Relationship between Brazilian Vocational Education and Furniture Design Sequential Course

Relação entre a Educação Vocacional Brasileira e o Curso Superior de Formação Específica em *Design* de Movelaria

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Abstract

This study focuses on Vocational Education and Training – VET – the so-called sequential courses in Brazil. The problem might be the lack of identification between the real needs of the labour market and the workforce or whether the links between them represent a new social order. The objective of this paper is to present the results of a case study about the Furniture Design Sequential Course conducted at a University in Southern Brazil. The methods consisted of structured observation, questionnaire and semi-structured interviews applied to students and employers, as well as document analysis. Some aspects are studied such as (i) issues related to the students' reasons for taking the furniture design sequential course and their judgement of its effectiveness in preparing them for the labour market; (ii) employers' knowledge of the course, with their judgement of its effectiveness in relation to standards of quality and production, and required skills from students; (iii) the structure of the course and the skills taught as well as their relation with the skills considered necessary by the labour market, as indicated by the students. The results of this research show that the sequential courses are in their infancy and it is not possible to conclude if this type of course presents a new social order. However, it is possible to see that sequential courses need to be studied before being implemented.

Key words: Vocational education. Sequential courses. Furniture design.

Resumo

Este estudo discute a Educação Vocacional e Treinamento - VET, chamada no Brasil de cursos seqüenciais. Um dos principais problemas enfrentados por este tipo de educação pode estar na falta de identificação da real necessidade do mercado de trabalho em identificar os profissionais requisitados pelo mercado de trabalho. Também se considera se há ligação entre esses profissionais e o próprio mercado representa uma nova ordem social ou se as ligações entre eles representam uma nova ordem social. O objetivo deste estudo de caso é identificar a problemática da educação vocacional por meio de estudos realizados no Curso Seqüencial de Formação Específica em *Design* de Movelaria, curso superior, em uma Universidade no Sul do Brasil. O método consistiu em uma observação estruturada, aplicação de questionário e entrevistas aos estudantes, entrevista a empregadores e análise de documentos da Universidade e da Legislação Brasileira acerca da diversificação e flexibilização do ensino superior. Alguns aspectos foram estudados, tais como: (i) questões relativas às razões para os estudantes estarem fazendo o curso, seus julgamentos e a eficácia deste na preparação para o mercado de trabalho; (ii) o conhecimento que os

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empregadores tem sobre o curso seqüencial com seus julgamentos e se estes cursos são eficientes em relação aos padrões de produção e qualidade; (iii) a estrutura do curso, as habilidades ensinadas e sua relação com as habilidades exigidas pelo mercado de trabalho. Os resultados da pesquisa indicam que os cursos ainda são muito novos e não permite dizer se esta modalidade de ensino superior é uma nova ordem social, mas foi possível perceber o quanto a diversificação e flexibilização do ensino superior brasileiro precisam ser estudadas antes da implementação de cursos desta natureza.

Palavras-chave: Educação vocacional. Cursos seqüencial. Design de movelaria.

Introduction and Justification

This study focuses on Vocational Education and Training – VET, the so-called sequential courses, a form of higher education qualification recently introduced in Brazil. Due to their recent approval, these courses are still in their infancy and there have not been studies to determine the suitability of specific courses to meet job market demands. For this reason, the idea of implementing them is subject to debate. Both the assessment of their effect and reception/ acceptance among higher education institutions permeate this study, but only the former will be the core of this research. The objective of this case study is to present the results of the study conducted at the furniture design sequential course at a University in Southern Brazil. The data come from the observation, questionnaire and semi-structured interviews applied to students and employers, as well as from document analysis. There are three aspects of the data: (i) issues related to the students' reasons for taking the furniture design sequential course and their judgement of its effectiveness in preparing them for the labour market; (ii) employers' knowledge of the furniture design sequential course, with their judgement of its effectiveness in relation to standards of quality and production, and required skills from students; (iii) the structure of the course and the skills taught and their relation with the skills considered necessary by the labour market, as indicated by the students.

I start by presenting a brief summary of the context of the furniture design sequential course, bringing up a description of the pilot study. The description comprehends a report of the observation period, the elaboration and application of the questionnaire and interviews to students, the analysis

of the data and the identification of the main issues emerging from the students' data. After that, I present the procedures used to interview employers, the data collected and the main issues identified in their data. Next, the data collected from the analysis of documents such as Brazilian law and university official documents are presented and, again, the main issues emerging from them are identified. At the end, I present some final considerations concerning the main issues raised from the different sources of data.

Vocational Education and Training – VET, the so called Sequential Courses

In this section, vocational education systems in Germany, Denmark, the Netherlands, the United Kingdom, France, and in the United States of America are presented. Table 5 shows the similarities and differences among vocational education and training in those countries. It presents relevant aspects for an association between sequential courses and vocational education and training in developed countries.

Under all the systems the trainees will spend an average of two years in vocational education and training which is something similar to what happens in Brazil. In the United States of America, a diploma is issued, whereas in the other countries the trainees receive a certificate at the end of their course. In Brazil, the students receive a diploma or a certificate. This is similar to what happens in the dual system in the Netherlands. Other vocational educational systems analysed give either the certificate or the diploma but do not include the possibility of offering both for vocational education and training.

Table 1 - The vocational education and training in Germany, Denmark, the Netherlands, the United Kingdom, France, the United States of America and sequential courses in Brazil.

| Countries | Description and Duration | |
|------------------|---|--|
| Germany (i) | Dual System | Certificate |
| Germany (1) | Full-time training company- private | 1-year training |
| | enterprise | 2-year training (partial qualification) |
| | Part-time vocational schools | 3-year training (Full-qualification) |
| Denmark (ii) | Dual System | Training certificate |
| | Enterprise VET school (vocational colleges) | |
| | Technical schools | |
| | Commercial school (business school) | |
| Netherlands | Dual System | Apprenticeship certificates; diploma from |
| (iii) | School-based on vocational education. | a training board |
| | Qualification can be acquired either on full | Assistant training 0-5 years |
| | time or a part-time basis | Specialist training 1-2 years |
| | Apprenticeship-based vocational education | Basic Vocational Training 2-3 years |
| | (with school attendance on a block or daily | Professional training 2-4 years |
| | basis) | Middle management training 34 years |
| | | |
| United | National Vocational Qualification System | Certificate for unit. Five unit or levels: |
| Kingdom | On-the-job Training (NVQ) | 1. Foundation skills in occupations |
| (iv) | College of Further Education and | (NVQ1); |
| | Professional Training (GNVQ) | 2. Intermediate or semi-skilled |
| | Colleges (bachelor HNC, NHD - NVQ4) | occupations; (NVQ2); |
| | Scottish Vocational Qualification System | 3. Advanced or technical, craft, skilled |
| | | and supervisor occupations (NVQ3); |
| | | 4. Technical and junior management |
| | | occupations NVQ4); 5. Chartered professional and senior |
| | | management occupations (NVQ5). |
| France (v) | Training Establishment in System | Certificates of vocational qualifications |
| Trance (v) | MC CAP (Full-time school or apprenticeship) | (CQP) |
| | BAC (pro) | Short-cycle, 2 years and levels: |
| | MC (Continuos class) | VI: not requiring any training |
| | BEP (Theoretical training or apprenticeship) | Va: short period of training |
| | BT (Technical) | V: normally requiring a qualification |
| | BAC - technical (Technological) | (BEP) |
| | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | IV: qualification equivalent a technical |
| | | III: requiring level of training |
| | | I and II: requiring a level of training of at |
| | | least a degree |
| United States of | Vocational High School System | Diploma |
| America | Area Vocational Centres | 2 years |
| (vi) | Community Colleges and Technical Institutes Skills centres | |
| Brazil (vii) | Sequential Course | 2 years |
| (,) | Complementary Studies | Certificate |
| 1 | Occupational Studies | Diploma |

Source: (i) Thiele (1994); Green, Wolf e Leney (2000); (ii) Collins (1993), Bosch (1993); Wossoner (1999); (iii) Minderop e Prohl (2000); Trant (1999); Lindley (1991); (iv) HMSO (1993); Dakers (1996); Mitchell (1995); Raggatt (1999); Qureshi (2001); (v) Maurice (1993); Neave (1996); Minderop (2000); (vi) Herschbach (1994); L'Angelle (1996); Minderop e Prohl (2000); Wright, Campbell e Garret (2001); (vii) Brasil (1999); Vadas (2002); Marback Neto (2002)

The fact that Brazil got inspiration from other countries' experiences led to problems in the labour market, because the diploma awarded by sequential courses is not officially recognised by professional associations or unions. This happens because both undergraduate and sequential course students receive the same kind of diploma.

The context of the Furniture Design Sequential Course

The sequential course in furniture design started in March 2003 and is scheduled to end in February 2005. The University implemented this course with the purpose of attending a local demand in which there are a lot of industries and commerce and need to provide workforce for their labour market. This course, like the other sequential courses in Brazil, is in its infancy and its general objective is to provide theoretical and practical knowledge on the creation process and serial furniture production, searching to develop the ability to manufacture products to satisfy the demands of the national and international markets. To begin with, any course out of the seven sequential courses offered by University could have been researched in this pilot study. However, the furniture design course was chosen because it has the smallest number of students. Therefore, it would not compromise the main study to be carried out later.

Description of the Study

Students

Observation of students

The purpose of the observation is to explore and take notes of the dynamics of the furniture design sequential course in relation the students' behaviour, requests and complaints; the teachers' attitudes; the coordinator's attitudes; the students comments about the contents of the course and assessment procedures; the facilities offered by the university as

well as any other aspect that might come up. Having known in advance which the students were taking the sequential course I planed to focus on. This observation happened in the classroom during the lectures for the period of fifteen days. I could observe them during all classes and the students' behaviours when the coordinator was there. The students emphasised issues about several things such as payment of the furniture design sequential course, library, teachers, seminars, contents, labs, suggestions for changes in the pedagogical projects, extra class lectures and visits to companies.

I went to the class of the furniture design sequential course with the coordinator and the teacher and stayed there all the time in a chair out the back sitting near the students. On the first day of the observation, the coordinator went there and explained what I was doing there and how long I would stay with them and all students accepted the observation as well as the teachers. However, at the beginning the students showed apprehension and made a lot of criticism about the sequential course but after three days, the observation occurred naturally.

Students' questionnaire

The questionnaire was designed after the period of observation by the students. From the data gathered, I made questions about the profile of the students attending the furniture design sequential course. The personal data intend to show the profile of students in furniture design like age, sex, and family income, working situation, school situation and labour area. Besides, questions connected with the contents of the sequential course, the teachers' and the coordinator's performance, assessment, and the sequential course itself were also made.

The questionnaire was applied on March 13, in the evening, in the students' usual classroom at University. In this class there were seventeen students and I received back ten questionnaires. Students were ensured that all data collected from questionnaires would be confidential and used exclusively by the researcher.

Analysis of the Questionnaire Data

Profile of students

The average age of furniture design students is around 28 and it has been 5 years they have not attended any school. 80% of these students had preuniversity courses, which lasted five months in average. In relation to vocational performance, the *per capita* income of each family is around R\$2,200.00. 80% are employed, 40% work in areas linked to the sequential course they are taking. 20% are business owners and 10% are in management positions. In the results of the questionnaires the profile of the students is very different in relation to educational background.

Main issues from the questionnaire. When analysing the ten questionnaires, the most relevant themes emerging from the data were related to: the content of the sequential course; the teachers' performance; assessment; the coordinator's performance; the required skills by the furniture industry and commerce. These themes are discussed below.

- Regarding the content of the sequential course: In average, 47% of the students said that the content can be applied to the labour market and theory/practice relationship allows for the development of problem-solving skills, and 93% said the content is important to the course and adequate for the labour market.
- 2. Regarding the teachers' performance: 87% of the students answered that teachers had really presented contents, objectives, methodologies, criteria for assessment and bibliography at the beginning of the furniture design sequential course. In addition, 60% of the students think that the subject contents are related with practical and professional applications. For 73% of the students, up-to-date knowledge of the area is demonstrated and for 60%, contextualized and up-to-date examples are given. In relation to the teachers' ability to encourage and enable learner's participation, just 33% of the students feel this situation really occurs. Dynamic methodology was

- adopted to attract students' attention only in the opinion of 47% of the students.
- 3. Regarding assessment: The majority of students (73%) mentioned that the teacher informs clearly about the criteria used for evaluation and assessment. 47% said that the obtained outcomes are compatible with classroom activities. Besides, just 40% of the students think that the assessment procedures value reflection and critical analysis more than memorization of data and facts.
- 4. Regarding the Coordinator's performance: Only 27% of the students said that the coordinator shares important information about the course with them and 40% answered that the coordinator makes an effort to solve problems that are identified in the course.
- 5. Regarding the required skills by the furniture industry and commerce: 73% of the students said that the course helps to improve specific job skills but only 33% felt the furniture design course satisfies their personal and vocational expectations. Also, only 27% of the students said that they have all the information they need about their course.

Students' interview

Three students were chosen to be interviewed according to two criteria as follows: (i) to have answered the questionnaire; and (ii) to be working in the furniture industry. Semi-structured interviews were carried out with the students and they provided me with the possibility of in-depth exploration of the issues emerging from the questionnaire. These students were interviewed with the aim to clear the questions that involved contents, teachers' performance, kinds of assessment and the sequential course itself. The semi-structured interviews took place in the teachers' room on March 17. Each one of the three interviews was conducted individually and lasted about 30 minutes. During that time I took notes and discussed the answers with the interviewee, always assuring him/her that his/her comments would remain confidential.

Main issues from the students' interviews. The most important themes emerging from the three interviews are outlined below and discussed further. 1. Reasons to take sequential course; 2. The contents of the disciplines are not enough; 3. The teachers need more knowledge of the contents in relation to theory and practice; 4. Each teacher adopted different assessment procedures; 5. The coordinator of the course does not share information with students; 6. The course needs improvement as to specific job skills.

- 1. Reasons to take sequential course: the students said that the main reasons to take a sequential course are (i) opportunity to improve qualification, mainly in relation to new technologies and vocational updating, (ii) length of the course (2 years), (iii) status, (iv) employability, (v) personal reasons, (vi) to have a diploma in higher educational level, (vii) to start working in another area and (viii) lower cost of the sequential course when compared to other kinds of courses at the same level.
- 2. The contents of the disciplines are not enough: all students interviewed work in the furniture industry or commerce and have jobs that require specific skills. In average, they have been developing their activities for 5 years. Most of the students answered that the sequential course was preparing them for the labour market but the skills taught in the classroom had little relationship with the enterprise and new technologies. "All the subjects have important information but some lack content such as: different ways of producing furniture and other details". "The course is very well structured and all the subjects are very important. The practical application could be better." About suggestions changes in the sequential course, the students said the contents should be more clearly presented. "...there is too much theory and we need more practice to prepare people for the labour market. The proposal is good but it needs to be more realistic."
- 3. The teachers need more knowledge of the contents in relation to theory and practice: the teachers' methodology seemed to be the most problematic for all students. Concerning the

- contents of the sequential course, it is sometimes considered relevant but there are not practical applications. For example the "[...] discipline about metals the teachers use just iron when there are some kinds as copper, aluminium and others". All students feel that the disciplines are important but need more connection with the labour market. In relation to teachers' methodology, classes are sometimes considered boring as they lack groups' dynamics and seminars. Apart from that, although teachers show knowledge of the area, relationships between the theoretical contents and possible practical applications are not established. "The teachers are very good in relation to the content but they have to improve a lot in relation to basic design". "I got very upset with the things that happened these months, the teachers that quite poor contents, unprepared teachers." "Teachers are very well prepared but some times they lack methodology".
- 4. Each teacher adopted a different assessment: all interviewees feel the criteria in relation to the assessment procedures used by the teachers along the course do not take into account practical applications of the contents. Each teacher uses different criteria to obtain outcomes based on theoretical issues, "...assessment needs to be clearer with more emphasis on work". The types of evaluation depend on he each teacher to the assessment of the learning process, the demand level, the assessment rules and the type of assessment. "Teachers are assessing us according to what has been taught in class".
- 5. The coordinator of the course does not share information with students: the students interviewed said that throughout the course the coordinator has superficial knowledge about sequential courses, but when the subject is specifically the furniture design is more difficult to have information about the pedagogical project, institutional information, Brazilian legislation, unions and the labour market. "The coordinator does not know exactly what the sequential course is."
- 6. The course needs improvement as to specific job skills: the students felt that there are gaps between

what is explained in class and what is required by the furniture industry and commerce. Apart from that, about the course itself they said "The course is very good but I think there should be more books in the library". "I expected to have faster results; the course should be more dynamic." "The sequential satisfies fewer my personal and vocational expectations." "I need more information about the course that I am doing".

Employers

Employers' interview

Apart from collecting data from students, I also considered essential to interview employers who were somehow in contact with students from the furniture design sequential course. As there are no sources of official information as to which furniture industries employ sequential course students I had to rely on the students' own indications. Three employers were selected and interviewed. They were conducted individually and lasted about 30 minutes. These sessions took place at the employers' workplace.

The aim of the interviews was to investigate the sequential course reality in relation to the labour market of the furniture industry and commerce from the employers' point of view.

Main issues from employers' interview: The general aspects about furniture design sequential courses from the employers' point of view were: their knowledge about the furniture design sequential course; their doubts about the development of the skills in the course; the students' performance according to standards of quality; the students' expected outcomes; the development of students' awareness; possible interferences preventing students from performing the job satisfactorily.

1. Their knowledge about the furniture design sequential course: the employers seemed to have no information about sequential courses in general. In relation to the furniture design course, they said the training in specific job skills is very relevant, but believe that this is not enough to meet

- their expectations because the students need more than vocational qualification. According to them, students should also develop abilities like group participation, interpersonal skills, creativity and initiative.
- 2. Their doubts about the development of the skills in the course: the employers expressed doubts concerning the effective development of the skills required by the labour market in the sequential course. The skills required by the furniture industry and commerce is diversified as each local enterprise has its own reality. It also depends on the quality of the furniture and whether the industry produces for local commerce or not. "There is some consistency between what is taught and what we need. I believe the higher level education attends the demand but not completely."
- 3. The students' performance according to standards of quality: the employers said that it is possible that the students from the furniture design sequential course perform the skills according to established standards of quality and production in furniture design.
- 4. The students' expected outcomes: Considering again the recent nature of the course, employers said that they need more time to consider if students from the sequential course have produced the expected outcomes.
- 5. The development of students' awareness: In their point of view, it is possible that these students are aware of job expectations. Besides, employers believe that sequential courses in general improve their workforce for the specific labour market. "I think so, as long as the courses have good teaching contents, good teachers, extra class activities which develop the sense of professional responsibility in the individual."
- 6. Possible interferences preventing students from performing the job satisfactorily: The employers said that from their point of view, there is a type interference that prevents students from performing the job and this consist of the furniture industrial secrets as well as the technology used in this segment.

Document Analysis

The purpose of the document analysis was to verify the objectives of furniture design sequential course implemented at University. It included different sources such as the Brazilian law of the educational system and the University's documents in relation to vocational education like the pedagogical project, diaries, and historical documents. The collection of data and their analysis is based on official proposals approved by the University council from University.

The pedagogical project defines the objectives and skills the furniture design course is supposed to develop in students as well as the field of labour market for the students. The pedagogical project brings information such as legal aspects, the mission statement, the general and specific objectives, skills, the students' profile, the curriculum proposal (subjects distributed by semester and by areas); content and bibliography; the academic structure: pedagogical action and teaching-learning assessment; institutional evaluation; and necessary facilities for the functioning of the course (library, labs and classrooms). Finally, the teachers' diaries summarize the activities developed in each class, and their analysis aimed at comparing teachers registers with their pedagogical plans.

The analyses of all the different documents provided me with the following main issues, which will be discussed further below: The Brazilian law contrasted with the reality of the sequential course; The nature of the creation of the furniture design sequential course; The superficial involvement of the University Council with the implementation of the furniture design sequential course; The lack of relationship between theory and practice in the pedagogical projects.

Major issues from document analysis

 The Brazilian law contrasted with the reality of the sequential course: the Brazilian law is very specific concerning practical aspects of the implementation of the sequential courses like the duration and names of the courses. The furniture design sequential course, for instance, was created according to the Brazilian legislation, which says that students will spend two years with 1.600 hours or 400 days taking the course. At the end, students receive a diploma with the title: *Curso Sequencial de Formação Específica em Design de Movelaria*. Also, according to the legislation the courses need to be proved by the University Council of the institution and after that registered in the Ministry of Education. The university under study offered thirty available places for furniture design and fourteen students had dropped out by March 2003.

On the other hand, there are several issues in the law that seem to be vague, allowing the Universities to perform as they wish. The most important of these issues is in the pedagogical project. In other words, the depth of the theory-practice relationship is not stated, the contents of the course are not specified, the qualification required from the teachers is not mentioned and the assessment procedures of the job skills are not defined.

In short, when comparing the Brazilian law with the current reality of the furniture design sequential course, it can easily be noticed that there is a distance between what the law proposes and what really happens at the University.

- 2. The nature of the creation of furniture design sequential course: many university reports showed that the furniture design sequential course was created by UNOPAR after a long time researching on the need of the workforce to meet the demands or special training in furniture, because the region of Londrina is a furniture center and the industry and commerce are important for the local economy. The documents, however, do not present data indicating clearly the need to implement a course especially for furniture design. Other possibilities seemed to be more feasible like furniture sales and furniture business management.
- 3. The superficial involvement of the University Council with the implementation of the furniture

design sequential course: University, following Brazilian legislation, through its Teaching, Research and Projects Council, approved by the CONSEPE, implemented the offer of sequential courses, providing high education courses oriented for the development of specific job skills exclusively. Although the University Council has performed its role accordingly, the documents show clearly that there was no further analysis concerning all the aspects related to the implementation of the furniture design sequential course such as the real demand for specific workers in this area and the structure of the university itself.

4. The lack of relationship between theory and practice in the pedagogical project: In the teachers' diaries all procedures are registered in accordance with the pedagogical project. Therefore, all diaries had the same problem: no real practice, only classroom and lab work. The majority of all diaries registered activities without worrying about the links between what happens inside the class and in the labour market.

Final Considerations

The Brazilian universities that offer sequential courses need to look closely at countries that have had experiences because until now they have just considered very superficial ideas in their implementation. The links between the several bodies involved are very strong in the countries analysed, whereas in Brazil these links are practically nonexistent. The divorce between the Ministry of Education and the Ministry of Employment, for instance, makes it even more difficult to establish those connections. Some unions have seen the students from vocational education and training as illegal workers in the job market. The employers do not know about sequential courses and have some difficulties in training their workforce, thus affecting the quality of their production and reducing competitiveness. As it has been widely recognized, a globalized world requires a product with better quality.

This study provided a perception in relation to students' profile, offer, implementation and dynamics of the furniture design sequential course but not a complete perception of the role of all-sequential courses at University in preparing students for the labour market.

Bearing in mind that the students are the most important part in the whole teaching scenario, during the observation it was possible to see that the teachers and coordinator treated students from the sequential course in the same way as they treat the undergraduate degree students, which seem highly inappropriate because sequential course students are older, are already inserted in the labour market and therefore can bring their own life experiences into the classroom. Besides, it seems to me that this inappropriate approach contributes to enlarge the distance between the course and the labour market because the former does not incorporate the knowledge the students have about the latter. After studying all the information collected in the questionnaire and interviews it was possible to conclude that the furniture design sequential course has not been preparing these students for the labour market for several reasons. Some of them are: The diversity of the students profiles and consequent diversity of expectations; The drawbacks in the teachers' and coordination performance; The university employees' and students' general lack of information about the course.

After analysing all the information collected in the students' interviews, it was possible to perceive that the students who came looking for Furniture Design Sequential Course were more interested in the duration, opportunity to improve qualification and status they provide than in their cost and the possibility to start working in another area.

Regarding the employers, it is clear that they do not have information about the furniture design sequential course and its aim. Therefore they cannot judge its effectiveness. This evidences the distance between the University proposal and the labour market needs.

The most important conclusion that can be drawn from the documents analysed is that the law is vague in important aspects, mainly the ones establishing guidelines for work qualification.

It is important to emphasize that this study only focused on the furniture design sequential course and the issues raised here are specific to this area. Further studies are necessary if other sequential courses are to be analyzed.

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Appendices

Appendix 1 The student' interview

1. Can I first ask you if you are currently enrolled in any sequential course and if you are employed in the same area of your course?

If yes, take details about -

- a. Job
- b. Skills required
- c. How long have you been developing this activity?

I am taking Furniture Design Sequential Course to improve my knowledge, to have more practice and to have a solid basis of the theory to defend my products and take it to the market. This will help me a lot in my area of work. I develop some creativity in the lab such as: structure, foam, TNT, leather and plastic patterns. I develop samples, deliver the product for production and teach employees each step of the work. When structuring, I teach the employees the model through the work instruction, I teach /.../ the whole production process. The objective is to have a beautiful fine product.

2. In your opinion is your sequential course preparing you for the labour market?

If yes, take details about -

- a. skills developed
- b. relation with enterprise
- c. others

In relation to the company we are people who take the company forward, to have profit aim at quality and the well being of each external and internal client. I have been working in this area for six years. In relation to the curriculum it could be possible to bring to the classroom what is really happening in the company. From production to sales. We could have richer contents, videos, films, visits, theory, practices, things we do not imagine. The assessment gives us more interest to learn, the classes are very interesting.

3. If no what would you change in the sequential course you are taking?

If no, take details about –

- a. skills developed
- b. relation with enterprise
- c. contents
- d. teachers' methodology
- e. assessment

When I analyze the lessons given by the teachers, they are good, but they could be better. We are doing projects, we are looking for sources and we are being helped by the teachers.

- 4. Concerning the contents of your course, can you please comment on?
 - a. its relevance
 - b. its practical application
 - c. importance of the disciplines

The subjects are very important to me, as I need theory and practice.

- 5. Concerning the <u>teachers'</u> <u>methodology</u>, can you please make further comments on?
 - a. teachers' knowledge of the area
 - b. attending teaching methodology
 - c. relationship between the theoretical content and practical application.

The methodology used by the teachers is sometimes complicated but if we research we can practice and the problems diminish.

- 6. Concerning the assessment conducted by the teachers along the course, can you please comment on?
 - a. the criteria used
 - b. the obtained outcomes
 - c. the types of evaluation

In relation to the teachers' knowledge, nobody is perfect. Sometimes when we ask about something they do not know.

In relation to the assessment of the course, I think it is poor because we are not respected, because we do not have a classroom, because we walk in the rain to DI (Desenho Industrial) class. I got very upset with the things that happened these months, the teachers that bring quite poor contents, unprepared teachers.

7. Concerning the course itself, would you like to make any further comments?

As the results I learn a lot of things with the teachers and class. The criticism here is to help improvement.

The course: it is a great opportunity to open doors but it takes a while for that to happen. The curriculum is excellent but it lacks information in theory and practice.

Appendix 2 The employer' interview

1. First of all, I would like to know what kind of information you have about sequential courses. In your opinion, what are their objectives?

The information we had before starting the course was that it was not an undergraduate course but a selective one and that it would be intensive, however it is not so.

2. Can you please tell me what skills are required by the employers in your areas? In your opinion, are they consistent with what the courses offer?

Any course that brings knowledge to the professional is important especially in his/her area of work, making the professional more qualified.

3. In your opinion, how well does the student from sequential course perform the skills according to established standards of quality and production in your business?

The sequential course is totally aimed at furniture design are of [...], which I did not expect. I expected different options, to create things that do not exist, that are new.

- 4. Would you consider that students from sequential courses have produced the expected output? In your point of view, are the students from sequential courses aware of job expectations? Yes, but not totally. The person will have to go insert of other qualifying courses to face the job market.
- 5. In your opinion, are sequential course students more aware of all the features and consequences associated with the job than your other employees? Would you say that students feel as an important/essential part in your company?

This is the vision I have today as everything will depend a lot on the teachers, the curriculum and the duration from now on. The students are interested in learning and wish to improve more and more.

From your point of view, is there any interference that prevents students from performing the job?

