

## ENADE and Proposed Curriculum of CFC: A Study in Brazilian Accountancy Programs

### Abstract

**Objective:** The objective in this study was to assess whether the institutions that offer Accountancy programs whose curricula stand closer to the proposed curriculum of the Federal Accounting Council (CFC) score higher on the ENADE exam.

**Method:** In the data collection, the websites of all Accountancy programs that participated in the ENADE in 2012 were visited. Information was located for 447 institutions, which constituted the study sample. In the data analysis, descriptive statistics and the Wilcoxon test were used.

**Results:** The main research findings demonstrate that the academic curricula of the public universities stand closer to the contents proposed by the CFC. The tests also evidenced that the best ENADE scores in 2012 also came from public universities.

**Contributions:** The research contributes by evidencing that the Brazilian Accountancy curricula substantially differ from the curriculum the CFC proposes. It also evidences that greater alignment with the proposed curriculum is associated with higher ENADE scores, which values the proposal as a parameter for new curricular revisions in Brazil.

**Key words:** Accounting Education. Federal Accounting Council. Curriculum.

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## 1. Introduction

The Higher Education Institutions (HEI) should provide the development of the skills the students require for professional activities. In order to do so, they need proper planning of the education process, which is embodied in the Political Pedagogical Project (PPP), a document elaborated to establishing a planning with the main ideas, elements, curricular and organizational structures of an undergraduate course (Veiga, 2003).

The HEIs structure their PPPs for each program, according to the norms of the respective areas. The National Curricular Guidelines (NCGs) - National Council of Education (CNE) / Board of Higher Education (CES) Resolution No. 10, issued on December 16th 2004, guide the institutions that offer Accountancy programs in the elaboration of the academic accounting curriculum, divided into three educational blocks: Basic, Professional and Theoretical-Practical. The Federal Accounting Council (CFC) also proposed a curriculum in 2009 to assist and standardize the curricula presented by HEIs.

Accounting is based on legislation that is constantly adapted and modified. At the international level, standards are created and changed frequently. Following the objective of standardizing the way of doing Accounting, teaching also needs modifications, especially in the contents covered in disciplines. Teachers and HEIs have the task of adapting their planning, methods and knowledge in order to fill in the gaps and offer accounting education with updated focuses (Fouché, 2013).

In addition to the above, the profound changes introduced by Law No. 11638 / 2007 should be reminded, when the International Financial Reporting Standards (IFRS) were adopted. According to Jackling, Howieson and Natoli (2012), the IFRS influence accounting education in the countries that have adopted them, as they are related to the organizational environment the students will integrate, and in some cases are already inserted in. According to Carvalho and Salotti (2013), Brazil is one of the few countries with full compliance with IFRS.

In view of the heterogeneity of the Brazilian HEIs' curricula, evaluation programs are necessary to guarantee the quality of the education offered. Law No. 10861/2004 established the National System for the Evaluation of Higher Education (SINAES), which established three pillars for the evaluation of HEIs: institutional evaluation; course evaluation; and student performance assessment. The tools used in the evaluation include the National Student Performance Exam (ENADE).

The quality of teaching at an institution is a result of the involvement of three components: students, faculty and HEI (Corbucci, 2007). Faculty variables may interfere with students' academic performance, whether through the academic or professional education, teaching strategy or method, work regimen, degree and professional experience. As for the HEI, the variables can be classified in infrastructure (study environment) and didactic-pedagogical organization (entrance form, PPP, class size and course shift) (Ferreira, 2015). Thus, the result of the ENADE evaluation represents the performance of the HEI based the relation among these three aspects.

Based on the results obtained by the HEIs that offer the Accountancy program on the ENADE 2012 and in view of the CFC's argument on the lack of curricular harmonization among the Brazilian institutions, the question that guides this study is: **is the greater proximity to the curriculum proposed by the Federal Council associated with higher levels of academic achievement on the ENADE?** In view of the above, the general objective of this research is to evaluate whether the HEIs whose curricula stand closer to the CFC proposal present higher scores on the ENADE of Accountancy programs.

The objective of analyzing the curricula of HEI and presenting their relationships with student performance in Brazilian undergraduate programs in Accountancy is justified by the fact that studies of this nature are still incipient in the Brazilian literature consulted. In addition, as from 2008, Brazilian Accounting began to undergo profound changes due to the adoption of international accounting standards, with the approval of Law 11388/2007. Some HEIs still maintain curricula prior to that law though. Thus, the practical contribution of this research is the possibility of assisting managers of HEIs who are in the process of adapting or creating their curricula and PPPs, also collaborating with the production of knowledge about the evaluation of higher education institutions.

## 2. Theoretical Review

### 2.1 National System for the Evaluation of Higher Education - SINAES

The purpose of the evaluation is summarized in the interest in improving knowledge (Grizendi, Silva & Ferreira, 2008). According to Álvaro Méndez (2002, p. 14), “in the educational field, evaluation should be understood as a critical learning activity, because it is assumed that evaluation is learning in the sense that, through it, we acquire knowledge”.

The SINAES allows for the evaluation of undergraduate programs and undergraduate students’ performance in all Brazilian HEIs, aiming at improving the quality of higher education and expanding its supply, guaranteeing the HEIs’ social commitments and responsibilities (Brazil, 2004). In view of this purpose, SINAES, based on its evaluation, characterizes the profile of the institution through activities, projects, courses offered, programs and sectors. The evaluation also focuses on the conditions of the physical facilities, the qualification of the teaching staff and the pedagogical structure the students are exposed to (MEC, 2013).

In other words, the SINAES evaluates the institutional aspects, the academic performance of the students and the undergraduate course. The ENADE measures the students’ income, according to Art. 5 of Law 10861/2004:

§ 1º The ENADE will verify the students’ performance with regard to the program contents established in the curricular guidelines of the respective undergraduate program, their skills to adjust to the requirements deriving from the evolution of knowledge and their competences to understand themes beyond the specific context of their profession, linked to the Brazilian and global reality and to other knowledge areas.

[...]

§ 3º The maximum periodicity to apply the ENADE to the students of each undergraduate program is three-annual.

§ 4º The application of the ENADE will be accompanied by a tool to survey the students’ profile, which is relevant to understand their results.

[...]

§ 8º The assessment of the students’ performance in each program on the ENADE will be expressed through concepts, ranked on a five-level scale, based on minimal standards set by experts in the different knowledge areas (Brasil, 2004).

As outlined above, the ENADE assesses the students’ performance through specific skills resulting from their training. According to Polidori, Marinho-Araújo and Barreyro (2006, p. 432), the “expectations of undergraduate training include, in addition to the content domain, the development of postures and processes that constitute the design of an expected professional profile”.

The ENADE is composed of: a test consisting of questions that measure knowledge and skills; the questionnaire focused on students’ impressions concerning the test; the socioeconomic questionnaire, which aims to characterize the student profile; and the questionnaire of the program coordinator (Brazil, 2004). The exam divides the contents in: General Education (25% of the grade) and Specific Education (75% of the grade).

The academic performance evaluation undertaken through the ENADE helps the institutions in the process of self-evaluation, for those who seek continuous improvement in their PPPs. According to Polidori, Marinho-Araújo and Barreyro (2006, p. 434), ENADE “aims to provide reflection within the program itself and the institution, as it constitutes a privileged moment of interaction with students, aiming at stimulating critical reflection and the evaluation of their education processes”.

The test is applied at all HEIs of the Brazilian states:

The objectives of the assessment include getting to know the strengths and problems of the institution, considering the appropriateness of its work to the new and classical social demands, identifying the degrees of involvement and the commitments of their teachers, students and servants, in view of the basic institutional priorities (INEP, 2004, p. 97).

In that sense, the ENADE is an important tool to assess the teaching and learning process in Brazil as, according to Worthen, Sander and Fitzpatrick (2004), the evaluation is a vehicle for identifying, clarifying and applying defensible criteria to determine the values, quality, utility and importance of the evaluated object. In this sense, according to Peck and Gorzalski (2009) and Preskill and Caracelli (1997), information from course evaluations can contribute to their improvement by providing managers with data that allow more in-depth knowledge about the reality of the programs and assist in their management.

In this respect, an important analysis would consider the curriculum, which is the tool the HEI use to structure the content approach and its respective schedules in student education. There are some shortcomings in this process though, which make it difficult to fulfill this role. According to Rodrigues and Peixoto, course coordinators do not see the results of assessments as relevant information for course improvements. In addition, it should be appointed that many of them claim to be ignorant of both the ENADE and student performance. At the same time, the study by Freitas, Barbosa, Galvão & Miranda (2015) indicates that the programs whose managers revealed a positive view on the quality and usefulness of the ENADE Course Report scored higher in the evaluation.

## 2.2 The curriculum of Accountancy programs

The pedagogical planning process is ongoing and seeks a balance for the sake of the development of the education system. According to Ribeiro (2010), higher education practice is continuously changing and the academic education needs cannot be predicted for a long period, which is why the planning of educational practice is constant. According to Silva (1996, p. 23):

The curriculum is one of the privileged places where knowledge and power, representation and mastery, discourse and regulation intermingle. It is also in the curriculum that the power relations are condensed which are crucial to the formation process of social subjectivities. In short, curriculum, power and social identities are mutually involved. The curriculum embodies social relationships (Silva, 1996, p. 23).

Moreira and Silva (1997, 28) point to the curriculum as “ground for cultural production and policy, in which the existing materials function as raw material for creation and recreation and, above all, for contestation and transgression.” By portraying historical, social and cultural factors, the elaboration of a curriculum is “a social process in which logical, epistemological, intellectual and social determinants co-exist side by side, such as power, interests, symbolic and cultural conflicts, domination propositions driven by factors related to class, race, ethnicity and gender” (Jesus, 2008, p. 2640). In this respect, Rojas-Rojas and Giraldo-Garcés (2015) highlight the relevance of the curriculum in the transformation of the professional practices and environments Accounting is embedded in.

Sacristán (2000, p.16) presents the curriculum as a “project based on a constructed and ordered plan, relating the connection between certain principles and their accomplishment, something that will prove itself and that in this practical expression concretizes its value.” The structure of the curriculum considers the skills and abilities that need to be developed in such a way that the student participates in the process of knowledge construction and that he is not seen only as an inactive subject (Vasconcelos, 2008).

The programming of an HEI should consider “the substantivity and ordering of the curriculum contents, the configuration of the most appropriate activities to achieve what is intended and the ability to carry out these plans within certain conditions of space, time, [...] and organizational structure” (Sacristán, 2000, p. 297). Curriculum planning is the starting point for constructing content in accordance with the context of teaching, thinking about how it will happen as a sequence before doing it, considering available time, methods to be employed, available resources, among others (Jackson, 1990; Taylor, 1970).

In view of the composition of aspects related to the curriculum, its objective is to transform the individual so that he can develop in the environment related to his area and be subject to certain changes in his trajectory (Doll Jr., 1997). As for the construction of the curriculum, the challenge is to provide “integrated human competence at the speed of time, also to humanize innovation processes” (Demo, 1998, p. 30).

Riccio and Sakata (2004, p.35) comment that “accounting education institutions in different countries are encouraged to adapt to the changes brought about by globalization”. In the case of national and international HEIs, in view of the integration effect, they have been forced to adapt their curricula to encompass issues related to legislation, organizations and cultures (Kumar & Usunier, 2001; Kwiek, 2001; Wallace, 2003).

In discussing accounting education in the Anglo-American world, Porter and Carr (1999, p. 565) emphasize the “inability of existing programs to properly prepare students for the dynamic and complex business environment they enter after graduating”. The authors criticize the fact that HEIs do not provide students with the necessary methods to act in the job market, since they often work only on concepts and do not help them to develop their skills.

The curricula of Brazilian institutions are guided by CNE Resolution No. 10/2004, which establishes the DCNs for undergraduate courses in Accountancy. With autonomy and flexibility, HEIs should consider that, the greater the supply of tools for graduates to develop their skills in the academic period, as regards the curriculum structure, the better their performance and professional success (Paola, 2009). Pires and Ott (2008, p.7) point out that:

The determination of CNE/CES Resolution No. 10/2004 are broad and flexible, which means that it is the role of each HEI to define, for example, which subjects to teach and the number of class-hours for each content, provided that the established guidelines are complied with, that is, provided that the curriculum contents are covered (Pires; Ott, 2008, p. 7).

As mentioned in Resolution 10/2004, the undergraduate program in Accountancy is interrelated with other branches of knowledge, such as Administration, Economics, Mathematics and others. Thus, the disciplines in related and complementary areas contribute to accounting education (Lagioia, Santiago, Gomes, & Ribeiro Filho, 2007). The assessment by Capacchi, Moretto, Vancin & Padilha (2007, p.12) is that, “if one is not preparing very generalist people, who actually know a little of everything and nothing in depth regarding the professionalism that businessmen expect so much”.

Regarding this freedom of the Accountancy curricula to choose their approach, in their research, Capacchi et al. (2007) analyzed the curricular structure and the educational challenges of the Accountancy programs in Rio Grande do Sul. In their findings, the authors verified that, in the courses analyzed, the curricula approach a reduced number of specific contents in accounting and concluded that, for the institutions studied, the education was generalist and not specialist, and could therefore interfere in these students’ results in accounting examinations and in professional selection processes.

Galdino and Soares (2013, p.2) investigated whether “Accountancy education at public universities in the North of Brazil is predominantly generalist or specialist.” Seven HEIs composed the study sample and analyses only considered the compulsory subjects in the curricula, separated by “accounting disciplines” and “non-accounting disciplines”. The authors were unable to state whether the training was predominantly specialist or generalist, due to the proximity of the percentages found.

According to Soares, Borgert, Pfitscher & Will (2012), in the specialized literature, specialist or generalist curricula receive different treatments. These concepts follow different but appropriate arguments. In summary, the authors discuss that the main characteristic of the general format is that the curricula contain a diversity of contents, following the social and professional education. The specialized curriculum has the objective of penetrating and analyzing, in a deeper way, specific topics in Accounting, thus preparing a specialized professional in certain segments in the area.

The CFC pointed out that, in 2009, there were more than 1,000 curricula for the Accountancy program, making it difficult to standardize the content, program and bibliography at the national level (CFC, 2009). Therefore, it issued a National Content Proposal for the Undergraduate Course in Accountancy, covering:

- The expected professional profile for the graduate in terms of competencies and skills;
- The curricular components;
- The assessment systems of the student and course;
- The supervised curricular training; the complementary activities;
- The monograph, the scientific initiation project or activity program as an optional component of the institution; and
- The academic regimen the program is offered in (CFC, 2009, p. 19).

Corrêa, Antonovz and Espejo (2009) analyzed the students' perception about the Accountancy programs at the Federal University of Paraná. The findings showed that the contents related to Administration, Economics, Informatics and Mathematics do not contribute to these students' education, besides classifying the discipline related to Ethical contents as not important. Rodrigues and Miranda (2013) carried out another analysis of curricular contents, focusing on the content that is most present in Brazilian public exams for the position of Accountant in the years 2011 and 2012. They identified a disagreement between the curricular suggestions of Resolution No. 10/2004, the CFC and the content required in the tests analyzed.

Oliveira, Silva, Miranda & Tavares (2015, p. 1) carried out a comparative analysis of the curricula's level of compliance with the curricular proposal of the CFC at Federal Higher Education Institutions (Ifes) in Brazil. The comparison was made with the content blocks presented in the proposal with the IFES' course plans. The authors observed that 55% of the analyzed institutions comply with the content proposed by the Council. Compliance was lower for the elective subjects, whereas the contents of the theoretical-practical training block presented the highest level of compliance, despite a small difference in the average adoption among the regions. The Midwest was the region with the highest level of compliance (61%).

In another study, Silva and Miranda (2016) performed curricular analyses of the Accountancy program at 447 Brazilian HEIs. The authors diagnosed that, the more hours the institutions allocated to the basic education subjects, the lower the students' scores on the ENADE, considering that 75% of the exam addresses aspects related to vocational training content.

Despite past studies, some gaps still prevail, such as identifying whether institutions with curricula more aligned to vocational training score higher on the ENADE.

### 3. Method

The research is classified as descriptive, whose approach is characterized as quali-quantitative, due to its statistical treatment approach of the data, as well as the analysis and interpretation of the contents. According to Richardson (2011, p. 79), the two methods are related and "the qualitative aspect of an investigation may be present even in the information collected by essentially quantitative studies." Regarding the data collection procedures, documentary research was used.

The population consists of public and private HEI, who offered the Accountancy program and received an ENADE concept in 2012, listed in the Preliminary Course Concept (CPC) Worksheet for 2012, available on the Inep website (2012). In total, there were 995 HEI, but the institutions that did not present the final ENADE 2012 score were discarded. Thus, the population was reduced to 854 HEI. The academic curriculum of all HEIs was investigated on their respective websites. The website search and forwarding of requests by e-mail took place from April until July 2015. 589 curricula were collected, but 142 HEI did not disclose the hour loads per discipline; thus, the sample consisted of 447 HEIs.

Initially, the descriptive analyses of the sample were developed to characterize it. Subsequently, the contents of the curricula of the participating HEIs in the sample were classified according to Silva's proposal (2016), considering CNE / CES Resolution 10/2004, the CFC Curricular Proposal and the study by Rodrigues and Miranda (2013), as explained in the first column of Table 1.

In view of the autonomy of each HEI to construct its curricula, some disciplines found were not mentioned in the CFC Curricular Proposal or in CNE / CES Resolution No. 10/2004. Thus, two groups classified these contents: G19 (Other basic subjects), composed of disciplines such as Research Methodology, Psychology, Sociology, Portuguese Language, Communication and Foreign Language; and G20 (NC) with contents not classified in the other groups or by Resolution No. 10/2004 and the CFC Proposal, as some institutions presented disciplines related to religious subjects and sports practices.

As part of descriptive statistics, the Variation Coefficient (VC) was used. According to Martins and Théophilo (2007), this is a dispersion measure, a result of the division of the Sample's Standard Deviation (S) by its Mean. To analyze the VC, the authors suggest: (a)  $VC < 15\%$ : represents low dispersion; (B)  $15\% < VC < 30\%$ : represents medium dispersion; and (c)  $VC \geq 30\%$ : represents high dispersion.

The Wilcoxon test was also applied to evaluate if there is a significant difference regarding the factors Brazilian Region, Administrative Category and Academic Organization in relation to the variables of the 20 content groups. It should be noted that the analyses were implemented in the freeware R (R Development Core Team, 2015).

## 4. Results

### 4.1 Descriptive analysis of the data

All 26 Brazilian states and the Federal District were part of the sample. The states with the highest number of curricula were: Rio Grande do Sul (RS) - 41; Santa Catarina (SC) - 43; Minas Gerais (MG) and Paraná (PR) - 51; and São Paulo (SP) - 66. From the Southeast, 147 curricula were analyzed and, from the South, 135. Together, they represented 63% of the total sample. In the Northeast, 80 curricula were examined; in the Central-West 50 and, in the North, 35. In this sense, the sample portrays the fact that the South and Southeast regions concentrate the largest number of institutions offering Accountancy programs in Brazil.

Inep classifies the HEIs into two Administrative Categories: Public and Private. Examining the database, we can see that the sample is divided into 80.8% of private institutions and 19.2% of public HEIs. In this aspect, the sampling also reflects the composition of the population, that is, around 80% of educational institutions in the private network.

Inep's characterization of each HEI also identifies the type of Academic Organization, divided into: Universities, University Centers, Faculties and Federal Institutes of Education, Science and Technology. In this sample, 239 institutions are colleges, 145 universities and 63 university centers.

Table 1 below presents the descriptive statistics for the hour load of the content groups surveyed.

Table 1

**Descriptive Statistics of Hour Load of Content Groups, 2015**

Groups	CFC Proposal	Minimum	Maximum	Mean	Median	VC
G1 – Accounting Theories	180	40	340	149.84	144	46.176
G2 – Management Accounting	360	120	380	425.98	420	110.244
G3 – Notions of Financial Quantification	120	0	440	59.84	60	63.275
G4 – Public Finance and Accounting	180	0	240	98.93	80	38.049
G5 – Actuarial Auditing and Expertise	150	0	400	193.68	180	55.145
G6 – Advanced and International Financial Accounting	390	60	576	290.75	288	87.734
G7 – Tax Planning and Accounting	60	0	360	112.59	120	51.325
G8 – Applied Accounting	0	0	340	83.02	72	73.145
G9 – Social Accountability	120	0	520	65.09	60	45.632
G10 – Administration	60	0	660	186.86	160	107.951
G11 – Economics	90	0	384	104.39	80	51.349
G12 – Law	270	50	630	209.59	204	71.301
G13 – Quantitative Methods	210	80	557	234.30	240	64.989
G14 – Training	180	0	744	198.67	204	144.975
G15 – Complementary Activities	60	0	1024	184.21	180	150.614
G16 – Optional Subjects	120	0	840	89.03	60	118.495
G17 – Laboratories	120	0	620	164.26	152	97.978
G18 – Course Conclusion Monograph	120	0	624	101.34	80	100.036
G19 – Other Basic Subjects	210	0	483	226.72	240	87.625
G20 – Contents not in CFC Proposal	0	0	756	40.28	0	82.867

Legend: VC: Variation Coefficient

Source: elaborated by the authors.

Note that only five groups had a minimum hour load different from zero: G1 (Accounting Theories), G2 (Management Accounting), G6 (Financial, Advanced and International Accounting), G12 (Law) and G13 (Quantitative). In addition to the three accounting-related groups (G1, G2 and G6), all HEIs in the sample considered the disciplines that deal with contents on Law and Quantitative Methods as necessary for the basic education of the accounting professional.

Table 1 shows that half of the sample institutions provide at least 420 hours in their curricula for the subjects related to Accounting, listed in group G2 (Management Accounting). Group G6 (Financial, Advanced and International Accounting) also presented a high median: at least 288 hours in the curricula of half of the HEIs surveyed. This is justifiable, since the contents classified in this group are related to the main Accounting disciplines. Thus, the recurrence of questions relevant to this approach tends to be more frequent in the assessment tests of Accountancy students' academic performance.

The median was 72 hours for the group G8 (Applied Accounting), and the subjects in this group focus on content applied to certain sectors of the economy. Group G4 (Finance and Public Accounting), also with a specific approach, in this case in the Public Sector, presented a minimum hour load of 80 at 50% of the HEIs.

In Table 1, all groups presented variation coefficients superior to 30%, that is, all are highly dispersed (Martins & Theóphilo, 2007). G4 (Finance and Public Accounting) obtained the lowest coefficient in relation to the other groups (38.049%) and almost all groups in the “Theoretical-Practical Education Block” surpassed 100% of relative dispersion: G14 (Training), G15 (Supplementary Activities), G16 (Elective) and G18 (Course Conclusion Monograph). Only G17 (Laboratory) presented a lower relative dispersion, 97.978, but not too distant from 100. In other words, there is great heterogeneity regarding the hour load destined to each group of contents among the Brazilian HEIs that offer the Accountancy program.



This result confirms the heterogeneity of curricula in the national territory advocated by the Federal Accounting Council (CFC, 2009), which, on the one hand, may be positive in favoring regional differences, but, on the other, hinders exchanges among students and may affect broad assessments such as ENADE and the Sufficiency Exam.

#### 4.2 Relations among ENADE (2012), investigated curricula and proposed curriculum of the Federal Accounting Council

The hour loads present in the national content proposal for the CFC undergraduate Accountancy program in 2009 were compared to the averages of the HEIs investigated for the 20 content groups analyzed. The CFC (2009) points out that, until the year of publication of the proposal, more than 1,000 Accountancy proposals had different curricula and this “hinders not only the students in terms of transfers, but also the provision of a more harmonious teaching in terms of content, program and bibliography” (CFC, 2009, p.5).

The Wilcoxon test was used to compare the hours the HEI allocated to each of the content groups, considering administrative category, academic organization and region.

Table 2

##### Wilcoxon Test: Administrative Category, Academic Organization and Region versus Curricular Proposal of Federal Accounting Council, 2015

Groups	All HEI	Administrative Category		Academic Organization		Brazilian Region	
		Public	Private	University	Univ. Center and College	SOUTH and SE	CW, NO and NE
G1	0.0000	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000
G2	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000
G3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G6	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G7	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G11	0.0000	0.0274	0.0004	0.0013	0.0051	0.0002	0.0444
G12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G13	0.0000	0.0043	0.0000	0.0224	0.0000	0.0000	0.0005
G14	0.0518	0.4130	0.0726	0.7396	0.0224	0.0285	0.7383
G15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
G16	0.0000	0.8977	0.0000	0.2289	0.0000	0.0000	0.0000
G17	0.0000	0.0456	0.0000	0.0755	0.0000	0.0000	0.0000
G18	0.0000	0.2038	0.0000	0.7645	0.0000	0.0001	0.0000
G19	0.0000	0.4962	0.0000	0.0794	0.0000	0.0533	0.0000
G20	0.0000	0.0007	0.0000	0.0000	0.0000	0.0000	0.0000

Legend: CW – Central West; NE – Northeast; NO – North; SE – Southeast; Univ. Center – University Center.

Source: Freeware R.

When comparing the medians of the research sample by content group with the hour loads in the curricular proposal of the CFC, it is observed that, in general, the hour loads of the institutions studied are statistically different from the proposal, the only exception was group G14 (Supervised training). That is, in a general analysis, this is the content group whose hour loads of Brazilian HEIs are closer to the curricular proposal of the CFC.

When the administrative category of the HEIs studied is observed, in addition to G14 (Supervised Training), G16 (Elective), G18 (Course Conclusion Monograph) and G19 (Other Basic Disciplines) groups in public institutions do not have Timetables statistically different from the curricular proposal of the CFC either. Except for G14 (Supervised Training), however, all other content groups of the private HEIs in the sample are statistically different from the CFC proposal.

A similar analysis can be developed when observing the academic organization of the investigated institutions. In this case, the groups mentioned above (G14, G16, G18 and G19), as well as G17 (Laboratory) of universities did not present significant differences when comparing the hour loads of the courses studied with the curricular proposal of the Federal Accounting Council. Therefore, university curricula are closer to the CFC proposal than university centers' and colleges' curricula.

Regarding the region where the institutions are located, G14 (Supervised Training) in the North, Northeast and Midwest, as well as G19 (Other Basic Disciplines) in the South and Southeast did not have significant differences in the hour loads of the curricular proposal of the CFC. This reflects the CFC's own statement in its proposal, which criticized the diversity of curricula between national HEIs and advocated the harmonization of curricular content.

Next, the test results of the mean hour loads are presented in Table 3.

Table 3

**Wilcoxon Test of Means per type of Administrative Category, Institution and Brazilian Region, 2015**

	Administrative Category		Academic Organization		Brazilian Region	
	Public	Private	College	Univ. Center and College	SOUTH and SE	CW, NO and NE
N	86	361	145	302	282	165
Mean Ranks	282.50	210.06	280.83	196.72	250.85	178.12
Wilcoxon	10492		13655		15694	
p-value	< 0.000		< 0.000		< 0.000	

Legend: CW – Central West.  
 NE – Northeast.  
 NO – North.  
 SE – Southeast.  
 Univ. Center – University Center.

Source: Freeware R.

The Wilcoxon test also reveals that the academic performance measured by the ENADE score of the institutions surveyed is higher in the categories: Universities, Public and South and Southeast, that is, exactly the institutions that have curricula closer to the CFC proposal, according to the Wilcoxon test. There are 275 more private HEIs in the sample than public ones. Therefore, in most institutions, curricula are not aligned with the 2009 CFC proposal. The states in the South and Southeast, however, which concentrate 63% of the sample, tend to structure their curricula more aligned with the CFC proposal.

In the research by Silva and Miranda (2016), it was evidenced that the institutions that privilege professional contents tend to score higher on the ENADE, which would be justifiable, as 75% of the content of this examination is vocational. In this respect, it is important to point out that, in the curricular proposal of the Federal Accounting Council, vocational contents predominate.

## 5. Final Considerations

The general objective of this research was to verify if the Brazilian HEIs with academic curricula more similar to the Curricular Proposal of the CFC (2009) scored higher on the ENADE 2012.

Resolution CNE / CES No. 10/2004 came into force three years before the implementation of Law 11638 / 2007, which changed the Brazilian Accounting scenario due to the adoption of international standards, i.e. aspects related to the professional contents of accounting have undergone adaptations. Considering that this is the main evaluation aspect of ENADE, even though the curricula of the HEIs are close to the proposal of the resolution, the institutions are able to keep the contents updated due to their flexibility and autonomy to define curricula.

In this sense, in view of the curricular diversity in Brazil that was verified in this study, in 2009, the CFC issued the Curricular Proposal for Accountancy programs. The results showed low compliance with this proposal, as only some groups of contents, in some specific types of institutions, did not present hour loads statistically different from the proposal. Most of them were found at public institutions of the “university” type. The tests also revealed that these are the institutions that also have the highest ENADE grades. These results suggest that institutions that have curricula more similar to the CFC proposal tend to present higher ENADE scores.

The data also revealed that many institutions presented high loads of basic content disciplines to the detriment of professional content. One hypothesis for this would be the use of teachers in disciplines shared among courses, such as Administration and Accountancy. It should be reminded that 75% of the questions evaluated in the ENADE refer to vocational content. Thus, institutions that have curricula with a greater focus on professional content tend to present higher grades on the ENADE. Likewise, institutions that privilege professional content are also closer to the CFC Curriculum Proposal.

It is important to remember, however, that education focused exclusively on professional content can imply the training of professionals with knowledge and skills focused basically on the technical aspects of the profession, the so-called specialist training (Capacchi et al., 2007; Soares et al., 2012). Nevertheless, in the current scenario, besides the professional knowledge, the curriculum should contribute to the development of skills, such as critical thinking, group work capacity, among other fundamental characteristics in the education of the accountant to act in the globalized world. According to Rojas-Rojas and Giraldo-Garcés (2015), accounting education should bring about changes in social and human aspects in the accounting community.

When assessing academic performance based on the ENADE, it should be made clear that several other variables affect this indicator. Other attributes of teaching institutions are the characteristic of teachers, and especially of students (Miranda, Lemos, Oliveira, & Ferreira, 2015).

Among the contributions of this study, it should be noted that, regarding the content hours, the Brazilian curricula of the Accountancy programs substantially diverge from the CFC curriculum proposal. Greater alignment to this proposal tends to be associated with higher scores on the ENADE though, which values the proposal as a parameter for new curricular revisions.

For future studies, it should be investigated whether greater curricular closeness to the CFC proposal is associated with higher scores on the Accounting Sufficiency Exam. According to the result found, the approach of the examination applied by the Accounting Council can be compared with that of the test elaborated by the MEC for Accountancy students.

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