

# The view of the academy and the job market on teaching auditing

## Abstract

The objective of this study was to identify the perception of audit teaching according to the academy and the labor market, based on the evaluation of the importance professionals and teachers grant to the main conceptual and normative aspects of the audit area. In order to achieve the proposed objective, the perception of the teachers responsible for the audit discipline and the auditors working in the labor market was collected through a questionnaire structured in the form of a Likert scale. The research sample comprised all the federal and state universities that offer accounting courses and all the audit companies registered in the database of the Brazilian Securities Commission (CVM). The responses were treated using the non-parametric Mann-Whitney and Spearman's correlation tests. The results show that, in approximately 75% of the topics raised in this study, the academy tends to correspond to the expectation the market holds about the importance given to such contents within the audit discipline. The main differences are related to Assurance Service, Audit of Non-Profit Entities, Audit of Governmental Agencies, Quality Control and Audit of Information Systems, which do not receive emphasis within the academy, according to the market perspective. The results presented here can be used for teachers to evaluate the disposition of the contents covered within the discipline, considering the relevance attributed by the market.

**Key words:** Teaching. Auditing. Audit Topics.

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## 1. Introduction

The recent years have been the most dynamic and turbulent period in the history of auditing. The global expansion of the markets, in addition to the financial scandals, which culminated in Enron's failure and Arthur Andersen's downfall, as well as the approval of the Sarbanes-Oxley Act and the creation of the Public Company Accounting Oversight Board (PCAOB), brought substantial changes to the profession of the auditor. Subsequent to such events, in the international context, a new accounting standard was introduced in Brazil with the advent of Law 11.638 / 2007, which deals with the adoption of the International Accounting Standards (IAS), also known as International Financial Reporting Standards (IFRS), which lead to important changes in the measuring, recognition and disclosure of the operations carried out by the companies (Nogueira Júnior, Jucá & Macedo, 2010).

Based on these episodes, Castañeda, Carvalho & Lisboa (2007) cite that the audit profession in Brazil is inserted in this context of convergence through the Federal Accounting Council (CFC) and the Institute of Independent Auditors of Brazil (Ibracon), in search of alignment, not only with respect to the IFRS, but mainly with the International Auditing Standards. As a result of this process, the audit activity tends to keep track of global trends in the practical and normative sense.

Indirectly, such changes have an impact on audit teaching. As the professional practice seeks to evolve to meet the demands of the market, the audit teaching process needs to be continually re-evaluated, so that it can adequately prepare future professionals in the field (Armitage, 2008). And that is the greatest challenge of the courses in Accountancy - design the curricula and content so that they meet the needs and evolutions of the profession. In particular, in the case of auditing, a gap exists between teaching and practice (Dombrowski, Smith, & Wood, 2013; Silva, 2008).

As regards the changes in the professional field, audit teaching remained oblivious to economic developments, distancing itself abruptly from market practices, as pointed out by some authors, such as Armitage (2008), Chaffey, Peurseem and Low (2011), Dombrowski et al. (2002), Humphrey (2008), Johnson, Baird, Caster, Dilla, Earley and Louwers (2003), Madeira (2001) and Ricardino Filho (2002). In Brazil, the audit teaching did not go through any relevant updates in the last fifty years, and the growth of the profession in the area was not adequately matched by the courses in Accountancy, according to Madeira (2001) and Ricardino Filho (2002).

Despite the importance of the profession, as the auditor is responsible for ensuring the reliability of the financial statements for the accounting information users, Silva (2008) and Armitage (2008) point out that research that seeks to identify the audit teaching process is still incipient, even at the international level. In Brazil, studies in the area were mainly concerned with the evaluation of curricular aspects and labor market perspectives, such as the work of Madeira (2001), Ricardinho Filho (2002, 2003), Silva (2008) and Veiga, Borges and Amorim (2014).

In view of the growing demands of the market, there is a need to carefully analyze the educational institutions responsible for the training of future auditors, especially in relation to the evaluation of education, in order to mitigate the differences between the academy and market expectations (Silva, 2008; Machado, Machado & Guerra, 2014).

In this sense, the following question is raised: what is the perception of teachers and professionals in the area about audit teaching? Therefore, this study aims to identify the perception of audit teaching from the academy and the labor market's perspectives, based on the evaluation of the importance professionals and teachers grant to the main conceptual and normative aspects of the audit area.

The justification of the work lies in the importance of evaluating the content of teaching in auditing, taking into account academic and professional aspects. The comparison between the expectations of the market and teachers in the audit area, based on the importance each of the groups assign to certain themes, allows the teacher to reassess the teaching process, from the perspective of teachers and professionals in the area, thus identifying which subjects the two groups consider to be the most relevant. This approach also allows the academy to absorb changes in the labor market. Moreover, the present comparison provides a basis to identify trends in audit teaching over a linear period, as well as to identify market needs considered by professionals in the area (Armitage, 2008; Chaffey et al., 2011).

In addition to this brief introduction, a review of the literature is presented in which the fundamental concepts for the understanding of the research are discussed; the methodological procedures and the description and analysis of the data are presented in the following sections; and finally, the conclusions and recommendations for future studies.

## 2. Theoretical Framework

### 2.1. The market and audit teaching

The expansion of global markets, especially since the 1990s, has begun a process of significant change in the audit profession. In a globalized context, where investors, governments, regulators and other stakeholders demand the disclosure of accurate information about the activities performed by companies, the scope of the audit goes beyond verifying the financial statements in accordance with the principles and standards (Johnson et al., 2003). In addition, it is also necessary to consider risk performance, risk assessment and management. In addition, Niyama, Moraes da Costa, Alves Dantas & Ferreira Borges (2013) still consider the performance of the auditor as fundamental for the functioning of the capital market, in order to provide security about the reliability of the accounting information published, thus contributing to an environment of greater confidence and credibility.

In addition to the changes in business relationships, Armitage (2008) adds that the major changes in the field of auditing came with financial scandals in the early 2000s, culminating in the failure of Enron and the overthrow of Arthur Andersen. These events led to the creation of the Sarbanes-Oxley Act and the Public Company Accounting Oversight Board (PCAOB). Nevertheless, as far as the Brazilian context is concerned, a new accounting standard has been recommended since the enactment of Law 11.638/2007, which deals with the adoption of International Accounting Standards, also known as International Financial Reporting Standards (IFRS). These lead to important changes in the measurement, recognition and disclosure of the operations carried out by the companies, mainly with respect to aspects related to: "(i) the representation of the financial statements; and (ii) the economic essence of the transactions as a basis for their recognition" (Nogueira Jr. et al., 2010, page 6).

In this sense, Castañeda et al. (2007) add that, as a result of the convergence process, the audit activity in Brazil tends to converge with the international standards. In this context, the Brazilian audit is based on a mutual cooperation between the Federal Accounting Council (CFC) and the Brazilian Institute of Independent Auditors (Ibracon), and mainly with the publication of the Brazilian Accounting Standards applied to auditing, elaborated according to its international equivalent, issued by the International Federation of Accountants (Ifac), also known as the *NBC TAs*.

For Armitage (2008), such practical changes have an impact on audit teaching. To the extent that professional practice seeks to evolve to meet the demands of the market, the teaching process needs to be continually re-evaluated, so that it can adequately prepare future professionals in the area. In this sense, Ricardino Filho (2002) points out that, to reduce the risk of issuing inadequate opinions about the financial statements under examination to acceptable levels, the development of tools or the understanding of complex business relationships is not enough. In the first place, the professionals need to be properly prepared for the practice.

In that sense, Silva (2008) configures the university as an institution aimed at preparing future professionals for the labor market. The analysis of the changes that occur around them turns into an indispensable element in the elaboration of the political-pedagogical project, aiming to prepare professionals in accordance with the requirements of the market. In addition, it is important that courses in Accounting are able to train professionals capable of interacting as agents of change, in continuous evolution. And it is precisely at this point that the greatest challenge of courses in Accountancy lies - to design curricula and content to meet the needs and evolutions of the profession. Armitage & Poyzer (2010) argue that the responsibility to keep curricula updated mainly rests on teachers, who must be aware of changes in the profession in order to incorporate them into the class schedule. Nevertheless, Siriwardane, Kin Hoi Hu & Low (2014) argue that success in the training process consists in the academic understanding of market needs.

A better understanding of such needs can be achieved from the analysis of the information pointed out about the professionals working in the field of auditing and the knowledge needed to exercise the profession. In accordance, Humphrey (2008) emphasizes that, for the development of knowledge in auditing and for the advancement of teaching processes in the area, researchers and auditors have to work together to move in the same direction in the theoretical and practical sense. Chaffey et al. (2011), however, point out that professionals are all too often ignored in surveys.

In addition, Humphrey (2008), referring to the American context, considers the lack of attention given by researchers to the gap between the labor market and audit teaching to be frustrating. The author further illustrates that contemporary auditing research may be more fruitful if it focuses directly on the understanding of the audit practice and the influence of regulatory institutions on the profession. The author argues that researchers are reluctant to understand the profession in a more critical and less quantitative dimension. Humphrey (2008) identifies that the scientific field in the area has distanced itself from the understanding of the professional practice. The author argues that, within the academy, relatively little is known about the practice, yet the legitimacy of knowledge in auditing remains poorly researched. For the author, the greatest difficulty lies in the approximation of research with specific points of practice.

The gap between the academy and the labor market in the context of auditing has already been argued in earlier work, such as Armitage (2008), Chaffey et al. (2011), Dombrowski et al. (2013), Humphrey (2008), Johnson et al. (2003), Madeira (2001) and Ricardino Filho (2002, 2003). Specifically in the Brazilian context, Madeira (2001) and Ricardino Filho (2002) assert that the teaching of auditing in Brazil has not undergone any relevant update in the last fifty years, so that academic education has abruptly distanced itself from market practices and the courses in Accountancy did not appropriately match the growth of the audit profession.

For a better understanding of both the gap between the two contexts and the precariousness of the audit teaching mentioned above, it is necessary to discuss the curricular contextualization of the Audit discipline within the course of Accountancy, taking into account its emergence and the main discussions about it.

## 2.2. Curricular aspects and background research

The emergence of the Audit discipline in Brazil goes back to 1945, as explained by Silva (2008). The author cites that auditing was initially inserted in the courses of Accountancy by means of Decree-Law 7.988 in the year 1945, when the discipline was named Accounting Revisions and Expertise. Only in 1992, when the discipline was already called Accounting Audit, was it classified as mandatory knowledge.

In the Brazilian context, higher education institutions have autonomy, according to the curricular guidelines of the courses in Accountancy, to determine the content of their teaching plans (Machado et al., 2014). For Madeira (2001), the curricular standardization presents advantages and disadvantages. On the one hand, standardized curricula allow teaching to be somewhat uniform, independent of the educational institution or its location. However, uniformity alone is not a guarantee of teaching or even of learning. The author asserts that, when too standardized, curricula end up impinging on the teaching process, limiting the possibilities of teachers, including the use of creativity.

It is important to note that, for Silva and Moreira (2008, p.7), “the curriculum does not constitute a neutral element of disinterested transmission of social knowledge. Rather, the curriculum is implied in knowledge relations, conveys particular and interested social views, produces particular individual and social identities.” Thus, the preparers of the curricula should find, according to Johnson et al. (2003), the balance between teaching, skills development and building professional awareness. In this sense, Siriwardane et al. (2014) argue that the audit profession involves a wide range of knowledge and skills, so that the training of future auditing professionals does not fall exclusively within universities, and audit firms also have a responsibility to develop the auditors’ knowledge.

As regards the behavioral skills required to maximize the efficiency and effectiveness of the audit firm’s work, Camargo, Camargo, Dutra and Alberton (2014, p. 46) indicate that the competencies assigned as the most important to the auditors vary according to the functional framework of these auditors, thus suggesting that these “are not static and that the skills that are important at the beginning of the auditor’s career may be replaced by others as the professional gains more experience.” From this perspective, “by combining the skills transmitted by the formal institutions and the skills acquired in their professional practice and by their personal training initiatives, individuals become the agents and main builders of their qualification”. The universities act as mediators in this process regarding the incentive to seek knowledge (Silva, 2008, p.35).

What human capital issues are concerned, including the teaching and training of audit professionals, the Advisory Committee on the Auditing Profession (ACAP) produced a report in 2008 with recommendations to improve the profession in the United States. The committee alerts that the link between the profession and the academy is underdeveloped and recommends the orientation of curricula to the market, seeking to continually evolve to meet the needs of the profession. In addition, the committee believes that the direct consequence of the harmony between teaching and practice is the better quality of audit services, as new professionals will be prepared to solve specific problems in the area.

In addition to the aforementioned report, it is important to mention the creation of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting-ISAR in 1976, which aims to promote the strengthening of the accounting profession and, among other things, to discuss subjects related to vocational training (Silva, 2008).

In 2011, ISAR, through the United Nations Conference on Trade and Development (UNCTAD), announced the revision of an elaborated curriculum proposal for the teaching of Accounting, seeking the design of a global curriculum, in order to enable, in addition to the harmonization of accounting education, the training of professionals able to act in a globalized context. The curricular proposal offered by UNCTAD (2011, p.80-86), in its item 3.8, regarding the teaching of auditing, recommends the following structure, which is summarized as follows:

- 3.8.1 Nature, goal and extent of auditing
- 3.8.2 Audit Standards and International Auditing Standards
- 3.8.3 Basic Audit Principles and Concepts
- 3.8.4 Basic Audit Structure
- 3.8.5 Audit Assessment and Planning
- 3.8.6 Collection and Analysis of Evidence
- 3.8.7 Development of Audit
- 3.8.8 Audit Report Structure
- 3.8.9 Internal Audit-Objectives and Functions

In the Brazilian context, the Brazilian Accounting Foundation (FBC), based on CFC Decree 13/2006, elaborated a National Content Proposal for undergraduate courses in Accountancy, which proposes the following in terms of auditing:

Basic Audit Concepts; Technical and Professional Audit Standards; Audit Planning; Sample Selection and Risk Assessment; Internal Control; Work Roles; Audit Opinions; Equity Accounts Audit; Income Accounts Audit; Audit Reports; Peer Review (FBC, 2008, p.69).

According to Ricardino Filho (2002), the legal provisions and the pronouncement of professional entities on the curricular structure denote the concern with ensuring that the Accountancy courses be taught in such a way that their framework is inherently connected to the activity, since Accounting education is one of the prerogatives to exercise the audit profession.

As for the aggravating gap between theory and practice, Ricardino Filho (2002) characterizes the situation of audit teaching in Brazil as, at least, worrisome. The author argues that the audit disciplines do not yet have the appropriate emphasis within the course of Accounting, in the same way as most of the teachers responsible for the discipline do not have the minimum masters or doctorate training.

Moreover, Chaffey et al. (2011) add that, ignoring the complex nature of various subjects in the audit curriculum, many Accounting programs offer only a relatively short module for auditing teaching. Moreover, there is no clear consensus as to what should be taught or what teaching methods should be employed, thus creating a great challenge for the educator.

In the research conducted by Ricardino Filho (2002), which aimed to identify if the teaching of the Auditing discipline in Brazilian higher education institutions demonstrate the conditions to fulfill their role of minimally pre-qualifying the future militants in the area for the performance of their professional and social role, it was revealed that the teachers in charge of the discipline had little or no experience in the market and no training in the field or no master's or doctoral courses. In addition, the author identified that the material used to support the course included practices that had lapsed since the 1990s, which only superficially address subjects related to the International Audit Standards, fundamental concepts such as relevance, risk of Auditing and statistical sampling.

Seeking to parallel audit teaching within the academy and the courses offered by the main audit firms with the curriculum proposal advocated by ISAR, the author found evidence of the gap between the academy and the market. However, it is important to point out that, in this case, the differences are already expected as, while the universities are focused on teaching, in a broader conception, the training offered by audit firms is focused on the technical aspect (Ricardino Filho, 2002).

As regards the importance of specific topics in the Audit discipline, Armitage and Poyzer (2010) show that the most important topics for teachers are audit risk, understanding internal control, obtaining evidence, understanding of the financial statements and fraud-related issues. For auditors, on the other hand, the results revealed that the most important topics are audit risk, ethics issues, audit documentation, understanding of internal control and analytical procedures.

Soares, Soares, Lanzarin and Casagrande (2012) identified that the most recurrent contents in the audit subjects were: “Basic Audit Concepts” (100%), “Audit Procedures and Techniques” (92%), Audit and Audit Types “, with 88% each; and the less recurrent contents were “Errors and Fraud” (21%) and “Audit Practice”, with 25%.

In the study by Silva (2008), the author sought to analyze the perception of the audit professionals regarding accounting audit teaching in the Brazilian undergraduate courses in Accountancy, as well as to evaluate the current stage in its adoption as a specific discipline in undergraduate Accountancy courses at HEIs in Brazil. The results present differences between the opinions of teachers and audit professionals, especially regarding the distribution of the discipline content, requirement of prerequisites and professional experience of the teacher.

As observed, no research was found in the national scope that seeks to evaluate the content of teaching in auditing, taking into account academic and professional aspects, according to the approach proposed in this work. Therefore, it is highlighted that research is needed to identify the expectations of the market and teachers in the area of auditing, with a view to supporting the academy to reevaluate the teaching process, taking into account aspects the labor market points out as relevant.

### 3. Methodological Procedures

According to the methodological precepts of Gil (2002), the approach to the problem in this research is characterized as predominantly quantitative. Regarding the objectives, the research is classified as descriptive, since the intention was to know the opinions of professionals and teachers in the audit area about the importance of the contents taught in the Audit discipline. Regarding the procedures, this research is characterized as a survey, because a group of teachers and a group of professionals in the area was questioned, seeking knowledge about the problem studied.

This work resembles, in essence, the study developed by Armitage (2010). However, in order to reach the proposed objective, a questionnaire was developed as a data collection tool, based on the works of Armitage (2008), Armitage and Poyzer (2010), Silva (2008), the curricular proposals advocated by the United Nations Conference on Trade and Development (UNCTAD) (2011) and the Brazilian Accounting Foundation (2009), in addition to the Brazilian Accounting Standards applied to Independent Auditing (NBC PA) and Brazilian Accounting Standards applied to Auditing (NBC TA), which were elaborated according to their international equivalent issued by Ifac, thus seeking to address pedagogical, conceptual, practical and normative aspects.

The questionnaire was structured in the form of a five-point Likert scale (1 “little emphasis” - 5 “Much emphasis”), containing 44 topics on audit teaching, which were distributed into six groups: (i) Teaching of General Audit Concepts; (ii) Audit Evaluation and Planning; (iii) Collection and Analysis of Evidence; (iv) Execution of Audit Work; (v) Audit Report; And (vi) Other Audit Areas. Each of the groups contained the option “other topics”, if the participant wanted to add some subject not mentioned in the questionnaire. The questionnaire also addressed issues related to the participants’ training and professional experience. An open question was also asked if the respondents were interested in manifesting other relevant aspects the Audit discipline should address and that were not addressed in the questionnaire.

In order to identify the professionals' perception about the relevance of certain subjects in audit teaching, the auditors were asked to score the emphasis with which they believed that such matters should be addressed in the audit discipline. The same question was asked to the teachers in a very similar way, but they were asked to indicate the contents pointed out according to the emphasis with which they were addressed during the discipline. Both the questionnaire sent to the teachers and to the auditors enabled the respondents to indicate the alternative "The subject is not addressed" and "The subject does not need to be addressed", respectively. In these situations, the value of zero was assigned for the statistical treatment of the data.

To identify the auditors' perception, the sample selected for the survey comprises 376 audit firms registered in the Brazilian Securities and Exchange Commission (CVM) database. As for teachers, the sample was restricted only to the federal and state public universities recognized by the Ministry of Education (MEC), which offer a course in Accountancy, totaling a sample of 72 universities.

The questionnaire was sent to the auditors using the e-mails registered in the CVM database, while the questionnaire corresponding to the teachers was sent to the e-mail of the course coordination registered on the university's website, requesting that the questionnaire be sent to the teachers responsible for the audit discipline. When the subject teacher's email was made available, the questionnaire was sent directly to him. The contacts were consulted on June 1, 2015 and the e-mails with the research link were sent on June 9, 2015 and forwarded on June 22, 2015. A total of 13 responses were obtained from the teachers and 35 from the auditors, which indicates a sample representativity of 18.05% and 9.30%, respectively.

The answers obtained were treated using Microsoft Excel® and SPSS® statistical software. To test the normality of the data, the Shapiro-Wilk test was carried out, which rejected the normality hypothesis. Non-parametric Mann-Whitney tests and Spearman's correlation were used to evaluate the differences between the responses obtained by the two groups.

#### 4. Result Analysis

The respondents' profile is characterized by 27 (77%) auditors working in non-Big Four audit firms; and eight (23%) working in Big Four companies. As for teachers, 11 (85%) are affiliated with federal universities and two (15%) with state universities. Most of the professors have at least a Master's degree (38%) and a PhD degree (46%), while the rest holds only an undergraduate or specialization degree (16%). Contrary to the results presented by Ricardino Filho (2002), the teachers in charge of the audit discipline, respondents of this research, mostly hold a Master's and Ph.D. It should be taken into account, however, that this finding may be due to the research sample, which was limited to federal and state public universities.

From the point of view of the auditors, the minimum training for the exercise of teaching in auditing is the master's degree (54%), or at least the specialization level (26%). The undergraduate and doctoral degrees were marked by only two respondents each. Three auditors, who answered the survey (9%), believe that the minimum requirements for teaching in the area come from auditing practice rather than the academy. The majority of the auditors (97%), except one, agree that the training of the professors who teach the Audit discipline in the undergraduate courses in Accountancy should be compulsory in Accounting. This perspective is matched by the academics who participated in the research, since all teachers who answered the survey have a degree in Accounting.

The auditors were questioned about the professional experience of the teacher responsible for auditing. Almost all the respondents (34), that is, 97% agreed that they should ideally have at least experience in an independent audit firm. On the academic side, it was verified that all the respondent teachers have experience in the accounting area, however, only two (15%) acted as independent auditors. Two others acted exclusively as accountants, while the others have experience in controllership and auditing departments of public and private companies.

The teaching method the auditors considered as more appropriate involves the set of lectures, case studies, resolution of exercises and seminars. The teachers partially shared the same opinion, who use the combination of these methods as an approach for the development of their classes. It was noticed, however, that many of them only use lectures as an approach to the process of teaching and learning in auditing.

The auditors were asked to attribute the emphasis they believe should be given to issues related to teaching general audit concepts addressed in the course. The same question was asked in a very similar way to the teachers, however, they were asked to indicate the contents indicated according to the emphasis that is given in the content of the discipline.

Table 1 shows the perceptions about the subjects related to the teaching of general audit concepts by each of the groups investigated.

Table 1  
**Teaching of General Audit Concepts**

Topic	Auditors			Teachers			DM	Mann Whitney Sig.
	Ranking	Mean	SD	Ranking	Mean	SD		
Professional Skepticism	5th	4,40	1,14	6th	4,231	1,01	0,17	0,404
Professional Judgment	6th	4,37	1,14	7th	4,231	1,01	0,14	0,490
Nature, Goal and Extension of Auditing	2nd	4,57	0,95	1st	4,769	0,44	-0,20	0,862
Audit Standards and International Audit Standards	3rd	4,46	0,98	3rd	4,692	0,63	-0,24	0,520
General Objectives of the Auditor	8th	4,23	1,03	2nd	4,769	0,60	-0,54	0,600
Fundamental Principles and Concepts of Auditing	4th	4,46	1,15	4th	4,538	0,66	-0,08	0,639
Certification Requisites	9th	3,51	1,25	9th	3,692	1,03	-0,18	0,771
Ethical Requisites	1st	4,63	0,55	5th	4,308	0,85	0,32	0,254
Legal Accountability of Auditors	7th	4,26	0,89	8th	4,154	0,90	0,10	0,679

Legend: SD – Standard Deviation; DM – Difference of Means.

Source: research data.

As shown in Table 1, within this topic, the subject the auditors considered most relevant concerns the “Ethical Requirements”. The same item is considered only the fifth most important from the point of view of teachers. Issues related to Ethics were also seen as one of the most important issues to be addressed in the classroom, from the viewpoint of auditors, in the research by Armitage (2008) and Armitage and Poyzer (2010). It is important to highlight that, in Brazilian Accountancy courses, the Ethics discipline is a compulsory curricular component. Nonetheless, the curriculum suggested by UNCTAD (2011) for the Accounting course also cites Ethics as a specific discipline. Thus, even if the differences between the teachers and professionals’ perceptions regarding this subject were not statistically significant, according to the Mann-Whitney test, one must take into account the possibility that this subject is not too emphasized within the audit discipline, in view of the existence of a discipline specifically focused on the development of ethical awareness and the stimulation of practices with that purpose.

As for the teachers, it was verified that, within this topic, they present subjects related to the “Nature, Purpose and Extension of the Audit” with greater emphasis. Both auditors and teachers attach the same level of importance to matters related to “Auditing Standards and International Auditing Standards”, “Fundamental Principles and Concepts of Auditing” and “Certification Requirements”, both groups attributing minor emphasis to the latter. Although differences were found in these subjects, none of them were significant, according to the Mann-Whitney test.

Table 2 presents the perceptions of the auditors and teachers on the issues related to the audit evaluation and planning. As noted in Table 2, while teachers are concerned with emphasizing issues related to “Analytical Procedures,” auditors do not value the same theme equally.

Table 2

**Audit Assessment and Planning**

Topic	Auditors			Teachers			DM	Mann Whitney
	Ranking	Mean	SD	Ranking	Mean	SD		Sig
Environment favorable to fraud	11th	3,83	1,25	6th	4,462	0,78	-0,63	0,089*
Financial statement analysis	6th	4,14	1,12	9th	4,000	1,00	0,14	0,564
Assessment of risk control	3rd	4,26	1,01	4th	4,462	0,88	-0,20	0,418
Designation of technical tea, and timetable	12th	3,80	1,05	12th	3,769	1,17	0,03	0,933
Understanding of internal control structure	7th	4,14	1,06	2nd	4,692	0,63	-0,55	0,047**
Forms of fraud	10th	3,86	1,14	11th	3,923	1,50	-0,07	0,575
Materiality in planning and execution of auditing	2nd	4,37	1,11	7th	4,385	0,77	-0,01	0,572
Work roles	8th	4,11	1,37	8th	4,308	0,95	-0,19	0,949
Planning of evidence collection (audit sampling)	5th	4,17	1,12	5th	4,462	0,78	-0,29	0,527
Analytic procedures	4th	4,23	1,00	1st	4,692	0,63	-0,46	0,110
Responsibility of auditor for the fraud	9th	4,06	0,94	10th	4,000	1,00	0,06	0,873
Audit risk	1st	4,43	1,09	3rd	4,538	0,88	-0,11	0,606

Legend: SD – Standard Deviation; DM – Difference of Means.

Obs.: \*,\*\* Significant at 10% and 5%, respectively.

Source: research data.

Also in Table 2, issues related to “Forms of Fraud” and “Auditor’s Responsibility for Fraud” were noted with similar degrees of importance. Likewise, the agreement of both groups on the relevance of topics related to “Evidence Collection Planning” and “Technical Team Designation” and “Timeline” is noticeable.

Significant divergences were identified in the importance attributed to “Understanding the Internal Control Structure” (Table 2), which is addressed with greater emphasis in the discipline, while the auditors do not attribute that much importance to the subject. Similar to the results found in the present study, Armitage and Poyzer (2010) note the same divergence regarding the importance professionals and teachers attribute to the “Understanding of the Internal Control Structure” in the American context.

On the other hand, significant differences can be observed with respect to the understanding of the “Environment Favorable to Fraud”, whose subject, although it is the sixth most emphasized by the teachers within this topic, is not seen with the same importance by the auditors. The greater importance attributed to teachers’ understanding of the “Environment Favorable to Fraud” was also identified in Armitage and Poyzer (2010), who consider that this divergence corroborates the indication that the academy is concerned that the student understands how the organizational environment contributes to the fraudulent process, thus providing a basis for the improvement of fraud detection techniques.

In Table 3, the perceptions of the auditors and teachers on the subjects related to the “Collection and Analysis of Evidence” are displayed.

Table 3  
Collection and Analysis of Evidences

Topic	Auditors			Teachers			DM	Mann Whitney
	Ranking	Mean	SD	Ranking	Mean	SD		Sig.
Appropriate and Sufficient Audit Evidence	1st	4,26	0,98	1st	4,385	0,96	-0,13	0,642
Types and Forms of Evidence	2nd	4,23	0,88	2nd	4,308	0,85	-0,08	0,791
Sampling Methods	3rd	4,00	0,91	3rd	3,923	1,19	0,08	0,931
Probabilistic Sample	4th	3,77	1,11	4th	3,846	1,14	-0,07	0,865
Non-Statistical Sampling	5th	3,66	1,11	5th	3,846	1,14	-0,19	0,620

Legend: SD – Standard Deviation; DM – Difference of Means.

Source: research data.

Regarding the expectation of professionals in the field as opposed to the emphasis on topics related to “Collection and Analysis of Evidence”, are addressed in class, as shown in Table 3, it is observed that no significant differences were found between the groups. The data presented in Table 3 demonstrate a consensus, both from an academic and professional point of view, regarding subjects related to this topic, considering that both groups assigned a similar degree of importance to each item. It is possible to verify that, concerning the collection and analysis of evidences, the subjects related to the Evidence of Adequate and Sufficient Audit and Types and Forms of Evidence are evaluated as the subjects that deserve more attention within the discipline.

Table 4, which demonstrates the auditors’ perception of the importance of approaching issues related to the “Execution of Audit Work” in comparison to the depth that such matters are addressed in the audit discipline.

Table 4

**Execution of Audit Work**

Topic	Auditors			Teachers			DM	Mann Whitney
	Ranking	Mean	SD	Ranking	Mean	SD		Sig.
Work roles	2nd	4,11	1,13	1st	4,385	0,87	-0,27	0,486
Organization of audit work	4th	4,06	0,94	2nd	4,077	0,64	-0,02	0,853
Going concern	3rd	4,06	0,94	3rd	3,769	1,09	0,29	0,405
Initial work – Initial balances	6th	3,97	0,98	4th	3,769	1,17	0,20	0,599
Review of subsequent events	8th	3,89	1,11	5th	3,692	1,60	0,19	0,971
Stakeholders	5th	4,00	1,08	6th	3,308	1,75	0,69	0,247
Formal representations	7th	3,97	0,95	7th	3,308	1,38	0,66	0,117
Quality control	1st	4,14	1,00	8th	3,231	1,42	0,91	0,032**
Information systems audit	9th	3,74	1,22	9th	2,308	1,84	1,44	0,010**

Legend: SD – Standard Deviation; DM – Difference of Means.

Obs.: \*\* Significant at 5%.

Source: research data.

As shown in Table 4, significant differences were found in the perspective of issues related to “Quality Control” and “Information Systems Audit”, as the p-value of these items is inferior to 0.05, thus rejecting the hypothesis that the investigated groups view these items with the same importance.

Although the item related to the “Information Systems Audit” occupied the same position in both groups’ ranking, as perceived, the academy undervalues this subject, that is, while the auditors tend to consider the need to elaborate this content in further depth, the teachers do not share the same opinion, who do not put greater emphasis on this topic. A possible reason for such a difference is explained by Ricardino Filho (2003) who, when analyzing the bibliography adopted within the audit discipline, found that the books the teachers used go back to the 1990s and do not deal with subjects related to information systems.

The groups’ views on the approach to matters related to the Audit Report are presented in Table 5.

Table 5

**Audit Report**

Topic	Auditors			Teachers			DM	Mann Whitney
	Ranking	Mean	SD	Ranking	Mean	SD		Sig.
Audit Report Structure	1st	4,20	1,13	1st	4,923	0,28	-0,72	0,014**
Recommendations for Company Management Policy	2nd	4,03	1,12	2nd	3,231	1,64	0,80	0,098*
Internal Control Report	3rd	4,03	1,07	3rd	3,769	1,01	0,26	0,353

Legend: SD – Standard Deviation; DM – Difference of Means.

Obs.: \*\* Significant at 5%.

Source: research data.

As Table 5 shows, even though the items received the same classification among the groups in the ranking, it is noticed that the emphasis with which the subjects related to the “Structure of the Audit Report” and “Recommendations for the Company Management Policy” are discussed in class, it differs significantly from the emphasis with which auditors believe that such a subject deserves to be debated. The teachers consider the “Structure of the Audit Report” more important, while the auditors attribute significantly more importance to the “Recommendations for the Company’s Management Policy”. Regarding the importance identified by auditors in relation to the approach of other audit areas within the Audit discipline, there were significant differences between market expectations and the focus on such issues within the academy, as can be seen in Table 6.

Table 6  
Other Audit Areas

Topic	Auditors			Teachers			DM	Mann Whitney
	Ranking	Mean	SD	Ranking	Mean	SD		Sig.
Assurance Services	1st	3,77	1,19	1st	2,231	2,01	1,54	0,014**
Audit for Non-Profit Entities	2nd	3,74	1,09	2nd	1,846	1,68	1,90	0,001***
Audit for Public Entities	3rd	3,71	1,07	3rd	2,077	1,55	1,64	0,001***

Legend: SD – Standard Deviation; DM – Difference of Means.

Obs.: \*\* Significant at 5%.

Source: research data.

Based on the results shown in Table 6, it can be seen that the group of auditors tends to give more importance to the approach of issues related to Assurance Services, Audit for Non-Profit Entities and Audit for Public Entities. On the other hand, these subjects are not treated with the same relevance within universities, since the teachers considered the subjects referenced in this topic much less important when compared to the auditors. The importance attached to these items leaves room for the understanding that they are addressed peripherally within the Audit discipline or often not even raised in class. In this field, it can be seen that the academy does not correspond to market expectations, in terms of improving matters related to other areas of auditing.

The answers obtained by the two questionnaires were submitted to the Spearman correlation test, to identify the agreement between the two groups about the themes pointed out in the survey. The Spearman test showed a positive and significant correlation between the two questionnaires at the tolerated error rate of 0.05 (coefficient = 0.757,  $p = 0.000$ ). That is, in approximately 75% of the contents addressed in the questionnaire, teachers tend to emphasize them to the same extent as the auditors believe that these should be emphasized within the Audit discipline, thus demonstrating the existence of some agreement about the important subjects in the Audit discipline.

Next, the research sought to identify personal opinions of each of the respondents about Audit teaching, through an open question. On the part of the teachers, initially, the statements point to problems related to the discipline’s timetable, which does not have sufficient time for due deepening in the most relevant issues of the audit area, nor does it permit the theoretical-practical contextualization which some of the respondent teachers consider fundamental. Nonetheless, the auditors argue that, in the vast field of auditing, the teaching of this knowledge branch within the university is limited to a more general and superficial contextualization. Silva’s research (2008) identified that the average length of the course is 86 hours / classes, although the author considers that the ideal for learning would be an average workload of 190 hours / class. In addition to Silva (2008), the works of Chaffey et al. (2011) and Ricardino Filho (2002) had already raised concerns about the discipline’s timetable, which is far below the minimum necessary for a proper approach of the themes required in the area.

The concern with the practical approach of knowledge in auditing is evident in the auditors' contributions, who choose technical requirements as essential within the curricular curriculum of the Audit discipline. Contradicting this positioning, the teachers' collaboration leaves implicit the concern to offer theoretical-practical directions that permit the resolution of eminent problems in daily business, which go beyond the operationalization of techniques. Additionally, the teachers appointed the use of debates in the form of a seminar on the scientific production in auditing as a teaching method.

The respondent auditors also raised the need for the focus on the Independent Audit environment in Brazil and in the world, involving issues related to the organizational structure and its functioning. From the perspective of the teachers, in addition to the elements raised by the auditors, teachers also find it important to discuss the historical antecedents of the audit, both in Brazil and in the global context, in addition to the discussion of corporate scandals that have been triggered in recent years. Some auditors also emphasize the relevance of addressing issues such as Compliance and Due Diligence, as well as a further deepening of the NBC TA and PA standards. The auditors also raised the importance of the discussion about the Principle of Independence within the discipline of Audit, which the auditors consider to be a fundamental principle for the exercise of the audit profession.

## 5. Conclusions

The objective of this study was to identify the perception of Audit teaching, in the academy and the labor market approach, based on the evaluation of the importance professionals and teachers attribute to the main conceptual and normative aspects of the audit area. To reach the proposed objective, a questionnaire was sent to the teachers responsible for the audit discipline and to the auditors working in the labor market. The results show that, in approximately 75% of the subjects raised in this study, the university tends to correspond to the expectation that the market holds about the importance given to such contents within the audit discipline.

The most significant differences perceived between the opinions of the groups relate mainly to matters related to the "Assurance Service", the "Non-Profit Entity Audit", the "Audit of Government Entities", "Quality Control", "Information Systems Audit" and "Company Management Policy Recommendations", which the market believes should be more emphasized within the audit discipline than they are. On the other hand, teachers tend to attach greater importance to issues related to the "Structure of the Audit Report", the "Understanding of the Internal Control Structure" and the "Environment Favorable to Fraud" than the market believes are really necessary.

The results also indicate that teachers face problems related to the discipline's timetable, thus making it impossible to deepen the content required for the practice of auditing, nor does it allow the teacher to address the desired theoretical-practical contextualization, limiting Audit teaching to a more general and superficial view. Chaffey et al. (2011), Silva (2008) and Ricardino Filho (2002) had already raised concerns about the discipline's timetable, which is far below the minimum necessary for a proper approach to the subjects required by the area.

An evolution was observed in the qualification of the faculty of the audit discipline when compared to the results of the research by Ricardino Filho (2002), which identified that only a small part of the teachers in charge of the discipline possessed an M.Sc. or Ph.D. Most respondents possess an M.Sc. or Ph.D. and experience in the labor market. It should be kept in mind that this finding may be due to the research sample, which was limited to federal and state public universities.

The appointed results demonstrate a certain level of agreement about the importance of the main contents of the Audit discipline, based on the market view in comparison to the academy. They do not permit assessing whether gaps exist between the two perspectives, since vocational training involves a much broader and more complex process than the content approach.

Considering the constant changes in the demands of the labor market and the limited workload of the Audit disciplines, however, the results presented here can be used for teachers to evaluate the disposition of the contents covered within the discipline, as well as to incorporate questions and requirements, taking into account the relevance attributed to such matters in the training of the auditor from the point of view of the labor market.

For future work, the sample used in this research should be expanded, as well as to evaluate the content of the audit discipline in other perspectives, such as the view of the graduates from the Accountancy courses who have just entered the labor market, besides the discussion of teaching methods used within the discipline. The debate about the practical and pedagogical knowledge desired for the exercise of Audit teaching is still interesting. Moreover, it is suggested that the gap between market expectations and the academy regarding the audit discipline is evaluated from the point of view of the Problem-Based Learning (PBL) method, thus aiming to improve the Audit discipline. Nevertheless, the discussion involving subjects related to the approximation between the two worlds deserves to be approached in further detail, mainly seeking to identify to what extent this harmonization benefits the teaching and learning process.

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