

A Key Question for Higher Education: Who are the customers?

MARCO ANTONIO CARVALHO PEREIRA

Departamento de Engenharia de Produção - Escola Politécnica - USP – Brasil

E-mail: pereira@marco.eng.br

MÁRCIA TERRA DA SILVA

Departamento de Engenharia de Produção - Escola Politécnica - USP – Brasil

E-mail: mtsilva@usp.br

Abstract - “Who are the main customers?” is a key question for any organization. In Higher Education, the question becomes more difficult, because its services answer different groups: students, employers, society/government and faculty. This paper analyzes the implications for the organization of education and research processes in higher education of their conflicting visions.

Key Words: higher education, customers, teaching, research

Universities, traditionally, have two main goals: to create and to disseminate knowledge. The creation of knowledge is done through the research and its dissemination, is done through the education. So, education and research are their central processes. Who is the main customer of each one of these processes? Is it easily recognizable? And as from identification of main customer, which are the conflicting views among them? These questions are object of studios in the present paper that it will analyses the education and research while productive processes, who is the main customer of each one of these processes, as well as their conflicting views in higher education institutions and the current implications.

It is defined process as “a conjunct of activities with one or more species of input and it creates an output of value to the customer” (Hammer e Champy, 1993). And what is customer? Universities traditionally are recognized as owner of multiples customers and/or stakeholders (Kotler e Fox, 1985; Reavill, 1997; Kanji e Tambi, 1999; Hwang e Teo, 2001). Studios in the areas of distinct knowledge, as marketing, service operations, quality, strategic planning, and more recently, in the utilization of balance scorecard, realized about activities of higher education institutions frequently they only demonstrate a relation of customers, since that the central objective from these studios, in the majority, it is related to the area to what it refers to the subject. Therefore, in these cases, the question “Who are the customers?” is commented in a superficial way. However, a very important question when there are multiple customers in a process is to define who the main customer is.

Why is important to answer this apparently so simple question “Who is the main customer?” by the simple fact of some analyses more serious of an organization, being in its marketing program or of total quality or in its strategic planning, this question normally will be answered in the beginning of some of these programs. And if it is very well answered it will be a first step given concretely to calibrate the operational process on an appropriate way, basing on the customers’ requirements.

This paper is structured on the following sequence: the first stage is the identification of possible customers of higher education institutions as from the bibliographical review. On a second stage it has a discussion about the main processes of higher education institutions: education and research, while distinct processes on a production system. Here are proposed specific production system models for each one of these processes, being the education process dismembered in two distinct processes: “teaching” and “learning”. And after it is demonstrated “Who the main customer is” of each one of these processes. Ending the paper, it is discussed the

conflicting views of different customers and their implications about the organization of education and research processes in higher education institutions

IDENTIFYING THE CUSTOMERS

The higher education institutions have a great number of customers groups as you can know from different authors who studied the subject. These customers have different requirements, complementary or contradictory among themselves. This can be seen in studios in distinct areas, such as quality (Owlia and Aspinwall, 1996b), marketing (Kotler and Fox, 1985) or strategic planning (Conway *et al*, 1994).

Robinson and Long (1987) emphasize the necessity of internal marketing in the universities and accentuate as, particularly important for this a bigger focus on the human. They classify the customers in primary, secondary and tertiary, in accordance to what they understand to be an order of relevance. To them, the primary customers are the students, the secondary customers are the education authorities and employers and the tertiary customers are the validating bodies, ex students, families, employers, etc.

Studying specifically marketing to educational institutions emphasizing on education activities, Kotler and Fox (1985) detailed that every education institution has several publics and need to know how to manage responsive relations with most of them. To the authors "*a public is a distinct group of people and/or organizations that has an actual or potential interest in and/or effect on an institution*". They show what they call sixteen major publics, individuals and groups that have an actual or potential interest in effect on a university: current students, prospective students, faculty, parents of students, administration and staff, alumni, suppliers, competitors, government agencies, business community, mass media, foundations, trustees, accreditation organizations, local community and general public.

Many authors in the literature study questions related to the quality in higher education institutions. Reavill (1998) developed a specific methodology to the stakeholder's identification of higher education, thinking on establishing the customers requirements as principal part in TQM (Total Quality Management). The author identified twelve stakeholders contribute to or benefit from higher education: students, employers, the family and dependants of the student, universities and their employees, the suppliers, the secondary education sector, other universities, commerce and industry, the nation, the government, taxpayers and finally professional bodies. The author affirm to be difficult to identify an order of priority of the relative importance from these customers, but for him "*based specifically on his own feeling, and it is no more than that, it that the most important stakeholders are the students, the employers, the families and the universities and their employees, but more than that is arguable*". We agree with the author because he did a complete analysis of totality, apparently with more emphasis in educational area, but without referring in any moment to this or that process in a clear, precise and objective way.

Karapetrovic and Willborn (1997) searching a definition to a "zero-defect student" similar to that existent to zero-defect in the manufacture of industries goods, relate as interested on discuss this question: the students, their families, companies, university professors and staff and the government. They emphasize, therefore, that those who can effectively help to establish the requirements of a course are: employers, professional organizations, alumni, government and the society as a whole. About students emphasizing that they are primary participant of the education process and while customers during their course, are customers that can give useful information and feedback of the quality of education process, through the surveys, therefore, can establish the requirements of the quality of the product, once they, students, besides the customers are the own product of the university.

A tool of quality that has been significantly used on studios of different aspects of higher education is the Quality Function Deployment (QFD). A basic and critic phase to the use

of QFD is the customer's identification of a business. Ermer (1993) used the QFD as a tool in the refinement of scholar curriculum of mechanic engineering course of Wisconsin Madison University, identifying and using as more relevant customers: as internal customer, faculty and as external customer, the students and the employers. On a recent studios, Hwang and Teo (2001) demonstrated how higher education institution can apply the methodology of QFD to change the voice of customers in operational requirements in the main process. In the initial phase of their work Hwang and Teo (2001) had to identify who would be the customers, to apply the QFD. They emphasize, therefore, that the higher education admits a multiplicity of stakeholders as: students, faculty, employers, government, private companies, industries, local community, general citizens, alumni, etc. Meanwhile, to apply the QFD in operational requirements identified the students as customers more relevant of education and the faculty members as customers more relevant of research.

In UK two ample studios were recently published related to the quality of higher education. Kanji and Tambi (1999) studied specially the application of TQM on the Britain higher education, while Hewitt and Clayton (1999) studied the complexity of applying to the higher education the principles of total quality and the lessons that are extracted of its application.

To Kanji and Tambi (1999), the customers of higher education are divided in different groups of actors, who are linked to the educational process being the main: current students, potential students, employees, employers, government and industry. The authors have classified the customers in internal and external, emphasizing that the internal customer are who work to the satisfaction of external customers (Juran 1988). Besides, to the authors the customers can be classified in primary ones and secondary ones, basing on their location being as internal customers or external ones and basing on the frequency of interaction that the institution has with them too. The authors consider that the product of higher education is the education and then, depending on the role developed by them during the course, the students can be classified as internal or external. The classification made by the authors is showed on the Figure 1 below:

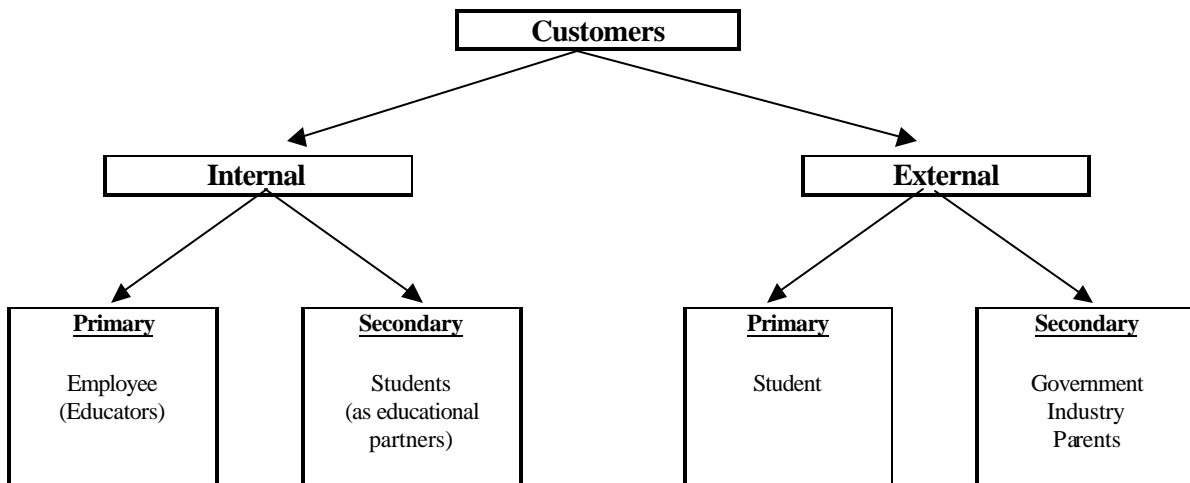


Figure 1 – Customers for higher education (Kanji and Tambi, 1999)

To Hewitt and Clayton (1999) the most obvious educational stakeholders are “the educators and those being educated, those teaching within universities and those studying there”. The authors affirm that the faculty and the students are clearly the primary participants of the teaching and learning process. Then, they list as other significant stakeholders the future employers. They emphasize that, on their opinions, a list of stakeholders only could be considered more consistent, if were included the government, its agencies and university

managers. They show the inter relations between different customers of the higher education demonstrated on the Figure 2:

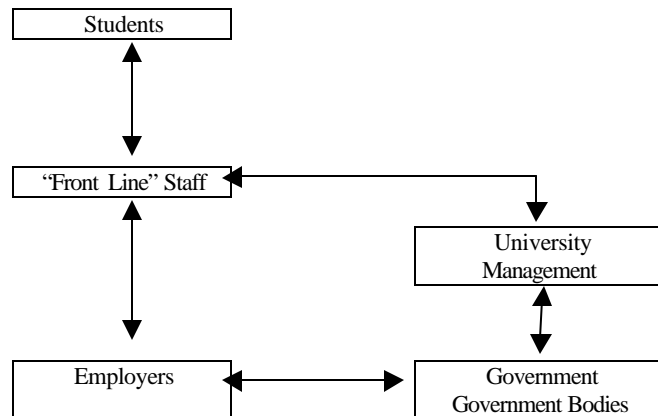


Figure 2 – Customers of higher education and yours inter-relationships (Hewitt e Clayton, 1999)

O’Neil (1999) describing the project and the implementation of Balance Scorecard (BSC) in the University of Southern California explain that one of main characteristic of BSC is to allow looking simultaneously an organization by four perspectives: 1.financial; 2.from customers; 3.from internal process of the company and 4.organized learning. By the customers view the question to be answered in the introduction of BSC is how the customers see the organization. Then, a stage that precedes the answer to this question is the customer identification. O’Neil (1999) in the application of the technical of BSC identified as the most relevant customers the students and the employers.

An analysis of the customers of higher education institutions from different views and authors in the marketing areas, quality and BSC reveal that prevail the rule of multiple customers of higher education. A brief board is showed on the Table 1 where are grouped and related the customers groups that more frequently are quoted in the literature, including other authors besides those before referred. These categories and definition to each one of them adopted in this work are the following:

1. Students - registered students regularly and studying in a university.
2. Employers - the future employers of students, being the industry, the commerce or government.
3. Faculty - all the faculty members who work on different activities in the university.
4. Society/Government - the society as a whole, including citizens, taxpayers and government authorities.
5. Families - families of the students those are most responsible by its financial management during the course.
6. Managers/employees - school managers and staffs from administrative and technical group of a university.
7. Others - all whose are spoken by different authors and not referred on the last categories as secondary students, alumni, suppliers, competitors, council or community group and etc.

So, what exists is that in the higher education institution, prevail the rule of multiple customers, being each one from these groups of customers have different requirements (Owlia and Aspinwall 1996b; Dohert 1997, Hewitt and Clayton, 1999). However, two are the gaps in the most of referred works. The first is that it does not say clearly what kind of process are related customers, leaving only implicit in the most of works, more emphasis to the educational aspects, or being related with the education process. But it is not explicit by the authors. A second gap is that the question whose is the main customers to each process is not discussed by any of those authors and they limit only to classify the customers in primary or secondary with no more details about the reason of this choice.

Authors	Students	Employers	Faculty	Society/ Government	Families	Managers/ Employees	Others
Weaver (1976)	v	v	v	v	v	v	
Kotler and Fox (1985)	v	v	v	v	v	v	v
Robinson and Long (1987)	v	v	v		v	v	v
Ermer (1993)	v	v	v				
Owlia and Aspinwall (1996a)	v	v	v	v	v		
Karapetrovic and Willborn (1997)	v	v	v	v	v	v	v
Rowley (1997)	v	v	v	v	v	v	v
Owlia and Aspinwall (1997)	v	v	v	v	v	v	v
Reavill (1998)	v	v	v	v	v	v	v
Kenji and Tambi (1999)	v	v	v	v	v	v	
Hewitt and Clayton (1999)	v	v	v	v			
Hwang and Teo (2001)	v	v	v	v			v
Prendergarst <i>et al</i> (2001)	v	v		v	v		v

Table 1 – Customers of higher education by the view of several authors

Owlia and Aspinwall (1996a) conducted a specific survey about the questions in the quality area of higher education. In this survey received 51 answers of people that had already published articles in quality area, mainly about higher education. People, who are from different areas of interesting, as education, management, engineering, and different countries, being most university teachers. One of the questions of this questionnaire was as asking to classify the higher education customer relevance, classifying in an order of importance from 1 to 5, the following customers: employers, families, faculty, society/government and students. Basing on the answers, the survey authors got the following ranking: 1 - Students; 2 - Employers; 3 - Society/government; 4 - Faculty and 5 - Families. However, this survey was not specified about, for example, only educational questions but about the higher education institutions and the relevance of their customers, this, in our understanding compromise the answers since that the relative importance of education and research processes, must be different for each one of respondent.

ANALYSING PROCESSES AND CUSTOMERS

The university is an institution almost millenary, having being born in Europe in the centuries XII and XIII. In spite of the age, it has been studied enlarged only the last few years. In the beginning, the Universities were corporations of teachers and students, who met constantly for classic reading, the discussion of polemic themes and the logical organization of available knowledge. The university had, since it was created, its essence linked to the education process. In the century XIX, Humboldt developed in Germany a new paradigm for the university, emphasizing the importance of research (Caraça et al, 2000), this idea was exported for other countries, mainly the United States where it had just a big impact about its industrial development (Rosenberg and Nelson, 1994). Recently, in the centuries XIX and XX the University, transmitter of knowledge through the education and creator of knowledge through the research, began to apply this learning for the benefit of the community, joining to its activities the service process. Therefore, the way as we know today, the higher education institution has three central processes that are its essence: the education, the research and the service. However, two of these processes are distinguished on a big importance: education and research.

However, this one that is named as being the education process indeed is something much more expressive in the reality, because it has two very many distinct actions among themselves associated to this unique concept. Basing on the practice, during the centuries, this process has been like that: in the first moment, the knowledge holder transmits it to someone, that receives it and in a second moment, this knowledge receiver processes it. For this, the named education process is a process divided in two sub distinct processes: one of them named teaching (Knowledge transmission) and other named learning (Knowledge obtained by study). Then, in fact, what it is called education process in the higher education institution, should be named learning and teaching process because it expresses much better what is happening. Many authors (Ellington and Ross, 1994; Bailey and Bennet, 1996; Rowley, 1996; Yorke, 1997; Horsburg, 1999) do like that when they refer about learning and teaching on their written. On the development of this work, we are going to divide the teaching and learning process into two distinct processes: the teaching one and the learning one.

Jauch and Orwig (1997) question about the concept application of TQM in the education activities of higher education and they refer to these two processes that they define as: teaching model (Figure 3) and learning model (Figure 4). However, they consider them as distinct processes because they show the proposal model by them as being learning one and it is that would be the right model for an analysis of education activities in education institution, thus they consider the teaching model as representative of classic model of goods production adapted to education activities. We agree with the authors about the existence of two models. However, we disagree with the authors when they say that the models are distinct because we think they are complementary as will be better specified ahead.

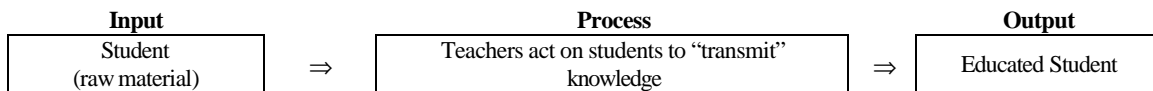


Figure 4 – Model proposed for “teaching” process by Jauch e Orwig (1997)

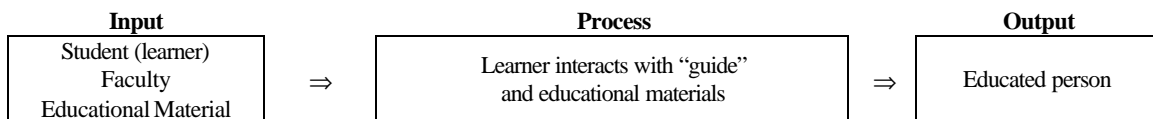


Figure 5 – Model proposed for “learning” process by Jauch e Orwig (1997)

A production system proposal to the education activities was done by Jaraiedi and Ritz (1994), authors of quality area, for an engineering graduation course, as showed in the Figure 5. This proposal seems to be very consistent, but it reveals very broad, because it is an education process as “entire” uniting the teaching and learning activities in a unique system.

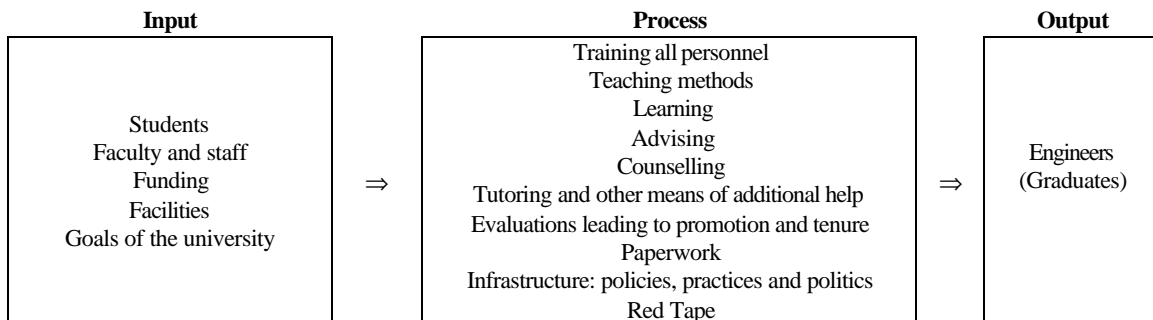


Figure 5 – Model input-process-output proposed by Jaraiedi e Ritz (1994)

TEACHING AND LEARNING PROCESSES

Slack *et al* (1995) suggest that in a production system the process is directly related with the inputs to be changed. In the higher education, enclosing the teaching and learning process, the important activity is the processing of customers, or else students (Sirvanci, 1996; Wallace, 1999). To Sirvanci (1996) the student during the course owns a double role: firstly as customer and after as worker. The student assumes the customer role when receives the knowledge transmitted by the professor and it takes the worker role when he needs to get time on the learning process, studying to demonstrate his knowledge by tests or exams. A similar opinion is done by Kanji and Tambi (1999) when they consider the student as external customer of the activities where he is the receptor of some service, being it from any nature and when they consider the student as internal customer in respect to his own learning, thinking that the student after getting his learning content, he must work on that. Kanji and Tambi (1999) call the student “*educational partner*” and Sirvanci (1996) is much more explicit when calls the student “*worker*” of his own learning. Therefore, the teaching and learning process, mainly basing on different roles taken over by the students, must be separated into two distinct processes: the “teaching”, under teacher’s responsibility and “learning”, under student’s responsibility. For this displaying the outputs obtained are different too. In the teaching process the main output is the student “in a state of change” or the student who received the knowledge that his teacher transmitted it, but it was not processed. This processing done by the student is his work in the following process that is the “learning”, when the student, doing this well, will join value to the final product and it is going to be a graduated professional at the end of the course.

Based on Sirvanci (1996) and Kanji and Tambi (1999) considerations, we show in the Figure 6 the main characteristics of the production system to the “teaching” process and in the Figure 7 the main characteristics to the “learning” process by the view of these authors.

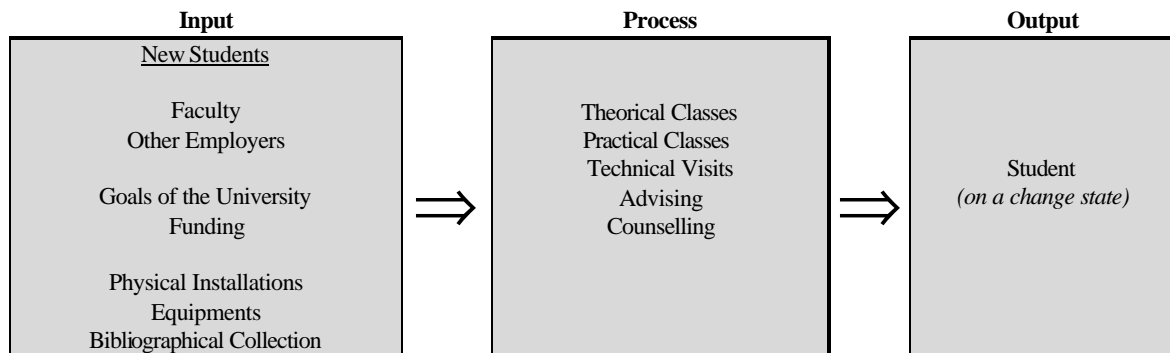


Figure 6 – Production system of “teaching” process in higher education institutions

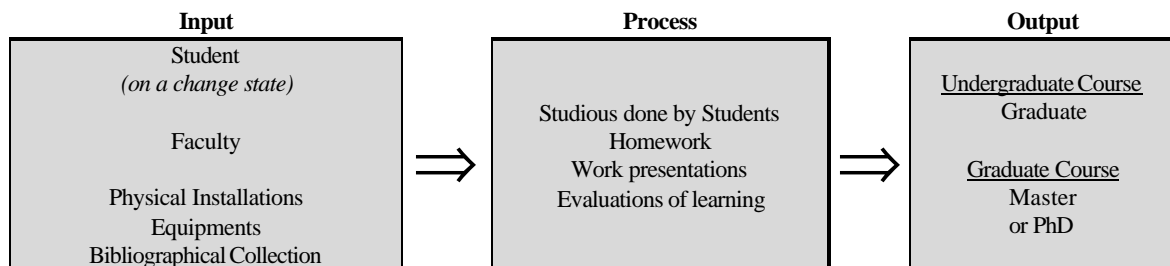


Figure 7 – Production system of “learning” process in higher education institutions

The goal of one process is to create a value output for a customer, as Hammer and Champy (1993). In each one of these processes above is clearly defined which are these outputs: One student “*on a change state*” in the “teaching” process and graduated professionals (or

masters or PhDs) in the “learning” process. For this, who are the main customers of each one from these distinct processes?

Michael *et al* (1997) analyses the education activities by an ample way and define that “*the customer of higher education is the student as a consumer of knowledge and services, the future employer or graduate school as a consumer of the student product, and society as a whole as taxpayers and beneficiaries of the educational operations of the institution*”. This opinion of Ramona *et al* (1997) is coincident with that found out in the survey by Owlia and Aspinwall (1996a) where the students, employers and society were considered as the most relevant three customers. Besides, in the bibliographic review verified that to Robinson and Long (1987) the students are primary customers, while the employers are the secondary customers; to O’Neil (1999) the most relevant customers are the students and the employers; to Karapetrovic and Willborn (1997) the students are the primary customers of the teaching process but with restrictions; to Hwang and Teo (2001) the students are the most relevant customers of education; to Kanji and Tambi (1999) the educators are the most relevant internal customers and the students are the most relevant external customers and to Hewitt and Clayton (1999) the faculty and the students are the primary participants of the teaching and learning processes. All of them have a common point of view in their works. None of them analyses the customers’ question in function of separation of the distinct processes: teaching and learning, they analyse the education process in a general form. This is the central point of constant references to the multiple customers in the literature and not about objective identification of principal customer of each process. It is what happens after a brief explanation of conception of internal and external customers.

Juran (1988), author of quality area, define as “external customer” every people that do not belong to an institution, but are affected by their products and as “internal customer” every people or organizations that make part of institution. A similar definition is from Jonhston (2001), author of area of service operations. The analysis of these concepts by a production system allows concluding that:

- 1 - The external customers are those who receive the outputs these systems and
- 2 - The internal customers are those who “work” in the process in these systems.

After having done these considerations, we are going have an analysis of the central question: Who is the main customer? Is it possible to answer this question, separately for each one of the processes: teaching and learning? The right answer for this question corresponds to a better comprehension of the role of the student, isolated, in each one of these processes, thinking that the student owns in the global process of the education a double role. (Sirvanci, 1996; Kanji and Tambi, 1999).

So “Who is the main customer of these processes: “teaching” and “learning”?”

In the “teaching” process, the responsible by the organization and transmission of knowledge is the professor, so he is the worker, having the role of main internal customer in this process, as defined by Ermer (1993), Kanji and Tambi (1999) and Hewitt and Clayton (1999), not specified for the “teaching” process isolated, but for a global process named education by them. And who receives the work done by these internal customers? Here, it is evident that are the students who receive the information, and so they have the role of main external customer of this process. This opinion is the same from many authors (Robinson and Long, 1987; Ermer, 1993; Hill, 1995; Galloway,1998; Hewitt and Clayton, 1999), excepting too the fact that they consider the student as a main customer of a process as a whole, named education, without separate the processes in accordance to our proposal.

In the “learning” process, the responsible for working the received knowledge is the student (Sirvanci, 1996), so, he is his principal internal customer. This work done by the students is submitted by periodical evaluations during their courses, to secure that happened added value and then to produce the final product, the graduated professional. And who is the main external

customer of this final product? Here, two answers are admissible. Being much more objective the direct beneficiaries are the employers and more subjective is the society/government. Is it possible, however, between them to identify a main customer? Some authors, with no more details, attribute the same importance to both of them in their works (Karapetrovic and Willborn, 1997; Kanji and Tambi, 1999). However, this is not the opinion of the most authors. To Ermer (1993) and O'Neil (1999) the most relevant customers are the students and the employers, the society/government is not mentioned. Other authors (Robinson and Long, 1987; Hewitt and Clayton, 1999) only mention both as customers, but give more relevance to the employers than to the society/government with no more details. However, this is what it was found out in the survey conducted by Owlia and Aspinwall (1996a) where you can verify the bigger relevance to the employers than to the society/government. Being incisive in this question, only Boiley and Bennett (1996) affirm that the most important external customer is the future employer. So, basing on the literature that considers in an explicit way the employer more important as customer than the society/government, we conclude that the main external customer is the future employer in the "learning" process.

THE RESEARCH PROCESS

In the research, the basic is the information processing with the creation of new knowledge beginning from the actual learning existent and available. This process occurs from the survey and bibliographic reviews, scientific experiences in lab, when it is for studying the cases in the social sciences, analyses and comprehension of information and researches etc. Here, the principal output is the production and publishing of new knowledge, as patents, scientific publications and doctorate thesis and others.

The Figure 8 shows the main characteristics of the production system to the research process by the view of the authors.

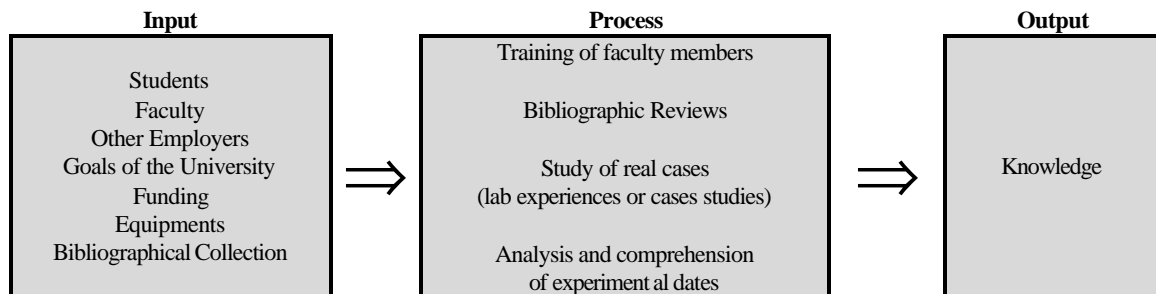


Figure 8 – Production system to research in higher education institutions

As the goal of a process is to create a value output to a customer (Hammer and Champy, 1993), who is main customer of the research? The internal customer is the worker that produces the knowledge and in this case, in the higher education institutions, this is the direct responsibility of the researchers that are faculty members. This position is that defended by Hwang and Teo (2001) they choose the researchers as the most relevant customer of the research, without saying about internal or external customer.

And the output of this process that is the production and information of new knowledge to whom will benefit? Who is the beneficiary for example, to the scientific progress in the health area, when it occurs by the invention of new medicines? Who is the beneficiary to the discovery of new chemical products? The answer has not any doubt now. The final beneficiary of the science advance is the society as a whole, as is organized, in the most part of the countries of occidental hemisphere, is represented by its governors, democratically elected.

The society as a whole, through the government, effectively is represented as customer, by the government bodies of research incentive in the different countries of the world. These

government bodies are responsible for tracing the routes of the educational and scientific politics of a determined nation that it has its level of development directly related to the educational and scientific politics adopted. It is true that in the last decades the countries that did expressive investment in the main activities of higher education – education and research had significant economic advance, as such as the countries of South West Asiatic, with a special eminence to South Korea. Many examples are related in an article of Salami and Reavill (1996).

CONFLICTING VIEWS

The definition about what to do (processes) and to whom to do (customers) is important in organizations that it intends to be very well succeeded. In the case of higher education institutions the central processes are education and research, as we have just studied. About discussing the relevance of both of them, or which one of them is more relevant than the other, this must be a particularity of each higher education institution, basing on their real objective. Caraça *et al* (2000) study this question and, tell that in the past the education activity always has a bigger preponderance than the research activity, in a general view, but nowadays, where the evolution of scientific advance is one of the biggest differentials of a nation development, this question becomes very expressive. Caraça *et al* (2000) argue the education activities and the research must have the same power in the present. In this work, we do not discuss about that and we consider only that the two processes are, actually, the most important of a higher education institution.

However, the multiplicity of customers in any organization allows the existence of conflicts basing on different views from different customers. Each one of the customers groups see things by their own point of view and sometimes from their personal interesting. Being defined “Who is the main customer?” from each one of the main processes of higher education institutions; we are going to indicate which the main points of conflicts by different views are. We indicated five points of conflict that were identified among the different customers. There are not only these opponent points but these points are those we consider the most important, that are:

1. The student to be considered as customer in the teaching activities in classrooms.
2. The student role on his own learning.
3. The existent expectation about the student as product by future employers.
4. The indicators of scientific productivity in the research.
5. The double role of faculty members: teaching and research.

The first divergent view to be studied is: Will the students be customers in the teaching activities in classrooms, in the reality? Why is this question relevant, if the most authors consider that the students are customers of educational process? Why is this question so important, if it has just been demonstrated, in this work, that the student is customer, and not only, a simple one, but also the main external customer from the teaching educational process? The answer is very simple: Some people do not consider the student as customer. In the survey conducted by Owlia and Aspinwall (1996a), with faculty members, verified the student the higher education customer for 92% of respondents, for 70% of them the student is the primary customer of higher education. However, 8% of them do not consider the student as customer. Why do we have this result? Clearly, Bailey and Bennett (1996) reject the idea that the student is customer of higher education, considering that, in fact, the student is the product and the employer is the primary customer. They concluded this basing on two ideas. Firstly, they explain that to solve the doubt if the student is customer it is needed to answer the following question: “*What do students want from higher education institutions?*” They conclude that the students understand that their higher education course is an investment in a permanent goods and not in a consume ones, transitory and the students know that they will not receive the real benefits from their course during it, but,

only after its conclusion. Besides, the authors in support of their theses, they support to the facts of a survey made by Boyer (1987) on which more than 80% of parents and high school seniors said that the most important reason for going to college is: “to have a more satisfying career” or “to prepare them to get a better job”. The interesting point emphasized by Bailey and Bennett (1996) when they do not consider the student as customer is the fact that they consider the student as beneficiary of educational process and so, its product. We do not agree with the opinion of these authors, because it is so simplistic and it is not based on any expressive fact, but only on theoretical conjectures.

According to our position and disaccording with Bailey and Bennett (1996) the most of authors consider that the student in a higher education course has an atypical position, as the point of view assumed, he can be considered as customer or he can be considered as product (Thomas, 1980; Lovelock and Rothschild, 1980; Conway et al, 1994; Michael, 1997; Lawrence and McCollough, 2001). To Hewitt and Clayton (1999) the students, in fact, assume not only two, but three roles into the teaching and learning system: raw material, customer and product. To Sirvanci (1996) the student has four roles during his course: “1. *Students are the product-in-process; they are the raw material when admitted to the school and the finished product following graduation.* 2. *Students are the internal customers for many non-academic facilities offered by campus.* 3. *Students are the laborers of the learning process and* 4. *Students are internal customers for delivery of course material*”. This opinion is like Harris’ one (1992) to show the complexity of the role of student in the dynamic and interactive nature of education, he expressed: “*While students are primary customers from college and universities, they are raw material, suppliers, co-processors and products*”.

Therefore, the difficulty of accepting the student as customer for some people is in the multiplicity of his role during the course that is atypical, in a common production system.

So, the customer student and the primary external customer of teaching process, the relevant, in fact, is to know which are his rights and obligations in this process. Wallace (1999) describe a work of consciousness in the quality area realized by Southern Polytechnic State University and after much analysis it followed that the students are primary customers of the education process (as a whole), opinion like that, many authors agree explicitly (Robinson and Long, 1987; Hill, 1995; Galloway, 1998; Hewitt and Clayton, 1999). However, this conclusion occurred after a large internal discussion basing on the principles of quality and they understood the following: “1. *The school must operationally define what is meant by student as customer;* 2. *Customers can, and indeed almost always do, have responsibilities;* 3. *A lack of knowledge about what they need is a common characteristic of most customers and* 4. *If the school doesn’t satisfy its customers, they will go someplace else*”.

Then, in the observations retracted by Wallace (1999) two are more expressives: the necessity of operational definition what means the student as customer and the customers have not only rights, but obligations too. A suitable definition of what students are while customers, on a operational level, must be discussed as obvious questions of what are minimum rights of student, as, having a good class, noticing that his professor prepared the class, receiving the subject in a logical and coherent way and getting the attention of his professor among others. However, the student has to be interested on the classes and participates in his learning process, as we are going to see ahead.

Another interesting point of view is studied by Michael *et al* (1997) and Lawrence and McCollough (2001). They say clearly about fear that many university teachers have when they assume the student as a customer. They are afraid of being evaluated. They are afraid of having to be more dedicated and preparing much better classes and others.

In a general way, it is important that the faculty is opened for accepting new concepts of quality and marketing to understand that students can evaluate their posture, their motivation, their frequency and the accomplishment of expected roll, among other possible parameter for

being evaluated. For this, it is advisable that it is repeated the very well succeeded experiences in this area, as that described by Wallace (1999). An apparent limit on which the students as customers have: is, firstly, about the curricular grade, because the student cannot deliberate about it or about the roll of each course and during it he does not have the exact notion about “the entire”, having only the notion of parts he has just coursed. However, it is not difficult listening to the students and then they give some opinions about the scholar grade, in accordance to the well-succeeded experience related by Ermer (1993). By other hand, the appreciation about students being customers gives to them great consequence, because we are not speaking about only rights but about obligations too and this asks for a conscious and mature posture.

A second divergent view to be studied is about the student in the learning process, being the laborer of his own learning. Hewitt and Clayton (1999), reveal in a survey conducted by them with faculty members and students, a great divergence among them about this theme. In accordance to this survey, when studied “*Encourage students to be actively involved in the learning process rather than be passive recipients of knowledge*”, the opinion of students and faculty members are completely different. The faculty members classified as the third most important parameter in a list with 73 parameters, while the students classified as the 64th parameter in a list with 73 ones. Then, we conclude that the students prefer to be taught than development a pro-active attitude in their learning process. What are the implications from this great divergence about the organization of education process? For faculty members, I consider much relevant the acquirement of concepts about pedagogy what it would permit a better performance in its facilitator and motivator role in this process. For students, this process asks for much more maturity, more involvement, in fact, an attitude much more pro-active in their own learning and it would be very important, because this is one of the main characteristics wanted by their future employers (Hewitt and Clayton, 1999).

A third divergent view exists between the faculty and the employers about the characteristics wanted from the product: student. Employers have as in common characteristics that are wanted for this student product, from which we can emphasize: better skill of written and oral communication, bigger capacity to solve practical problems of real life and more capacity of working in groups. For this, the employers would like to interplay more with the university, to opine about the scholar grade and about the way is developed the different abilities of student. (Ermer, 1993; O’Brien and Deans, 1995; Bailey and Bennett, 1996). In survey conducted by Hewitt and Clayton (1999) in UK two third of employers spoke about questions of scholar curriculum and one of these questions was about the incorporation of the employers’ opinions in appreciation and review of their scholar programs. This question, when it was submitted for appreciation to the faculty members, it was classified as the 68th among 75 questions, then it is evident the inferior importance given to this. The selected question in the survey is not directly related to the central characteristics wanted by employers, but it reveals a large difference between on what the employers wish and what the professors think about their participation, many times as being opined about related questions to the education process of future graduate. Referring to this question, O’Brien and Deans (1995) found out that the employers suggest the relation between theory and practice in the education of future graduate is different from that existent in the academy. To employers, as selected in survey by authors, the ideal balance between theory and practical should be around 60% of theory and 40% of practical, while in the reality what exists is around 80% of theory and 20% of practical. In spite of simplicity from this result, these numbers show the different views between what think the faculty members and future employers. The concrete divergence is that the employers would like to follow much more, study and until evaluate the educational process of student but not only to receive the final product. In fact, this seldom happen, because a large distance that there is between the questions of academy and the questions of future employers. Boiley e Bennett (1996) after studying this

question they say that both of them, employers and faculty, many times “*view themselves as operating in separate arenas*”.

The implications that this divergence of views bring is that for both, faculty members and future employers would be appropriated a bigger approaching, having the improvement of education process of future graduate, for this, would be needed an attitude much more pro-active from both of them searching an experience change that it comes to enrich the education process as entire. In fact, thinking on the selected result by survey realized by Hewitt and Clayton (1999) the faculty members must be opened to receive evaluations from the future employers during the process and not only from final product.

A fourth divergent view, specific to the research, is about the indicators of scientific productivity chosen by government from different countries. Interviews made with researchers by Hwang and Teo (2001) demonstrated much dissatisfaction in three central points related to research: a lot of papers to work, the project allowance is much slow and there are many restrictions to use the funds of research. However, the responsible government bodies by funds allowance for researches, they link these discharges to an extensive document and they delay more than it is hoped by researchers, for analyzing and deliberate about research projects. Besides, the faculty members claim at the obligation to keep some requirements of publication, this, in many cases, causes much stress, as it was related by Oshagbemi (1997, 2000). These complaints mean that for many institutions the quantity of publications is better than their quality. This divergence of views among institutions of incitement from researches, representing the society/government and the faculty members, on its paper of researchers is very stressful by the satisfaction to achieve researches and it affects two in each five researchers as demonstrated in the survey conducted by Oshagbemi (2000). As consequence of this dissatisfaction, the main external customer, the society, is prejudiced because it receives a scientific production “contaminated” by virus of dissatisfaction to research by a significant number of professors. As representative of society, the government institutions should have a bigger interaction with the professors, who are the active producers of research process, how described Hewitt and Clayton (1999) are primary customers less heard in this process.

A fifth divergent view, or better conflicting one, for many faculty members is the fact that on their role they need to develop well two activities apparently distinct among them: teaching and research. In the teaching activities, he acts as a supplier, transmitting knowledge for his students. In the research activities, he acts as a “supplier” in the creation and amplification of knowledge for society. For some authors this double role is a rule in conflict among them (Kerr, 1963; Clark, 1987). Studying about the professors’ satisfaction in their teaching, research and administration activities, Oshagbemi (2000) prepared a survey and found 80% of satisfaction level in the teaching activities, 60% in the research activities and 40% in employment of administrative leadership. The same author, in other study (Oshagbemi, 1997) with the information of the same survey he listed the factors that create satisfaction and dissatisfaction on professors in their activities. He concluded that the professor has much more pleasure on teaching than research, because the freedom in the teaching activities is bigger than in the research activity. In the teaching activity, the professor since he performs the programmatic subjects of course he is the principal “actor” of the classroom with large freedom about the way he must conduct his classes. However, in the research activity, researchers through scientific publishers and participation in congress impose it to demonstrate positive results. Rowley (1996b) and Thomas and Harry (2000) analyses the existent tensions in this double role and the necessity of developing well both of them and conclude that both are important to the function of professor and the education of high quality only is obtained when both, teaching and research, are recognized as vital importance by professors. In any way, this is one of the biggest expectations that the students have, while customers of teaching process and the society while customer of research.

CONCLUSION

This paper studied the main activities of higher education institutions, education and research, while productive processes. It analyzed who is the main customer of each one from these processes; their conflicting views and the implications resulted from them.

The first significant conclusion is that the process named “education” divided in two distinct processes: the teaching process, under main responsibility of university teacher and the learning process, under main responsibility of student. Models of production system were proposed for each one of these processes and it has been identified who is the main external and internal customer of each one of them. It was proposed a model of production system to the research process too and identified who is its main external and internal customer. The conclusion about customers is showed on Table 3 in an objective way.

Process	Internal Customer	External Customer
Teaching	Faculty	Student
Learning	Student	Employer
Research	Faculty	Society/Government

Table 3 – The main customer of teaching, learning and research processes.

This work demonstrates five conflicting views among different groups of customers:

1. The student to be considered as customer in the teaching activities in classrooms;
2. The student role on his own learning;
3. The existent expectation about the student as product by future employers;
4. The indicators of scientific productivity in the research and
5. The double role of teachers: teaching and research.

It explains the conflicts and it shows ways to reduce them through the search of a bigger efficiency in the objectives of higher education institutions.

References

- Bailey, D., e Bennett, J. V., (1996), The Realist Model of Higher Education. Quality Progress. November, 77-79.
- Boyer, E. L.; (1987), College: The Undergraduate experience in America. Harper & Row. New York. NY. p 12
- Caraça, J., Conceição, P. e Heitor, M. V., (2000) Towards a public policy for the research university in Portugal. Higher Education Policy. 13, 181-201
- Clark, R. B., (1987), Academic Life: Small Worlds, Different Worlds. Carnegie Foundation for the Advanced of Teaching. Princeton. NJ.
- Conway, T., Mackay, S., and Yorke, D., (1994), Strategic Planning in Higher Education: Who are the Customers? International Journal of Educational Management, 8(6), 29-36
- Dohert, G. D., (1997), Quality, standards, the consumer paradigm and developments in higher education. Quality Assurance in Education. 5(4), 239-248.
- Ellington, H., and Ross, G., (1994), Evaluating teaching quality throughout a university. Quality Assurance in Education 2(2), 4-9
- Ermer, D. S., (1995), Using the QFD becomes an Educational Experience for Students and Faculty. Quality Progress. May, 131-136.

- Galloway, Les (1998), Quality perceptions of internal and external customers: a case study. *The TQM Magazine*, 10(1), 20-26.
- Hammer, M., and Champy, J., (1993), *Reengineering the corporation, a manifesto for Business Revolution*; Harper Collins Publishers. New York.
- Harris, J. W., (1992) Key concepts of quality improvement for higher education. In: J.W. Harris & M. Bagget (Eds). *Quality Quest in the Academic Process*. Stamford University. Birmingham. UK.
- Hewitt, F. e Clayton, M. (1999), Quality and complexity – lessons from English higher education. *International Journal of Quality & Reliability Management*, 16(9), 838-858.
- Hill, F. M., (1995), Managing service quality in higher education: the role of student as primary consumer. *Quality Assurance in Education*. 3(3), 10-21
- Hwang, H. B. e Teo, C.; (2001), Translating customer's voices into operations requirements – A QFD application in higher education. *International Journal of Quality & Reliability Management*, 18(2), 195-225
- Horsburgh, M. (1999), Quality Monitoring in higher education: the impact on student learning. *Quality in Higher Education*, 5(1), 9-25
- Jauch, L. R. e Orwig, R. A., (1997), A Violation of Assumptions: Why TQM Won't Work in the Ivory Tower. *Journal of Quality Management*. 2(2), 279-292
- Jaraiedi, M. e Ritz, D., (1994), Total Quality Management Applied to Engineering Education. *Quality Assurance in Education*, 2(1), 32-40
- Johnston, R., (2001), *Service Operations Management*. Pearson Education Limited. New York. NY
- Juran, J. M., (1988), *Juran on Planning for Quality*. Juran Institute Inc.
- Kanji, G. K e Tambi, M. B. A (1999), Total quality management in UK higher education institution. *Total Quality Management*, 10(1), 129-153.
- Karapetrovic, K and Willborn, W., (1997), Creating zero-defect students. *The TQM Magazine*, 9(4), 287-291
- Kerr, C., (1963), *The uses of the University*. Harper & Row, New York. NY.
- Kotler, P. and Fox, K. F. A., (1985). *Strategic Marketing for Educational Institutions*. Prentice Hall. New Jersey.
- Lawrence, J. J. e McCollough, M, A., (2001) A conceptual framework for guaranteeing higher education. *Quality Assurance in Education*. 9(3), 139-152
- Lovelock, C. H. e Rothschild, M. L., (1980) *Uses, Abuses and Misuses of Marketing in Higher Education. Marketing in College Admissions: A Broadening of Perspectives*, The College Board, New York, NY.
- Michael, R. M., Sower, V . E. e Motwami, J., (1997) A comprehensive model for implementing total quality management in higher education. *Benchmarking for Quality Management & Technology*. 4(2) 104-120
- O'Brien, E. M. e Deans, K. R., (1995), The position of marketing education: a student versus employer perspective. *Marketing Intelligence & Planning*. 13(2), 47-52
- O'Neil, Harold F, (1999) Designing and implementing an academic scorecard. *Change*, nov.
- Owlia, M. S. e Aspinwall, E. M; (1996a), Quality in Higher Education – a survey. *Total Quality Management*. 7(2), 161-171.
- Owlia, M. S. e Aspinwall, E. M; (1996b), A framework for the dimensions of quality in higher education. *Quality Assurance in Education*, 4(2), 12-20

- Owlia, M. S. e Aspinwall, E. M.; (1997), TQM in higher education – a review. *International Journal of Quality & Reliability Management*, 14(5), 527-543
- Oshagbemi, T., (1997), Job satisfaction and dissatisfaction in higher education. *Education + Training*. 39(3), 354-359
- Oshagbemi, T., (2000), How satisfied are academics with their primary tasks of teaching, research and administration and management?. *International Journal of Sustainability in Higher Education*. 1(2), 124-136
- Prendergast, J., Saleh, M., Lynch, K. and Murphy, J., (2001), A revolutionary style at third level education towards TQM. *Journal of Materials Processing Technology*, 118, 362-367
- Reavill, L. R. P., (1998), Quality assessment, total quality management and the stakeholders in the UK higher education system. *Managing Service Quality*, 8(1), 55-63
- Robinson, A; Long, G., (1987) Marketing Further Education: Products or People?. *NAFTHE Journal*, march, 42-51
- Rosenberg, N. and Nelson, R. R., (1994). American universities and technical advance in industry. *Research Policy*, 23, 323-348
- Rowley, J.; (1996a), Measuring Quality in higher education. *Quality in Higher Education*, 2(3), 237-255
- Rowley, J.; (1996b), Developing constructive tension between teaching and research. *International Journal of Educational Management*., 10(2), 6-10
- Rowley, J.; (1997), Beyond service quality dimensions in higher education. *Quality Assurance in Education*, 5(1), 7-14
- Salami, R e Reavill, L. R. P.; (1996), The critical success factors for international technology transfer (ITT) to less develop countries in Grimberg, W., Kickel, s. and Skapura, L (Eds), *Technology Transfer Models for Growth and Revitalization*. Technology Transfer Society, Franklin, IN.
- Sirvanci, M., (1996), Are the students the true customers of Higher Education?. *Quality Progress*. October, 99-102
- Slack, N., Chambers, S., Harland, C., Harrison, A. and Johnston, R., (1995), *Operations Management*. Pitman Publishing. London
- Thomas, R., (1980), Corporate Strategic Planning in a University, *Long Range Planning*, October, 13, 70-78.
- Thomas, R., and Harris, V., (2000), Teaching quality and staff research: are there connections? A case study of a metropolitan university department. *Quality Assurance in Education*, 8(3), 139-436
- Wallace, J. B., (1999) The case for student as customer. *Quality Progress*, February , 47-51
- Weaver, T., (1976), What is the good of Higher Education. *Higher Education Review*. 8(3), 3-14
- Yorke, M., (1997), This way QA? *Quality Assurance in Education*, 5(2) 97-100