

**COMMUNICATION AND INTERACTION WITH THE TEACHER:
Perceived Value and Satisfaction of Students in Distance Learning and Teaching in Present**

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ABSTRACT

This study aimed to investigate perceived value and student satisfaction regarding the communication and interaction with the teacher in terms of the Distance Education and Classroom discipline Accounting General Administration course at the Universidade Estadual do Centro-Oeste(UNICENTRO) during the school year of 2012. It is worth noting that although the communication process happens differently in EaD and EP regarding communication and interaction both types can make use of synchronous and asynchronous means for transmitting content and materials aimed at achieving quality education. Thus, the survey used a quasi-experimental quantitative approach likert-type scale with seven points for a sample of 205 participants in distance education and EP 349 in the month of October 2012. Thus, the main results showed that in EP despite the vast possibilities of communication through the Virtual Learning Environment (VLE) the teacher uses minimally such tools in the educational process which impairs communication with students. In contrast to EaD instead of communication, interaction is impaired because of reduced number of live classes and online, requiring the insertion of this pedagogical discipline greater utilization of synchronous communication tools.

Keywords: *student satisfaction, distance education, classroom discipline, virtual learning environment*

1 INTRODUCTION: The Communicational Process in Education

According to Faria (2010) the communicational process deserves be highlight as one of the main points in education, both in DE, as the PE. Therefore, this study aimed to investigate the perception of value and the satisfaction concerning the communication and interaction with the teacher in the modalities of Distance and Presential Education on the discipline of the General Accounting of the Administration course of the State University of Central West of Paraná (UNICENTRO) from the perspective of the students enrolled in the academic year 2012.

Paechter, Maier & Macher (2010) state that, although the application of the *e-learning* has increased rapidly in the universities, few is known about the expectations of the students inserted on this process. Thus, one of the fundamental assumptions in a successful education-learning process, whether in the presential education, whether in the distance education, be in communication and consequently, the interaction between the agents involved in this process. That is, Primo (2003, p. 34) points out that "a communication process happens when the subjects participate, share and interact with each other, which characterizes them as interacting subjects".

The skills of the instructor and/or teacher and the students involved in the learning process of both modalities are important to achieve the acquisition of the knowledge.

Thus becomes important to highlight that the concept of communication adopted by this study is not focused on communication models already worn, where there is a linear relation between receiver and transmitter, in which the transmitter has bigger power over the receiver; but in communication with "bilateralism between transmitter and receiver in an asymmetrical relation, which contains elements emotional, cognitive and that occurs on a verbally and non-verbally way. It is a large process of interaction, of negotiation of the senses. " (Trigueiro, 2001, p. 16)

Thus, Beltrán (1981) *apud* Trigueiro (2001, p.22) cites that the "communication is the process of democratic social interaction based on the exchange of symbols through which the human beings voluntarily share their experiences under conditions of free and equal access, dialogue and participatory. "

In his turn, Belloni (1999, p. 13) shows that the concept of interaction consists of a "reciprocal action between two or more actors where occurs the intersubjectivity", that is, a relation in which two individuals are, directly or indirectly, using any communication medium, such as the *internet*, for example.

In its turn, the virtual environment presents a new facet with respect to the distance education, treated by Thornton et al (2004) whose work enhances the specific skills consisting in the effective use of the communication tools and interaction for the knowledge be fully transmitted.

According to Capper (2001) the *e-learning* has as main characteristics: a) any time - stored and accessible classes at any time; b) anywhere - connection option in space, not necessarily in the classroom; c) collaborative group - with the creation of new opportunities for synchronous and asynchronous interaction; d) new approaches in the education process - sharing innovations in creation and development of works.

Still Sun *et al* (2006, p. 864) state that "The *E-learning* is emerging as a new paradigm of modern education. The big advantage of the *E-learning* is the freedom of interaction among students and instructors or students and educators, in addition to provide unlimited time through an asynchronous space. "

It is on this concept in which is settled the process of education and learning in DE, because it presents a set of collaborative tools, which aims to promote the interaction among the users(Maia & Meirelles, 2004). In this relation the members have interdependencies among their activities, so that the failure of a member can result in the failure of the entire group. Thus, through virtual environments, users deal with big limitations of senses (sight, smell, touch,) to interact, in most cases, with two-dimensional interfaces. They are:

- a) unidirectional: composed of a single direction of way to the transmission of the material for the student, without the sense of direction student -teacher. Examples of this medium would be the *Telecurso 2000*, books, videos, etc .;
- b) bidirectional: composed of a two-way route, used for the student information, as to the interaction of the teacher with him. Such interaction makes the student liable to be monitored and assisted, in so far as the teacher can answer questions, develop exercises to specific situations, activities, etc. It is believed, therefore, that such medium found in the Internet a propitious location, fertile. (Franco *et al*, 2009, p. 24)

For Tung & Shang (2008) the individual ability of the agents in this context, that composes the DE environment to use the tools available to them, physically and in Virtual Learning Environments, effectively with skill and competence are also translated into satisfaction and perception of value, this because in the DE the communication occurs on an asynchronously way¹, opposed to what occurs in the "traditional" classrooms, in which the communication is only synchronous². Emphasizing this position Struchiner & Gianella positioning (2001, p. 32),

On the DE the communication occurs mediated by a technological interface and by the capability of the teacher to see "beyond" the text and the computer. Communication is an intentional act of exchanging ideas, wishes and emotions in a clear, attractive and direct way. On the regular education, this exchange happens face-to-face. On the distance education, its happens mediated by technology. In both cases, cares should be taken so that there is no noise in that communication. These cares pass by the clarity and systematization of the concepts, but also by the clarity in the use of the communication channel. In the case of online *education*, on the clarity and good use of the text.

Thus, the distinction between the DE and the PE is the physical distance between the student and his teacher. According to the definition established by the Ministry of Education (2010) the DE is an educational process that occurs when the teacher and the student are separated in relation to time and space. On this relation, the learning occurs with the use of media and information and communication technologies, with students and teachers developing educational activities in divers places or times (Ministry of Education of Brazil, 2010). From the definition brought by the ME, it is understood that the DE allows the student to have access to the education without fixed timetables, without problems with the displacement to the institution and may create your own program of study. However, the fact that teacher and student are physically separated in this type of education does not excludes the contact through interaction. Quite the contrary. The type of interaction occurs by virtual means.

On its turn, the Presential Education (PE), according to Puerta & Amaral (2012) occurs face-to-face where there is a direct communication with the teacher on defined place and time. This type of education is also known as conventional education. Therefore, the form of interaction, as to time and space, occurs on a synchronous way.

Thus, in conventional education, there is no receiving of information from several places of study. The teacher can observe the students behavior, if they are attentive, sleeping, talking in parallel. At the same time, the student can give his opinion in real time, give a *feedback* about the information received by the teacher. In this sense, Bentes, Magellan & Iahn (2008) state that the education-learning process in the presential education involves a physical structure composed by: blackboard, desks, classrooms, teachers and students present at the same environment with the aim of teaching and learning through expositive classes.

On the distance education there is no personal contact: the "eye-to-eye." There is a junction of the synchronous activities, such as chats, *Web TVs* and the asynchronous, such as, for example, the discussion forums. One of the most significant differences between presential education and distance education, with regard to communication and resources, focuses on the use of the media. Rosa (2001), Vidal (2002) e Meirelles & Maia (2004) state that the PE presents a limited use of the media, usually with teaching focused on the direct communication. In the DE is required a massive use of media, being the teaching focused on the multimedia features.

Thus, according to these characteristics it is perceived that traditional forms of presential education, are unable to deal alone with the educational needs requested by countries, states, municipalities, companies and organizations in general. Contemporary society is characterized by technological innovations and for the information. It is in this context that is placed the distance education (DE) in Brazil. Vergara (2007, p. 3) states:

Far from opposing or be a threat to the presential education, the DE is just one more way of educate, another opening to the traditional relation education/learning. On education there is a range of possibilities. The DE is one more. It was underlined by the *International Councilon Distance Education*

¹The asynchronous communication is accomplished in different times and does not require the simultaneous participation (in real time) of those involved. Participants do not need to be gathered on the same place or at the same time, resulting in more flexibility of interaction and monitoring (Moran, 2005).

² The synchronous communication is performed in real time, requiring simultaneous participation of all the involved (Moran, 2005).

(ICDE), that took place in Vancouver, in 1982, and by the Vienna Conference, accomplished in 1999. At this conference was already stated that the universities would use, increasingly, the DE, combined with presential education.

Pereira & Soares (2010) argue that the practice in education via DE, has been overcoming challenges and breaking paradigms while fascinates the traditional educational systems. The innovative forms of teaching used in DE as the media, videos, and recorded classes, have become ordinary work material for both modalities. In other words, today, such forms of education are seen as complementary tools to the process in DE and in the Presential environment. At this context, Tori (2009 p. 121) states that,

More recently, the junction of both education modalities of educational forms have only popularized, and the term *Blended Learning* begins to consolidate. With this approach, the educators can make use of a wider range of learning resources, planning virtual and presential activities, taking into account limitations and potential I, each one presents in certain situations and in terms of form, content, costs and desired educational results .

On his turn, Vergara (2007) states that in Brazil, less than a decade are being used technological resources that enable the environment of the presential classroom in virtual environments, but the distrust is still big, not only for the traditional presential courses as the not always desirable quality of the distance courses offered. In this sense, Vilaca (2010, p. 92) states that:

With some frequency it is possible to find teachers who, in order to present or defend the DE, establish opposition between DE and traditional teaching This "opposition" however, in practical terms, presents conceptual imprecision and may have the opposite of the desired effect, assigning misunderstandings about what is DE and what it means to be "traditional".

The same author also states that the term "traditional" for a presential course is at least pejorative, since the same technologies used in presential classes can be exactly the same as the classes via DE, and vice versa, as the use of presentations on *slides*, use of films and use of the online *format*.

According to Liaw (2008) the DE is characterized by a high disciplinary level in studies by the students, mainly due to factors such as lack or little direct contact between students and teachers, consequently bigger self-discipline in the studies because they are done individually. In this sense, Sol *et al* (2008) points out that the attitude of the student is an important factor for the satisfaction on the *E-learning*

From considerations performed is that it is justified the choice of theme for this study. That is, it is normally assumed that one of the factors that can influence on the success or failure of both a distance learning course, as a presential course, perhaps lies in the fact of how the students participate, do activities and evaluate the process of communication and interaction of the interactors involved in this process in both types of education, that is, how happen the communication process (communication and interaction) between student-teacher?

It is emphasized, according to Shee & Wang (2006), the student satisfaction is precedent to its particular success, it seems clear that the process of education and learning in both modalities should first of all, add to the students information, knowledge and theories that can be valued by them, so it seems clear that the student satisfaction is directly intrinsic to its personal satisfaction about the learning.

It is relevant to clarify that the choice of general accounting discipline occurred as a way to contribute with researches directed to the accounting sciences in the country. Also, this discipline is considered as fundamental on the business courses which includes in its preparation and application of theory and practice at a junction of skills that the student should have to acquire such knowledge.

Therefore, the teaching-learning in disciplines from this framework in the business area is not a simple process requiring from the presential teaching, and from the distance learning the use the maximum resources and tools available to this process.

Thus, is necessary a further analysis with regard to the perception of value and satisfaction about the communication and interaction in both modes, even because the offer of the Administration course in UNICENTRO, in distance modality, is still recent, having been implemented in 2010. It should be highlighted also that the study conducted had limitations for the literature search, using references available and selected by the researchers, but not intending to cover the all universe published DE and PE.

2 PERCEPTION OF VALUE AND SATISFACTION IN HIGHER EDUCATION

According to Sternberg (2000) the perception of the chain of psychology that studies the cognition, what means, perception, structuring, learning and storage of specific knowledge. To him the perception is "set of psychological processes by which people recognize, organize, synthesize and provide meaning to the sensations received from the environmental stimuli." (Sternberg, 2000, p.147)

Thus, it is considered that when there is a need of measure perceptions of consumers or users of certain products or services, the psychological intervention becomes relevant, because with the help of it is achieved find out the expectations, hit or not that generate certain levels of satisfaction by the use or consumption of certain goods or services by the subject.

The satisfaction, and consequently its value, is founded in the Applied Social Sciences, the triad of Function, Performance and the Value himself, known in the following way: Function - refers to the description of all the activity that a product performs; such performance suffers variations between agents, so the Value is individual and should be analyzed uniformly or in a group. (Sternberg, 2000)

It is understood with this that the perception of value is the variation of the value assigned to the product or service consumed and can only be analyzed through researches with the user, customer or consumer of the product or service. Thus, the perception and satisfaction of certain product or service is scaled by the customer fulfillment of their needs and desires.

In this context, the DE, as a service, increased the possibility of studies in Higher Education Institutions without the need to break the physical space of the student, and also, allowed that him, the student, according to the technology, can program their schedules adapting them to their professional activities.

Meanwhile, Neves (2006) highlights that this new type of service provided by the majority of the Higher Education Institutions, finds internal and external barriers to establish this service relation, mainly due to the innovation, which somehow causes a resistance from the teacher and the student regarding "the acceptance of this model, that question often the structure used, the format of the course and its operating mode" (Neves, 2006, p. 5).

The favorable to this type of education argue that it creates also market expansion possibilities with other graduate and postgraduate courses. However, this aspect has been the target of many discussions and questions. It is worth to highlight that the conceptualization of services is not something simple.

According to Las Casas (2000, p.15), the American Association of *Marketing* defines services as "those activities, benefits or satisfactions that are offered on sale or that are provided in connection with the merchandise sales". The author concludes that service is the part of the exchange ratio that should be experienced, is a lived experience, is the performance.

Thus, Kotler & Armstrong (2006, p. 6) emphasize that at the time of purchase of a service, the consumer considers two primary factors: i) Value for the customer - that is the difference between what it earns acquiring a particular service and what he spends doing such acquisition; ii) Customer satisfaction -is what he perceives about the performance of the service in relation to his expectations.

To Reichheld (1996), the creation of the perception of value is an essential basis of any successful relation between agents, whether they are employers, employees, entrepreneurs and customers, teachers and students, because from this perception is generated the feeling of loyalty between the parts. According to the same author, it can be said that the perception of value is the consequence of a successful relation among agents, whose result "is the satisfaction of the parts or agents involved" (Reichheld, 1996, p.38). It is understood that way that the word "value" can be associated to its perception and so has the concept of "perceived value".

According to Motta (2000) satisfaction is a feeling, or degree of consistency between their motivation and incentives, creating a quality standard, this standard, when hit, also affects his needs and desires as consumer, so, their full satisfaction. Concerning to the higher education, it can be stated that in the education X learning process, whether it be in presential classroom or in DE classroom, the perception of value generates conscience of satisfaction, in this case with information makes the matter or knowledge a relevant aspect to be relegated by the student.

Kotler (2003) argues that, contrary to the stock and transportability, the simultaneity is a characteristic in the provision of services in the education area. The author points out that education can be consumed before, during and after the service relation, as with the planning of the course, the course planning, the discipline planning, elaboration and correction of tests.

In the case of distance education, *sites*, classes via VLE and teachers available in *chats* and *e-mails* demonstrate that although the interaction does not occur in the traditional way, there is an effort by the providers to the user to have full satisfaction (Neves, 2006). That is why in the higher education, the complexity of the service offered to the client is associated to a risk, especially in DE. That is, for being something new and does not have a detailed overview over the perception of the student involved in the process, creates uncertainty of gain or loss that may occur during the service provided by the educational managers (Torres, 2004).

In this perspective, the higher education as a service starts being produced simultaneously and can be applied and perceived in different ways, depending on the group of people involved in the process. However, it is believed that this process will only become effective with the participation of the user - in this case the student of DE.

To Sheth, Mittal & Newman (2001, p. 75) "the value is only created when the service or product is capable of such, and as the satisfaction to the customers are not identical, such services or products may have different values between them." From this, the authors recommend classifications from market values as follows: a) Universal Values - refers to the basic purpose, are called universal because they are invariably sought by all the consumers of a particular product or service; b) Personal Values - satisfies the desires of each consumer, because they are different between each person.

In this context, Silva (2010) mentions in his studies that in DE the services are regulated in some dimensions of value such as: a) interaction between colleagues; b) teacher-student interaction; c) teacher-tutor-student interaction; d) quality materials; e) course content; f) structure of the course.

Such dimensions can result in perception of the quality and perceived value. For that, the cited author considers that a significant learning in DE occurs when all involved participate actively through the socialization of the information, resources and support systems in real or virtual time.

So, when is correlated with the object of study, it can be said that the agents involved in the education-learning process in DE or Presential Education, like any other customer, seek universal and personal values, these values are as the authors themselves different between the agents, so their perception of value will differ between them. To Ishida, Stefano & Andrade (2011), there is a strong importance in the study of students satisfaction by the institutions, because this way can be known the expectations of the students, thereby improving the methodologies, working the institution's image in front of its audience.

Therefore, according to Astin (1993), conduct satisfaction surveys can help in generalization of the experiences of academic formation, scoring specific aspects such as the quality of the teaching, the curriculum, the relationship with teachers and colleagues, the administration, the facilities and resources used beyond the perception of the students concerning the academic and intellectual environment of the institution.

Thus, in the higher education, Schleich (2006) defines satisfaction as the result of the experiences obtained by the student concerning the services received by the university. Through the citation, it is noted that the level of satisfaction in the educational area is determined by the difference between the performance of the service perceived by the student and his expectations.

3 RESEARCH METHODOLOGY

This study presents a quasi-experimental quantitative approach. According to Kerlinger (1980, p.5) "[...] in such study there is no experimental manipulation; there is no differential treatment of groups of subjects. We take people and groups as they are and study the supposed influences of variables on other variables, the relations between the variables. " Therefore, the experiment and the quasi-experiment, are similar in their definition, differing exclusively in the control of variables and group formation.

In this sense, the research developed counted with two investigative stages which were divided as follows: a) bibliographic b) field research, being performed on a simultaneous way. The bibliographical research was marked on authors who deal specifically with the elected thematic.

In its turn, the research in the field (second stage) used a questionnaire with *Likert* type scale of seven points which aimed to measure which the perception of value and satisfaction of students of both modalities concerning to the communication and interaction between student-teacher.

In the questionnaire adapted to the study, was included also a survey of demographic data in order to draw a general profile of the studied populations, contemplating the following information: a) age, b) income, c) family members, d) the student already has a degree and) reason to make the course, f) gender and finally g) pole or location where is enrolled.

It should be noted that in the first week of October 2012 was conducted a pre-test of the research instrument. In this stage, was applied the questionnaire to 10 teachers of the Department of Administration of the UNICENTRO to verify possible ambiguities, misunderstanding and inconsistency of the questions.

Also, in this pre-test stage, was applied the questionnaire to 20 students of PE modality and 20 students in DE modality of the course of Administration. During the pre-test process, there was necessity of adjustments and corrections. These were made on the second week of October 2012.

Once made the necessary adjustments was applied the questionnaire in a sample of 349 students of distance education and 205 students of presential education in the period 15 to 22 of October. The application was presential due to ease of access and approach in the classroom and in the Virtual Learning Environment (VLE).

The treatment of the collected data was performed by means of statistical tools. Thus, on a first moment, after collecting the experimental data and tabulation of these, was used the descriptive statistic in order to make clear the relevant information as mean and trend of the universe studied. At this stage, this was the PE and DE data were treated differently, namely, with independent analyses. Sequentially was used the inferential statistic. At this stage there was a mix of the groups.

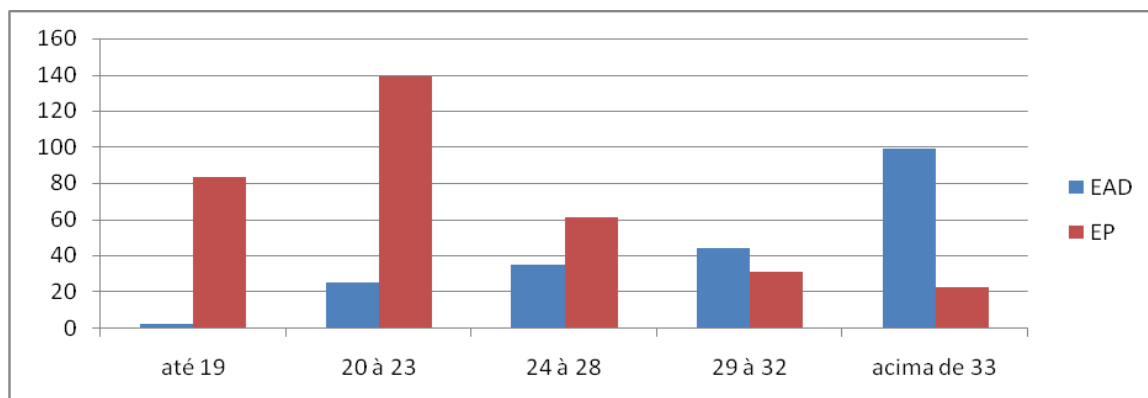
After this phase were made tests of sample normality (Levene) and homogeneity of variances (Kolmogorov-Smirnov) to determine use of parametric or non-parametric tests. As the tests diagnosed the data as non-parametric, was opted to make the Kruskal-Wallis test.

4. RESULTS AND DISCUSSIONS

As a way to substantiate the research, were presented first the results of the demographic data, by the order of Age Group, Income and Gender. These results were presented using simple graphics with absolute numbers and, when necessary, reference was traced to their percentages. Subsequently, in a second stage, demographic data were compared with the descriptive analysis aimed at mapping in both groups (DE and PE) which showed a most significant value perception in relation to communication and interaction between student-professor.

4.1 Profile of Respondents: DE and PE

With regard to the age of the respondents, the Graphic 1 clearly shows that the majority of the students, who form the group studied in DE, which means, 99 respondents are centered on the age group above 33 years (48%). It was also observed that on this same group of DE, 70% of respondents are located in the age groups of 29 to 32 years and above 33 years. Therefore, it is seen that the public researched in DE is characterized as being an adult population, a factor that confirms the objective of DE proposed by the Ministry of Education (2012).

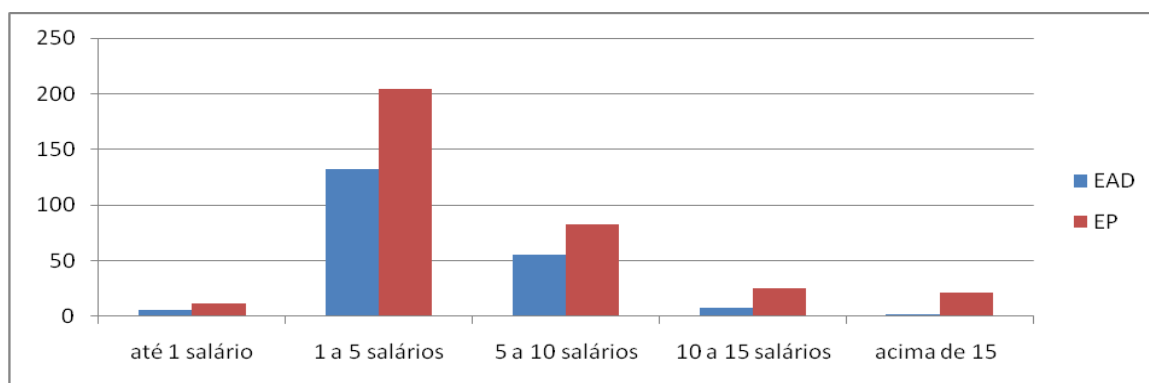


Graphic 1: Age Group of the Respondents in DE and PE
Source: Research Data (2012)

Still about the respondent public on DE is perceived that at the age group until 19 years is located 0.9% (2 respondents), at 20 to 23 years focuses 12% (25 respondents) and at 24 to 28 years is asserted 17% (35 respondents). Can perceive a rising curve on this issue, in which these three groups of answers add up 30% of total respondents (62 respondents). In turn, PE students have an average of 20 to 23 years, which characterizes by be a young audience. Interesting note that this data reaches practically 40% of the entire population (139 respondents). It is also observed that, if added, the responses, up to 19 years and from 24 to 28, it reaches practically 81% of respondents with 283 students, showing even with more strength that the PE public is made up of young students.

Complementing the data from PE, is visualized that the age group between 29 and 32 years amounted to 8.8% (31 respondents) and with 33 years and above only 6.3% (22 respondents). Such data corroborate the research of Rosa (2001) and Vidal (2002) who also diagnosed the PE public centered on the age group between 20 and 28 years. It is highlighted then, in relation to age group, that the graphics present a strong difference. The ages between the students of PE and DE is practically inverse. EP the average age is concentrated between 20 and 23 years. In turn, in DE, the average age stood between 33 years or above.

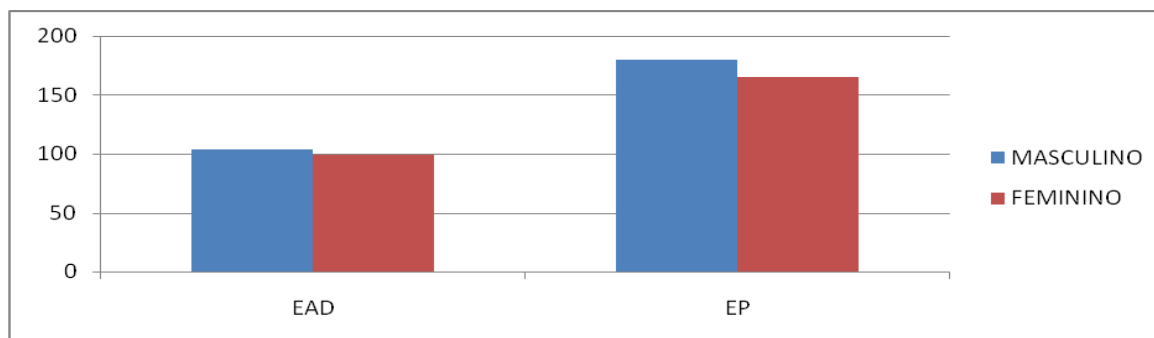
Concerning the family monthly income, the majority of the public surveyed in DE informed that receive from one to five minimum salaries, totaling 65% (132 respondents) as provided in Graphic 2. In a second analysis when agglutinate the incomes between the options 1 to 5 salaries and 5 to 10 minimum salaries there is a concentration of 91% of respondents, that means, quantitatively 187 respondents.



Graphic 2 - Family Income of Respondents in DE and PE
 Source: Research Data (2012)

Already 3% of respondents (6) informed that family income centers on up to minimum salary and at the other extreme 4% (8 respondents) informed that the family income is around 10 to 15 minimum salaries and 1% (2 respondents) above 15 salaries. In the PE group the income concentrates, on average, between one and five minimum salaries with 58% of the responses (204 students). When included the income between 5 and 10 salaries is observed that such groups reach more than 82% of respondents (287 students).

It is observed, based on the results obtained, that in both modalities the average family income centered between one to five minimum salaries, but the students in PE present a slight tendency of higher income in proportion to the students of distance education. In this sense, there is a first impression that this difference of income between the students of PE and DE refers to the fact that the student of DE find itself in smaller cities and usually with lower professional possibilities.



Graphic 3 - Gender of Graduation Respondents in DE
 Source: Research Data (2012)

Regarding gender, there is balance between the two research groups, that is, in the DE students group there are 50.7% of respondents of the male gender (104 respondents) and 49.3% of female gender (99 respondents). In turn, in the group of students of PE, 51.5% (180 respondents) were male and 48.5% (165 respondents) are female.

According to Moore & Kearsley (2007) the DE was created to allow reach a population that, for various reasons (geographical, economic, physical, or others), had no access to education and, therefore, is based as a means of overcoming emergency problems, or fix some failures of educational systems at some point in its history.

Meanwhilw, the research diagnosed that the DE students are no longer traditional, that means, they are no longer students that "historically not had access to higher education" but instead, students that are looking some form of updating, and no longer the first graduation . According to the research results, in PE, of the 349 respondents, 38 said already have another graduation.

In contrast, in DE, of the 205 respondents, 36 affirmed having another graduation. Comparing the research of Rosa (2001), whose results showed a homogeneous condition for the students of the EP and heterogeneous for distance education students in refers to age and income, research carried out in the discipline of Accounting of the Administration course of UNICENTRO, brought other notes about these questions according to Graphics 1 and 2.

4.2 Communication and interaction with the teacher: Kruskal-Wallis results.

4.2.1 Communication with the teacher

Question	DE		PE		SIGMA
	Trend	Average	Trend	Average	
01) Presential communication was well conducted	6	5,25	4	4,48	00,0
02) There was communication with the teacher outside the classroom	7	4,93	7	4,24	0,02

Frame 1: Communication Student-Teacher on DE and PE

Source: Research Data (2012)

According to the data in Frame 1, can perceived that in relation to communication with the teacher the students of DE presented a perception of value and satisfaction more positive than the students of PE, regarding their averages and trends, highlighting the question 01 (communication in the classroom or presential) whose Trend in DE was 6 (satisfied) and on PE only 4 (indifferent). In turn, the question 02 (communication outside the classroom) both groups obtained Trend 7 (completely satisfied) demonstrating the willingness of the teacher out of the classroom to maintain an asynchronous communication in both modalities.

In contrast, when the Averages are analyzed, it is observed that there is a distancing between the studied groups regarding the Trends, which shows that a significant part of the students presented little satisfaction regarding the communication with the teacher. However, there is as exception to question 1 (communication in the classroom or presential) in the group that obtained PE and Trend 4 and Average of 4.48 respectively. When were visualized the Sigma of the questions, the results were below 0.05, which represents significant differences between the averages.

These results demonstrated that the perception of value and satisfaction of DE students were more positive than in PE, be it on synchronously (Question 1) or asynchronous form(question 2). Such results validate the study conducted by Franciosi *et al* (2001) that claims to be "the development process of a DE environment more than translate presential classes to a web environment. The development of an environment in DE uses information and communication technologies that presupposes a careful planning. "

Thus, the most positive perception of value and satisfaction of the students between the public of DE in the research conducted with the general accounting discipline of UNICENTRO towards the teacher, directly reflects the compromise established between them. In other words, in DE is a requirement the teacher know how to use synchronous media (*chat*, video conferencing, teleconferencing, audio conferencing) and asynchronous (*e-mail*, discussion groups, *world wide web (www)*, *download*) of communication, which makes the distance learning adaptable to the different situations and needs of students.

Because of this preparation, the teacher of DE seeks to privilege the activities and review the contents in order to make the student feel close to it, which creates a synchronous commitment by the teacher in this modality, providing to the student safety on the studies, and consequently more satisfaction. This does not mean that the teacher of PE is not committed to education, just is not accustomed to the use of asynchronous tools in his pedagogical practice.

In addition, the DE counts on the tutor support to intermediate communication between teacher and student. This element exert a positive influence of satisfaction among the public of DE, because it helps the teacher in attendance of students in different schedules. These data are in agreement with the study conducted by Vergara (2007) that revealed the important role of the tutor in DE by through the promptness of the answers, activity that does not exist in PE modality. In distance education, the tutor keeps up and monitors the synchronous and asynchronous activities, instigating the student's ability, provoking discussions leading discussions in order to build the knowledge.

4.2.2 Interaction with the teacher

These questions bring to light that the use of VLEs makes the process of teaching and learning be valued by the students of DE, but also specify that the use of VLEs also carries an unsatisfactory perception concerning the interaction with the teacher (question 3). Therefore, despite the students in DE have a higher perception regarding the synchronous and asynchronous communication with the teacher, the interaction is still hampered by several questions. Frame 2 presents these data:

Question	DE		PE		SIGMA
	Trend	Average	Trend	Average	
03) It was easy to interact with my teacher	6	4,98	7	5,45	0,0

Frame 2: Interaction Student-Teacher on DE and PE
 Source: Research Data (2012)

According to Frame 2, it is perceived that the students when questioned about the interaction with the teacher, showed perception of value and more positive satisfaction in PE (Trend 7, Average 5.45) than in DE (Trend 6, Average 4.98). These results are corroborated by Sigma of 0.00.

At this point is attributed that the dissatisfaction of value concerning the interaction with teacher presented in DE concerns the synchronous time, what means, the student talks with the teacher via *web conference* at most once or twice during the course, which somehow hamper the interaction relation with this agent. Thus, small communication failures through the VLE can become disastrous in the general context and clearly reduce the perception of value of the student in DE.

Vidal (2002), Meireles & Maia (2004) state in their studies that the teacher's stance in PE and DE differs, because that in PE the stance is of full monitoring and in DE the monitoring is accomplished by means of VLEs, which can in terms complicate the interaction if the agents are not perfectly integrated. This may cause failures in the interaction process student-teacher for the misuse of informational resources.

Aguiar & Grossi (2010) reported in their studies, evidence that students in DE have more difficulty in interact, although conclude that the more adult student at the DE more he is ready for learning. In contrast, this public is more dependent on the teacher, tutor and colleagues and need constant orientation to perform the interaction.

5 FINAL CONSIDERATIONS

In a process of providing highly complex services as the education, which presents different interactions between students and teachers, materials, infrastructure, administrative sectors, among others; the perception of value and satisfaction refers to only a small part of the whole, but a part of extreme relevance, because the human perception, comes against the theories that underlie the value and consequently the generation of needs and their satisfactions making this perception of value one of the driving forces, able to move customers in search of services and products.

When Reichheld (1996) cites that the perception of value is the fundamental foundation of any successful relation between agents, it seems clear that such study aimed to map the deficiencies and qualities in both education modalities, and it can be said that the first finding in terms of perception of that study is that students

of both saw the education under the same perspective. Therefore, it can be said that under the point of view of students, both modalities lend themselves to offer an education according to the wishes of the students.

In this sense, is siding with the presupposition that the agents of the both modalities has the power to use several forms of communication and interaction with students in the process of teaching and learning, but make use of these elements in an uniform manner. In this sense, Maia & Meirelles (2004), Oliveira *et al.* (2004), Valentini & Soares (2005) attribute this aspect as being positive in a general context. That is, all the educational tools of VLE are available to agents.

Meanwhile, the research conducted with the students of the general accounting discipline of the Administration course of UNICENTRO, pointed out clearly that the teacher of this discipline, despite the vast possibilities of communication through the AVA uses minimally such tools in the educational process in PE. In this sense, it was evident that the presential disciplines can no longer remain restricted only to their own modality tools. The use of VLEs (in the case of the UNICENTRO the *MOODLE*) can improve the knowledge level reached by the PE modality, and thus, raise the perception of value and satisfaction of students.

In contrast, also became evident that the DE needs to use more effectively the synchronous communication with the teacher, that is, adopt more live classes and *on-line* and, consequently, create a more friendly way to strengthen the interaction, as occurs face-to-face in the presential education.

Thus, Silva (2010) highlights that the current time is interactive, so challenging for the managers of old media. In this sense, the teaching management becomes an explicit challenge oriented to the participation and interaction between the agents that compose the process. In other words, is observed that there is no more space for the knowledge transmission of A to B, but instead, the interaction between A and B.

It is believed that over time, the coherence of the PE and DE modalities becomes inevitable, that because the creation, inclusion and massification of a model of *B-learning* is settling quickly. This promotes the continuous improvement of more online *classes* via *web conference* in distance education modality and the incentive in the use of asynchronous communication in the PE.

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