

International Journal of Human Sciences Research

INNOVATION AND PERFORMANCE IN TEACHING PRACTICES IN THE SUBJECT OF ACCOUNTING AND BUSINESS, AMID THE COVID-19 PANDEMIC

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Abstract: Under the academic context experienced during the Covid-19 pandemic, which culminated in the demand for new teaching practices that enable a more dynamic and interactive teaching-learning process in remote classes, whether synchronous or asynchronous, the present work aimed to describe the innovations in teaching practices in the Accounting and Business discipline at ``Universidade de Fortaleza`` (Unifor) and students' perception of its effectiveness. This work used bibliographical research, documentary research and participant observation to describe the experiences. Furthermore, a questionnaire was administered to 64 students, on 07/09/2020, using Google Forms, and the results were analyzed using descriptive statistics and content analysis. Among the shared experiences and contributions of this report, mainly lies the elaboration of the interactive material, with curation and production of videos and parodies, made available in the Unifor Online Classroom Environment, amid the global pandemic and the need for remote classes. However, the resources most highlighted by the students that contributed most to the teaching-learning process were: Exercising Learning (61% maximum grade), Challenge questions (51% maximum grade), Recorded classes (51% maximum grade), Slides (37% maximum grade), Work (Discipline Product) - Economic and financial analysis of companies listed on the stock exchange (44% maximum grade), Unifor Online Classes and Quiz Environment (31% maximum grade), Online games – Kahoot and Quizlet (12% maximum grade). This report contributes by expanding this debate, helping teachers to develop new perspectives on teaching practice, as well as awakening students to new tools that can help them become protagonists of their own learning.

Keywords: Innovation. Teaching practices.

Pandemic. Accounting. Business.

PRESENTATION

The adoption of technologies, methodologies and innovative teaching practices by teachers affect both the teachers themselves and the learning of students, which increases the interest in this topic in research from different areas of education (Alano; Souza; Hernandez, 2019).

Innovation in higher education can be presented in different ways. Heringer et al. (2019) can be an example of this, based on the application of active methodologies based on the flipped classroom. These researchers described the application and adaptation of the traditional classroom model to the so-called semi-flipped classroom model, which, unlike the flipped classroom, students can also watch videos in the classroom.

For Cirião, Morelatti and Ponte (2019), teachers implement new practices, taking as a starting point the shared knowledge translated, socialized, discussed and “resignified” by the group through reflections arising from the process of collaboration between peers and the exploration of the contents of the teaching material in the context of what is presented at meetings.

As of March 2020, several changes occurred in the course of offering teaching activities, caused by the suspension of in-person activities due to the Coronavirus (Covid-19) pandemic, around the world (Marques; Lopes; Carvalho, 2022).

In the midst of this, students and teachers had to seek other forms of mediation in the teaching and learning process in education, as school and university environments remained closed to obey and maintain the rules set out by the World Health Organization (WHO) and specific State Decrees aimed at social isolation and control of virus contamination. In Ceará, a reference in educational results in

Brazil (CLP, 2023), it was no different, as well as at ``Universidade de Fortaleza`` (Unifor) – the second-best young university in Brazil, the best private university in the North and Northeast regions, and one of the best private universities of Brazil, according to the Times Higher Education (THE) Young University Ranking 2023.

The present work aims to describe the innovations in teaching practices in the Accounting and Business discipline at ``Universidade de Fortaleza``, and the students' perception of their effectiveness, amid the Covid-19 pandemic environment, in the first half of 2020.

This work is divided into four sections, starting with this Presentation. Below is a description of the experience, informing all the educational technologies that were shared. The third section includes the Results and discussion, in which it is described and compared with the literature presented. Finally, the last section presents the Conclusions, with the respective limitations and contributions of the work.

DESCRIPTION OF THE EXPERIENCE

To meet the objective of the report, bibliographical research was initially carried out, through consultation of previous studies that focused on the object of analysis, in order to provide the theoretical basis for analyzing the results and discussing the reported experience.

Then, documentary research was used, based on the Teaching Portfolio produced every six months by the author professor, combined with participant observation to describe the aforementioned experiences.

Furthermore, the results of the questionnaire obtained from the responses of 64 students of the Accounting and Business discipline, offered to courses at the Center for

Communication and Management Sciences at ``Universidade de Fortaleza`` in 2020.1, were presented, who accessed and completed the survey until the end, and accepted participate in the research, considering the ethical aspects of the research and acceptance of the Free and Informed Consent Form.

Data collection was carried out until 07/09/2020, using Google Forms, with the purpose of identifying the students' perception regarding the effectiveness of teaching practices in the Accounting and Business discipline.

For data analysis, descriptive statistics and content analysis were used, considering quantitative and qualitative data.

RESULTS AND DISCUSSION

In this section, shared experiences are described. Additionally, such experiences are compared with the aforementioned literature (Alano; Souza; Hernandez, 2019; Barboza et al., 2016; Cirático; Morelatti; Ponte, 2019; Heringer et al., 2019; Hernández-Ramos; Martins et al., 2022; Marques; Lopes; Carvalho, 2022; Martín-Cilleros; Sánchez-Gómez, 2020).

In the first semester of 2020, at the Center for Communication and Management Sciences at ``Universidade de Fortaleza``, 06 (six) Accounting and Business classes were offered, taught by 04 (four) teachers, in two shifts (morning and evening). This report refers to the results achieved by the 03 (three) classes for which the author was responsible. However, it is worth noting that some activities were developed together with the other teachers, understanding that the process of collaboration between peers is fundamental (Cirático; Morelatti; Ponte, 2019), and are highlighted below.

Firstly, it is important to describe the characteristics of the subject, the teaching methodology and the academic performance

of the students. Figure 1 summarizes this information.

The Accounting and Business subject is a four-credit subject, with four main units in its syllabus, and offered to various management courses in the first semester, such as Administration, Accounting, Economics, etc. Therefore, it is expected to be a multidisciplinary subject, which meets the different pedagogical projects of the courses.

Therefore, the didactic teaching methodology covered not only the theoretical content through dialogued expository classes, but sought to present students with practical opportunities when working, mainly, with case studies of Enron and Volkswagen (through an article, Netflix film and documentary) and preparation of the subject product: Economic-financial evaluation of two companies listed on B3 – work carried out in groups and developed in a collaborative Google Drive environment. In addition to these activities, the following were developed: Review Program; curation and development of figures, videos and parodies of Unifor Online’s Ambiente Aulas; gamification with Kahoot, crosswords and word searches; teaching material (slides), exercises and challenging questions, and 50 recorded classes.

To develop the case studies, the four Accounting and Business professors jointly held the ‘‘Cinedebate Contábil’’, taking students to the auditoriums and movie theaters on the Unifor campus in four sessions. At the end, the teachers debated with their students, using the flipped or semi-inverted classroom methodology, which proved to be more advantageous as pointed out by Heringer et al. (2019) – unlike the flipped classroom, students can also watch the videos in the classroom, developing analytical and critical skills.

Furthermore, the present author was part of the CCG Subjects Review Program, recorded at the TV Studio, which aimed to

record video classes with the participation of the student audience, allowing simultaneous interaction.

The product of the subject (Economic-financial evaluation of two companies listed on B3), which in the present author’s classes comprised the full AV2 grade, was carried out throughout the semester, with the teacher’s guidance regarding access to the companies’ financial statements via the B3, CVM and companies’ own websites – investor relations. Furthermore, the teacher carried out practical classes on vertical and horizontal analysis using the ‘‘Google Sheets’’ software, going beyond the syllabus and providing guidance on the use of formulas for the analysis and interpretation of results, as well as on the use of ‘‘Google Presentations’’, ‘‘Microsoft Power Point’’ and ‘‘Canva’’ for putting together the presentations and the use of ‘‘Loom’’, ‘‘Zoom’’ and ‘‘Google Meet’’ to make the recordings. This proved to be relevant as the use of educational technologies became essential in the recent period, as well as first semester students were already able to have their first contact with information that they were eager to obtain. In total, 33 reports and 27 video presentations were produced by the students.

At the end of the semester, the students who answered the feedback questionnaire identified the instruments used in the classroom that were most effective for their learning, as shown in Figure 2.

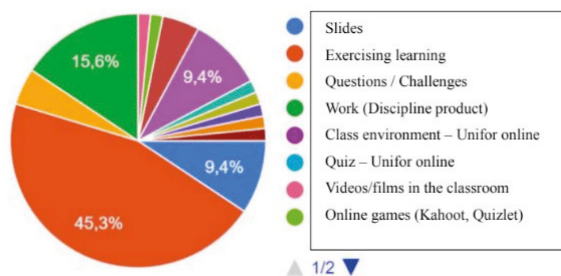


Figure 2 – Most effective teaching tools

Source: Prepared by the author (2020).

As it can be seen in Figure 2, the highlights were: Exercising Learning (45.3%), Product of the discipline (15.6%), Unifor Online Classroom Environment (9.4%) and Slides (9.4%).

Figure 3 presents the respondents' perception regarding the contribution of each teaching instrument to their own teaching-learning process, with 1 (blue: lowest) and 5 (purple: highest).

As can be seen in Figure 3, all teaching practices in the Accounting and Business discipline contributed to the teaching-learning process, in the perception of the 64 students who answered the questionnaire. However, the practices that stood out the most positively were: Exercising Learning (61% maximum grade), Challenge questions (51% maximum grade), Recorded classes (51% maximum grade), Work (Discipline product) - Analysis economic-financial analysis of companies listed on the stock exchange (44% maximum score), Slides (37% maximum score), Unifor Online Classes and Quiz Environment (31% maximum score), Online Games – Kahoot and Quizlet (12 % of maximum grade).

Exercising Learning (61% maximum grade) refers to exercises to fix content carried out by students and, after attempts by students, corrected with the teacher during classes. The Challenge Questions (51% maximum grade) follow the same model as the previous exercises, however, they are asked in the most challenging single question format, comprising cognitive, behavioral and attitudinal skills.

Recorded classes (51% of the maximum score) comprise the third instrument that most contributed to the teaching-learning process from the students' perspective. All synchronous remote dialogued lectures were recorded, and once completed, made available on a YouTube channel. These recordings made it possible to retrieve or review content (Silva

Junior, 2021), considering that some students were unable to attend all the complete classes synchronously, live, due to various reasons such as having symptoms of Covid-19, unstable internet, power outages, limited electronic devices for the family, among others.

Regarding these recordings of dialogued expository classes, Martins (et al., 2022) considers that the dialogic expository class has as its main characteristic the participation of the student, leaving behind the monologue teaching model in which only the teacher spoke, it is about An active methodology that is simple to implement, the teacher explains the content and asks questions in order to encourage the participation of students. Furthermore, the use of video in the classroom intensifies the interaction between subjects in a beneficial way, if one has a deficiency in a certain skill, they can learn from the other by developing their skills (Barboza et al., 2016). Thus, it is clear that students adhere to the traditional format of the teaching-learning process based on exercises, challenging questions and recorded dialogued lectures.

In turn, the Product of the subject - Economic-financial analysis of companies listed on the stock exchange (52% maximum grade), refers to the work considered as the main object of learning by the methodology adopted by the teacher and the fourth with the highest percentage of grade by the students – despite this, more than half of the students gave the maximum score to this instrument. As previously highlighted, it consists of work in groups of 4 to 5 students, with the objective of carrying out a comparative analysis of two companies listed on B3: ``A Bolsa do Brasil``. Over the course of two weeks, the teacher tutored the students for this analysis, including: (1) setting up the B3 website; (2) selection of companies and collection of economic-financial data through access to

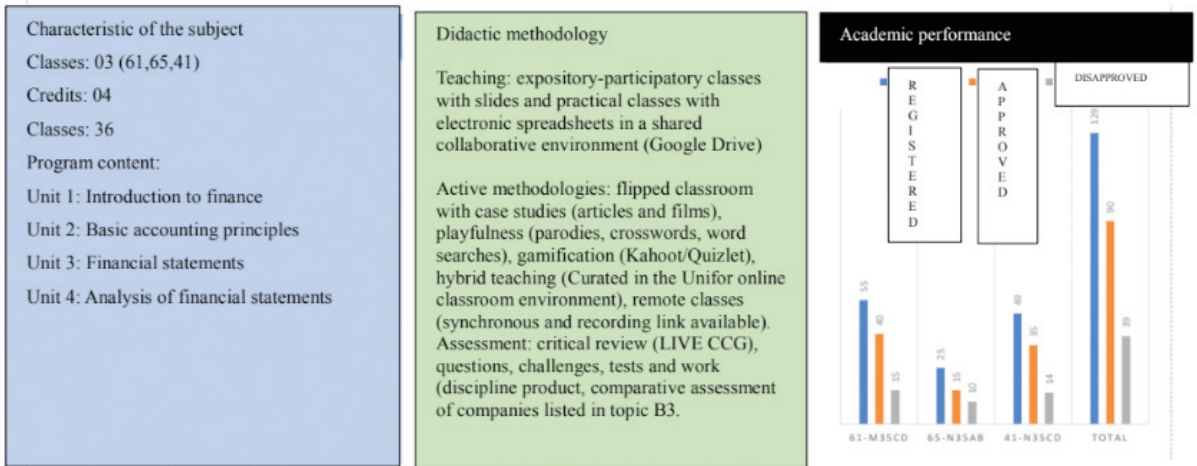


Figure 1 – Characteristics of the discipline, methodology and academic performance
 Source: Prepared by the author (2020).

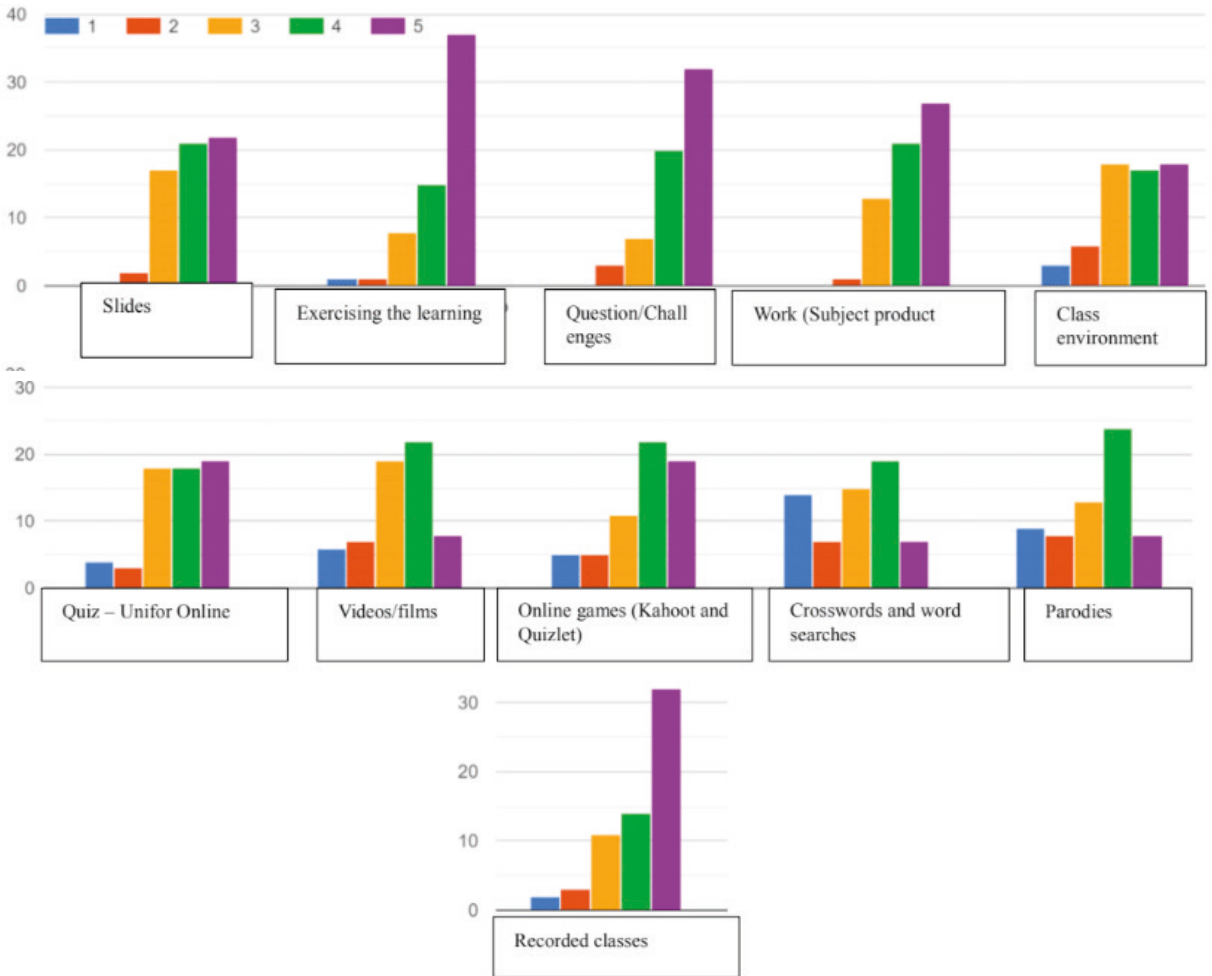


Figure 3 – Contribution to the teaching-learning process
 Source: Prepared by the author (2020).

Standardized Financial Statements (DFPs); (3) data tabulation in Google Spreadsheets, considering it to be a free collaborative environment with unlimited space provided by Unifor's institutional email, in addition to serving as a moment for students to learn how to use electronic spreadsheets in their first semester of training; (4) carrying out a horizontal and vertical analysis of the Balance Sheet and Income Statement for the last three periods of each company, with the help of the formulas in the electronic spreadsheet; (5) carrying out an analysis of liquidity, debt and profitability indicators of the two companies during the period, with the help of the formulas in the electronic spreadsheet; (6) preparation of a final opinion on the comparative analysis of companies, developing analytical capacity, critical argumentation and vocabulary precision; (7) preparation of the slide presentation, with the help of Power Point, Canva and Prezi; (8) final online presentation, with the help of Meet or Zoom recording, developing students' various skills and competencies, such as organization, professional attitude, teamwork, technological skills, leadership and speaking skills.

Slides (37% maximum score), the fifth instrument evaluated by students with the highest percentage in terms of contributions to their learning, refers to the support material used to guide the development of classes.

The Unifor Online Classes and Quiz Environment (31% maximum score) refer to the tools available in the institutional environment of "Universidade de Fortaleza" already used by the teacher even before the start of the pandemic, still in 2019, with the inclusion of material curation, sequentially, like a comic book, using texts, videos, figures, considering each unit of the subject's Teaching Plan, as well as Quiz with questions and answers to practice the content. It is noteworthy that, after the initial pandemic period (2020.1), the

period of analysis of this report, the University invested in the development of an Academic Virtual Environment (AVA) through Moodle, and this Unifor Online Classes tool was consequently deactivated.

Online Games – Kahoot and Quizlet (12% maximum grade) comprise activities to review content in a gamified way with students, with the help of the Kahoot and Quizlet platforms, testing their knowledge and rewarding those with better performance with extra points. Currently, the teacher uses another platform that has become the students' favorite, Blooket, a new and exciting version of the modern classroom review game with several different options. This result is in line with the study by Hernández-Ramos, Martín-Cilleros and Sánchez-Gómez (2020), who evaluated the use of Kahoot with Portuguese students and obtained the following results: (1) positive appreciation of the use of Kahoot as a self-assessment tool ; (2) they expressed satisfaction with its educational use and that, as future teachers, they would use it; (3) however, although they recognize that the gamified methodology increases their motivation for the subject, they are not convinced that it is more effective than other traditional methodologies.

Therefore, the general results of the present study, with students from "Universidade de Fortaleza", corroborate the findings of Machado et al. (2022), who analyzed the perception of 85 students at FAE Centro Universitário about the implementation of new methodological strategies for remote teaching during the pandemic. In order to identify which tools used by teachers had the greatest impact on learning, "recording classes for later access" obtained the highest average, followed by Google tools (Spreadsheets, Presentations, Documents, Drive, etc.), and "exercise lists" or other content acquisition verification features. When asked about the importance of the

methodologies used by teachers during classes held remotely for the development of learning, respondents ranked the following with greater importance: (1) expository classes conducted using Google Meet; (2) Group work; (3) use of active methodologies (case studies, PBL, TBL, flipped classroom and projects); (4) seminars and workshops; and, (5) with the least importance according to the average presented, Gamification (quizzes, kahoot, games, etc.).

Additionally, carrying out content analysis of the students' own reports on the strengths of the teaching methodology used by the teacher, the following stand out: "Her commitment to making sure that students are presenting the material", "Always exercise after the content given", "Dynamic and attentive", "Learning focused on management and day-to-day problems", "Resolution of exercises very well explained", "Dynamics of classes", "Exercises, quizzes, challenging questions. Few teachers do this", "always available, explains very well", "Uncomplicated teaching, patience to explain the same thing several times, without losing tenderness and desire to teach", "Making the student develop skills listed at the beginning of the subject", "Dedication, commitment and concern for us students", "Dedication, commitment and concern", "Leaves the traditional class, is very open to students and manages to keep our attention", "She uses many methods different instead of always being that monotonous thing, in addition to always reviewing what has already been said, and that is very good", "The teacher seems to really like what she does and was very available and attentive to the performance of all students, I found that in the online environment it was easier to clear up doubts and review the classes to see the parts I hadn't understood, or review while I was doing some work to help me understand. The pace of the online classes was very good for me, we went calmly, when there

were doubts the teacher came back without any problems. (The class monitor was also super attentive when aiding via WhatsApp). The challenge questions and review exercises answered in class by the teacher also helped a lot", "Slides, recorded classes (the only teacher who recorded), class environment", "Good teaching method and good communication with students", "Great reviews carried out throughout the semester", "Teaches with love and dedication", "The teacher is very committed, organizing classes and monitoring students", "The way she explains the content, in a way she manages to motivate students ", "I notice a lot of willingness, commitment, joy and companionship to teach students", "Have patience to teach the content to students", "Use of various learning tools enabling interaction with the subject in different ways, "The classes They are engaging due to the interaction and encouragement of participation!"

Among the points for improvement highlighted by the students, the following stand out: "I would do even more exercise", "Make the possibility of individual work more flexible, unfortunately not everyone is committed to the subject so often disorganization and lack of interest on the part of the group can affect the performance of others. In addition to the psychological, as it is very difficult when in addition to handling your part of the work you have to handle the other's, because the other person was willing to do it and didn't do it", "More exercises, because in the discipline of accounting and business the only way to fix the content is through exercises", "Administer even more practical classes, solving questions with the students. In my opinion, it is what most enhances the understanding of this discipline", "It was an atypical semester, I don't know where I really need to improve as we will return to normal".

In this context, it is worth highlighting that, as raised in the research by Marques,

Lopes and Carvalho (2022), in addition to the difficulty of recording video classes, it was observed that teachers had difficulty communicating technologically with students, which contrasts with the reality of students, as the majority were born in a technological era, with free mastery of these digital tools. Therefore, the teacher needs to become knowledgeable and handle the different means of technological communication, in order to be able to deal with a youth born in the technological era, this way he will make his classes more attractive and connected in today's world, by dynamically approaching his knowledge academic (Barboza et al., 2016).

CONCLUSIONS

Under the recent academic context that involves the demand for new teaching practices that enable a more dynamic and interactive teaching-learning process in remote classes, whether synchronous or asynchronous, the present work aimed to describe innovations in teaching practices in the subject. Accounting and Business and students' perception of its effectiveness.

Among the experiences shared, the resources most highlighted by students as essential in this teaching-learning process were: Exercising Learning (61% maximum grade), Challenge questions (51% maximum grade), Recorded classes (51% maximum grade), Slides (37% maximum grade), Work (Discipline product) - Economic and financial

analysis of companies listed on the stock exchange (44% maximum grade), Unifor Online Classes and Quiz Environment (31% maximum grade), Online games – Kahoot and Quizlet (12% maximum grade).

As pointed out by the literature presented, it was possible to perceive that the use of the semi-flipped classroom maintained the advantages of the flipped classroom and brought more results to the teaching-learning process, as highlighted in the application of the case studies with the realization of ``Cinedebate Contábil``.

It is worth noting that only 64 students responded to the feedback questionnaire, which limits the extrapolation of results. Furthermore, this report does not intend to exhaust the debate in question, but to contribute to its deepening.

However, this report contributes academically by expanding this debate from innovation in teaching practices to the teaching-learning process, helping teachers to develop new perspectives on teaching practice, as well as awakening students to new tools that can help them become protagonists of their own learning.

Therefore, it is suggested that new studies be developed in order to verify the impact of the Covid-19 pandemic on Brazilian education, on the teaching-learning process of students, on the teaching and evaluation practices of teachers, as well as on educational institutions. University education.

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