the Global Knowledge Index 2022, which was published by the Mohammed bin Rashid Al Maktoum Knowledge Foundation in partnership with the United Nations Development Program. The index consists of seven composite sub-indices and is focused on the performance of six critical knowledge sectors: pre-university education, technical education and vocational training, higher education, information and communications technology, research, development and innovation, and the economy. The technical and vocational training sector also achieved this status due to the Kingdom's wise leadership, dedication, and unlimited government support. Its commitment to the qualification and development of citizens and enhancing their abilities to be active contributors to the nation's development was also beneficial. The Foundation's annual expansion of colleges and institutes has enabled it to attract over 28% of high school graduates through a variety of initiatives, such as the expansion of undergraduate programs, the expansion of employment-based training programs, and the provision of specialised programs and majors that meet the current and future needs of the Kingdom's labour market. In addition, numerous initiatives have been initiated to enhance the utilisation of both male and female graduates, enhance the training of women, establish programs that are accessible to them, and fortify partnerships with the business sector to construct and operate training facilities that meet the demands of the labour market. (Chamber, June 2024).

- In addition to the above-mentioned points, a parliamentary study issued by the Federal National Council disclosed that the outcomes of higher education institutions do not align with the skills and specialisations required to meet the demands of the labour market. The report identifies the following sectors: energy, digital transactions, healthcare, pharmaceuticals, medical equipment, technology, advanced sciences, communications, artificial intelligence, industry, transportation, financial services, construction, and building. From 2017 to 2022, the research observed increased enrolment in theoretical disciplines and a decline in applied fields. The report attributed this to the necessity of engaging the outputs of the Higher Education Council and the private sector, the inadequacy of academic advising and consulting services in certain institutions, and the incapacity of some institutions to offer scientific and applied specialisations due to elevated costs and specialised equipment. The report emphasises that integrating graduates into various businesses might enhance workforce efficiency. (Shahab, April 2, 2025).

Numerous international and national conferences were convened to emphasise the commitment to ensuring the quality of higher education outcomes; the most notable occurred on October 28, 2024, in Beirut, Lebanon, organised by the Arab Democratic Centre, focussing on the International Scientific Conference on Higher Education and Labour Market Requirements: Strategic Visions. The conference emphasised the necessity of understanding the skills and knowledge required by the labour market, examining the challenges encountered by graduates, revising curricula, incorporating new competencies such as critical thinking and creativity, establishing strategic partnerships between universities and businesses, involving industries in program development, financing research on industrial problems, promoting innovation and entrepreneurship, implementing continuous training programs for faculty, and adopting global best practices in higher education (Center, October 28, 2024).

The rapid evolution of technology and its alignment with local and global labour market demands significantly impacts the finance and accounting sectors, just as it does in other fields. The effectiveness of finance and accounting education programs is crucial for preparing students for labour market demands, prompting enquiries from educators, corporations, and government officials. Therefore, ensuring that finance and accounting teaching curricula align with job market requirements is essential for producing knowledgeable graduates. Moreover, they should also be equipped with the practical skills necessary to excel in a dynamic professional environment. Algerian universities' accounting and finance teaching curricula have gone through multiple phases, influenced by the political and economic transformations witnessed by Algeria and the world. Despite ongoing efforts to develop the curricula, integrating theoretical knowledge with practical applications and modern technology remains the main challenge.

I.1. The problem of the study :

Through the above, the issue of this research paper crystallizes in the following fundamental question:

How suitable are the teaching curricula in finance and accounting at Algerian universities for the job market's needs in the same field?

This central issue of the study leads us to search for answers to the sub-questions that arise from it, which are as follows:

- Is the content of the courses studied at Algerian universities in line with the job market requirements?¹.
- Did graduates of Algerian universities benefit from training in software programs that meet the requirements of the job market?
- Did graduates of Algerian universities benefit from field training that qualifies them to enter the job market?
- Are there statistically significant differences regarding the alignment of the finance and accounting curricula content with labor market requirements attributed to personal variables (gender, school system, specialization)?

2. Study hypotheses: As a preliminary answer to the study's problem, the curricula in finance and computing align with the labor market requirements in the same field, given the stages that higher education in Algeria has gone through in its various specializations. Additionally, a set of sub-hypotheses can be included as an initial response to the previous sub-questions, which are as follows:

- The content of the studied courses in Algerian universities aligns with the job market requirements.
- Algerian university graduates benefited from training in software programs that meet the job market requirements.
- Algerian university graduates benefited from field training that qualifies them to enter the job market.
- There are statistically significant differences regarding the alignment of the content of the finance and accounting curricula with labor market requirements attributed to personal variables (gender, educational system, specialization).

I.3. The importance of the study: The study's importance lies in the necessity of developing the curricula for teaching finance and accounting in Algerian universities to keep pace with the labor market's changing needs, especially with the ongoing digital and economic transformations. The curricula should be more flexible and in line with global developments in the fields of accounting and finance.

I.4. The objective of the study: This study aims to do the following:

- Understanding the extent of alignment between finance and accounting curricula and labor market requirements;
- In addition to highlighting areas where finance and accounting education can be enhanced to prepare students in the same field better,
- Attempting to identify the shortcomings of the curricula in order to bridge the skills gap and ensure graduates are prepared to face the challenges of the modern workplace.

I.5. The employed methodology: To tackle the study's problem, a field approach was used to investigate the link between the examined variables. Data was obtained through the distribution of a questionnaire to a random sample, retrieving 83 valid questionnaires for the study. Subsequently, a series of suitable statistical tests were employed to analyse the retrieved data and provide results concerning the correlations among the variables using SPSS v27.

I.6. Prior Research on the Subject : Extensive research has been undertaken to align university curricula for the accounting and finance specialisation with the job requirements in the respective profession. Consequently, we will present a compilation of studies pertinent to the research paper's topic. After the inquiry, we will either corroborate or refute the conclusions drawn from these studies based on our findings.

1. Faisal Najmuddin Abdullah and Nassim Yousef Hanna (2018), The extent of the suitability of the curriculum of the Department of Finance and Banking with the requirements of financial institutions - an accounting perspective, a comparative and field study in the Kurdistan Region - Iraq, where the researchers talked about the basic skills that the student is armed with during his

- university studies, and they considered it the basis from which the student sets out to the labor market, and from this standpoint this study came in order to measure the extent of the suitability of the curricula of the Department of Banking Finance with the requirements of the labor market in financial institutions. The study compared the extent of convergence and overlap between the curricula of the Department of Finance and Banking and the Departments of Business Administration, Economics and Accounting at the College of Administration and Economics at Salahuddin University - Erbil. It was found that there is a great convergence between the curricula in the Department of Finance and Banking and the Department of Accounting. The researchers also studied the accounting skills that graduates of the Accounting Department possess compared to what graduates of the Department of Finance and Banking possess, and the results came to confirm what the researchers reached regarding the study of the curricula. Here, it is necessary to conduct a comprehensive review of the curricula in this department, because a question arises about the extent of the benefit that the student achieves during his four years of study, in order to be prepared, in an acceptable manner at least, to bear the responsibilities placed on his shoulders as a graduate of the Department of Financial and Banking Sciences, in light of the current curricula applied (Hanna, The appropriateness of the financial and banking department curriculum with the requirements of financial institutions - accounting approach Comparative and field study in the Kurdistan Region – Iraq, 2018).
2. Ahood Almaleh, Muhammad Ahtisham Aslam, Kawther Saeedi and Naif Radi Aljohani (2019), *Align My Curriculum: A Structure to Close the Gap Between Required Market Skills and Acquired University Curriculum as technology develops*, academics and curriculum designers are constantly pressured to give students skills that fit the market's demands. A methodical and constant market review is necessary to remain current with the necessary skills and then update the curriculum to equip the students with relevant market skills. This paper provides a system called Align My Curriculum (AMC). The AMC framework seeks to enable congruence between acquired university curriculum results and necessary market competencies. It can help to organise, compare, and graphically depict the information of a university curriculum and employment openings on the market. By enhancing the courses and thereby closing the skills gap, the given framework helps academics and curriculum developers. Academics and businesses can learn about the most needed and obtained abilities. Furthermore, it is helpful for analysts, students, and job candidates. This paper presents the design, implementation, and experimental findings with visual analysis to support decision- and policy-makers (Ahoo Almaleh, Sustainability2019).
 3. MESHARI ALHUSSAIN(2019), The study sought to ascertain whether, for graduates from accounting and financial specialisations, educational outputs in Saudi public institutions fit them. It looked at the motivation of teaching personnel, the study plan that fits the labour market, professional test knowledge, and specialist identification. Data were gathered in the study using an inductive technique and a questionnaire. There were 125 graduates from Saudi public colleges in the sample; eighty per cent were under thirty years old. The study came to the following conclusions: study plans were excellent, teaching personnel were informed and erudite, specialisation identification was a personal desire, and the quality of the produced outputs was high. Hefty financial costs proved to be the main challenge for graduates taking professional assessments. While the quality of educational outputs was not shown to be correlated with the identification of specialisation, teaching staff efficiency, study plan, and professional exams did (ALHUSSAIN, 2019).
 4. Ahamed Lebbe Sarifudeen (2020), *The Expected Performance Gap in Accounting Education: An Analysis of Generic Skill Development in Degues of Accounting Available at Sri Lankan institutions*, Globalisation in the corporate sector calls for accounting education to change its courses from supply-driven to demand-driven depending on the needs of the industry a highly qualified workforce. Although there is intense competition among recent accounting graduates today, their employability potential does not meet employers' expectations, which causes a mismatch between supply and demand. Consequently, this study intends to investigate, from the viewpoints of industry employers and final-year accounting students, the general competencies needed to equip graduates for success in the workplace. Six skills in general define this study: technical skills (accounting, finance and taxation), managerial skills, information technology skills, intellectual abilities, and personal and interpersonal skills. Using questionnaires, this quantitative study gathered information from sixty accounting firms and

160 final-year accounting undergraduate students from nine public universities. The mean rank and one-sample t-test determined the most crucial talents and areas of discrepancy between employers' and undergraduates' opinions of soft skills' value for their careers. Undergraduates identified intellectual talents as their most critical ability, followed by soft and technical skills, according to the survey. Following intellectual and soft abilities, employers thought soft skills to be the most crucial ability for recent graduates. The findings also reveal some notable differences in their opinions on the relevance of soft skills for Sri Lankan accounting graduates. Consequently, the study advises that the accounting curriculum should constantly be improved and that soft skills should be given more importance so that colleges may turn out graduates of high calibre. The results of this study should assist Sri Lankan companies, academics, and accounting graduates, as well as guide policy decisions about the value of soft skills for the employability potential of these professionals (Sarifudeen, 2020).

5. Kiheli aicha salema, guemmou assia, zargoune omar farouk(2022), Evaluation the Reality of Accounting Education in Algeria – a Comparative Study between Academic Education Curricula according to the IES02 and the Requirements for Practice Accounting Professions in Algeria - , This study aims to take stock of the reality of accounting education adopted in higher education in Algeria, taking into account the international references represented by the international standards education. To do this, we opted for the descriptive and comparative methodology to evaluate the programs intended for Algerian students according to the benchmark of the IES2. The assessment covered modules relating to accounting knowledge, the environment, information techniques, as well as the content of academic programs and the practice of the profession at the local level. The result of the study concluded to the weakness and the incompatibility of the modules with the IES2. Also, the programs do not cover the requirements of the accounting profession in Algeria (Kiheli aicha salema, 2022).
6. Hasna Mechri (2022), The convenience of the accounting education outputs to the requirements of the labor market-A field study on the Department of finance and Accounting Farhat Abbas University (Setif1), The study aimed to find out the convenience of the outputs accounting education to the requirements of the labor market from the point of view of the faculty members and the recent graduates of the Accounting and Finance Department, the labor market, In order to achieve the objectives of the study, a questionnaire was designed to test its hypothesis. The results have shown that there is a relationship between the outputs of accounting education and the requirements of the labor market from the perspectives of faculty and recent graduates of the Department of accounting and finance, and the labor market, this integration must therefore be taken into account in any attempt to develop the accounting education (Mechri, 2022).
7. Augusta da Conceição Santos Ferreira (2023), Rethinking the Curricula in Accounting Teaching: Skills Demanded in the Market Society is facing important transformations and challenges arising, in particular, from rapid technological evolution and the growing need for global development to be based on sustainable objectives. The accounting profession is not indifferent to these transformations and challenges; therefore, it is necessary to reflect on the skills appropriate for performing the profession in this changing society and, consequently, on the skills that the student must acquire and develop within the scope of the accounting degree. In this sense, this work aims to identify the skills that the accounting degree must enhance in students to respond to the current and future demands of the profession. For this, an exploratory study was conducted, which concluded that the accounting profession is changing, with an increasing importance of management support and decision-making functions (business partner). In addition, the results also point to the need to enhance skills in the field of information and communication technology, as well as in professional and personal skills (Augusta da Conceição Santos Ferreira, 2023).
8. Tran Hong Giang (2024), Revising Pedagogies and Financial Accounting Curricula to Satisfy Demands of International Integration The discipline of financial accounting presents fresh prospects and problems in the framework of growing globalisation and international integration. The necessity of updating courses and pedagogies in financial accounting education to satisfy changing needs is investigated in this work. We propose a thorough framework for curriculum modernisation by evaluating present educational methods and spotting the essential competencies needed for worldwide standards. This covers cutting-edge teaching strategies stressing real-world applications, improving cross-cultural competencies, and including

advanced accounting ideas. Our study emphasises the need to match financial accounting education with the demands of worldwide business to better equip students for the competitive worldwide labour market. Teachers and legislators trying to improve the quality and relevance of financial accounting education in an era of global integration will find great value in the results and suggestions offered in this paper (Giang, 2024).

- Sherzad Ramadan (2024), Matching accounting courses to market needs: Iraq's story illustrates how to increase the value and applicability of accounting education; this study looks at how Iraqi university accounting courses fit industry needs. The study gathered data using a questionnaire sent to Iraqi accounting professionals, graduates, companies, and teachers. The study looks at the most recent accounting courses, demographic data, opinions on the value of accounting courses, and evaluations of critical skills for the business. The poll exposed a broad spectrum of demographics, including notable replies from companies (51%) and academics (58%). The findings reveal regions of convergence and divergence in the perceived value of particular accounting courses, suggesting possible gaps between theoretical concepts and pragmatic uses. Non-accounting courses and critical skills have similar objectives and little variances. The study underlines the need to match accounting courses in Iraq with corporate demands. Among the recommendations are a methodical review of courses, more industry-academic cooperation, continuous professional development for teachers, and an emphasis on a broader spectrum of competencies. Reacting to evolving market needs, the report offers evidence-based recommendations for improving accounting education in Iraq (Sherzad Ramadhan, 2024).

II- Methods and Materials:

To accomplish the study's purpose, a questionnaire was sent to a random sample, retrieving 83 valid responses for analysis. The tool's validity and reliability were subsequently confirmed, followed by the execution of requisite statistical tests to evaluate the study's hypotheses across the following dimensions:

II.1. Examination of Validity and Reliability: Cronbach's Alpha serves as a standard metric for assessing the internal consistency of a collection of items or questions designed to evaluate a particular construct, hence facilitating the analysis of the questionnaire's reliability. This coefficient aids in assessing the consistency of various items in the questionnaire in measuring the same idea. We evaluate the questionnaire's dependability based on the outcomes of this test as follows:

- Cronbach's alpha > 0.9 signifies exceptional reliability.
- 0.8 < Cronbach's alpha < 0.9: signifies commendable reliability.
- 0.7 < Cronbach's alpha < 0.8: signifies acceptable dependability.
- 0.6 < Cronbach's alpha < 0.7 signifies inadequate reliability.
- Cronbach's alpha < 0.6 signifies inadequate reliability

Table (1): Scale Reliability Analysis

	Cronbach's alpha
All Survey assertions	0,8260

Source: Compiled by the researchers utilising SPSS v27 results.

The table indicates the questionnaire exhibits strong overall reliability, with a Cronbach's Alpha coefficient of 0.862 for all items.

II.2. the descriptive analysis: This section will examine the descriptive analysis of the sample members based on the data presented in the initial section of the questionnaire, focussing on personal characteristics such as gender, study system, specialisation, employment, and professional experience, as detailed in the subsequent table.

Table (2): Outcomes of the descriptive analysis of the sample

Variables	Classification	Repetition	Percentage %
Gender	Male	36	43,4
	Female	47	56,6
Study system	LMD system	18	21,7
	Classic system	65	78,3
Specialization	Finance	34	41,0
	Accounting	47	56,6

	Other specialisation in finance	2	2,4
Employment	Affirmative	75	90,4
	Negative	8	9,6
Professional experience	Under 3 years	17	20,5
	betwen3 to 7 years	17	20,5
	Over 7 years	49	59,0

Source: Compiled by the researchers utilising SPSS v27 results.

To analyse and interpret the descriptive study's outputs, which encompass the frequency and percentage for each category across several variables, it is essential to evaluate each variable independently and investigate the distribution of the responses.

- Gender:** The sample of 83 comprised 36 males (43.4%) and 47 females (56.6%). The gender distribution indicates that females comprise the majority of the sample (56.6%) compared to males (43.4%). This suggests a heightened interest among females in this academic or research domain, whether linked to market trends, specific cultural influences in Algeria, or the chosen sample.
- Study System:** Regarding the study system, 18 persons were educated under the LMD system, representing 21.7%, whereas 65 individuals were educated under the classical system, accounting for 78.3%. Consequently, a significant majority of graduates in this sample were educated under the classical system (78.3%), in contrast to the LMD system, which accounts for 21.7%. This signifies that most respondents in the analysed sample graduated under the classical system despite the current predominance of the LMD system in Algerian universities.
- Specialisation:** The sample comprised 34 persons specialising in finance, representing 41.0%, and 47 individuals specialising in accounting, constituting 56.6%. Furthermore, two individuals are in a different finance specialisation, representing 2.4%. Consequently, the specialisation in accounting is the predominant choice (56.6%) among graduates, succeeded by general financial specialisations (41.0%). Conversely, the alternative specialisation in finance and accounting constitutes a mere 2.4%. This suggests that students favour specialisations directly associated with accounting over other financial specialisations.
- Career:** The data indicates that a significant majority of graduates (90.4%) are employed, suggesting favourable career prospects in Algeria's financial and accounting sectors. This implies that the curricula can provide students with the abilities necessary for the labour market.
- Professional Experience:** The data in the table reveal that the highest proportion of graduates (59.0%) possess over 7 years of professional experience. This denotes graduates from prior years or individuals who commenced their employment immediately after graduation. Simultaneously, recent graduates or individuals with limited experience (under 3 years or between 3 and 7 years) constitute a lesser proportion (41.0%).

II.3. Correlation Study: The correlation matrix illustrates the direction and strength of the relationships among the scale content, utilised programs, and field training. This matrix may be used to examine the interrelationship among them.

Table (3): Correlation Matrix

		Scale content	The programs used	Practical training
Scale content	Pearson Corrélacion	1	,330**	,358**
	Sig. (bilatéral)		,002	,001
The programs used	Pearson Corrélacion	,330**	1	,423**
	Sig. (bilatéral)	,002		,000
Practical training	Pearson Corrélacion	,358**	,423**	1
	Sig. (bilatéral)	,001	,000	

Source: Compiled by the researchers utilising SPSS v27 results.

The analysis of the Pearson correlation coefficient indicates statistically significant positive connections at the 0.01 level among all three variables: scale content, used programs, and field training. The coefficient was 0.330 between the scale content and the employed programs at a significance level of 0.001, demonstrating a positive albeit modest correlation. The correlation between the scale content and the training programs was positive and weak, with a value of 0.358 at the same significance level. The correlation between the utilised programs and field training was modest and positive, with an average value of 0.423, which is statistically significant.

The tenuous correlation between the variables can be elucidated by the notion that each encompasses a distinct facet of the curriculum content aimed at students in finance and accounting, rendering them autonomous from one another.

II.4. Analysis of Sample Opinion Trends: The trends in the sample's opinions can be examined concerning various statements related to the study curricula in finance and accounting at Algerian universities by evaluating the three studied axes using the three-point Likert scale (weak, medium, good), as follows:

Table (4): Establishing the Length of Categories in the Three-Point Likert Scale

Duration of the class	[1 – 1.66]	[1.67 – 2.33]	[2.34 – 3]
Level of adoption	Weak	Medium	good

Consequently, utilising these categories and the average projections, we summarise the trends of the sample's thoughts according to each axis in the following table:

The primary axis: The degree of alignment between program content and standards with labour market demands

Table (5): Examination of Sample Attitudes for the Primary Axis

The expression	Weak	Medium	good	The arithmetic average	Standard deviation	Level of adoption	The configuration
Throughout the academic journey, multiple accounting forms were examined, including financial accounting, managerial accounting, corporate accounting, tax accounting, and auditing.	11	01	71	2.72	0.68	good	1
The classes enhanced your skills in logical reasoning and critical analysis.	07	11	65	2.70	0.61	good	2
A balance exists between the theoretical content of the scales and their practical use.	30	17	36	2.07	0.89	Medium	3
The language of accounting standards instruction aligns with the terminology employed in professional settings.	39	10	34	1.94	0.94	Medium	4
The duration designated for the accounting standards courses is adequate for completing their curricula.	49	13	21	1.66	0.85	Weak	5
The weighted mean of the axis	2.21				medium		

Source: Compiled by the researchers utilising SPSS v27 results.

The assertions regarding the congruence between the language of accounting standards instruction and the terminology employed in professional settings and the claim concerning the adequacy of the allocated duration for accounting standards courses to fulfil program requirements ranked lowest. The latter assertion exhibited a notably weak level, with a mean of 1.66 and a standard deviation of 0.85.

Consequently, the analysis of the sample's opinions revealed that, despite students being exposed to diverse standards pertinent to their specialisation, which fostered their analytical and logical thinking skills, the language barrier and inadequate time allocated for program completion impeded their acquisition of competencies necessary for the job market.

The second axis: The degree of advantage derived from training in computer software that corresponds with labour market demands

Table (6): Examination of Sample Attitudes for the Second Axis

The expression	Weak	Medium	good	The arithmetic average	Standard deviation	Level of adoption	The configuration
The instructional courses illustrated the process of submitting tax and quasi-tax declarations online.	56	07	20	1.57	0.85	Weak	1
The curriculum encompassed standards for training in accounting-related computer programs, including Elbassit and Compta PC.	59	11	13	1.45	0.75	Weak	2

The curriculum encompassed guidelines for training in utilising computer software pertinent to inventory management.	60	10	13	1.43	0.75	Weak	3
The curriculum encompassed training protocols for utilising payroll-related software, specifically PC paie and Elbassit paie.	64	08	11	1.36	0.70	Weak	4
The curriculum encompassed standards for training in utilising computer programs pertinent to insurance (....., CNAS).	66	06	11	1.34	.0.7	Weak	5
The weighted mean of the axis	1.42					Weak	

Source: Compiled by the researchers utilising SPSS v27 results.

With a weighted average for the axis reaching 1.42, which falls under the first range of the three-point Likert scale, the table indicates that the overall trend for the axis of employing computer software connected to accounting and finance in the curriculum was weak. The same holds for all the assertions made by the axes since the sample members did not agree to include measures concerning the use of computer software in accounting and finance in the course. Though ranked first for the axis, the arithmetic average for the statement "The educational curricula showed how to make tax and quasi-tax declarations via the Internet" reaches 1.57 and falls under the weak range of the Likert scale with a standard deviation of 0.85. The last statement in the axis related to training on the use of computer software related to insurance, with an arithmetic average of 1.34 and a standard deviation of 0.7, comes after the statement concerning accounting recording software, with an arithmetic average of 1.45 and a standard deviation of 0.75.

The third axis: The degree of advantage derived from field training pertinent to the labour market

Table (07): Analysis of Sample Direction Perspectives for the Third Axis

The expression	Weak	Medium	good	The arithmetic average	Standard deviation	Level of adoption	The configuration
The thesis, after the research, concentrated on the case analysis.	05	08	70	2.78	0.54	good	1
Upon completion of the study, an internship will be provided.	22	08	53	2.37	0.87	good	2
The practical internship enhances the development of scientific and technical skills.	19	18	46	2.33	0.82	medium	3
The accounting education program encompasses a phase of practical training that aligns with academic instruction.	41	21	21	1.76	0.83	medium	4
All students can quickly secure an internship opportunity.	45	24	14	1.63	0.75	Weak	5
The weighted mean of the axis	2.17					Medium	

Source: Compiled by the researchers utilising SPSS v27 results.

With a weighted average of 2.17, which falls in the second range of the three-point Likert scale and is closer to the lower level, the table clearly shows that the overall trend about the benefit from field training qualified for the labour market came at an average level. This shows that the sample members agree that students do not gain from the required field training and internships to solidify their knowledge and abilities in line with the needs of the labour market along their academic path.

With a standard deviation of 0.54, the most important statement in the axis connected to the focus of graduation theses on case studies had the arithmetic mean of 2.78 inside the third range of the three-point Likert scale. With an arithmetic mean of 2.37, also within the same range, and a standard deviation of 0.87, this was followed by the remarks about practical internships at the end of the study term. The other dimensions were relatively low except for the simplicity of all students finding a location for practical internships, where the arithmetic mean was 1.63, inside the first range of the three-point Cartesian scale (weak) with a standard deviation of 0.75. Given the lack of

agreements between the university and social partners, this suggests that occasionally, students may have to employ personal contacts in several institutions to guarantee a field internship.

Thus, practical internships are seen as helpful for students because they improve their scientific and technical skills. Nevertheless, the difficulty in finding internships has hampered their preparedness for the workforce, as field training guarantees the acquisition of practical skills fit for the demands of the employment market.

II.5. Validation of the study hypotheses

First hypothesis: Students adhering to a curriculum aligned with employment market demands benefit.

To ascertain the truth of the hypothesis, the subsequent two hypotheses facilitate the use of a one-sample test to examine the alignment of course contents at Algerian universities with job market requirements.

The curriculum of Algerian institutions equips graduates to fulfil the requirements of the job market.

H₁: Curricula aligned with employment market demands do not assist Algerian university graduates.

Table (08): Initial Hypothesis Test Outcomes

University graduates benefited from a curriculum tailored to the labour market requirements.	Test Value =10					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	157,885-	82	,000	-7,78072	-7,8788	7,6827-

Source: Compiled by the researchers utilising SPSS v27 results.

The T-Student test statistic of -157.885 derived from the hypothesis test indicates a significant discrepancy between the anticipated mean of 10 and the observed mean.

The null hypothesis was rejected in favour of the alternative hypothesis, which asserts that the standards of the finance and accounting profession do not align with labour market demands; thus, the significance level (sig) reached a value of 0.000, much below 5%. Therefore, one can refute the primary hypothesis.

The second hypothesis posits that training in software applications aligned with labour market demands benefited university graduates.

Two hypotheses will be evaluated using a One-Sample Test to see if training on software applications that meet labour market demands has benefited university graduates:

Training in computer programs aligned with labour market demands in finance and accounting benefits Algerian university graduates.

H₁: Training on software programs that meet the demands of the labour market in finance and accounting does not benefit Algerian university graduates.

Table (09): Results of the Second Hypothesis Test

Training on software applications aligned with work market standards benefited university graduates.	10Test Value =					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	-125,767	82	,000	-8,7067	-8,7067	-8,4355

Source: Compiled by the researchers utilising SPSS v27 results.

The T-Student test value obtained is -125.767, indicating a significant difference between the observed and hypothesised mean of 10 in the second hypothesis test findings.

By rejecting the null hypothesis and accepting the alternative hypothesis, the significance level (sig) decreased to 0.000, significantly below 5%. This indicates that the second primary hypothesis can be refuted, as graduates in accounting and finance do not benefit from instruction in computer programs that qualify them for the labour market.

The third hypothesis posits that field training equips university graduates for workforce entry, benefiting them.

A one-sample t-test was performed based on the previously stated hypothesis involving the following two propositions:

(H₀): Field training from Algerian institutions equips graduates with the qualifications necessary for employment.

(H₁): Field training designed to prepare Algerian graduates for the workforce is ineffective.

Table 10 presents the test results as follows:

Table (10): Results of the Third Hypothesis Test

Field training that certifies university graduates for the job market is beneficial to them.	Test Value =10					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	-134,104	82	,000	-7,82651	-7,9426	-7,7104

Source: Compiled by the researchers utilising SPSS v27 results.

The t-test value was estimated as -134.104, With a significance level 0.000, much below than 5%. This signifies that the conclusion is statistically significant, allowing for rejecting the null hypothesis (H₀) in favour of the alternative hypothesis, suggesting that university graduates lacked sufficient field training during their academic journey to prepare them for the job market. This indicates the refutation of the third principal theory.

The fourth hypothesis posits that statistically significant discrepancies exist between the alignment of accounting and finance course material and labour market demands, attributed to human characteristics such as gender, educational system, and specialism.

The one-way ANOVA test and the independent samples T-test can identify statistically significant differences based on gender, study system, and speciality as follows:

1. Based on gender:

Table (11): Comparative Analysis of Variations by gender

	Levene's test for equality of variances even test		T test for equality of mean		
	F	Sig	T	Df	Sig
Hypothesis of equal variances	1,183	,280	-1,081	81	,283
Hypothesis of unequal variances			-1,060	69,043	,293

Source: Compiled by the researchers utilising SPSS v27 results.

Levene's test yielded a value of 0.280, exceeding 5%. The table presents the findings of the independent samples t-test, which examines the differences between sexes regarding the alignment of finance and accounting curricula with labour market demands. Consequently, we permit the hypothesis of equal variances between genders.

Thus, the t-value of the t-test for mean comparison was -1.081, indicating that the mean for women is lower than that for men. We fail to reject the null hypothesis, indicating no statistically significant differences between the sexes; the significance level (sig) was 0.283, exceeding 5%.

2. Based on Educational System:

Table (12): Comparative Analysis of Variations by Educational System

	Levene's test for equality of variances even test		T test for equality of mean		
	F	Sig	T	df	Sig
Hypothesis of equal variances	1,337	,251	1,945	81	,055
Hypothesis of unequal variances			2,171	32,259	,037

Source: Compiled by the researchers utilising SPSS v27 results.

The table presents the independent samples t-test to determine if there are statistically significant differences in the alignment of finance and accounting curricula with labour market requirements based on the implemented system, whether LMD or classique. Levene's test for the equality of variances between the two groups is presented in the table alongside the significance level (sig), which was 0.251, exceeding 5%, thus indicating homogeneity and consistency in the variances of the two groups.

We can, therefore, accept the hypothesis of equal variances, indicating a value of 1.945 for the Student's t-test of mean differences between the two groups at a significance level of 0.55, which exceeds 5%. At the 95% confidence level, this shows that the two groups do not differ statistically substantially. Therefore, in contrast to the professional track, the implementation processes of the LMD system within the academic track remain primarily consistent with the traditional system; hence, we cannot dismiss the null hypothesis (H₀), which posits that there is no significant difference between the two systems.

3. Based on specialty:

Table (13): Comparative Analysis of Variations by specialty

	Sum of squares	Df	Mean square	F	Sig
Between groups	,425	2	,212	1,280	,284
groups Intra	13,282	80	,166		
Total	13,707	82			

Source: Compiled by the researchers utilising SPSS v27 results.

The table shows a one-way ANOVA assessment showing notable variations in the degree to which curricula in finance and accounting fit labour market needs depending on specialisation. The significance threshold of 0.284, higher than 5%, shows that the Fisher statistic, which indicates that the variations between the groups are not sufficiently significant, came at 1.280. We cannot thus reject the null hypothesis, which holds that the groups have no statistically significant variations. In other words, graduates of accounting and finance degrees have no difference in receiving courses that fit labour market needs.

III- Conclusion:

Based on what the research report revealed, the researchers came to a set of Results and suggestions.

III.1. Results: We deduce the following based on the SPSS statistics program version 27 outputs and analysis and interpretation of the replies from the investigated sample:

- Algerian colleges' study materials do not fit the demands of the employment market. Hence, there is a discrepancy between what is taught in them and what is needed in the labour market; in contrast to the conclusions of Faisal Najmuddin Abdullah and Naseem Yousef Hana (2018), the researchers employing a comparative methodology identified a notable alignment between the curricula of the Department of Finance and Banking and the Department of Accounting with the requirements of financial institutions in the Kurdistan Region of Iraq. Ahamed Lebbe Sarifudeen's research (2020) indicates that despite intense competition among recent accounting graduates, their employment prospects do not align with corporate expectations, resulting in a supply-demand disparity. The researcher focused on six competencies: technical skills—accounting, finance, and taxation—administrative skills, information technology skills, cognitive abilities, and personal and interpersonal skills. He proposed continually improving the accounting curriculum, emphasising the importance of human qualities to ensure institutions generate well-educated graduates for the workforce. A study conducted by Kiheli Aicha Salema, Guemmou Assia, and Zargoune Omar Farouk (2022) also confirmed the fragility and incompatibility of the modules with IES2. Furthermore, the courses disregard the requirements of the accounting profession in Algeria. The participants said that instruction in financial and accounting software, including Elbassit, Compta PC, and PC Pay, was not a primary emphasis in the curricula of Algerian colleges. Therefore, in light of technological advancements, we recommend the implementation of the (AMC) system proposed by Ahoud Almaleh, Muhammad Ahtisham Aslam, Kawther Saeedi, and Naif Radi Aljohani (2019), as this system seeks to achieve alignment between university curriculum outcomes and requisite market competencies.

- According to the views of the sample people, the training on computer programs in finance and accounting—including Elbassit, Compta PC, and PC paie—was not a necessary component of the courses in Algerian colleges; consequently, in light of technological advancements, we recommend the implementation of the AMC system proposed by Ahoud Almaleh, Muhammad Ahtisham Aslam, Kawther Saeedi, and Naif Radi Aljohani (2019), as this system seeks to achieve alignment between university curriculum outcomes and requisite market competencies.

- There is an apparent discrepancy between real field training and job market criteria since field training at Algerian institutions does not sufficiently equip graduates to enter employment; Augusta da Conceição Santos Ferreira (2023) requested this since he demonstrated the evolution of the accounting profession characterised by increased managerial support and decision-making responsibilities (business partner). This emphasised the necessity of enhancing expertise in information and communications technologies alongside professional and personal attributes.

- The following: The degree to which courses in the field of finance and accounting fit the labour market needs to be related to gender, the system followed (LMD, Classic), or the specialisation (Finance, Accounting, Other finance specialisation) does not show any statistically

significant variations, Mishari Al-Hussain's research (2019) confirmed that the selection of a major exhibited no discernible correlation with the quality of educational outcomes.

III.2. Recommendations: The aforementioned leads us to advise the following:

- Raising practical training or real-world applications can improve curricula' balance between theoretical and pragmatic elements.
- Changing the teaching language to fit the terms and vocabulary employed in the employment market.
- Review the time set for accounting courses to guarantee enough coverage of all crucial subjects.
- One could say that the curricula in Algerian institutions should be changed to better suit the needs of the job market by improving practical training and adjusting academic programs to integrate the skills needed by the market.
- Emphasising specific programs utilised by the public and private sectors, advanced training on computer software that fits labour market needs should be introduced.
- Enhancing the practical side of the courses and offering thorough hands-on instruction on computer software connected to accounting in many spheres, particularly insurance.
- Enhancing the synchronisation between theoretical study and practical training will offer pupils a complete educational process.
- Establishing alliances between public and private sector organisations would help create more chances for practical internships, empowering students.
- More varied field training options that fit labour market demands would help improve the field training curriculum. This could involve working with several businesses and organisations to offer actual field training that better equips graduates for the workforce.
- While adjusting the LMD system to fit the labour market's demands, it is important to create mechanisms for applying the system based on its principles and their deviations from the classical one. It is imperative to concentrate on guiding the curriculum content in every specialisation in line with the employment possibilities open to a university graduate. Haut du formulaire Bas du formulaire

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