ACHIEVING THE QUALITY OF ACCOUNTING LEARNING OUTCOMES: AN ALGERIAN PERSPECTIVE
Kaoutar RIMOUCHE a, Mohammed HIMRANE b

a. kaoutarrimouche97@gmail.com, Jijel University, Algeria.
b. m_himrane@univ-jijel.dz, Jijel University, Algeria.

Received date: 17/05/2021, Accepted date: 13/06/2021, online publication date: 30/06/2021

ABSTRACT
This paper aims to demonstrate the efforts made by the International Accounting Education Standards Board (IAESB) in achieving the quality of the accounting learning outcomes and to explore the reality of accounting education in Algerian. We based on the comparative method in order to compare between the content of universities' accounting programs and the International Accounting Education Standard (2). Considering that the accounting educational system in universities should emphasize serving students and ensure that they will be able to practice the accounting profession in the future, and that accounting education should seek to adapt to the trend of professional accounting development. We have concluded that there is almost a perfect match between what Algerian universities apply and what the International Federation of accountant's committee approved, but the problem lies in achieving the learning outcomes with the required quality as stated in the IES2

Keyword: Accounting Education Standards; Learning Outcomes; Accounting Education Programs; Algerian Universities.

JEL Code: M41; A29.

1. INTRODUCTION
The development undergone by the accounting profession at the international level and the differences in accounting practices forced to provide a common language and a unified framework base on an international scale, which led the International Federation of Accountants (IFAC) to work on developing the educational process, where it was in charge of establishing The International Accounting Education Standards Board (IAESB) that issues standards associated with accounting education and develops outputs through the formation of qualified accountants to play their professional significant role in the professional domain. On the other hand, because the practice of accounting work requires graduates well prepared according to scientific foundations that enable them to assume the responsibilities entrusted.

* Corresponding Author
Given that the accounting education programs are deemed the most important parts of the accounting education system, the Accounting Education Standards Board has taken care of developing them and ensuring the quality of their outcomes by issuing the International Education Standard 2 - technical competence- which is included in the initial professional development stage for potential accountants.

The university is considered the most important educational institution that qualifies potential accountants, and several criticisms have been directed against the outcomes of its accounting educational programs for not meeting the requirements of the labor market.

This study comes to evaluate the accounting education programs in Algeria and to compare its learning outcomes with the International Education Standard 2.

So, **How does the quality of accounting learning outcomes can be achieved in Algeria?**

The importance of the research is evidenced by its addressing the role that the Accounting Education Standards Board plays in improving the quality of accounting learning outcomes, in addition to evaluating Algerian's accounting programs and trying to demonstrate its deficiencies.

This research aims to demonstrate the importance of working with accounting education standards in Algeria, in order to enhance the accounting learning outcomes and bridge the gap between what exists in reality (the labor market) and what the individual receives in the stage of his formation.

In order to achieve our goal, we subdivided our research into:

1. Accounting Education and Accounting Profession
2. Accounting Education Standards
3. Algerian perspectives in developing Accounting Education

**2. ACCOUNTING EDUCATION AND ACCOUNTING PROFESSION**

Accounting Education is a widely used label, whether at the level of universities, vocational education, or secondary schools, etc. As it is applied to a variety of programs and activities that seek to educate students both specialized and non-specialized in the field of accounting, in order to enable them to practice the accounting profession.

Consequently, Accounting Education is associated with a wide range area of works that is carried out by accountants such as preparing financial reports, auditing, taxation, and corporate governance (Wilson, 2014)

The fundamentals of advancing the accounting profession lie in the quality of accounting education, accounting training, and international accounting standards, in addition to other complementary basics.

Accounting education represents the most important of these basics, which has always been affected by the requirements and developments of the accounting profession.
The main purposes of accounting education are to enhance students' understanding of the principles and concepts which support accounting and business practices. Also, to prepare them for the ability to adapt to a changing work environment. In addition to Acquisition of various skills, which include professional skills, time management, public speaking, etc. (Low, Grant, & Christina, 2013)

Accounting education based on an integrated educational system in all accounting aspects represents the first step toward the creation of qualified accountants, and enables them to provide better services in a way that they are well up to date. Thus, it is an important factor for realizing the accounting functions that will lead to offering economic information that can contribute effectively to the process of economic development.

Most researchers argued that accounting education and the accounting profession could not be separated from each other and that the lack of coordination between them will lead to slow development in the accounting profession and less response to economic variables. (Ismae & Babiker, 2016)

**Figure (01):** The accounting education system.

- **Input:** represents the category with different cultural backgrounds and prior knowledge
- **Process:** represents teaching activities and techniques that lead to acquiring different skills for practicing the profession of accounting.
- **Output:** it is the final product that represents qualified students that can practice accounting profession.
- **Feedback:** It represents the development and correction of deficiencies through continuous oversight of the previous components of the system.

Source: It is done by the researchers.

3. **ACCOUNTING EDUCATION STANDARDS**

In 1977, The International Federation of Accountants (IFAC) was established, To serve the public interest, strengthen the global accountancy profession.
In pursuing this vein, the IFAC Board has established the International Accounting Education Standards Board (IAESB). That works in developing education standards to be used by the International Federation of Accountants members, and other interested stakeholders in professional accounting education, such as universities, employers, government authorities, and accountants.

Consequently, it will lead to strengthening the worldwide accounting profession (McPeak & Gary, 2012).

The main objectives of the IAESB:

- Decreasing the international differences to work as professional Accountants;
- It improves the objectivity of the accounting outputs by being a framework that rules the process of accounting education;
- Facilitation of the Global movement of professional Accountants, and
- Providing international education standards (IAESB, 2019, p. 8).

The Accounting education standards (IESs) are classified into two categories which are:

- Initial professional development (IPD) of aspiring professional Accountants (IES2, IES3, IES4, IES5, IES6);
- Continuing professional developments (CPD) of professional (IES7);

In addition to the IES1 that clarifies the requirements for an individual to enroll in accounting education programs, and the IES8 that is related to Professional Competence for Engagement Partners Responsible for Audits of Financial Statements. (IAESB, 2019, p. 6)

The table (01) shows the designations of the eight revised education standards and the dates that they should be applied:

**Table (01):** The designations of the eight revised education standards and the dates of their application.

| The standard name                                                                 | Application date |
|-----------------------------------------------------------------------------------|------------------|
| IES1: Entry Requirements to a Program of Professional Accounting Education.         | 2004.07.01       |
| IES2: Technical Competence                                                        | 2015.07.01       |
| IES3: professional skills                                                        | 2015.07.01       |
| IES4: professional values, ethics, and attitudes                                  | 2015.07.01       |
| IES5: practical Experience                                                       | 2015.07.01       |
| IES6: Assessment of Professional Competence                                       | 2015.07.01       |
| IES7: Continuing Professional Development                                        | 2014.01.01       |
| IES8: Professional Competence for Engagement Partners Responsible for Audits of Financial Statements. | 2016.07.01 |

Source: by the researchers.
The Standards that are linked to this paper is IES2.

The IES2 clarifies the professional knowledge to be achieved by aspiring professional accountants by the end of the initial professional development stage.

The following table represents learning outcomes for technical competence:

**Table (02): Learning Outcomes for Technical Competence.**

| Competence area                        | Learning outcomes                                                                 |
|----------------------------------------|-----------------------------------------------------------------------------------|
| Financial accounting and reporting    | - Apply accounting principles and International Financial Reporting Standards (IFRSs).  |
|                                        | - Evaluate the appropriateness of accounting policies.                             |
|                                        | - Prepare financial statements according to IFRSs.                                 |
|                                        | - Interpret financial statements, non-financial data, and related disclosures.     |
| Management accounting                 | - Apply techniques to support management.                                          |
|                                        | - Apply quantitative techniques to analyze cost behavior.                          |
|                                        | - Analyze financial and non-financial data.                                        |
|                                        | - Prepare reports to support management decision-making.                           |
|                                        | - Evaluate the performance of products and business segments.                     |
| Finance and financial management      | - Compare the various sources of financing available to an organization.            |
|                                        | - Analyze an organization’s cash flow and working capital requirements.            |
|                                        | - Analyze the current and future financial position of an organization.           |
|                                        | - Evaluate the appropriateness of the components used to calculate an organization’s cost of capital. |
|                                        | - Apply capital budgeting techniques in the evaluation of capital investment decisions. |
|                                        | Explain income, asset-based, and market valuation approaches.                      |
| Taxation                              | - Explain national taxation compliance and filing requirements.                    |
|                                        | - Prepare direct and indirect tax calculations for individuals and organizations.  |
|                                        | - Analyze the taxation issues associated with non-complex international transactions. |
|                                        | - Explain the differences between tax planning, tax avoidance, and tax evasion.    |
| Audit and assurance                   | - Describe the objectives and stages of financial statements.                      |
|                                        | - Apply auditing standards                                                        |
|                                        | - Evaluate the risks of misstatement in the financial statements                  |
|                                        | - Apply quantitative methods that are used in audit engagements.                  |
| Governance, risk management and       | - Explain the principles of good governance.                                      |
|                                        | - Analyze the components of an organization’s governance                          |
internal control framework. 
- Analyze an organization’s risks and opportunities using a risk management framework. 
- Analyze the components of internal control related to financial reporting.

Business laws and regulations 
- Explain the laws and regulations that govern the different forms of legal entities. 
- Explain the laws and regulations applicable to the environment in which professional accountants work.

Information technology 
- Analyze the adequacy of general information technology controls and relevant application controls. 
- Explain how information technology contributes to data analysis and decision-making.

Business and organizational environment 
- Describe and analyze the environment in which an organization operates. 
- Identify the features of globalization

Economics 
- Describe the fundamental principles of microeconomics and macroeconomics and its effect on business activity. 
- Explain the different types of market structures

Business strategy and management 
- Explain the various ways that organizations may be designed and structured and Explain the purpose and importance 
- Analyze the external and internal factors that may influence the strategy of an organization. 
- Explain the processes that may be used to implement the strategy of an organization. 
- Explain how theories of organizational behavior may be used

Source: (IAESB, 2019, p. 33).

The question here is whether this program is similar to the one is applied in Algerian universities and whether it includes these learning outcomes.

4. ALGERIAN PERSPECTIVE IN DEVELOPING EDUCATION ACCOUNTING

Algeria knows the inefficiency of its accountants due to their lack of creativity and failure to keep pace with global developments.

We will address the state of accounting education in Algeria through the following titles.

4.1 A comparison between accounting education programs in Algeria and the IES2

Since Universities are the most important educational centers that qualify potential accountants, We chose to do a comparison between accounting education programs in Algerian universities and The IES2, in order To evaluate them and identify the deficiencies that permeate them.
The following tables show the accounting programs approved by the Ministry of Higher Education for the bachelor's degree stage

**Table (3): First year program of economics, business and management sciences.**

| Educational unit  | First hexagon                  | Second hexagon                  |
|-------------------|--------------------------------|--------------------------------|
| **Basic unit**    | Materials                      | Materials                      |
|                   | Introduction to economics 1    | Introduction to economics 2    |
|                   | History of economic facts 1    | Accounting 2                   |
|                   | public accounting 1            |                                |
|                   | Microeconomics                 | Microeconomics 2               |
| **Methodology unit** | statistics 1                   | Statistics 2                   |
|                   | Math 1                         | Math 2                         |
|                   | Methodology 1                  | Computer science 1             |
| **Explanatory unit** | Introduction to Law            | Commercial law                 |
|                   | Introduction to Sociology      | Sociology of organizations     |
| **Horizontal unit** | English                        | English                        |

**Source:** (Ahsène, 2021)

**Table (4): The second year program of financial accounting program.**

| Educational unit  | First hexagon                  | Second hexagon                  |
|-------------------|--------------------------------|--------------------------------|
| **Basic unit**    | Materials                      | Materials                      |
|                   | Cost Accounting                | Business Economics              |
|                   | Enterprise management          | Macroeconomics 2               |
|                   | Macroeconomics 1               | Financial mathematics           |
|                   | Accounting standards           | Public finance                  |
| **Methodology unit** | Statistics 3                   |                                |
|                   | Business Finance               |                                |
|                   | Methodology 2                  |                                |
| **Explanatory unit** | Computer science 2             | Computer science 3             |
| **Horizontal unit** | English 3                      | Corruption and work ethics      |

**Source:** Is done by the researchers depending on jijel university program.
Table (05): The third year program of accounting and taxation speciality.

| Educational unit | First hexagon | Second hexagon |
|------------------|---------------|----------------|
|                  | Materials     | Materials      |
| Basic unit       | Business taxation | Financial accounting2 |
|                  | corporation accounting | Financial management |
|                  | Financial accounting1 | Tax review |
| Methadology unit | tax administration | management control |
| Explatory unit   | Statistical tools for data analysis | Tax law |
| Horizontal unit  | English | English |

Source: (Ahsène, 2021)

By comparing the accounting education programs which are approved by the Algerian University for the bachelor's stage, with the accounting competence areas that are approved by the International Federation Accounting Committee, We found that they are almost entirely identical. But, the problem lies in achieving the learning outcomes of each competence area, and in the quality and method of teaching.

Here are some of the reasons that may prevent them to be achieved:

- The absence of students in the lecture and their limitation to attend the class of directed work;
- Stability of teaching methods and placing too much reliance on the lecture style for a large number of students;
- The Limited capacity to develop in the content of the material;
- Some professors teach accounting courses that are outside their specialization;
- Repeating the same exams in form and content, which drives the student not attend and get interested;
- The lack of accounting research, creativity and placing reliance on foreign universities;
- Not having enough time to complete the program;
- The lack of students integration in reality through doing coordination with institutions.

4.2 The latest developments in accounting education in Algeria

According to the notification of Ministry of Finance Accounting Consulting, As part of the support for the reform of the financial accounting system, and in order to meet the support needs of companies and entities which must establish and publish their financial statements in accordance with the requirements of the SCF, inspired by the standards, and in accordance to the provisions of Law 10-01 of June 29, 2010, relating to the profession of chartered accountant, a specialized educational institute for the accounting profession has been opened I.E.S.P.C in the legal form of a public industrial and commercial establishment "IEPIC », placed to the Ministry in charge of
finance. The institute responsible for training accountants and auditors is located within the university "LOUNICI ALI -Blida2.

The texts allowing the opening and operation of this institute are published in the Algerian official journal including the training program which, it should be noted, that is inspired by the International Federation of Accountants (I.F.A.C) and countries with experience. (FINANCES)

- Candidates for training with a view to obtaining the title of chartered accountant and / or expert, organized by the specialized institute of the accounting profession or by any other institute approved by the Minister in charge of finance, must hold a university degree or a foreign diploma recognized as equivalent, to be admitted to the contest for access to training. Holders of a license (BAC + 3) or more or any other academic qualification obtained abroad recognized as equivalent are titled to be examined to the specialized educational institute of the accountancy profession. The following specialties concerned are:
  - accounting;
  - accounting and finance;
  - finances;
  - audit.

The admission test to the institute consists of written and oral tests.

Students follow a first cycle of specialized training lasting two (2) years, sanctioned by the graduate certificate in accounting and auditing.

The students opting for the profession of chartered accountants must follow the regulatory professional traineeship, at the end of which they must take the final exam to obtain the diploma of chartered accountant.

The students opting for the profession of expert accountant must follow a second cycle of specialized training lasting one (1) year sanctioned by a study certificate in depth accounting and finance. These students holding the certificate must follow the professional traineeship, at the end of which they must pass the final exam to obtain the diploma of expert.

The final examination for obtaining the diploma of chartered and expert accountant include written and oral tests.

- The students with licenses in the following specialties have the right to participate in the contest:
  - Classic system :
    - License in commercial sciences, option in accounting finance, or accounting and finance;
    - License in management sciences, option in accounting or finance;
    - License in economic sciences, option financial sciences, financial economy;
• Licence-Master-Doctorat (LMD) System:
  - Licence in commercial sciences, speciality: accounting and auditing; accounting and finance or accounting and taxation.

We have also two types of tests:

• Writing admission test:
  - Finance and accounting (coefficient 3, time 4 h);
  - Auditing (coefficient 3, time 3 h);
  - Law and taxation (coefficient 2, time 3 h);
  - General economy (coefficient 2, time 2 h);
  - Technology of information and statistics (coefficient 1, time 2 h);
  - Languages (coefficient 1, time 2 h).

• Oral admission test:
  These tests consist of an evaluation of the candidate, as part of an interview on topics related to the professions of accountant and auditor. At the end of the tests, a written mark out of two hundred and forty (240) points is calculated for each candidate having undergone the two tests, and an oral mark out of eighty (80) points.

4.3 Perspectives for accounting learning in Algeria

The current number of accountants "remains low to meet the needs of the national economy, to support the number of trainees from universities, as well as to support the State in the reform of public accounts. To remedy this situation, the Ministry of Finance plans to set up an accountancy institute and gradually integrate the domain of accountant-expert and auditor into the higher education system to train more professionals in this field.

This revision aims to assess the financial accounting system, to deal with the problems observed by economic operators during its application, to comply with international standards and to integrate new accounting forms which involve professionals in the management of the company, notes the same manager.

The evolution of the management of international economic entities highlights the need to update the Financial Accounting System in order to further develop the use of accounting by methods facilitating the consolidation of accounts backed by international standards, favoring thus the development of the stock market and financial

We called for a better involvement of these professionals in the growth of the company and not to be satisfied with traditional accounting tasks.

The transformation of the profession of the chartered accountant also involves the development of his advisory role by enhancing the important databases and by collaborating more with other legal and financial professions.
He considered that the future of the profession of the chartered accountant is dependent on the "digital revolution" that these professionals must deal with.

The digitization of their business will reduce costs, save space, improve their performance, better store, secure, control and analyze data.

We need more training by the specialists in digital solutions dedicated to accounting professionals, we need also the adaptation of Algerian legislation to the international digital context by notably accelerating the dematerialization of accounting documents.

We need to set up an appropriate and high-level training system in the field of accountant, audit and finance within the specialized institute. On the other hand, the provision of scientific and technical documentation relating to the fields of accounting, auditing and finance must be within the reach of the institute.

5. RESULTS AND DISCUSSIONS

There is a positive relationship between accounting education programs in Algerian universities and the competence areas approved by the Accounting Education Standards Board, which must be achieved at the end of the Initial Professional development stage.

in order to ensure the achievement of the accounting learning outcomes and its quality in Algerian universities we give some advice:

- Trying to integrate the student into reality by linking academic institutions with other state institutions;
- Inviting experts, accountants and financial professionals to give lectures and attend seminars with students in order to prepare the student for future professional work;
- Linking between the theoretical side and the practical side, especially with regard to international accounting standards and the preparation of financial statements;
- Extension of the programmed time for teaching core subjects and reducing it for supplementary subjects.

There is a positive relationship between what the accounting education standards stipulate and what the specialized education institute for the accounting profession I.E.P.C that Algeria has opened aims to achieve through:

- Implement specialized training programs for graduation;
- Participate in the popularization of modern techniques of engineering accounting training, auditing and finance;
- Provide continuing education for accountancy professionals.

College graduates are the main force of the accounting field in the future. However, at present, the talent training programs in Algerian universities fail to make corresponding adjustments in the context of accounting reform, lack information technology courses related to artificial intelligence, and pay less attention to the innovation of accounting concepts (Krasodomska & Godawska, 2021). This will
lead to the lack of market competitiveness of college graduates and the inability to meet the market demand of the accounting industry in the future.

The Accounting Education Standards Board is concerned with enhancing the accounting learning outcomes through the continuous review and development of the initial professional development standards in order to meet the needs of the labor market for qualified accountants.

6. CONCLUSION
International Education Standards (IESs) for professional accountants, developed by the International Accounting Education Standards Board (IAESB), are influencing accounting education and training worldwide. The Accounting Education Standards Board focuses on the accounting learning outcomes more than the inputs in order to create competencies in the field of accounting capable of keeping pace with the development in the accounting profession, as the Council makes efforts to develop these standards, especially the accounting standards concerned with enhancing the accounting learning outcomes.

Algerian universities depend on the accounting education standards in preparing their accounting program, but they do not achieve the quality of accounting learning outcomes as it required in IES2 at the end of the Initial Profession Developments.

In the context of bridging the gap between the Algerian accounting education outputs and accounting education standards, Algeria has established an institute seeking to provide better training for potential accountants by relying on accounting education standards in preparing their training programs and establishing exchange and cooperation relations with national or international organizations that it works in the same field of activity.

REFERENCES
Ahsène, B. (2021, 06 23). كلية العلوم الاقتصادية والعلوم التجارية وعلوم التسبي . Retrieved from Fsecsg.univ-jijel.dz:
https://fsecsg.univ-jijel.dz/index.php?option=com_content&view=article&id=271&catid=10

David McPeak, K. V. (2012). The International Accounting Education Standards Board: Influencing Global Accounting Education. accounting education.

FINANCES, M. (s.d.). CONSEIL NATIONAL DEL LA COMPTABILITE. OUVERTURE DE L' INSTITUT D'ENSEIGNEMENTS SPECIALISE DE LA PROFESSION.
Achieving the quality of accounting learning outcomes: an Algerian perspective

IAESB. (2019). -*HAND BOOK OF INTERNATIONAL EDUCATION PRONOUNCEMENTS.* New York: International Federation of Accountants.

Ismae, A. Y., & Babiker, M. E. (2016). The Relationship between Accounting Education & Accounting Practice: With Reference to Academics and Practitioners of Accounting Profession in Sudan. *International Journal of Economics and Finance.*

JOURNAL OFFICIEL DE LA REPUBLIQUE ALGERIENNE N° 45. (s.d.). *Arrêté interministériel du 8 Joumada Ethania 1438 correspondant au 7 mars 2017 fixant la liste des diplômes universitaires ouvrant droit au concours d’accès à l’institut d’enseignement spécialisé de la profession comptable.*

Louise Crawforda, C. H. (2014). International Accounting Education Standards Board: Organisational legitimacy within the field of professional accountancy education. *accounting forum,* 2.

Low, M., Grant , S., & Christina , L. (2013). Accounting Education and the Provision of Soft Skills: Implications of the recent NZICA CA Academic requirement changes. *e-Journal of Business Education & Scholarship of Teaching.*

McPeak, D., Karen V, P., & Gary L, S. (2012). The International Accounting Education Standards Board: Influencing Global Accounting Education. *ACCOUNTING EDUCATION.*

Wilson, R. M. (2014). *The Routledge companion to accounting education.* London: Routledge, Taylor & Francis.