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Message from the Editors

Hello from TOJNED

TOJNED welcomes you. TOJNED looks for academic articles on the issues of education science and may address assessment, attitudes, beliefs, curriculum, equity, research, translating research into practice, learning theory, alternative conceptions, socio-cultural issues, special populations, and integration of subjects. The articles should discuss the perspectives of students, teachers, school administrators and communities. TOJNED contributes to the development of both theory and practice in the field of education science. TOJNED accepts academically robust papers, topical articles and case studies that contribute to the area of research in education science.

The aim of TOJNED is to help students, teachers, school administrators and communities better understand the new developments about teacher education. Submitted articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJNED. TOJNED provides perspectives on topics relevant to the study, implementation and management of learning with technology.

I am always honored to be the editor in chief of TOJNED. Many persons gave their valuable contributions for this issue.

TOJNED and Sakarya University will organize the INTE-2015 (www.int-e.net) in June, 2015 in Barcelona, Spain.

Call for Papers

TOJNED invites article contributions. Submitted articles should be about all aspects of teacher education and may address assessment, attitudes, beliefs, curriculum, equity, research, translating research into practice, learning theory, alternative conceptions, socio-cultural issues, special populations, and integration of subjects. The articles should also discuss the perspectives of students, teachers, school administrators and communities.

The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJNED.

For any suggestions and comments on the international online journal TOJNED, please do not hesitate to fill out the comments & suggestion form.

October 1, 2014

Editor in Chief,
Prof. Dr. Aytekin İŞMAN

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Improve Student Success Through Their Realities

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ABSTRACT

In recent years, research in Higher Education showed that student achievement is particularly influenced by their motivation and their commitment to their studies. However, in recent years, teachers in higher institutes of technological studies in Tunisia observed among a number of students from 1th and 2nd year license economic sciences and management decreased their motivation and commitment to their studies.

In 2008, with the adoption of License Master license PhD program in Tunisia, teaching modules have been integrated in the (personalized career plan, entrepreneurial culture) these curriculum modules were designed to better understand student reality. In the context of training, these modules provide a better understanding of the reality of the students and consequently improve their success.

It is in this context that a study was conducted among students of 2nd year License Economics and Management enrolled at Higher Institute of Technological Studies of Nabeul (ISETN). To do this, a questionnaire and a guide of maintenance have been developed in order to examine the different components of the model of model of motivation, commitment and success proposed by Prégent et al (2009). - Model adapted from Pintrich, Schrauben (1992) and Eccles, Wigfield, Schiefele (1998).

This two-pronged approach aimed to assess and better understand the perceptions of students in relation to the components of the model used, in addition to promoting their reflexivity. The results obtained in particular allow teachers to identify areas of intervention to improve the success of their students.

Keywords:

INTRODUCTION

This communication is the result of a collective work by a team of teachers Department of Economic and Management Sciences in collaboration with the Director of Studies in the ISET of Nabeul. It aims to present the results of a completed fall 2013 with the main objective exploratory studies to develop a better understanding of the reality of the 2nd year students of economics and license management to identify areas for intervention improve their success. This interest in better understanding the student actually broadly follows the recommendations of the Ministry of Higher Education in Tunisia.

The first section of this article presents the context behind this research project and objectives inherent in the latter. The second sections briefly state the theoretical framework on which this study is based. The third section depicts the methodological elements that guided the collection of data from students referred. In the fourth and the fifth section, the main results are presented and discussed. The first courses of action that were identified under conditions of student success are finally revealed in conclusion.

BACKGROUND AND OBJECTIVES OF THE STUDY

During the second year students take five courses: three disciplinary courses, technical, course data analysis and two language courses. The first four courses are compulsory and must be inculcated notions are fundamental to exercise the professions related to business administration.

Despite repeated and unequivocal about it with students' indications, we observe a decrease in recent years their academic performance in these courses. This concerns us, especially as the conditions of assessment remained essentially the

same over time: a constant team teaching, course content unchanged, similar examinations, criteria identical correction.

Students also seem to us little incentive to invest in learning their future profession. They say find difficult assessments and claim lack of time to prepare the required work. Their absenteeism rate class is growing and we have the perception that they are more likely to check boxes (I finished it even though I did not understand much).

In this context, we decided to conduct a study to develop a better understanding of the reality of our students - that is to say, the relationship they have with their studies - in order to identify possible intervention to improve their success. At the same time, we wanted to find a way to make them think about their motivations, perceptions, attitudes and learning strategies.

THEORETICAL FRAMEWORK

Before explaining briefly the theoretical framework used for this study, we consider it relevant to define the concept of success based on our thinking.

The acquisition and integration by the student or the student knowledge and skills in connection with a high-level training registering the personal project and at the same time contributing to the development of the artistic professional, scientific, cultural, civic and personal.

In recent years, research in Higher Education showed that student achievement is particularly influenced by their motivation and their commitment to their studies.

To make intelligible the dynamics underlying these two phenomena in the acquisition of knowledge in a university context, Prégent et al. (2009: p. 252) have shown in a model of motivation, commitment and success (Figure 1).

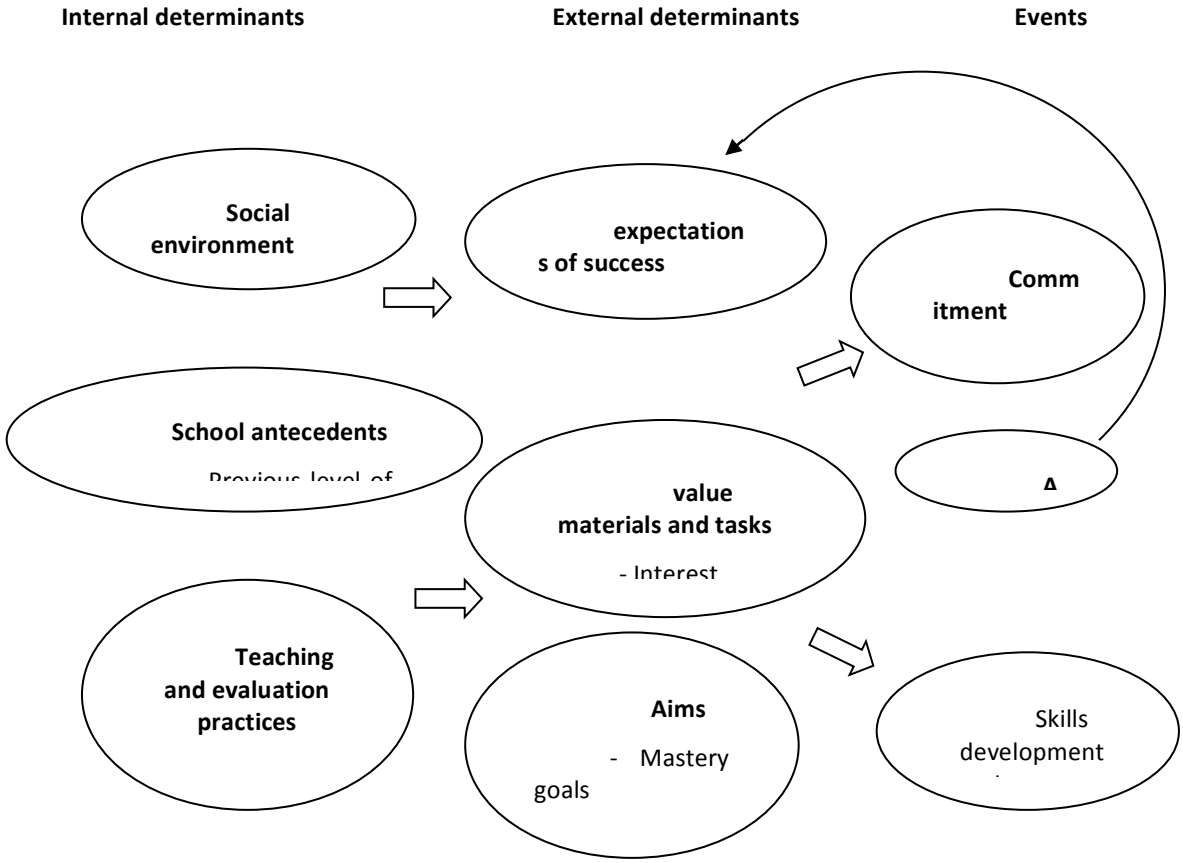

Figure 1. Model of motivation, commitment and success of Prégent, et al. (2009) - Adapted from Pintrich and Schrauben (1992) and Eccles, Wigfield and Schiefele (1998).

Motivation is presented as a dynamic state that has its origins in a series of internal and external determinants that drive

the student to actively engage in the learning process. Prégent et al. (2009: p. 252-253) describe their model as follows: "The dynamics of the model assumes that all of these assumptions could have an impact on the level of commitment (cognitive engagement and behavioral engagement) and perseverance. In turn, commitment levels and high persistence significantly contribute to skills development and success. Finally, the loop effect, the student is constantly reviewing one or the other components of the model after every change that may affect the development of their skills and achievements. "

The components of this model form the framework of this study and associated indicators What Prégent et al. (2009) to each of them guided us in the development of our tools for data collection.

METHODOLOGICAL ELEMENTS

For the purposes of this study, two methods of data collection were selected, a questionnaire survey (quantitative methodology) followed by a group discussion (qualitative methodology).

Questionnaire survey

As a first step, a questionnaire survey targeting 52 students in the 2nd year was conducted in early October 2013. This survey was designed to measure students' perceptions in relation to five themes: 1) curriculum, 2) factors influencing motivation to learn and commitment to studies, 3) faculty task, 4) learning strategies used and 5) skills and attitudes to business of a manager.

The questionnaire included 40 questions. The first 35 questions were formulated based on indicators identified by the authors of the model used and by Bédard and Viau (2001). The last five questions were used to collect socio-demographic data. The questionnaire was validated by the project team and has been the subject of a pre-test.

It was given to the students covered in class, after a course to ensure a good turnout. Students have previously been informed by the project manager of the objectives of the survey as well as ethical rules and participation laid down (voluntary and anonymous, confidential data processing). The participation rate was 88%, ie 46 respondents completed the questionnaire.

DISCUSSION GROUP

In a second step, the students of the 2nd were invited to participate in a panel discussion that took place in early December 2013. This approach had two objectives: to have a better understanding of some of the results obtained through the questionnaire and encourage reflexivity students referred.

Group discussion, semi-structured type was made from a discussion guide included 15 questions. These were grouped into five themes: 1) presence in the classroom, 2) understanding of the requirements and guidance of teachers, 3) perception towards faculty task, 4) improving conditions of student success program and 5) reflexivity. This guide has been validated by the project team. Ten students agreed to take part in group discussion. Previously, the project manager briefed the objectives of the discussion as well as ethical and operating rules established. For this purpose, a consent agreement and confidentiality agreement was signed with the participants. The discussion lasted an hour and half and is subject to an audio recording.

RESULTS

This section presents the main results obtained in the course of the study. They were grouped into four themes.

INTEREST IN CURRICULUM AND COURSES AND PERCEIVED UTILITY CLASS ATTENDANCE :

The survey respondents were very likely to show their satisfaction with their curriculum. Indeed, 93% of them are satisfied with their choice of program and 78% expressed the view that the license provided useful course the reality of a business manager. However , respondents admitted that their level of interest in the subject of compulsory courses Grade 3 differed significantly from one course to another, the average ranging between 2.89 and 4.17 were obtained for each of the four courses on a scale of 5 , where 5 corresponded to a very high and 1 interest, not a high interest. In addition, nearly a quarter (22 %) of respondents indicated that they had occasionally or rarely in the classroom for their courses.

The focus group participants were invited to comment on what they believe motivated students to attend class for their courses.

They relied mainly on two factors. The first was the perceived benefit on the explanations given by the teacher during a class more students have the perception that the explanations provided in the class help to understand the material , the more he says motivated to present themselves to benefit. The second factor was the perceived added value regarding the dissemination of unique information (not otherwise available in class), as illustrated in the excerpt below:

"The teachers, who leave their examples available, say, on the Internet or [elsewhere], it is less likely to go over. But as in the course [name of course], the examples he [the teacher] actually, they are on the board and they are not elsewhere. We tend to go in just to take those notes. "

To a lesser extent, some participants also mentioned that the fact that their presence in the classroom was important for a teacher motivated them to attend his classes.

EXPECTATIONS OF STUDENT SUCCESS AND PERCEPTION OF THEIR UNDERSTANDING OF THE MATERIAL AND WORKING METHODS

"Given a learning task , a student still has expectations for its success " (Prégent et al. 2009 : p. 256) . In fact , 89% of survey respondents said they trust in general , in their ability to pass the baccalaureate and 91 % said they thought gain enough knowledge from one year to another program to complete the course .

However, respondents rated more favorably their ability to succeed each of the four mandatory that their understanding of the material in each of these courses. Indeed, respondents gave averages ranging from 3.80 to 4.09 on a scale of 5 (where 5 corresponded to very high and 1 low) when they assessed their ability to succeed in each of these courses while these averages were consistently lower (3.24 to 3.93 on the same scale of measurement) when they assessed their understanding of the material.

As expectations of student success based, inter alia, on the degree of control they believe exercise in their learning (Prégent et al., 2009), survey respondents were asked about their working methods. In a proportion of 43%, they said they had no opinion, disagree, or abstained from answering the question I consider employing effective methods of work to get my way.

On the occasion of the discussion group, so it was deemed appropriate to return to this last point with the participants and to check if they had made changes to their working methods in the session.

The participants mentioned that they prepared for the first time this session a sheet of notes (synthesis) which was authorized during certain examinations. According to many, the preparation of the score sheet has more incentive to revise all the material, compared to what they would do for a open book exam.

Nevertheless, several focus group participants agreed that, in general, their working methods could be improved.

GOALS OF STUDENTS AND TEACHING STAFF EVALUATION PRACTICES

A feature model of Prégent et al. (2009) is that it takes into account the social or professional aspirations of students through the future perspective of the goals pursued dimension component. This dimension " refers to mental representations is the student's future direction, including professional orientation " (p. 260).

For the survey respondents can put some light on the characteristics of mental representations they have of their future profession, they were asked to select the five skills or attitudes

(Among the 15 proposed a list inspired Guide development of skills of a fire economics and management) that seemed most important to them.

The five skills and attitudes held by the largest number of respondents were:

- Judgment (74 % of respondents);

- Demonstrate a spirit of analysis and synthesis (65%);

- Demonstrate critical thinking (63%);

- Rigor and attention to detail (59%);
- Ability to work in a team (57%).

Although more than a majority of respondents believe that a good manager is a professional who is rigorous, more than a third (37%) said they were undecided or disagrees with the fact that a great teacher has stringent requirements about the knowledge and skills that focus on fundamental elements of the course. In addition, 54% of respondents said they were undecided or disagree with the fact that a great teacher is demanding in terms of learning.

Because jurisdiction is "one of the four core values of the profession», it was therefore considered essential to better understand the students' perception regarding evaluation practices of teachers. In this context, the focus group participants were asked to comment on what could justify certain practices and requirements.

From the outset, the participants agreed that being subjected to stringent encouraged them to devote more time to their studies and deepen the course material. Some also added that the teacher evaluation practices were consistent with the requirements of the profession.

On the other side, several participants noted that the severity of some evaluation practices had the effect of increasing their stress levels and affect their balance studies - work - life.

REFLEXIVITY

According Derobertmasure and Dehon (. 2009, p 30) , reflexivity refers to :

«The ability to think deliberately (Peters et al, 2005. De Cock, 2007, Dewey, 1933 cited by De Cock, 2007) on its own practices (Perrenoud, 2001) in order to solve problems (Hatton & Smith , 1995) , that is to say to improve its practical (Tochon 1993). "

One objective of this study was to find a way to reflect the students referred to their motivations, perceptions, attitudes and learning strategies.

As part of the survey, respondents were invited to comment on the following statement: Overall, the result of this questionnaire made me think about my motivations, perceptions, learning strategies and attitude as a student or undergraduate student in mechanical engineering. In a proportion of 63 % of respondents said they agreed with this statement.

To explore the theme of reflexivity with the participants of the focus group, they were asked what they believe the best way to make us reflect on the points listed in the above statement. Several participants mentioned that while the fact of increasing the links between training and professional practice is a good way, because it would help them better understand the realities, issues and challenges of their profession.

DISCUSSION

The present study focused on two objectives. First, it aimed to develop a better understanding of the reality of students to identify courses of action to improve their success. Secondly, she wanted an opportunity to find a way to reflect these students about their motivations, perceptions, attitudes and learning strategies.

Based on the results, we can say that our first goal is achieved, since this study we, among others, allowed:

- Identify factors that could further motivate our students to attend class ;
- Learn that our students recognize that their working methods could be improved;
- Understand that if some students disagree with the rigor of certain practices
- Evaluative teacher, it could be because they have difficulty managing stress
- They cause and the resulting constraints.

We are also able to say that our second goal is achieved, since most of the majority of students interviewed in our survey expressed the view that the questionnaire developed for this purpose had been thinking about their motivations, perceptions,

attitudes and learning strategies. Participants of the focus group we also mentioned that to increase the links between training and professional practice would be another avenue to consider promoting their reflexivity.

CONCLUSION

Although we are still thinking about the follow-up to this study, we can identify some areas for action to improve the success of our students.

To promote their presence in the classroom, we will consider factors they identified in the planning and organization of our courses. To help them invest in their learning effectively, manage stress caused by our evaluation practices and reconcile studies - work - life, we will offer in the first half of 2014 PPP over more times volume. This course will in particular aim to develop skills to foster perseverance and success in school, as a good time management and stress and the use of effective methods of work. Finally, to promote the reflexivity of our students, we will evaluate future ways to increase the links between training and professional practice.

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THE "ABC-COMPETENCE" MODEL FOR NON-FORMAL COMPETENCES CERTIFICATION

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ABSTRACT

The paper proposes a model, called "***ABC - Competence: Analysis, Balance and Certification of Competences***", for certifying the competences acquired in non-formal contexts, according to the criteria established by the "Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning" (2012/C 398/01).

In the model application, the following aspects are very important:

- the identification of the trainer figure; he becomes the guarantor of contents and training methodologies choice and evaluates the actual acquisition of competences;
- the classification of competences (*knowledge/ability; hard/soft*);
- the identification of competence levels, according to the European Qualifications Framework for lifelong learning.

After the professional profile identification (i.e.: ESCO - European Skills/Competences, qualifications and Occupations classification), the model allows certifying the competence level acquired by learners as a result of participation in a training course.

Keywords:

INTRODUCTION

The **model for non-formal competence certification** permits to evaluate and certify the competences acquired by learners of a vocational training course (CEDEFOP, 2009b).

Non-formal learning is different from formal learning because it takes place outside the formal school/vocational training/university system, through planned activities (i.e. with goals and timelines) involving some forms of learning support, for example:

- programmes to impart work-skills, literacy and other basic skills for early school-leavers;
- in-company training;
- structured online learning;
- courses organised by civil society organisations for their members, their target group or the general public.

Instead, informal learning is not organised or structured in terms of goals, timelines or procedures. That covers skills acquired (sometimes unintentionally) through life and work experiences, for example:

- project-management or IT skills acquired at work,
- languages and intercultural skills acquired during a stay abroad,
- IT skills acquired outside work,
- skills acquired through volunteering, cultural activities, sports, youth work and through activities at home (e.g. taking care of a child).

To develop a model for competence certification, you need a reference framework (Robinson, 2007), currently not yet defined, but it's possible to follow the criteria dictated by the "Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning**"** (2012/C 398/01) (European Parliament; Council of the European Union; 2007; European Parliament; Council of the European Union; 2008; Council of The European Union, 2012).

The model for non-formal competence certification is applicable to different types of competences, both manual/operational/craft and organizational/managerial/intellectual.

In general, it is possible to differentiate between **Hard and Soft skills** (ISFOL, 2013).

Soft skills are personal attributes that enhance an individual's interactions, job performance and career prospects. Unlike *hard skills*, which are the technical requirements of a job and many other activities, soft skills relate to a person's ability to interact effectively with co-workers and customers and are broadly applicable both in and outside the workplace (*Spencer&Spencer* and *Goleman Emotional Intelligence* models).

Competence certification must enable you to recognize and evaluate in an individual the acquisition of theoretical knowledge and practical skills, both highly technical and related to a specific work context, and transversal and useful in different contexts.

Competence certification allows obtaining a whole profile certification or part of it (Franceschetti, 2012).

A partial classification of profiles and skills is already used in the European job mobility portal EURES and PLOTEUS (EURES, 2013; PLOTEUS, 2013). It exists in many languages and currently contains thousands of skill descriptions and job titles. It will be updated and enriched with additional descriptions of occupations, skills/competences and qualifications to become an important part of ESCO (European Skills/Competences, qualifications and Occupations classification) (ESCO, 2011).

The professional profile definition also helps to understand labour market needs and to connect education/training outcomes with jobs (Westerhuis, 2011).

COMPETENCE CERTIFICATION PROCESS

Systematic validation mechanism is an enhancement tool for making clear which skills are available in the European workforce (UNIONCAMERE, 2013):

- facilitating a better match between skills and labour demand, addressing skills shortages in growing sectors;
- promoting better transferability of skills between companies and sectors;
- helping citizens mobility around the EU to study and work.

As previously mentioned, the competence is a structured set of knowledge (to know) and skills (to know how) to be used independently in work or study situations and for professional and personal development. Therefore, certify a professional profile (set of competences) means attest knowledge, skills or "*the ability to use knowledge and skills independently in real-life contexts*" (competence), depending on the profile characteristics.

Conceptually, a person could be skilful but not competent, in the sense of lacking the necessary theoretical knowledge in a particular field.

Wanting to restrict the certification of skills in non-formal learning contexts, the model for competence certification will aim the investigation, according to the specific course characteristics, of [Figure 1]:

- theoretical concepts acquisition (*knowledge certification*);
- practical abilities acquisition (*skills certification*);
- the joint acquisition of theoretical concepts and practical abilities, knowing how to use independently in work situations *(competence certification).*

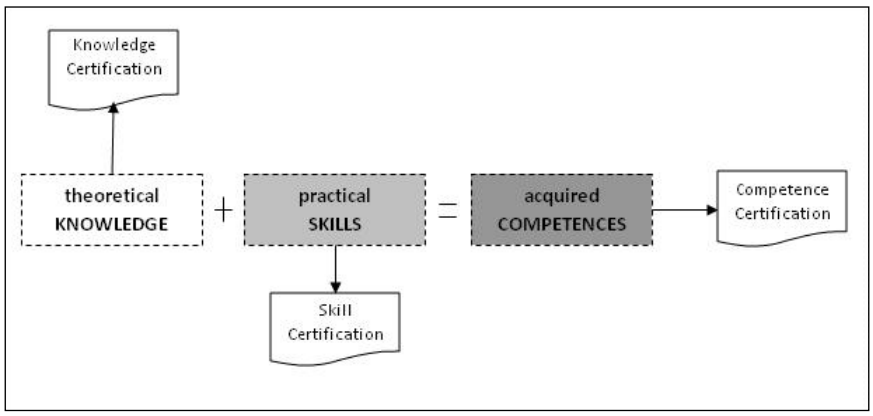


Figure 1: Certification process

"ABC-COMPETENCE" MODEL: ANALYSIS / BALANCE / CERTIFICATION OF KNOWLEDGE / SKILLS / COMPETENCE

The proposed model, called ABC-Competence (Analysis/Balance/Certification of Competences) provides three possible investigations (Silvestri et al. 2013) [Figure 2]:

1. **Certification of acquired competences:**
   Assessment of matching between the proven competences and the reference standard.
2. **Balance of competences, input and output:**
   Assessment of the competence level growth as a result of participation in the course.
3. **Training requirements, satisfied and to satisfy:**
   Evaluation of learners expectations and their satisfaction.

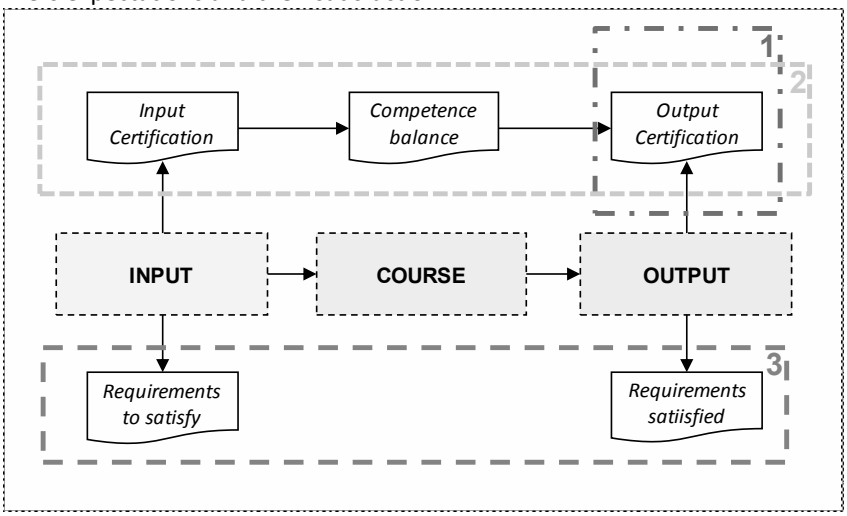


Figure 2: Certification model scheme

1. Certification of competence

The competences assessment of a candidate is based on the comparison between the proven skills and a reference standard.

If a conformity between the assessed competences and the reference exists, the certification process is successful and the learner can obtain a certificate of competence with the evaluation of the possessed level.

Therefore, the major difficulty for the competence certification is the definition of competence indicators (an element or a set of elements, able to report or provide information about the property of a particular competence).

The set of indicators attributed to a competence, defines distinctive and ascertainable criteria that make clear the competence acquisition, in reference to the application context.

On the basis of the Council Recommendation 2012/C 398/01, cited above, each certification process takes shows the following four steps:

- **Identification** phase aims to identify and define the competences amenable to a certifiable standard;
- **Documentation** phase allows to document the competence possession through evidence gathering and/or testing;
- **Evaluation** phase permits to verify the competence possession (according to criteria and indicators referring to predefined standards) and to assess the achieved level;
- **Certification** phase concludes the certification process. It consists in releasing standardized documents that certify the competences assessed, according to defined rules.

The following flowchart [Figure 3] shows the activities to be performed within the different phases and related responsibilities.

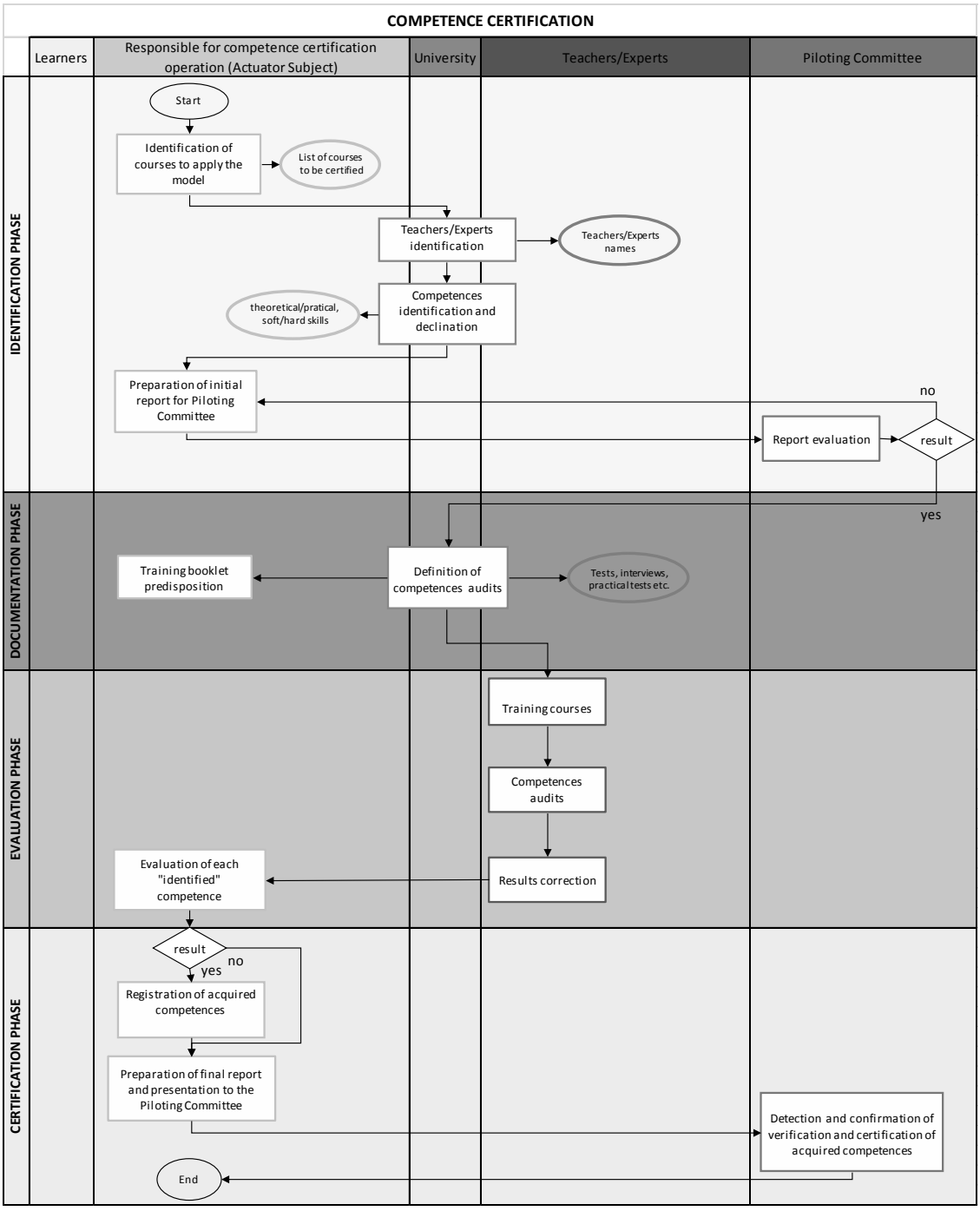


Figure 3: Flowchart of skills certification (phases-activities-responsibilities)

Given the absence of a framework to evaluate the acquired competences, it becomes essential entrusting the non-formal

education and, consequently, its effectiveness evaluation, to ***trainers experienced*** in the specific professional profile.

Furthermore, only "an authorised body confirms that an individual has acquired learning outcomes (knowledge, skills and competences) measured against a relevant standard" *(Council Recommendation on the validation of non-formal and informal learning)* (UNESCO, 2011).

Therefore, the qualified teacher becomes the guarantor of contents and training methodologies and evaluates the actual acquisition of competences by the learner (Dreyfus et al., 1980).

The trainer qualification (as in other areas, such as Health and Safety at Work) is based on his documented and provable previous experience.

To qualify the teaching staff, you can refer to the guidelines for the European Social Fund 2007-2013 reporting, which identify three levels of teaching:

Group A: requires at least ten years of experience and includes university professors, senior researchers (research managers, early researchers), business executives, entrepreneurs, industry experts and professionals;

Group B: requires a minimum of three years of experience and includes university researchers, industry experts and professionals;

Group C: includes university researchers, industry experts and professionals with less than three years of experience.

The University could ensure that trainers have the necessary technical and professional requirements (Teachers of Group A, B or C).

The presence of such expert figures will produce a training course adequate to the profile to be formed and, consequently, will certify the acquisition of specific skills, whether theoretical/practical (*knowledge/ability*), technical/transversal (*hard/soft skills*).

In order to base the competence assessment on correct and reliable data, expert trainers will adopt audit tools (questionnaire, test, interview, practice test etc.), opportunely defined.

For example, if the chosen tool is the questionnaire, a question with three answers (only one correct), for every two hours of training, will be prepared by the teacher, who will also have to provide information about the characteristics of each question:

- Valence: theoretical / practical (assessment of knowledge or ability, respectively);

- Nature: transversal / technical (assessment of soft or hard skills, respectively).

The criteria to be satisfied in order to demonstrate the competence, will be implicitly defined by the questions, inextricably linked to the course contents.

In particular, soft skills are generally grouped into four main macro-categories (Personal, Relational, Cognitive and Organizational), instead, technical ones will be identified according to the professional profile considered.

The question structure could be as follows:

Table 1: Scheme of question

1 question with 3 answers (only one correct), per every 2 hours of training	**QUESTION:** ○ Answer 1 ○ Answer 2 ○ Answer 3	**VALENCE:** □ Theoretical (*knowledge*) □ Practical (*ability*)	**NATURE:** □ Transversal (*soft skills*)* □ Technical (*hard skills*)**

Choose the investigated COMPETENCE:

*

□ *PERSONAL: awareness of strengths and weaknesses, target orientation, own emotions, behaviours and stress management.*

□ *RELATIONAL: listening skills, social skills and empathy, communication skills, persuasiveness and influencing skills;*

□ *COGNITIVE: analysis and synthesis skills, problem solving, logical and / or mathematical reasoning, creativity;*

□ *ORGANIZATIONAL: planning skills, time management, control ability, flexibility.*

**

□ *TECHNICAL/PROFESSIONAL SKILL (PROFILE)*_____

Table 2: Example of question for the assessment of a transversal knowledge

1 question with 3 answers (only one correct), per every 2 hours of training	**QUESTION:** *What is 2+2?* ○ 3 ○ 4 ○ 5	**VALENCE:** X Theoretical (*knowledge*) □ Practical (*ability*)	**NATURE:** X Transversal (*soft skills*)* □ Technical (*hard skills*)**

Table 3: Example of question for the assessment of a transversal ability

1 question with 3 answers (only one correct), per every 2 hours of training	**QUESTION:** *If two boys have two sandwiches each one, how many sandwiches together?* ○ 3 ○ 4 ○ 5	**VALENCE:** □ Theoretical (*knowledge*) X Practical (*ability*)	**NATURE:** X Transversal (*soft skills*)* □ Technical (*hard skills*)**

*X * COGNITIVE: logical and / or mathematical reasoning*

The choice of the questions allows defining the region of competence investigated, valence (knowledge / ability) and nature (soft / hard skills); then, by analyzing the answers given by each learner, it is possible to value his level of possession.

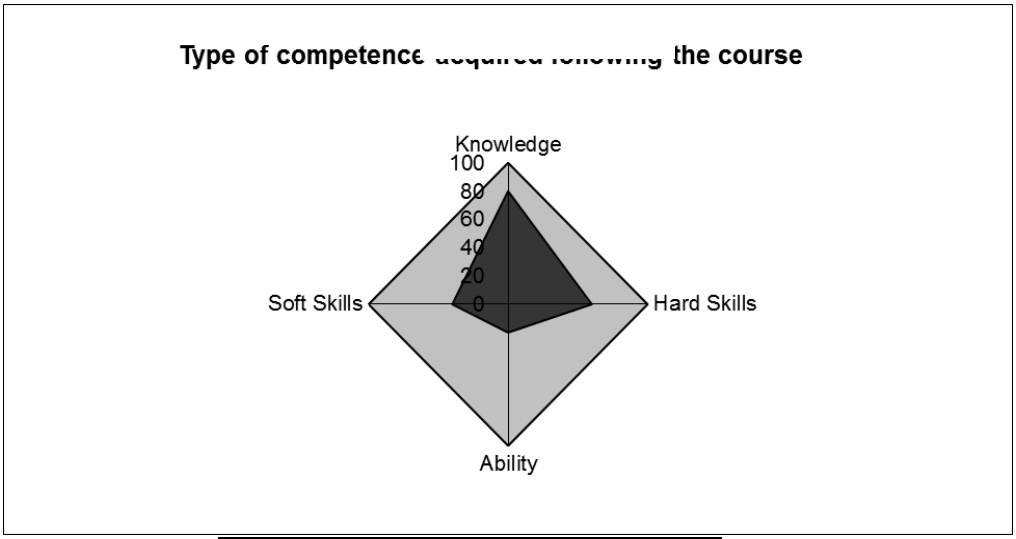
For the definition of the possession levels, we referred to the descriptors of the *European Qualifications Framework* for lifelong learning (EQF) (European Commission, 2008a; European Commission, 2008b). According to that framework, we can establish 8 levels, related to the learning outcomes and to the possession of knowledge, skills and competences. The rating scale suggests the levels and ratings listed below:

- **Excellent (score 9-10):**
  critical and in-depth knowledge of the topics, commendable competence level.
- **Outstanding (score 8-9):**
  extensive knowledge of the topics, very good competence level.
- **Good (score 7-8):**
  satisfactory knowledge of the topics, discrete / good competence level.
- **Average (score 6-7):**
  essential knowledge of the topics, just enough competence level.
- **Mediocre (score 5-6):**
  fragmentary knowledge of the topics, modest competence level.
- **Insufficient (score 3-4):**
  incomplete knowledge of the topics, level of competence not sufficient.
- **Poor (score 2-3):**
  very sketchy knowledge of the topics, grossly inadequate competence level.

- **Null (score 0-2):**
  no knowledge of the subjects, competence level very low or nil.

In agreement with the European Qualifications Framework (EQF), all Member States are in the process of developing National Qualification Frameworks (NQFs), which describe qualifications in terms of learning outcomes (CEDEFOP, 2013a; ISTAT, 2009; Coles, 2007).

In is interesting to evaluate the kind of competences investigated, linked to the course contexts; therefore the distribution of questions can be summarized through a Radar graph, which allows delineating the region of the skills acquired thanks to the training course [Figure 4].

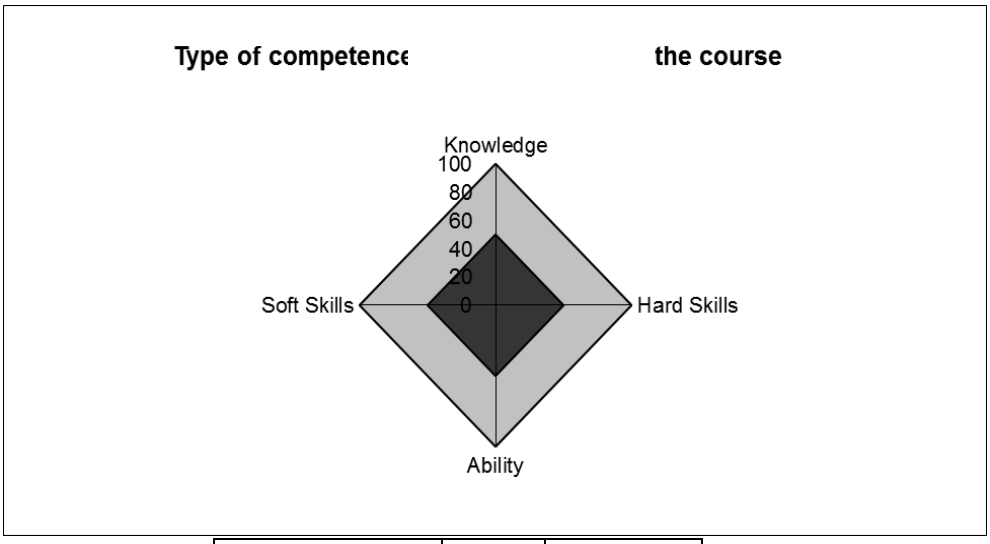


Question type	% total	% questions
Knowledge	100%	80%
Ability		20%
Hard Skills	100%	60%
Soft Skills		40%

Figure 4: Definition of the region of competence investigated

The darker polygon indicates how many questions compared to the total (clearer polygon), refer to knowledge rather than ability or hard skills rather than soft skills.

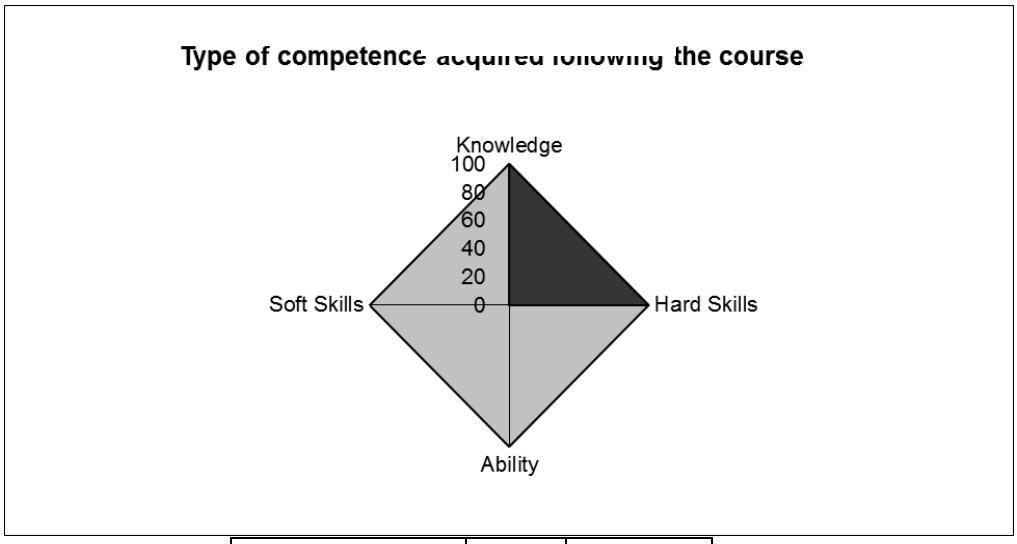
For example, in the case of questions half and half theoretical and practical, rather than half and half transversal and technical, the radar graph will be as follows [Figure 5].



Question type	% total	% questions
Knowledge	100%	50%
Ability		50%
Hard Skills	100%	50%
Soft Skills		50%

Figure 5: Example of Representation 50-50, theoretical-practical and transversal-technical

Instead, in the case of questions only theoretical and technical, we have the following representation [Figure 6]:

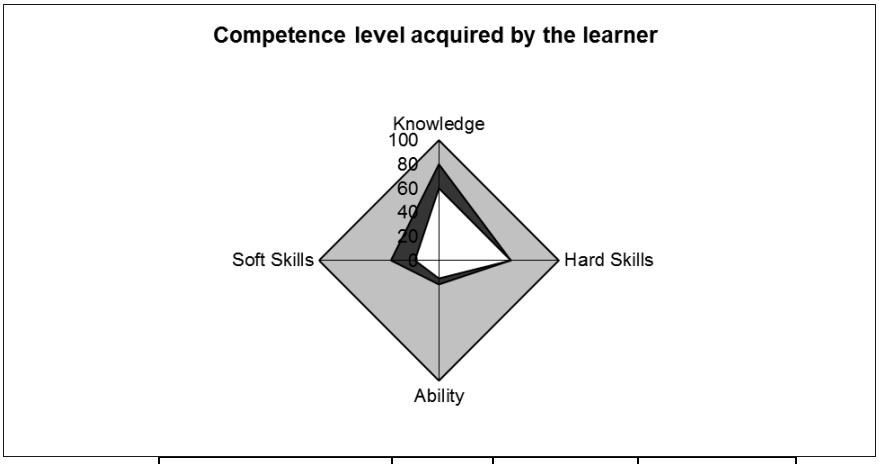


Question type	% total	% questions
Knowledge	100%	100 %
Ability		0%
Hard Skills	100%	100 %

Soft Skills		**0%**

Figure 6: Example of representation only theoretical and practical questions

In the same way, it is possible to represent the level of skill possessed / acquired by each learner [Figure 7].



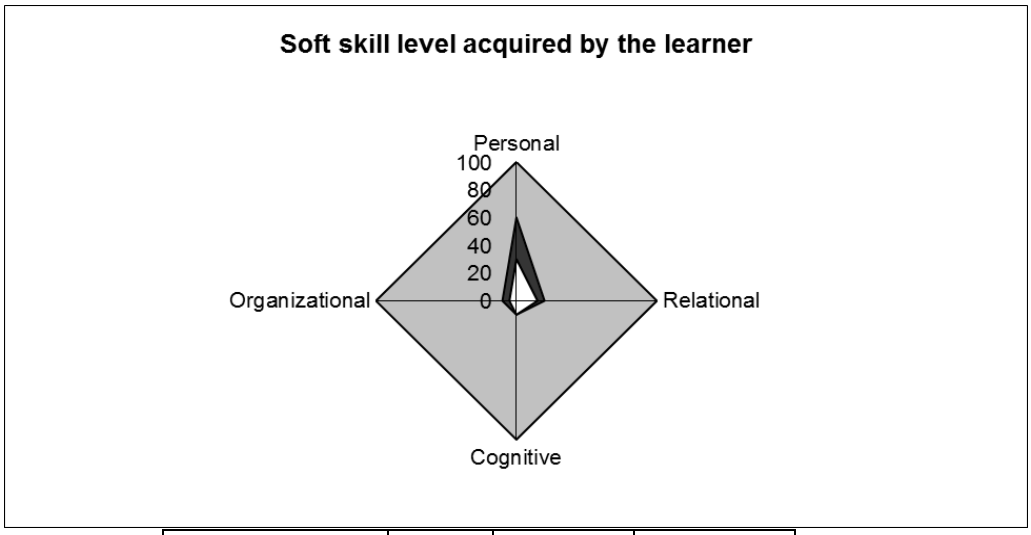
Question type	% total	% questions	gained level
Knowledge	**100%**	**80%**	**6**
Skills		**20%**	**6**
Hard Skills	**100%**	**60%**	**8**
Soft Skills		**40%**	**4**

Figure 7: Representation of the level of skill possessed / acquired by the learner

The innermost polygon (white color) indicates the level of skills possessed / acquired by the learner, referring to the competence region of the course (darker polygon), calculated on the basis of the correct answers for the different types of investigated skills. If all answers are correct, the white polygon overlaps the darker one.

Obviously, thanks to the information about the question type, provided by the teachers, it is possible to make a more detailed assessment and proceed to the **certification of specific skills**, to be included in the certificate which will be issued to the learner.

For example, you can evaluate and represent which types of soft skills are investigated and owned by the learner [Figure 8].



Soft Skill type	% total	% questions	gained level
Personal	**100%**	**60 %**	**4**
Relational		**20 %**	**6**
Cognitive		**10 %**	**6**
Organizational		**10 %**	**8**

Figure 8: Representation of the soft skill level possessed /acquired by the learner

The same analysis can be done for technical skills, related to the particular professional profile.

In fact, the type (valence and nature) of questions to be asked, can either be chosen by the teacher both defined in the design phase to force the contents towards the development of specific skills.

2. Balance of input and output competences

A further aspect of the assessment could investigate the growth of the learner knowledge/skill/competence level, as a result of attending a specific course.

For this purpose, the questionnaire introduced in the previous paragraph should be made before starting the course and administered in both at the beginning and at the end.

By the collected results, the effectiveness of the training in competences increase and, consequently, the value of the trained person will be monitored.

The possibility of evaluating the competence increase, will obviously depend on the specific course duration.

In the case of short courses, less than 40 hours, it's expected a single check at the end of the training.

In the case of long courses, exceeding 40 hours, it will be possible to evaluate the growth, for example, through the administration of two questionnaires, at the beginning and at end of the course, achieving an "*in and out*" competence balance.

The questions will be similar for both tests, so you can really evaluate the effectiveness of the training activities. The order and wording of the questions will be changed and some will be even redundant, so you can verify the effective knowledge of the answer by the learner.

3. Competence analysis

In order to analyse the most important training deficiencies perceived by the learner, will be necessary to provide questions for understanding the training needs satisfied and those to be met.

- Ex ante: the learner in self-assessment can determine how much he expects that the course is relevant to his studies or how much he believes it useful for his career;

- Ex post: the learner, still in self-assessment, can determine how much the course has corresponded to his expectations and how it will be (if measured immediately after the course) or was (if assessed after time from the end of the course) useful to his work.

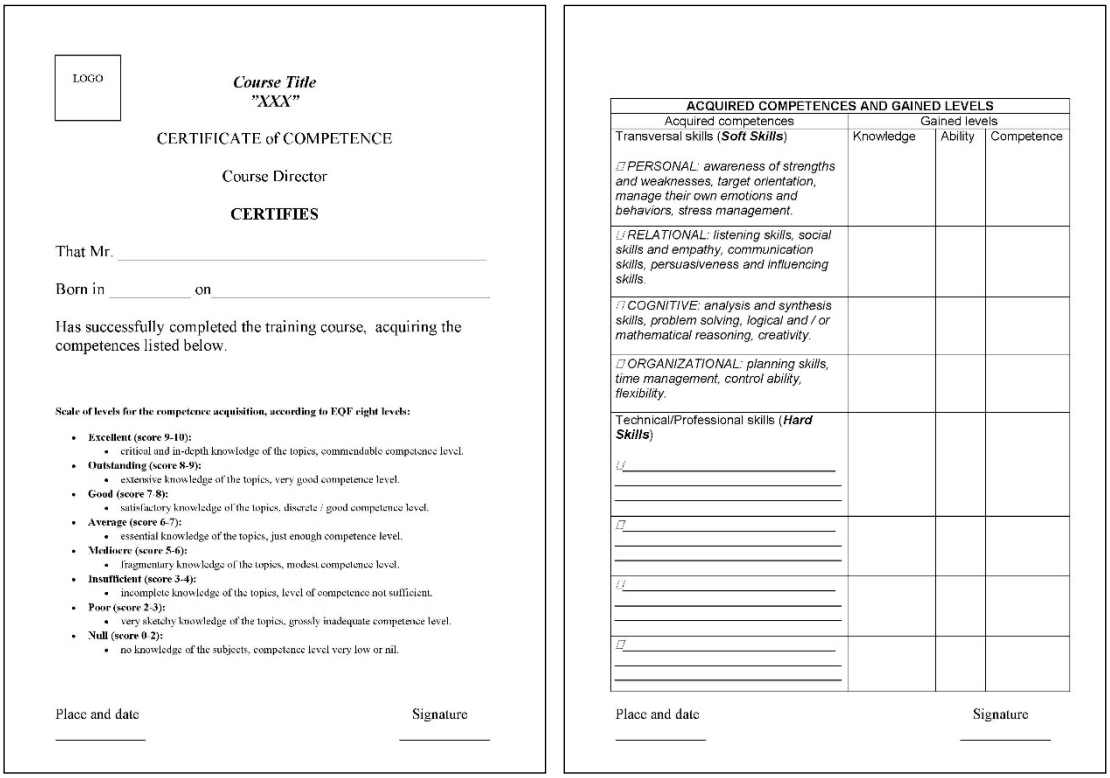
COMPETENCE CERTIFICATION MODULE

The certification process must be completed with the declaration of competences possessed by the learner, also according to the principles of transparency and comparability promoted by the European Union (CEDEFOP, 2005; CEDEFOP, 2009a; CEDEFOP, 2013b; CEDEFOP, 2013c).

The proposed certification module will be similar to the one established by the Italian Ministry of University and Research for the certification of basic competences in the major cultural areas (Language, Mathematics, Science-Technology, History-Social).

The certificate will list the competences acquired by the learner, in terms of knowledge and skills, divided into technical and transversal ones.

In order to monitor the professional growth of the learner, will be set up a training booklet, containing information about all the courses attended and the achieved results, including details of tested and certified competences [Figure 9].



LOGO

Course Title
"XXX"

CERTIFICATE of COMPETENCE

Course Director

CERTIFIES

That Mr. _____

Born in _____ on _____

Has successfully completed the training course, acquiring the competences listed below.

Scale of levels for the competence acquisition, according to EQF eight levels:

- **Excellent (score 9-10):**
  - critical and in-depth knowledge of the topics, commendable competence level.
- **Outstanding (score 8-9):**
  - extensive knowledge of the topics, very good competence level.
- **Good (score 7-8):**
  - satisfactory knowledge of the topics, discrete / good competence level.
- **Average (score 6-7):**
  - essential knowledge of the topics, just enough competence level.
- **Mediocre (score 5-6):**
  - fragmentary knowledge of the topics, modest competence level.
- **Insufficient (score 3-4):**
  - incomplete knowledge of the topics, level of competence not sufficient.
- **Poor (score 2-3):**
  - very sketchy knowledge of the topics, grossly inadequate competence level.
- **Null (score 0-2):**
  - no knowledge of the subjects, competence level very low or nil.

Place and date _____ Signature _____

ACQUIRED COMPETENCES AND GAINED LEVELS

Acquired competences	Gained levels		
Transversal skills (***Soft Skills***)	Knowledge	Ability	Competence
☐ *PERSONAL: awareness of strengths and weaknesses, target orientation, manage their own emotions and behaviors, stress management.*			
☐ *RELATIONAL: listening skills, social skills and empathy, communication skills, persuasiveness and influencing skills.*			
☐ *COGNITIVE: analysis and synthesis skills, problem solving, logical and / or mathematical reasoning, creativity.*			
☐ *ORGANIZATIONAL: planning skills, time management, control ability, flexibility.*			
Technical/Professional skills (***Hard Skills***)			
☐ _____			
☐ _____			
☐ _____			
☐ _____			

Place and date _____ Signature _____

Figure 9: Fac-simile of Certificate for Training Booklet

RESULTS AND FUTURE DEVELOPMENTS

The simplicity of the proposed methodology ensures its easy application in different educational contexts. In particular, its implementation is taking place in some training courses carried out by Confindustria Perform Srl, part of Fondimpresa 2012.

The expected results will then be analyzed in order to understand potentialities and limitations of the ABC-Competence model.

The generality of the methodology allows adapting it to the current evolution of the European regulatory framework.

CONCLUSIONS

In the present work a methodology for the certification of competences acquired in non-formal contexts has been proposed, in a framework constantly evolving.

The "ABC-Competence" model, after identifying professional profile (set of competences to be investigated), permits to certify the level of competence achieved by a training course participant.

Three different certifications of acquired competences are proposed, depending on the survey you want to lead (Analysis / Balance / Certification); a possible certification module, based on EQF Levels has been also presented.

The development of specific competences (theoretical and practical, rather than transversal and technical), can be followed through the creation of a personal training booklet, constantly updated.

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Differences in Grade 8 Students' Math Achievement as a Function of Saxon Math Instruction

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ABSTRACT

Student performance on the Grade 8 Texas Assessment of Knowledge and Skills Math test for all students (*n* = 789) who took the TAKS math assessment in 2007 (*n* = 167), 2008 (*n* = 198), 2009 (*n* = 207), and 2010 (*n* = 217) was examined to determine the extent to which differences were present as a function of Saxon Math instruction. Statistically significant differences were yielded in the percent of students who met the math standard, as well as in the percent of students who met the Commended Performance standard, both small effect sizes. In the non-Saxon Math school year, the percent of students who achieved Met Standard were well below the percent of students who achieved Met Standard after receiving one, two, and three years of math instruction in the Saxon program. Similarly, the percent of students who reached Commended Performance in the non-Saxon school year were considerably lower than the percent of students who received one, two, and three years of Saxon Math instruction. Implications are discussed and suggestions for further research are made.

Keywords:

INTRODUCTION

Similar to math instruction in other states, many diverse approaches are used in math instruction in Texas school districts. One program, a revised edition of the Saxon Math middle school program, was published in 2007 and included for adoption on the Texas state approved textbook list in 2007 (Texas Education Agency, 2013b). In the six years since the adoption and subsequent readoption of Saxon Math for middle school, no research has been published concerning the effects the revised curriculum has on student achievement. As such, the focus of this study was on the relationship between instruction in Saxon Math and Grade 8 students' math achievement.

A body of research (e.g., Agodini & Harris, 2010) exists concerning Saxon Math curriculum as compared to other math programs and Saxon Math instruction in relation to improvement in student achievement (Resendez & Azin, 2008; Resendez, Fahmy, & Azin, 2005; Resendez, Sridharan, & Azin, 2007). However, no research was located in which the 2007 revised Saxon Math curriculum was examined. Accordingly, the literature we reviewed was on student performance on the Saxon Math curriculum, prior to its current revision. Readers should note that the three studies that were located were all conducted through PRES Associates, an independent educational research firm contracted by Saxon Publishers.

Resendez et al. (2005) conducted an investigation to determine the effects of Saxon Math on student math achievement as indicated by the Texas Assessment of Academic Skills (TAAS) and the Texas Assessment of Knowledge and Skills (TAKS). Participants were Grade 6, 7, and 8 students in Texas schools using Saxon Math programs between 1993 and 2004 (*n* = 15). Control schools (*n* = 15) were randomly selected from matched comparison schools identified by the Texas Education Agency for the same years. Students were grouped into three cohort samples to answer three distinct evaluation questions. Concerning the improvement of math performance as a result of Saxon instruction, statistically significant growth in TAAS and TAKS math performance was documented for all three grade levels of students, higher than for the matched sample. Additionally, students who used Saxon Math from Grade 6 through 8 had a higher passing rate on the math exit level test. Finally, students labeled Limited English Proficient, special education, and at-risk who were taught via the Saxon Math program outperformed their counterparts who were not taught via the Saxon Math program. In conclusion, Resendez et al. (2005) stated that eight years of archival data indicated the Saxon Middle School Math program was associated with positive outcomes on two Texas statewide assessments.

In a study conducted with archival data from the South Carolina Department of Education, Resendez et al. (2007)

analyzed the relationship between Saxon Math programs at the elementary and middle school levels with student achievement on South Carolina's statewide assessments, the Palmetto Achievement Challenge Test (PACT). Data for Grades 3 through 8 from the 2001-2002 through the 2005-2006 school years were analyzed in this comparison study. Schools using Saxon Math (n = 20) were matched to schools not using the program (n = 20). School were matched based on characteristics such as grade-span, enrollment, gender, ethnicity, and free/reduced lunch rates. Major findings from this study included statistically significantly increased math performance on the PACT by both elementary and middle school students as they progressed through grade levels. All subgroups (i.e., males and females, minorities and non-minorities, students who were and were not economically disadvantaged, students who were and were noted Limited English Proficient, and students who were and were not enrolled in special education) at the elementary level and middle school levels demonstrated increasing trends in math performance. Finally, although the average performance of students in all grade levels of Saxon schools was statistically significantly higher than the average performance of non-Saxon students, both the Saxon group and the control group showed similar increases in performance over time. Resendez et al. (2007) concluded from this investigation that although the Saxon math was related to student improvement in math skills over time, students performed as well from instruction in other math programs in this sample of schools.

In a related study conducted with archival data from the North Carolina Department of Education, Resendez and Azin (2008) analyzed the relationship between Saxon Math programs at the elementary and middle school levels with student achievement on the North Carolina End of Grade (EOG) state exams. Data for Grades 3 through 8 from the 2002 through the 2007 school years were analyzed in this comparison study. Schools using Saxon Math (n = 57) were matched to schools not using the Saxon Math program (n = 68). In comparing before-and-after Saxon implementation in schools, statistically significant improvement was documented in state assessment scores after the schools implemented Saxon Math. Improvement was not only immediate, but enduring increases in achievement scores were also evident. Gains in math performance continued to increase over time. Student groups (i.e., White, minority, special education status, Limited English Proficient, free/reduced lunch status) showed increases in math performance as well. Resendez and Azin (2008) documented that the Saxon Math program positively impacted student math achievement.

Purpose of the Study

The purpose of this study was to examine the effect of Saxon Math on Grade 8 student math achievement in a selected Texas school district. The data utilized for this study were chosen because of the Texas adoption of the revised Saxon Math curriculum in 2007 and the final four years of state assessment data available during the years of Saxon Math instruction under the TAKS system.

Research Questions

The following research questions were addressed in this study: (a) What is the difference in Grade 8 students' Met Standard scores as a function of Saxon Math instruction?; and (b) What is the difference in Grade 8 students' Commended Performance scores as a function of Saxon Math instruction?

Method

Participants

A middle school in one mid-sized, rural Texas school district was used for this study. One high school, two middle schools, and five elementary schools comprised the district. The student population of the district increased from 5,606 students in 2007 to 6,263 students in 2010. With respect to this particular middle school campus, the student population of the participant campus consisted of Grades 6 through 8 with an ethnic distribution of 9.6% Black, 23.5% Hispanic, 65.7% White, and 62% of students who were economically disadvantaged (Texas Education Agency, 2013a).

Data utilized in this research consisted of Grade 8 students' math scores for all students who took the TAKS math assessment in the 2007, 2008, 2009, and 2010 school years. Grade 8 students in 2007 were students who received traditional math instruction and were the last group of students before the revised Saxon Math curriculum was implemented. In each consecutive year, beginning in 2008, students received one, two, and three years of instruction in Saxon Math, respectively. Thus, data from four intact groups of Grade 8 students were analyzed in this investigation.

Instrumentation and Procedures

Archival data for the Grade 8 TAKS math assessment for the 2007 through the 2010 school years were obtained from the school district's student assessment data management system, Data Management for Assessment and Curriculum (DMAC) and imported into an excel file. The excel file was merged using the Statistical Package for Social Sciences (SPSS). Included in the DMAC data file were four values utilized for this study: (a) Met Standard; (b) did not meet standard; (c) met Commended Performance; and (d) did not meet Commended Performance.

Definition of Terms

Met Standard is defined by the Texas Education Agency (2013c) as performance at or above the state passing standard. Students who achieve this standard have sufficient understanding of the mathematics curriculum as outlined by the Texas Essential Knowledge and Skills (TEKS) curriculum. Commended Performance is defined as academic achievement that is considerably above the state passing standard. Students who achieve this standard have a thorough understanding of the mathematics TEKS curriculum (Texas Education Agency, 2013c). Saxon Math is an evidence-based, core mathematic program for grades K-12. The middle school program is textbook-based with embedded differentiated instruction; the curriculum includes algebraic reasoning and in-depth problem-solving (Houghton Mifflin Harcourt, 2011).

Results

To determine the extent of the relationship between Saxon math instruction and Grade 8 students' state assessment scores, a Pearson chi-square was conducted (Slate & LeBouef, 2012). Because frequency data were present for all variables, all variables were categorical, and the large sample size provided for a per cell size of greater than five, the assumptions for a chi-square procedure were met.

For the first research question concerning the relationship between Saxon Math instruction and students' Met Standard assessment scores, the chi-square analysis resulted in a statistically significant difference, $\chi^2(3) = 23.66$, $p < .001$. Using Cohen's (1988) criteria, this difference represented a small effect size, a Cramer's *V* of .17. As depicted in Table 1, the student group that did not receive Saxon Math instruction had 12.3% fewer students meet the Met Standard than the group that received one year of Saxon math instruction. For the student group that received three years of instruction in Saxon Math, 23.5% more Grade 8 students met the Met Standard on the state accountability math exam (see Figures1 and 2).

Table 1

Numbers of Students and Percentages of Math Met Standard and Did Not Meet Standard as a Function of Saxon Math Instruction

Student Group	*n*	Did Meet Standard	Did Not Meet Standard
Year One Students	167	53.9%	46.1%
Year Two Students	198	66.2%	33.8%
Year Three Students	207	67.1%	32.9%
Year Four Students	217	77.4%	22.6%

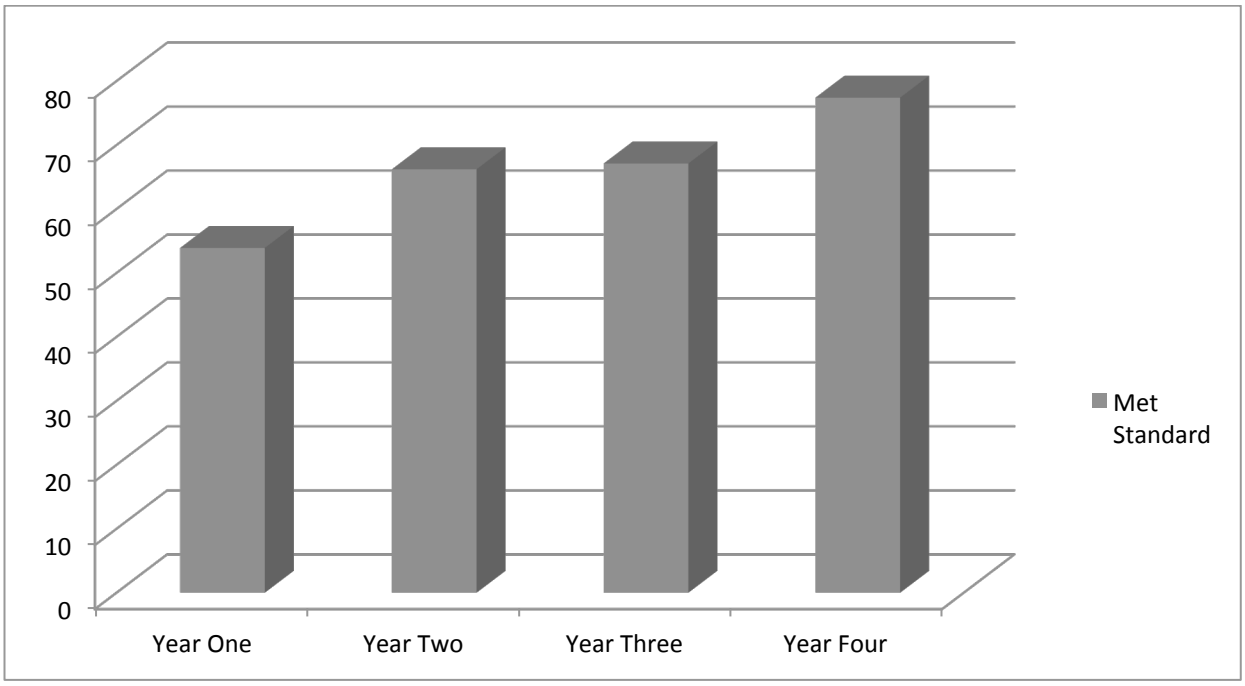

Figure 1. The percentage of students who Met Standard by year of Saxon Math instruction.

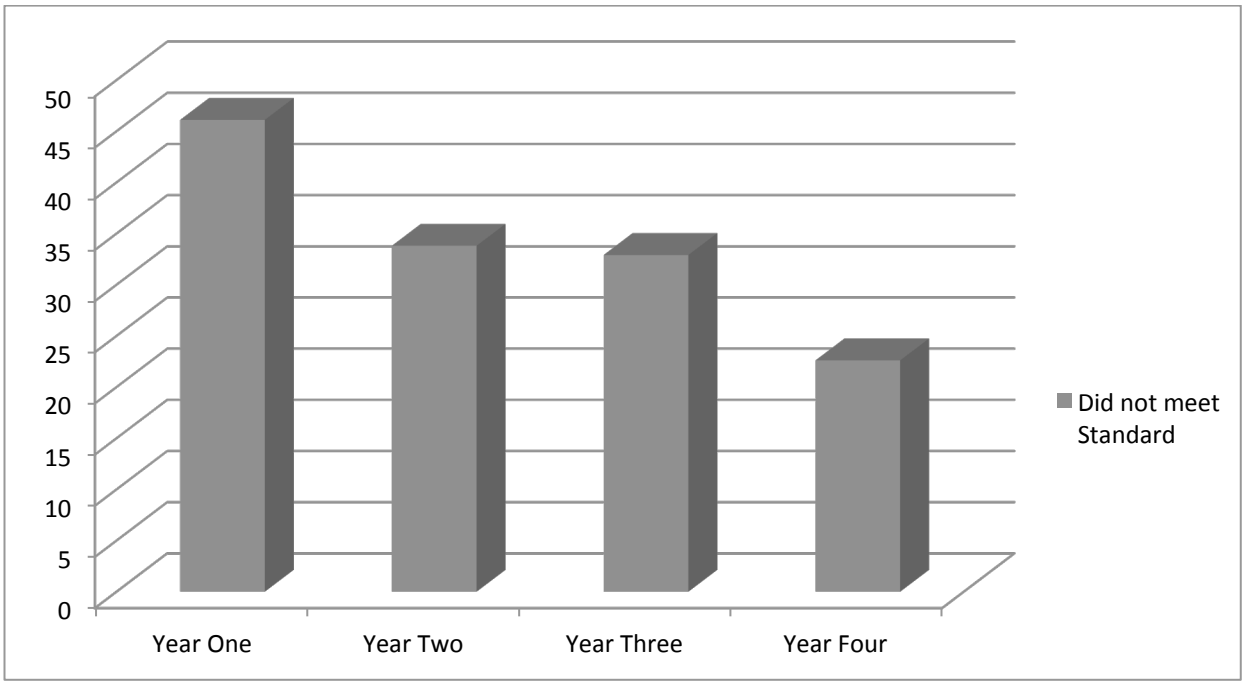

Figure 2. The percentage of students who did not reach Met Standard by year of Saxon Math instruction.

For the second research question concerning the relationship between Saxon Math instruction and students' Commended Performance assessment scores, the chi-square analysis resulted in a statistically significant difference, $\chi^2(3) = 10.09$, $p = .018$. The Cramer's *V* effect size for this result was .11, a small effect. As indicated in Table 2, the percent of students who achieved Commended Performance on the state math assessment after one year of Saxon Math instruction was 4.8% higher than the number of students who did not receive Saxon Math instruction. Consequently, 7.9% more students who received Saxon Math instruction for three years reached Commended Performance than did those students who received no Saxon Math instruction (see Figure 3).

Table 2

Numbers of Students and Percentages of Math Commended Performance and Did Not Meet Commended Performance as a Function of Saxon Math Instruction

Student Group	*n*	Did Meet Commended	Did Not Meet Commended
Year One Students	167	7.8%	92.2%
Year Two Students	198	12.6%	87.4%
Year Three Students	207	7.2%	92.8%
Year Four Students	217	15.7%	84.3%

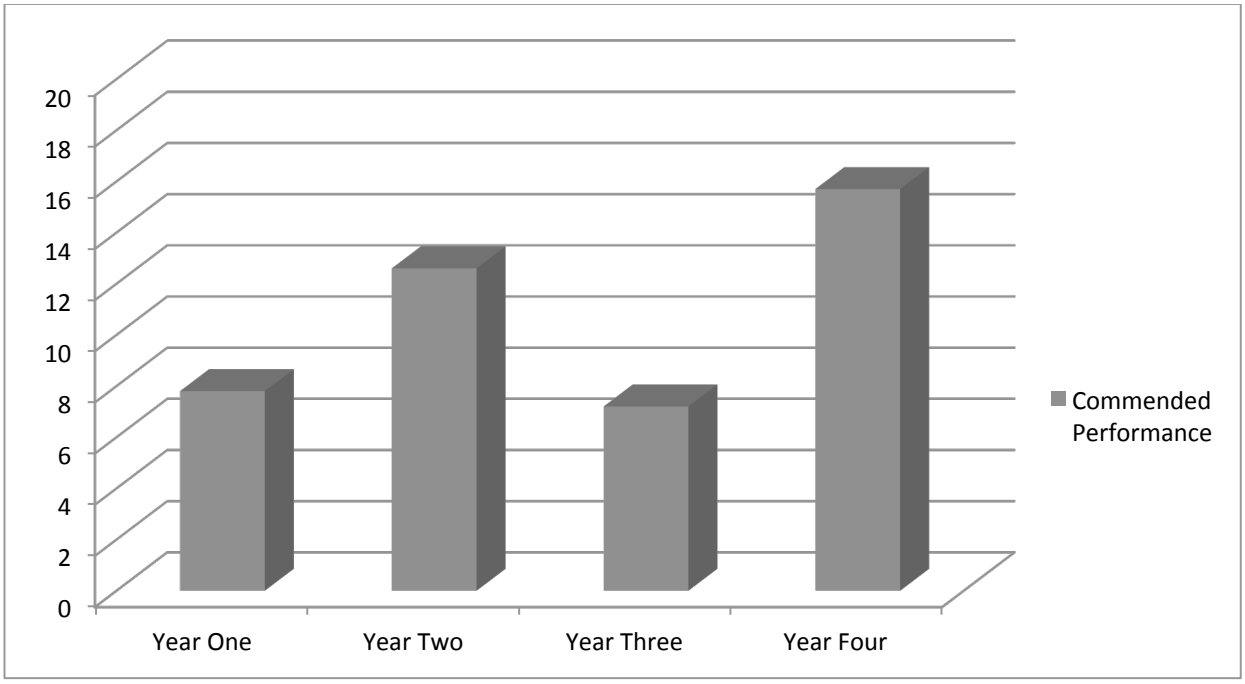

Figure 3. The percentage of students who met Commended Performance by year of Saxon Math instruction.

Notably, as delineated in Table 3, students who did not receive instruction in Saxon Math also did not meet the state assessment math standard or commended status as frequently as did their peers who received instruction in Saxon Math. Additionally, scores improved the more years of Saxon Math instruction students received. Not only did Met Standard scores improve with each year of additional instruction in Saxon Math, Commended Performance scores improved as well.

Table 3

Numbers of Students and Percentages of Math Met Standard and Commended Performance as a Function of Saxon Math Instruction

Student Group	*n*	Met Standard	Met Commended
Year One Students	167	53.9%	7.8%

Year Two Students	198	66.2%	12.6%
Year Three Students	207	67.1%	7.2%
Year Four Students	217	77.4%	15.7%

Discussion

A broad spectrum of math textbooks and curricula exists today. Much of the curricula in traditional textbooks employ a massed-practice approach in which practice problem sets associated with a particular lesson consist of several problems of the same type (Walsh, 2009). Saxon Math is a distinctly different curriculum than traditional math textbooks. Developed in the early 1980's by John Saxon, the Saxon approach to mathematic curriculum and instruction was based on the premise that students learn when instruction is incremental, when previously learned concepts can be continually reviewed, and when assessment occurs often and is cumulative (Resendez et al., 2005). The incremental method of learning was continued in the 2007 revised Saxon curricula.

The purpose of this study was to determine the effect of Saxon Math on student assessment scores, and, consequently, on students' understanding of mathematical concepts. Pertaining to the data from the school district in this study, evidence was present that Grade 8 students' achievement scores were affected by the Saxon Math program. Students with one year of Saxon math instruction reached Met Standard on the state assessment at a higher rate than did students who did not receive instruction in Saxon Math. Students with two and three years of Saxon Math instruction achieved Met Standard at higher rates than did the year one students. Similar results were evident with students achieving Commended Performance.

Although data from only one school district were analyzed in this research investigation, the study can be replicated to include data from across Texas and the United States. Analyzing data from a single school district in this investigation limits the generalizability of the study findings. The use of archival data also inhibited the ability to ascertain the fidelity with which the Saxon Math curriculum was implemented as well as the characteristics of the classrooms (e.g., climate, size, teacher skills).

The findings from this investigation were generally congruent with research studies (Resendez & Azin, 2008; Resendez et al., 2005; Resendez et al., 2007) conducted prior to the 2007 revision of the Saxon Math curricula. In these prior studies conducted in three different states, the Saxon Math curriculum had a positive outcome on math assessment scores in elementary and middle schools. Students instructed in the Saxon Math method showed significant growth in math performance on the TAAS from Grade 6 (1998) to Grade 8 (2001) and higher performance across all grade levels (2003-2004 sixth through eighth graders) on the TAKS (Resendez et al., 2005). Additionally, student achievement across student groups indicated a positive trend in math scores.

Many important questions remain to be answered in future studies of the revised Saxon Math curriculum: (a) What are the long-term effects of the revised Saxon Math on student performance?; (b) What effect does the revised Saxon Math curriculum have on the achievement gaps between student groups?; and (c) What differences are evident in academic performance between student groups as a function of Saxon Math? Until such questions are addressed, we encourage readers to view our results tentatively.

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Innovative Technology of Teaching Professional English At A Technical University In Russia

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ABSTRACT

This paper is a report on the findings of a study conducted at Samara state university of architecture and civil engineering, at the faculty of engineering economics. The research is devoted to interactive methods of English teaching. The author considers various interpretations of the concept “interactive methods”, analyses their effectiveness and develops own system of foreign language teaching, that is focused on the participation of all students in the speech process and chooses “team-building technology” as a core element of this system and as a type of interactive methods. This technology includes the complex of games in English. The results of the study prove that implementation of such games efficiently improves language level and develops professional skills of engineers—managers.

Keywords: engineering education, teaching system, foreign language, psychodrama approach, frame approach, “team-building” technology, games in English, corporate culture.

INTRODUCTION

Nowadays due to political, economical and social changes that take place in Russian Federation cultural and business interaction with other countries has considerably developed, and as a result, it influenced construction engineering and engineering education in general. Many enterprises and joint-venture companies demand high-technology developments, that have commercial value and meet the requirements of overseas customers.

Study of Russian and international requirements to the training of a qualified engineer show that professional competence of an engineer is determined not only by high professional level of knowledge , but also by the ability to interact in

a team of specialists (V.I. Baidenko, E.V. Belov). Consequently, the modernization of education at technical universities becomes urgent. English language teaching plays a great role in this as it increases the competitiveness of graduates.

Much research was conducted, concerning methods of teaching: learning and teaching styles in engineering education (Richard M. Felder, Linda K. Silverman); new teaching approaches (Jeffrey Rhoads, Charles Krousgrill, Emil Venere); learning approaches (P. Kapranos & P. Tsakiropoulos); strategies of engineering education were identified (M.N. Vraznova, V.D. Zuravskiy, Z.A. Sazonova, I.B. Fyedorov, Peter J Goodhew). The analysis of these works proves that teaching and education in a modern technical university has become interactive and innovative.

The aim of this paper is to show basic characteristics of interactive education and its effectiveness at English lessons.

THE STUDY

English language as a discipline in technical universities influences the personal and professional potential of students. English language studying, like studying of any other language, develops integrative thinking of an engineer. Engineer students don't only master English language, but also develop professional skills that are necessary in engineering business. The atmosphere and communicative approach of this discipline imply the introduction of interactive methods. "The foreign language lesson is characterized by the formation of creative personality as teaching communication can't take place in spiritless atmosphere" [E.G. Kashina, 2007].

Interactive methods replaced the communicative methods of education, as they increase the students' motivation, purposefulness and allow to organize a lesson in such a way that all students are involved into English language speaking. Lesson management with the help of interactive methods help to form culture speech, which is essential in their future profession.

It is important to determine the concept 'interactivness'. Nikishina V.O. defines 'interactiveness as 'speech interaction of two or more people' [4]. Obskov A.V. interprets it as 'an enhanced activity in a group of people' [5]. In general, Russian researchers define 'interactiveness' as activity of people, while foreign researchers (Louis Abrahamson, Otis Lam, Lucia Yeung) understand it as 'constructing knowledge together'. There can be various examples of interactive exercises: 1)think- pair-share; 2) Buzz group; 3) Case Study; 4) Asking questions; 5) Note review; 6) Role-playing; 7) Short writing exercises; 8) Demonstration; 9) Discussion; 10)Brainstorming; 11)Debate (between students and Teacher); 12) Simulation.

These techniques have multiple benefits: the instructor can easily and quickly assess if students have really mastered the material (and plan to dedicate more time to it, if necessary), and the process of measuring student understanding in many cases is also practice for the material—often students do not actually learn the material until asked to make use of it in assessments such as these. Finally, the very nature of these assessments drives interactivity and brings several benefits. Students are revived from their passivity of merely listening to a lecture and instead become attentive and engaged, two prerequisites for effective learning. These techniques are often perceived as "fun", yet they are frequently more effective than lectures at enabling student learning.

At the chair of linguistics and cross-cultural communication such type of interactive methods as "team-building technology' is used. Before choosing this technique a detailed analysis of scientific literature was made, that allowed to reveal the specific features of engineering-economists profession – integrativity of functions both of an economist and engineer. Engineering business – is the professional sphere of engineers-economists (engineers-managers) which has the following peculiarities: the leading type of activity is managerial, consisting of several stages (planning, realization, control and reflection). Engineer-economist should possess communicative skills in English and ability to perform in a team.

The pilot study, carried out at the engineering-economics faculty of Samara university of architecture and civil-engineering, showed beginner and elementary level of English, which stimulated search of new ways of teaching.

The developed system consists of content element which is based on frame approach and is represented by the discipline "Foreign language", and organizational element, based on methodological assumptions of pscychodrama and contextual approaches. The core part of content element is a discipline "Foreign language", aimed at teaching foreign language with the help of frame approach. Frames help students to master professional terminology. The frames that constitute the system are not only lexico-semantical units, but also terminology of certain professional activities context, thus they become part of behavior and professional style.

Organizational element of the system is a combination of games, which are selected on the base of psychodrama and context approaches. These games will help to imitate the professional activity, the professional roles are acted, the professional reality is performed due to the context that resemble the sphere of engineering business. The "team-building technology" includes situations of true-to life communication in the managerial process of engineering-economists. These situation help students to motivate, persuade and support the members of a professional team.

Brian Coal Miller selects the following types of games: 1) 1)battling: games that teach healthy competition; 2) support: activities to appreciate and help each other; 3)teamwork: challenges that require cooperation; 4) creativity: challenges that encourage out of the box thinking [1]

FINDINGS

Concerning the profession of engineers-managers, they should possess various communicative skills at every stage of management. These communicative skills are reflected in the professional roles they play such as: informator, director, motivator and critic. The games that were taken into consideration are aimed at developing each of these roles described.

Table 1: Games that develop professional roles.

Types of games	Professional roles	Communicative skills
1. Support: activities to appreciate and help each other	Informator	Inform
2. Battling: games that teach healthy competition	Director	Decision-making in conflict situations
3. Teamwork: challenges that require cooperation	Motivator	Motivation and support
4. Games for stimulating critical thinking (out of the box thinking)	Critics	Distributing the duties and positive criticism

All these skills described in the Table 1 are necessary for building a positive group dynamics that means an engineer-manager should possess abilities to work in a team. The norms of communication are one of the main elements of corporate culture.

The analysis of corporate culture theories (T. Deel, A. Kennedy, F. Trompenaars, E. Shein, M. Hall, G. Hofstede), consideration of concepts “culture”, “corporate culture of an organization”, “corporate culture of a person” has allowed to conclude that the basic component of these notions is communication as the instrument of corporate culture formation. Corporate culture helps the specialist who is involved in management to work effectively, to share information among all the members of the team in engineering business.

While developing the structure of corporate culture of an engineer-manager it was decided to use the professional roles of an engineer-manager and the communicative skills mentioned above. According to these findings it was assumed that corporate culture of an engineer-manager consists of cognitive, motivational, communicative and reflexive components, thus this notion can be defined as an ability to perform communicative functions in the process of management.

Table 2: Logics of modeling the corporate culture structure of engineers-managers

Stages of management	Planning	Realization	Control	Reflection
Roles of engineers - managers	Informator	Motivator	Director	Critic
Corporate culture components	Cognitive	Motivational	Communicative-managerial	Reflexive

Taking into consideration the fact that the management process of an engineer manager is international, the problem of teaching English becomes urgent.

The initial experiment showed that students of engineering-economics faculty don't pocess corporate culture (98 students answered the questionnaire) and the level of English is very poor. This situation required development of a teaching system that included games and activities. They were used during the whole semester (4 months).

CONCLUSIONS

Games that are selected according to the principles of psychodrama and context approaches enabled the formation of corporate culture components. Activities to appreciate and help each other enable the formation cognitive component as students obtain knowledge of psychological peculiarities of a person in management. Games that teach healthy competition formed communicative component of corporate culture as the skill of emotional support is formed. Challenges that require cooperation form the motivational component as a certain management style is formed. Games for stimulating critical thinking (out of the box thinking) form the reflexive component.

Table 3: Comparing analysis of corporate culture formation at different stages of experiment

(% index)

Corporate culture components	Initial experiment	Final experiment
Cognitive	10,0	82,0
Motivational	51,0	79,0

Communicative	25,0	91,0
Reflexive	25,0	83,0

For more detailed analysis of results of corporate culture formation interrelation of these indexes was identified with the help of correlation analysis. The final experiment showed very strong interrelation between all the components(both initial and final experiment indexes compared) : cognitive and motivational (before r=0,673, after r=0,766); communicative and reflexive (before r=0,506,after r=0,710); motivational and reflexive (before r=0,401, after r=0,651). These findings can be beneficial for teaching not only engineers-managers, but students of other technical specializations and can be used for designing a new discipline "Professional English".

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Innovation Business: Trends and Perspectives

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ABSTRACT

Information is the whole informational space through which we learn, share and learn about the world, etc. Similarly, the formation of a modern educational environment provides unique opportunities for international educational cooperation, exchange of experience, knowledge, experts, scholars, students. Business innovation allows you to analyze and distinguish between levels of economic development for the production of medium and large industrial enterprises understand the nature and importance of the processes taking place in the modern economy. Innovative business is an active independent form of individual groups of citizens, enterprises, R & D organizations to produce and sell a wide range of the latest inventions, technology, products, information services industry in which the high need in the era of modern information technologies. Modern business is characterized by an innovative freedom of choice, mobility, dynamic businesses in entrepreneurship, business, and is practiced by small and large enterprises. Analysis of market research innovation leads to the conclusion that business innovation is seen as a means of making a profit by any legal means as a way of thinking and innovative human that quickly mobilizes its resources from the low-income and poor performance in the area of high-tech manufacturing and produce high revenues and profits. Business Innovation - is a phenomenon of the modern international economy, which has turned into a global multi-complex information industry through increased infrastructure and sales on the world market, competing with the highly profitable industries as one of the main economic activities.

Keywords: Business innovation, Modern technology, Market analysis, Entrepreneurship, Economic activity

INTRODUCTION

INFORMATION TRENDS IN INNOVATIVE BUSINESS

The inclusion of digital economy in the global economic system as an open economy, outstripping the pace of its internal transformation, requires non-standard solutions and new methods in entrepreneurship and innovative business. Business innovation allows you to analyze and distinguish between levels of economic development for the production of medium and large industrial enterprises understand the nature and importance of the processes taking place in the modern economy.

For example, information is the whole informational space through which we learn, share and learn about the world, etc. Similarly, the formation of a modern educational environment provides unique opportunities for international educational cooperation, exchange of experience, knowledge, experts, scholars, students, etc.

Although IT and modern business - two different kinds of activities, but in reality it is an inter-dependent and mutually reinforcing two-fold function, which is called the innovation business.

Free movement of capital goods in the present conditions must be complemented by the formation of labor markets, resources, services, capital and an effective system of commercial credit and increasing the role and influence of the market IT, communications and information services. Economic performance depends not only on the level of development of productive forces and relations of production and finance, but also on a very important factor - entrepreneurial skills, innovation, innovations, know-how in the business.

For example, at a major oil refinery production facility with tens of thousands of employees, issues of further development of production will seriously deal with only a small group of entrepreneurs from the members of senior management. At the same time, managers and leading specialists in enterprises using modern IT can use interactive

participation in the production meetings, establish contacts with research and development information, HRM, marketing departments, logistics, production, technical, financial and other.

The use of the know-how of modern technologies and inventions in business has formed a new era of modern business innovation and world-renowned companies: "Yahoo", "YouTube", "Apple"; "Google", "Twitter", "Nokia", "Samsung" , "IBM", "Microsoft", "Sonny" etc.

Consequently, innovative business is an active independent form of individual groups of citizens, enterprises, R & D organizations to produce and sell a wide range of the latest inventions, technology, products, information services industry in which the high need in the era of modern information technologies such as:

Internet Tablet Apple (iPad and iPad 2,3,4), iPhone from A to Z, E Trade, E-ticket, e-book, e-business, e-card, e-cash, e-commerce, e-form , e-library, e-mail, e-mail aliases, e-mail autoresponder, e-mail, forwarding, e-mail client, e-media, e-money, e-zine ...

Modern business is characterized by an innovative freedom of choice, mobility, dynamic businesses in entrepreneurship, business, and is practiced by small and large enterprises. Under the free choice of the consumer understood the rationality and freedom of choice of purchase, sale, timing and choice of competitors ("Nokia", "Samsung", "Apple", "LG", "Bosh", "BMV", "Toyota", " Audi "...).

Innovative business Finally, by no means closes on economic institutions and is not limited to purely information-technology activities. It is the financial and industrial groups and systems, banks, insurance, consulting, advisory, multinational companies and corporations, international organizations, universities, institutes and branches.

The innovative modern business is and universities in the U.S., Europe, Asia, Harvard, Oxford, Cambridge, etc.

Entrepreneurship is something specific, inherent as an individual and the institution. The economic activity of business innovation lies in the premises of available resources for future results due to the uncertainty and risk.

Known representatives of business innovation in the world - are entrepreneurs 1 Carlos Slim Helou and family 74 20.5 71 Telecommunications Bill Gates Mexico 2 56 3 55 Microsoft United States 3 Warren Buffett 50 3 80 4 Investments USA Bernard Arnault 41 13.5 62 LVMH (luxury) France 5 Lawrence Ellison Oracle 39.5 11.5 66 United States 6 Lakshmi Mittal 31.1 2.4 60 Metals India 7 Amancio Ortega, 31 +6 74 Zara (clothing) Spain 8 Eike Batista 30 +3 54 Ore Brazil 9 Mukesh Ambani -2 27 53 Oil and Gas India 10 Christina Walton and family 26.5 4 56 Wallmart USA, Mark Zuckerberg, Steve Jobs, Rotary Valves ...

General Electric (GE) is one of the largest corporations in the United States and, among other things, engaged in the production of jet engines, railroad locomotives, construction of water treatment plants. Business corporation includes segments "energy infrastructure", "aviation", "health", "transport", "solutions for homes and businesses," as well as financial arm GE Capital.

Net profit of U.S. diversified group General Electric, available for distribution to holders of ordinary shares of the company for 2012. increased by 4% - to 13,641 billion against a profit of $ 13,120 billion, received for 2011.

This is stated in a published report, GE. Read full article: http://quote.rbc.ru/news/fond/2012/01/20/33538557.html

Statistical portal Statista demonstrated that represents net income Apple, received in fiscal year 2012, compared with the achievements of others. Apple revenues in 2012 were $ 156.5 billion, while net income reached a record high - 41.7 billion as is also the case with the competition?

From October 2011 to September 2012 net profit of the companies Microsoft, Google, eBay, Yahoo, Facebook and Amazon combined totaled 34.4 billion on 7 billion less than the one Apple. During the same period, PC manufacturers Dell, Asus, Intel, Acer, IBM, Lenovo and HP together earned 19.4 billion profit in two times less than Apple. Smartphone makers Nokia, Samsung, HTC and RIM, once again, taken together, were 12.8 billion

According to the materials Interfax South Korean Samsung Electronics, the largest manufacturer of televisions, mobile phones and computer memory chips in the world, increased its net profit for the fourth quarter of 2012 by 75.6% to a record, thanks to growing up Smartphone sales and profitability of the semiconductor business.

Last year, Samsung overtook Apple to become the leading global provider of smart phones. Operating profit in the segment of telecommunications equipment (which include the production of smart phones) increased in October-December more than doubled - from 2.56 trillion. won to 5.44 trillion. out.

In total, Samsung supplies to the world market for over a quarter of the total number of mobile phones. According to market research firm Strategy Analytics, also released on Friday, Samsung has sold in 2012, 213 million against 135.8 million Smartphone's from Apple, and 35 million from Nokia. The global market for this increased by 43% - to 700 million

Analysts tipped Samsung continued growth in Smartphone sales and profits in the sector in the current year, a number of the more optimistic forecasts, provides sales jump by 50% immediately.

According to analysts of Morgan Stanley, in the fourth quarter Samsung sold 63 million Smartphone's compared to 47.8 million units from Apple. NH Investment & Securities expects that in the I quarter of Samsung's sales amount to 59.7 million - almost twice as much as in Apple. 05.03.2013 15:35 | News Economy.

Apple has become the most expensive global brand second year in a row according to Brand Finance, the brand value has increased by $ 16.7 billion to $ 87.3 billion is noteworthy that for a few years in the top ranking confidently entered brands manufacturers of gadgets. Back in 2007, the Apple brand ranked only 44th place, but then began to gradually become more expensive: in 2010 - 20 th place, and in 2011g.-8th. Samsung has taken the current rating of the second line. During the year, the price of brand rose from $ 38.197 billion to $ 58.771 billion and a global rating of the company rose to four lines from 6th to 2nd place, displacing Google for third place.

The cost of the brand Google, which in 2011 still held the top spot in the rankings, still grew, albeit slow pace - from $ 47.463 billion to $ 52.132 billion in 2013

Lost positions the company Microsoft. The company remained at Walmart 5th place, and the value of its brand has grown to $ 38.32 billion to $ 42.303 billion

Ten of the most expensive brands, the cost and rating

The company's	brand value, $ billion	Rank 2013	Rank 2012
Apple	87,304 January	1	1
Samsung	58,771	2	6
Google	52,132	3	2
Microsoft	45,535	4	3
Walmart	42,303	5	5
IBM	37,721	6	4
General Electric	37,161	7	7
Amazon.com	36,788	8	10
Coca-Cola	34,205	9	8
Verizon Communications	30,729	10	12

Source: Brand Finance Global 500, 2013

Analysis of market research innovation leads to the conclusion that business innovation is seen as a means of making a profit by any legal means as a way of thinking and innovative human that quickly mobilizes its resources from the low-income and poor performance in the area of high-tech manufacturing and produce high revenues and profits.

Overseas U.S. and Western scientists experts forecast further progress of innovative IT, which are the driving force behind the five major "trend information" in business:

1. the growing role of information products;

2. development of interoperability;

3. elimination of intermediaries;

4. globalization;

5. convergence

Business Innovation - is a phenomenon of the modern international economy, which has turned into a global multi-complex information industry through increased infrastructure and sales on the world market, competing with the highly profitable industries as one of the main economic activities.

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The Demonstration Effect within the Realm of Creative Chaos

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ABSTRACT

This research proposes to investigate the called demonstration effect as the more efficient method to overcoming professors resistance to the adoption of interactive technologies applied to education, as much in the support to the face-to-face and distance practices, as well as in its diverse environments and platforms, videoconferences, production, management and distribution of live and on-demand contents, exploring the spectre of collaboration opportunities that includes the independence of time, distance and equipments. Considering that the technological solutions are known and available, their effective use and its institutionalization only will be able to be obtained through presentation and the systematically repetition of a set of procedures, in domino, cascade or in chain effect, producing a set of similar events of variable duration.

Keywords: demonstration effect, motivation and technology resistance, effective use of technology-mediated learning, conversation networks, creative chaos.

INTRODUCTION

Proposing changes that reach the field of education is always a very risky subject. The existing proposals are many and the resistance of the people involved even greater. The discussions around the proposals tend to polemicize, not finding a common ground, not contributing to their implementation and thus not being relevant.

The history of technology-mediated learning (TML) is no different. This is a sequence of new ideas and technologies, always counterbalanced by resistance to change, common framework to the most modern countries and even those considered more bureaucratized.

In this paper I focus on analyzing the technology-mediated learning, supporting classroom practices, mixed (blended learning) and at distance, as well as in their diverse environments and platforms, videoconferencing, production, management and distribution of live and on-demand content, exploring the spectrum of opportunities for collaboration that includes the independence of time, distance and equipment.

Whereas the technological solutions are known and available in Portugal, it seeks to try to understand the resistance of professors to adopt them and at the same time, suggest strategies to overcome this obstacle.

The paper draws on findings from the research 'The Demonstration Effect for the Creation of Learning and Conversation Networks within the Realm of Creative Chaos' funded by the Portuguese Foundation for Science and Technology and presented at International Educational Technology Conference (IETC 2011).

The main objective of this research was to answer the following research question: to what extent the demonstration effect can act as the most efficient method of persuasion and motivation of resistant professors to the adoption of interactive technologies applied to education, either in the support of classroom practices or at the distance, as well as in their different environments and platforms, videoconferencing, production and management of live and on-demand content, exploring the spectrum of opportunities for collaboration that includes the independence of time, distance and equipment?

Theme of many articles, dissertations and theses, the most common reactions of educators to innovations are centred, according to Gatti (1993), in chronic skepticism caused by poorly implemented and disrupted programs, allied to a natural resistance to changes and innovations. In the specific aspect of e-learning, these motivations detected have been added to the widespread belief in the educational area that dispenses the professor. Perhaps therein lies the main reason for rejection systematically found in educational context, where it is seen as a competitor. Another important point for the reflection of the educators who consider the ICT-based education as second class is the question of the use of these technologies in classroom

teaching.

Is it possible for the professor, nowadays, to dispense ICT in the classroom and promote education without the use of the latest technologies?

Of course it is.

It would also be possible to write this text by hand or use technology of yesterday as a typewriter (manual, electric or electronic) or even some PC from the first generations.

The fact that we use the latest media does not necessarily imply in better quality. But meets to the expectations of stakeholder or who is on the other end. And this reduces frustrations…

Educate with new technologies is a challenge that so far has not been faced in-depth.

We just made adjustments, experiences and small changes.

Most often we limit ourselves to pave the cow paths.

The face to face meetings are virtualized and distances become face-to-face. The meetings in the same physical space combine with virtual meetings, at distance, over the Internet.

Likewise the technology-mediated learning increasingly brings people together, through online connections, in real time, which allows professors and students to talk to each other and form small learning communities.

The Internet opens an unimaginable skyline of options for implementation of distance learning courses and flexibility of classroom. By development of the network it is possible to provide, search and organize content and use collaborative tools such as instant messaging, social networks and other media to favour the construction of virtual learning communities.

We have few trained professionals to prepare and manage flexible, semipresential (blended learning, hybrid learning) and distance courses. It is an area of great future, but we are still learning by doing, experimenting and researching.

According to Moran (2003), educating with the support of virtual environments requires more dedication from professors, more support from a technical-pedagogical team, more preparation and monitoring. For students there is a gain of personalized learning, that adapts to their pace of life, especially in adulthood.

With the increase in student access to the Internet, we can improve the curriculum, combining moments of meeting in a classroom with others of individual and group learning. Learning how to teach and how to learn, by integrating face-to-face and virtual environments, is one of the major challenges we are currently facing in education worldwide.

It is important in this dynamic process of learning by researching, using all resources, all the possible techniques for each professor, by each institution, for each class: integrate traditional with the innovative dynamics, writing with the audiovisual sector, the sequential text with hypertext, the physical meeting with the virtual.

What changes in the role of the professor?

It changes the relationship of space, time and communication with students. The swap space extends from the classroom to the virtual. (Moran, 2003).

The time of sending or receiving information extends to any day of the week.

The communication process takes place in the classroom, on the internet, in e-mail, instant messages, SMS, chat, social network. It is a role that combines a few moments of conventional professor with a much more prominent role of manager research, search stimulator, coordinator of results. It is a role of animation and coordination much more flexible and constant, which requires a lot of attention, sensitivity, intuition and technological domain.

We have to develop rich communication processes, and progressively deeper.

Schools open to the world, to life. Create teaching and learning environments more attractive, immersive and multisensory. 'The technologies, within a pedagogical innovative project, facilitate the teaching-learning process, raise awareness of new issues, bring new information, reduce routine, connect us with the world, with other schools, increase interaction, allow customization and communicate easily with students, because they bring to the classroom languages and means communication of day-to-day' (Moran, 1996, p. 21).

Once sensitized to these realities, it will be easier for professors to accept learning alternatives that have their basis in the process of non presential communication, since 'no one educates anyone, no one educates himself alone, people educate each other, mediated by the world' (Freire, 1996).

Everyone has their level of competence. There is no way to generalize.

There is incompetence: for the computer science, for the internet, for the e-learning environments, for the video conferences, for the production of content, for the management and for the new role of professors in the face of new variables and possibilities.

The comparison of different realities can bring many answers to questions not purely technical.

The distance learning paradigm ended up influencing the classroom teaching and the teaching-learning process before centred on the professor evolved initially for the student and then to communities, coexistence networks established by relationships between professor-student and between students.

The theory of 'Biology of Cognition' of Maturana (1970, 2002 & 2003) considers that 'the task of education is to open spaces for training individuals as beings who are starting points for actions'. Your assumption is based on the fact that education is 'to create, perform and validate in coexistence, a particular way of living'.

In this perspective, the emotions are bodily devices that specify our way of operating at a given time and that determine the difference in the interactions.

Thus, to educate it is necessary constituting a conversation network that coordinates the making and the thrill of participants.

The development of this empowering environment, based on personal relationships and in the solicitude is essential requirement for creating knowledge (Von Krogh, 2001).

This environment supports activities to the professors involving groups and enables the development and storage of individual knowledge. The creation of a proactive place adds organizational flexibility and promotes the institution for the future.

To develop this process it is necessary that the institution provide the appropriate context, based on five enabling conditions, presented by Nonaka and Takeuchi (1997) and Von Krogh (2001): intention, autonomy, redundancy, fluctuation and creative chaos; and variety of requirements.

When these conditions occur in a harmonious and consistent way, it is possible to develop an innovative process based on knowledge. This process works basically two dimensions: an epistemological (tacit and explicit knowledge) and another ontological (different aggregation levels: individual, group, organization, corporation, chain, network, etc.), in the development of what Nonaka and Takeuchi (1997) baptized by knowledge spiral.

The domino effect (cascading effect or knock-on effect) resulting suggests the idea of an effect to be the cause of another, generating a series of similar events with medium, long or infinite duration.

Thus the demonstration effect can be obtained and this will be the result on the behaviour of individuals caused by observing the actions of others and their consequences.

All the technologies required to access the same set of content in different media are available openly, i.e. without direct costs of acquisition associated.

Environments (Learning Management Systems) that are free such as Moodle and Sakai begin to dominate the e-learning of the universities. And this facilitates the exchange of content (SCORM - Sharable Content Object Reference Model).

The various possible connections made by mobile phones or through virtual environments like SecondLife, ensure a diversity of options. But despite the many plug-ins, many environments have not been made to the current needs (of the new generations): instant messaging and social networks. New generation environments such as Schoology (based on the philosophy of social networks) are coming to meet these needs...

However the main problem persists: the resistance of professors...

People who do not want things to change are those who for some reason feel they have a disadvantage in changing.

My analysis shows that several projects have been and are receiving a 'red light' by lack of adherence of professors. This is a national issue, observed also in other European countries.

In this sense, any action that does not count with the suitable previous awareness, preparation, sensitizing, involvement, participation and agreement of the parties shall be subject to the low level of adoption seen in all universities.

The workshops of motivation and/or training conducted have failed to achieve their goals. Many professors still show some resistance regarding self-sufficiency Informatics. Some are from the time when there was someone to type and format their texts, feeding databases, assemble electronic spreadsheets or even process statistical data of their investigations (Roth, 2011).

The world also has changed for professors. But this resistance shows their non-beneficial results as much as these same traditional people that will select the new professors, that is, the status-quo tends to remain to the extent that normally they seek and form 'pairs'...

Probably the most effective changes will only be established through mechanisms of pressure. Some people only change when they feel insecure and/or before experiencing fear, whether of death or even of being unemployed…

To the extent that many European universities engaged in the pursuit of modernity and the students have a wide range of mobility (EHEA) this can change the options of where to hold its formation, because these customers 'well' or 'poorly' served will share their reviews on the internet, producing a positive free marketing or a negative marketing, depending on the case.

New processes of selection of professors shall arise by changing the current paradigm and requiring new skills. At the same time a higher turnover can be promoted by changing the current standard facilitator of the permanence of retired professors who insist on staying active without adapt to new demands.

If things remain as they are, without any interference, everything seems more unlikely, although not impossible.

We must reflect on the fact that the use of technology is the responsibility of individuals, and these will only be able to use it to bring benefits to society if they are educated to do such.

In times where all the universities may appear to be (on the internet) what they see fit, where the offerings of courses through e-learning multiply exponentially and where the EHEA “pasteurized” and standardized contents, making equal the different courses, how to stand out in the chaos?

What is the perfect link to not enter into the banality of similar offerings?

I conclude by suggesting that the answer comes from the own question and stems from the Administration's study, more specifically of the Marketing and it's not just for higher education institutions as to any enterprise that wants to stand out and/or start a new lifecycle: innovate, find a correct concept, establish a market differential

We are facing all the possibilities (creative chaos) and if we cannot innovate with our own efforts, we can at least observe best practices (from other universities and other professors), adapt them and adopt them.

Thus, we can finally see the power of demonstration effect and overcome the forces of inertia, prejudices and immobility.

The demonstration effect is not a panacea (solution to all problems) but can collaborate and contribute to those professors who are committed, interested and willing to change see successful experiences as a model and inspiration for their own transformation.

But for those who remain outside the process, the experience will not have any effect and will still be subject to criticism or questioning.

You can not turn in favour of an idea without having notion of it, just as it is impossible to criticize without knowing.

Entering disarmed in the process is critical. With closed eyes nobody sees anything.

The challenge is actually for universities, institutions that need to adapt.

Some authors believe that these institutions will collapse if they don't follow the techno-social and cultural changes that are inevitable. (Tapscott, 2009).

Many had imagined that the use of technologies (Web-based learning) would be the beginning of the end, (Wyatt, 2001).

But they were wrong…

Over the centuries since the founding of the first institution in the Western world, the university has faced many challenges.

And survived…

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Exploaration On The Of Industry-University Cooperation In Animation Education

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ABSTRACT

Cooperative education model is one kind of effective patterns to raise the practical ability talent in university. This kind of pattern enables teachers to obtain the practical work experience. It is advantage in sharpening students' innovation ability, strengthening their choosing profession competitive power. To animation professional talents education, quality of practice teaching is very important. In Universities, animation department mainly educate talents engaged in animation industry, such as director, animator, scripter. The cultivation of students' practical ability is the main feature of Animation program. The government should appear the persistent effect mechanism as soon as possible to advance cooperative education with steady steps, establish the control system and make it clear the responsibilities and status of both sides of the cooperation. University must strengthen to student's education for all-around development and occupation career guidance.

Keywords: Cooperative education model, Industry-university cooperation, Animation program

INTRODUCTION

In China more and more animation educators realize higher education should pay great attention to cultivating student's ability to innovate, and practical ability and entrepreneurial spirit. Social demand is one of the biggest driving forces of the development of the higher education.

Along with rapid social development, the shortage of advanced technology and practical application of innovative talents become the bottleneck problem restricting China's economic and techniques innovation development. It also makes Chinese ordinary colleges graduates need to face the situation of Employment market with sophisticated mechanisms. Cultivation of innovative talent is inseparable from innovation practice, so that practical teaching mode of cooperation between schools and enterprises can be effective mode of training practical talents in Higher education.

To animation professional talents education, quality of practice teaching is very important. In universities, animation department mainly educate talents engaged in animation industry, such as director, animator, scriptwriter. The cultivation of students' practical ability is the main feature of Animation program. So practice teaching quality influent directly to students' vision, and hands-on skills and the innovation ability. It is necessary to provide animation students with enough time and suitable opportunities to practice and improve students' innovative ability in practice teaching. In recent years, the Nanjing Normal university Fine arts school animation program proved Industry-university cooperation is not only an efficient method of cultivating Chinese animation and innovation talents, but also the positive exploration on practice of talents training mode reform. The Nanjing Normal university Fine art School animation program was set up since 2001, keeping in integrating theory with practice, explore development. In 2002, animation program cooperation with Nanjing Alphabet Multimedia Co., Ltd_well-known in China's animation industry, established students practice base, and realized teaching practice project to internship in cartoon production for some customs including CCTV, Hong Kong TV and Taiwan TV. The animation program organized in-class teaching and extracurricular practice together through university-industry collaboration Production and Research Cooperation. As a result of 10 years of exploration and practice, University teaching and researching activities extend to social, extends to the corporate structure based on practice teaching as the main body, based on the integration of production, teaching and research of industry-university cooperation , a new talent development mode。 In the case of animation, we need an in-depth discussion about relationship between the model of industry-university cooperation and educating practical talents in universities.

1. The concept of Industry-university cooperation mode

Industry-university cooperation mode is cooperation mode of education, known as the "cooperative education" in the world. "cooperative education", explanation form The World Association for Cooperative Education is: The cooperative

education unifies in the classroom in study and the work study, Students apply theoretical knowledge to the associated, as a true employer effectiveness, and often be able to obtain payment of the work in the real world, then bring work challenges and growth experience back to the classroom to help them study for further analysis and reflection (Jiefang 2006). In 1987, at the fifth World Conference on Cooperative Education, World cooperative association described regarding from six aspects as following:

Cultivating application talent is a kind of education overall arrangements.

A properly arranged education program is used by a unit of education and one or several units agreed and management implementation.

The arrangement of the production work is part of the whole education program.

The study plan is the normal start and end of the period.

The work experience part including the production work moreover must have the reasonable proportion in the entire program.

The program must maintain a high level. (Ping & Lian 2007)

Industry-university cooperation mode of education through full use of school and community two kind of education resources, two kind of education environment, School and Enterprise Omni-directional and multi-level work closely together to jointly become the subject of education, School and Enterprise work closely together to become the principal part in Omni-directional and multi-level, Sharing of the right to education, and sharing the obligations and responsibilities, in order to achieve to educate Practical Talents.

According to the agreement between Nanjing Normal University Fine Art School and Nanjing Alphabet Multimedia Co., Ltd, working together to build an animation practice base, improved the integration of talents training mode of Industry-university cooperation. The practice base engaged in animated collection of quality resources for teaching practice and actively cooperate with each other to explore new ways of combining teaching, research and industrial, establishment of a multi-level, comprehensive teaching system and shared commitment to animation industry development and animation talent of students. After the practice complete, students return to school to complete their dissertation and graduation design, most students can bring feedback of encountered Challenges during the work and growth of knowledge to their final design, so that their own practice in the classroom will be renewed by further digestion and thinking, Eventually formed their own behalf highest level of animation as a graduate design show in front of everyone. After graduation, about 10% students to go directly to a company engaged in animation work. Facts have proved that the Industry-university cooperation mode is effective in the use of the animation education.

2. Advantages of Industry-university cooperation mode

Industry-university cooperation mode is a major innovative educational philosophy and the education system, enable education to be reintegrated into society. Practice of industry-university cooperation mode proof industry-university cooperation mode is a kind of cultivation talents model uniting of production-teaching-research. Industry-university cooperation mode can effectively improve the students' creative ability, adaptive ability and coordination ability. As a result, undergraduate students can learn in practice, graduated students can research in practice, teachers can teach in practice. The mode helps to improve teacher's research capability and commercialization capacity, enhancing quality of education, and extend students ' learning content, and improve their combination of theory and practice. For enterprises, can also benefit from industry-university cooperation, Recruit talents in needed to promote enterprise development, so that to achieve a win-win situation between schools and enterprises. Teaching benefits teachers as well as students, Teachers and teaching at both important parts of the implementation of education, industry-university cooperation mode has a positive meaning for the teachers and students:

2.1 Advantageous to the exercise of teachers

Nanjing Normal University has formed the following two ways in training teachers:

Animation company backbones with professional theoretical knowledge and experience become a stable part-time teacher, and give full play to their professional skill, guiding students in practical learning;

Teachers from school are chosen to related enterprise to take exercise, in order to train a batch of compound teachers for school both in theory and are good at skills training. Relies on the enterprise technical personnel's participation, the school can solves problem which professional teachers with experience are insufficient. Professional teachers can improve their own ability in technology, research and teaching through industry-university cooperation.

2.2 To enhance the students' ability to innovate and to improve their careers competitive

Traditional patterns of talent cultivation in higher education are a relatively homogenous. Off-campus internship is primarily cognitive in nature, is often the Classroom extension of time is mostly short, and often becomes a mere formality. The traditional education specialty and the curriculum cannot adapt the market demand, talent training targeted poor, because school talents education lack of information on local industries and businesses. Students unable to meet the needs of the community when looking for work, because of lacking of vocational training. Graduates are often the expectations of the community are far removed from that lead to graduate employment difficulties. Simultaneously, the general employer complained that graduates adaptation period in position is too long, and it is difficult to find the professional suited to career requirement. In the Industry-university cooperation model enterprise can be allowed initiative to take part in the educational activities, playing an important role in the context of education, providing students practical chance and supervision, and combining the teaching, researching and social practice. so that students obtain system of vocational training, innovations in practice.

3. Restrictive factors and countermeasure of industry-university cooperation mode

Both sides have encountered many difficulties in Nanjing Normal University and in enterprise's long-term cooperation process, therefore industry-university cooperation mode have some restriction factor:

3.1. The enhancement industry-university cooperation mode has been achieved the mutual recognition from the government and the university, the enhancement industry-university cooperation mode achieved the mutual recognition from the government and the university, but it is no specific laws and regulations that can supervise the industry-university cooperation to educate talents, either no responsible for the supervision and examination of the coordinators and safeguards, and no specific incentive mechanism and the specific implementation approaches in industry-university cooperation, as a consequence many companies do not have motivation to industry-university cooperation.

3.2. University is not well prepared on industry-university cooperation, Lacking of proper organization of security, system guarantee. Many students and teachers are not clear for the purpose of understanding industry-university cooperation. Students and teachers Lack of adequate psychological preparation and confidence when they encountered the problems in the implementation process of industry-university cooperation.

3.3 In the industry-university cooperation, tripartite enterprises, universities, and students have different starting point and purpose. An enterprise’s main goal is pursuit of the maximization of economic benefit, An university’s Purpose is Pursuit of optimal educational mission and social benefit, a Student’s object is pursue growth and employment facilitation, Therefore, How to embody "multi-win", for enterprises, universities and students is beneficial to the three parties. It is the key factor to further promote industry-university cooperation smoothly.

According to many difficulties in the process of cooperation, we must take the following measures:

3.3.1 The government should be issued a long-term policy of

Industry-university cooperation as soon as possible for promoting cooperation between schools and enterprises, adopt various affirmative policies to encourage enterprises to participate in the cultivation of High-skilled talents.

3.3.2 Establish wholesome management systems between school and enterprise, further clarifying the responsibilities and status of industry-university cooperation. Enterprises and schools should be fully recognized the role of cooperation in training talents, because both sides both are organization executor and the achievement evaluators of the industry-university cooperation. At the same time, both sides should be guided by the principle of mutual benefit in the industry-university cooperation, amicably resolve problems encountered in cooperation, constantly to seek for a win-win situation, for student success and employment development.

3.3.3 Enhance Quality-oriented Education to students, Enhance occupation and career guidance, clear the students in the industry-university cooperation are not only students but also disciples, as dual identity. During the period of school students learning and practical training, besides study basic theory knowledge and grasping basic professional skill, enterprise culture and enterprise rules should also be incorporated. Enhancing students ' professional ethics, honesty, professionalism and team work spirit cultivation, and the combination of working and learning on the students of practical training, top post internship information and education, and student's responsibility consciousness, legal system consciousness, the social consciousness. Let the student realize fully to the importance of work-integrated learning, top-post internship and enhance students ' professional skills, increasing the role of social experience.

Based on integration of production, learning and research, Nanjing Normal University’s teaching practice proof that industry-university cooperation talent training model can fundamentally change the current animation education lack of practice. Such a model has a positive significance for cultivation of practical talents in universities. However, the industry-university cooperation mode has a long way to go, only needs the government, the university as well as enterprise's cooperating

fully can cultivate talents serve for the society with innovative thinking, entrepreneurial spirit and practical ability.

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Higher Education In Portugal: From Expansion To Quality Assessment

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ABSTRACT

After presenting a brief description of the Portuguese higher education evolution, since 1974 to the present day, and providing the indispensable legal framework, we discuss its structure, highlighting the actual binary nature that includes universities and polytechnics, public and private. Crucial statistics about the subsystems and the actual study programmes are also given. Finally we present the Portuguese Agency (a.k.a. A3ES) responsible for the assessment and accreditation of the study programmes imparted by Portuguese HEIS. An overview of the work carried out so far by the Agency and its assessment model is also presented.

Keywords:

INTRODUCTION

1. The evolution of Portuguese higher education in recent decades

The current Portuguese higher education system is a product of modernization, reflecting the dynamics of a complex web of societal transformations (Magalhães, 2004). In fact, Portuguese higher education institutions (HEIS) undergone profound changes for the last 40 years. As a significant expression of this we can refer not only the tremendous increase of young people that applied to higher education, but also the deep impact the process had on how HEIS are being structured and carrying out their mission.

Following the democratization movement, after the 1974 'Carnations Revolution', access to education, hitherto the privilege of a few, was wide open to everybody, as the State sought to create the conditions for equal educational opportunities for all citizens, regardless of gender, economic or social condition (Arroteia, 1996). The principle was enshrined in Article 73 of the Portuguese Constitution that states the following:

1. Everyone has the right to education and culture.

2. The State shall promote the democratization of education and the conditions for education, both at school and elsewhere, to contribute to the development of the personality and the progress of democratic and socialist society.

3. The State shall promote the democratization of culture, encouraging and ensuring access for all citizens, especially workers, to cultural enjoyment and creation, through popular grassroots organizations, associations of culture and recreation, media and other appropriate means.

The expansion of higher education Portuguese system necessarily implies two facets: the growth of the number of students and of HEIS. Acoording to Pordata[2] in 1980 there were 73.869 higher education students, while in 2012 the number

[1] Centro de Estudos Interdisciplinares do Século XX da Universidade de Coimbra – CEIS20.

raised to 311.574, which corresponds to a growth of 421%. Corresponding to this massive demand increase, we watched the proliferation of a rich diversified offer provided by the new state universities or private universities, which began to emerge on a large scale around the eighties. The system developed since then presents a significant variety of organizational structures, size and different legal nature, counting with public institutions – including Open University and military and police institutions of higher education – as well as with private ones, including the concordatary Portuguese Catholic University.

A fundamental aspect to be taken into account pertains the differentiation between universities and polytechnics. Urbano (2011, 97-98) resumes the introducing of the binary system as follows:

The political project based on the expansion and diversification of education, presented by Veiga Simão in the mid-70s, in which the polytechnics would integrate higher education with universities and other institutions of similar educational nature, was an important milestone. Actually, the polytechnic system, a surrogate of higher education short cycles, was then created by the so called Veiga Simão Reform (with Law 5/73 and Decree-Law 402/73). The change became definitively consecrated with the substitution of the designation of 'short cycle higher education' by 'polytechnic higher education', undertaken by the Decree-Law 513-T/79, which states the new system 'equal dignity in relation to university', although assigning to the newcomer specific objectives.

With the Decree-Law 131/80 and the subsequent 303/80 some amendments are introduced to the referred 513-L1/79, in order to correct certain aspects of the polytechnics' installation system. Finally, the Law 29/80 came to settle the polytechnic education network in Portugal, which integrates 27 schools in 15 national districts. Such network, strongly regionalised, was expected to be a very important factor for local development, once it could supply the trained technicians with the practical preparation for addressing the regional scientific and economic specific needs.

However the legislative framework of the binary construction of higher education, turned out to be the Law on the Bases of the Education System from 1986, which enshrined definitely the polytechnic subsystem. Nevertheless the law eventually provide an ambiguous distinction between the two subsystems of higher education regarding the objective, scientific depth and the theoretical and practical components. Supposedly conceptual education would be left to universities and pragmatic ability to polytechnics. The Law states the following in its Article 11th:

3 - University education provides a solid scientific and cultural preparation as well as technical training that enables to perform professional and cultural activities and to foster the development of the skills to conceive, innovate and produce critical analysis.

4 – Polytechnic education aims to provide a solid cultural and technical training of higher level, as well as to develop the capacity of innovation and critical analysis and of imparting scientific knowledge of theoretical and practical nature and its applications for the pursuit of professional activities.

The least one can say is that the difference, if there is one, is very blurred. Even so it means that along with the explosion of higher education access, Portugal undergone the expansion of training opportunities, arising from the creation of the new polytechnic subsystem but also due to the diversification of courses and departments in classic universities. Besides, bridging the responsiveness gaps of public services, private offering accelerated the process of higher education 'massification', bringing Portugal close to the statistical reality of other European countries.

Having surpassed the quantitative leap –which ensured a greater ease of access to higher education, and incorporated the pedagogical changes required by Bologna–, it is now evident a clear new inflection assumed by educational policies governing Portuguese higher education. Once recognized the dysfunctions resulting of an anarchic system growth, the cycle of

[2] http://www.pordata.pt/Portugal/Alunos+matriculados+no+ensino+publico+total+e+por+nivel+de+ensino-1003

'unlimited expansion' is now being closed, in favor of a growing concern with the 'rehabilitation' and the regulation of 'supply' in view of the actual social trends and the labor market demand.

In tune with what has been happening in the rest of Europe, and although we cannot properly speak of a paradigm rupture, we have witnessing a push for settling quality assessment standards in higher education. We can divide the process in two phases: the first one corresponding to an initial system of mutual evaluation among peer institutions; and the second one coinciding with the introduction of an independent Agency in 2007. The main subject of this paper is precisely to describe the system established by the implementation of the referred Agency, however we will start by presenting a sketch of the Portuguese current higher education system.

2. The Portuguese higher education system

According to the latest report from the National Board of Education (Conselho Nacional de Educação, 2012), Portuguese Higher Education Portuguese is currently maintaining a dynamic transformation, by virtue of the adequacy of their training provision to the Bologna Process, the new legal framework of the organizational and management institutions – established by the Law 62/2007– and the financial constraints that the country's situation imposed on the functioning of higher education institutions. Each of these factors has been forcing HEIS to carry out structural changes, particularly concerning their operation processes, but also regarding the ways of envisaging the fulfillment of their mission.

Figure 2 presents the current higher education Portuguese network by subsystem and institutional nature.

	Public institution	Private institutions	Total
University			
Universities	14	10	24
Universitary institutes	1	2	3
Universitary institutes (not integrated)	5*	25	30
Polytechnic			
Insitutes	15	2	17
Schools (not integrated)	6**	53	59
Total	41	92	133

Figure 1: Higher education Portuguese network (Source: Conselho Nacional de Educação, 2012)

**4 military; 1 for police corps*

***One military school (health service)*

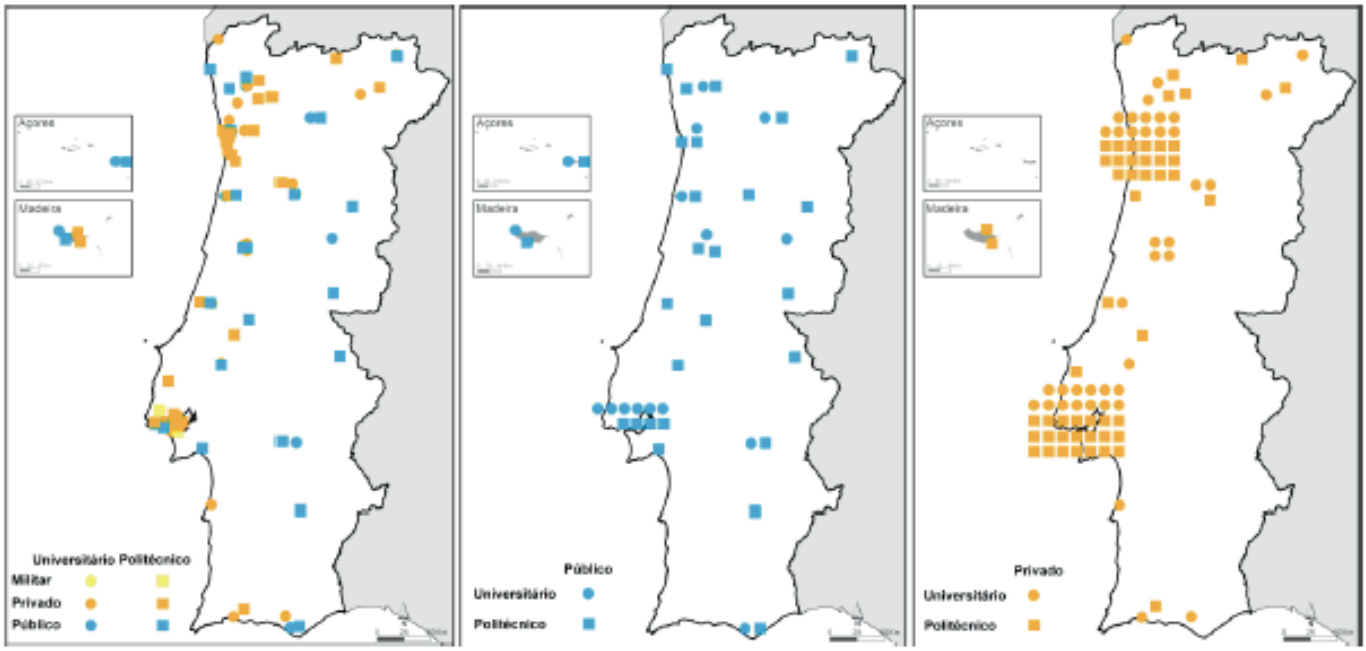
Portuguese Higher Education network consists of private establishments belonging to private and cooperative entities, including the concordat education, represented by Catholic University. Currently it comprises universities and polytechnics, in a total of 92 institutions. In 2010/11 the total number of courses in operation was 4222, of which 3321 were imparted by public institutions and the remaining 1121 by private ones (Figure 2). One should notice that overall, the private higher education sector is responsible for more than one quarter (1088 courses) of the existing educational provision. Universities major effort has focus on offering masters courses, whose weight is 54% (1553 courses) in the total existing supply of university education (2883 courses). Yet in public universities, doctoral courses already correspond to about 24%. The figures also show that nearly half (49.3%) of the courses are Masters (2nd cycle), 37.2% of degree (1st cycle) and 13.5% of doctoral (3rd cycle).

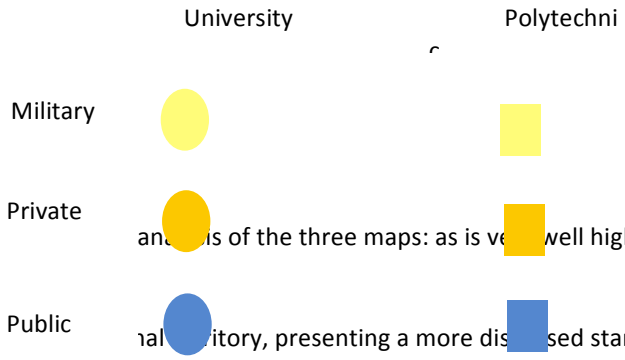
		Licenceship	Master	PhD
Public	Universitary	441	1190	512
	Polytechnic	587	404	-
	Sub-total	1028	1594	512
Private	Universitary	318	363	59
	Polytechnic	225	123	-
	Sub-total	543	486	59
		1571	2080	571
Total		4222		

Figure 2: 2010-2011 Study cycles by subsystem (Source: A3ES, 2012)

It is important that one also consider the geographic distribution of these institutions in order to construct a global perception of the system. Figure 3 gives us an overview of the actual national coverage by the HEIS' Portuguese Network.

Figure 3: 2011 Portuguese network of public and private HEIS (Source: Fonseca & Encarnação, 2012, 21)





A striking conclusion and ...is of the three maps: as is ve... well highlighted by Fonseca and Encarnação (2012, 9-10),

Public institutions c... ...al ...itory, presenting a more dis...sed standard than private ones, which focus on the Lisbon and Porto metropolitan areas and regions, the more populated. Private institutions are concentrated in large urban areas, they are in greater number but of smaller size. The average size of public institutions is about 6,800 students, while in the private sub-system the average size drops to about 920 students per institution.

A main issue, stressed by the National Board of Education, refers to a complementary factor that has been shaping Portuguese higher education system in the last decade: the quality assessment standards push. According to the above quoted report (Conselho Nacional de Educação, 2012, 154),

The restructuring that has been observed in the higher education network, in particular with regard to training provision stems from the evaluation and accreditation of study programmes undertaken by the Agency for Assessment and Accreditation of Higher Education (A3ES) that has completed in 2012 the preliminary assessment of the established programmes.

This takes us to consider in detail the referred Agency in order to satisfy our main goal with this paper.

3. The Portuguese higher education quality assurance system

The current legal framework for the Portuguese higher education quality assurance system was defined by the Law 38/2007 of 16 August. Some months later, the Decree-Law 369/2007 of 5 November came to establish and endorsed the statutes of the new Portuguese quality assurance agency, known as *Agência de Avaliação e Acreditação do Ensino Superior* (A3ES). The later referred diploma that could be considered as the organic chart of the Agency stipulates its legal nature, of a private law foundation –independent both from the government and from higher education institutions –, as well as the fundamental organic structure and the organisational structure of its operational services. Figure 1 presents the main bodies of the Agency: the Board of Trustees, the Management Board, the Audit Committee, the Advisory Council and the Appeals Council.[3]

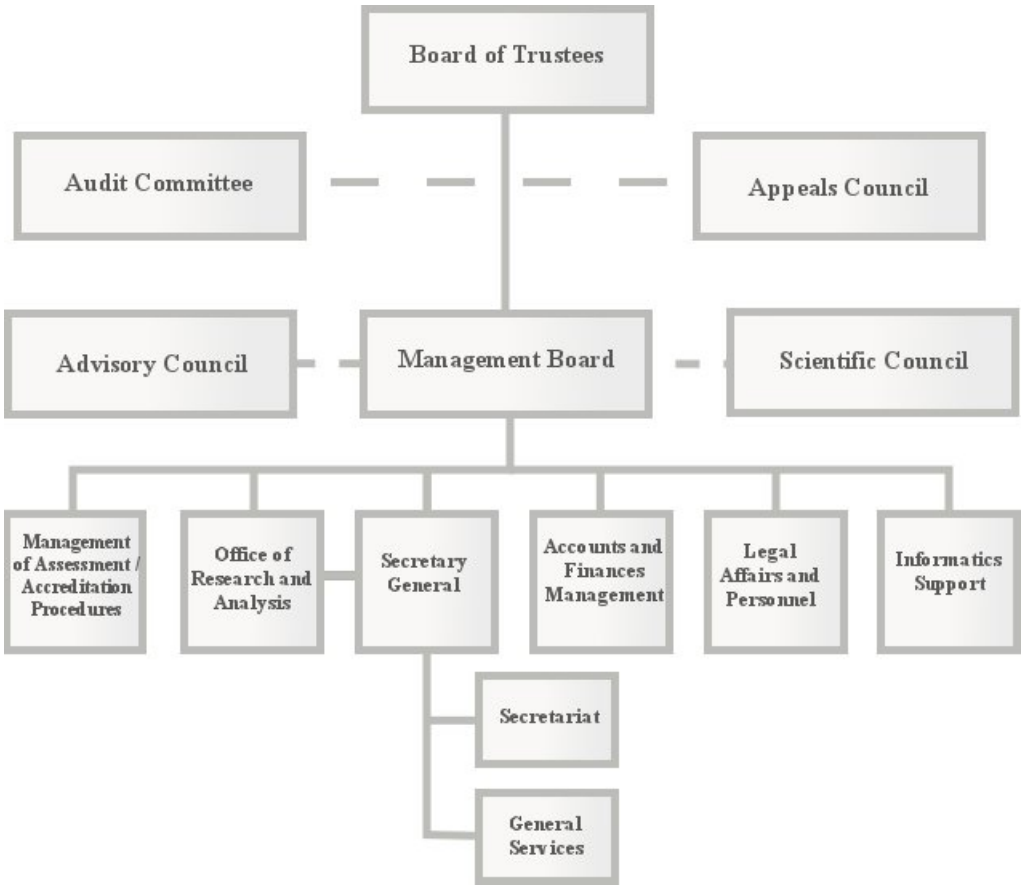
The Board of Trustees (BT) is composed of five members appointed by the Minister responsible for Higher Education in consultation with the bodies representing higher education institutions, public and private, from university and polytechnic subsystems.[4] The Board of Trustees appoints the members of the Management Board and the Appeals Council. Aside formulating views and recommendations about the operation of the Management Board, BT has the authority to reviews the Agency's Annual Activity Plan, as well as the Annual Management Report, the budget and the accounting.

[3] The members of the Agency's Management Board were appointed in December 2008 and the Agency started its operation in 2009.

[4] The period in office is five years, which can be extended in a further additional year but cannot be renewed.

The Management Board (MB) is responsible for performing all the necessary actions for fulfilling the Agency's objectives that the statutes do not commit to other bodies. It is stated to be composed by a maximum of 4 executive members and 3 non-executive members, for a 4-year term of office that can be renewed.[5] MB has the following main competencies: to start any assessment and accreditation procedure; approval of reports resulting from assessment and accreditation procedures; and to make final assessment and accreditation decisions[6]. MB can also decide to adopt the results of assessment or accreditation carried out by other quality assurance bodies, national or foreign, as well as the approval of regulations in the area of quality assurance in higher education.

Figure 4: A3ES' Organisational Structure (Source: A3ES website)



The Audit Committee has the responsibility of checking the legality, regularity and proper management of the Agency's finances. Of the most relevance for ensuring quality assessment equity, A3ES relies on the Appeals Council, which is responsible for considering the appeals against the decisions of the Management Board on assessment and accreditation.[7]

[5] Currently MB is comprised of 4 executive members and 1 non-executive member who were appointed on 18 December 2008 and then re-appointed in 2012 for another term of office.

[6] MB is not obliged to follow the recommendations of the External Assessment Teams.

[7] The Appeals Council consists of five members, appointed by the Board of Trustees, with relevant professional experience, without permanent ties to Portuguese higher education institutions, and must include people with experience in foreign counterpart bodies.

Regarding matters of higher education quality assurance and decisions making, MB can rely on the Advisory Council, which must issue an official opinion on the Agency's annual activity plan and its strategic orientation.[8] In addition, the Management Board can also take the advices of the Scientific Council, a non-statutory body integrating six foreign experts with recognised international competency in the area of higher education quality assurance (Agência de Avaliação e Acreditação do Ensino Superior, 2013).[9]

The Agency started its activity by implementing a preliminary accreditation system: institutions were simply asked to reorganise their study programmes offer by demonstrating they have sufficient resources to support the ones they wish to maintain. Thus, the responsibility for adjusting the offer of study programmes was passed to HEIS. Study programmes no longer viable should be discontinued.

Some study programmes with indicators above a given threshold were exempt from a full assessment/accreditation and were considered as pre-accredited until the start of the regular accreditation process in the academic year 2011/2012. Those which could produce sufficient evidence that their study programs complied with minimum quality standards went through a formal assessment/accreditation process by external assessment teams that included foreign experts. According to A3ES above quoted report (2013, 19):

The preliminary accreditation process allowed the testing of the assessment/accreditation procedures using a limited number of cases. It also gave a clear sign to institutions and society that the Agency could act in an efficient and effective way by removing study programmes with evident quality problems. This was combined with the implementation of internal quality assurance systems, aiming at promoting consensus between the Agency and its partners regarding a common concept of quality.

As a direct consequence of this process institutions only submitted 4379 programmes to accreditation and decided to remove 883, which represents 20,1% of the 5262 existing study programmes. Until February 2013, the Agency has granted preliminary accreditation to 3 384 programmes, while institutions have by themselves removed 1 457 programmes. Meanwhile, 421 programmes that did neither receive preliminary accreditation nor were removed were submitted to a full assessment/accreditation process with a site visit by an external assessment team and consequently 307 became accredited whereas 114 were not.

The first regular accreditation cycle is underway and will be completed in 2016, when expectedly 3384 study programmes should have been processed.

One way to transmit a general idea of how the process of review and possible approval of a study programme is carried out, can perhaps be made explicit by presenting the script of self-evaluation (a.k.a. ACEF)[10] submitted by a HEI, which is afterwards discussed with the A3ES experts' team during the on site visit to the concerned institution.

The introductory section of the script asks the proponent to characterise the request: studies cycle, degree, prevailing scientific area, number of ECTS credits required by the degree, duration of the course, access conditions, curriculum framework, cv of the responsible for the course coordination, internships and in service training and existing cooperation protocols, among others.

[8] The membership of the Advisory Council integrates representatives of higher education stakeholders, including the Council of Rectors of Portuguese [Public] Universities; the Coordinating Council of the [Public] Polytechnic Higher Institutions; the Portuguese Association of Private Higher Education; the student unions for higher education, one of them representing university higher education and the other representing polytechnic higher education; the existing professional associations; the Council of Associated [Research] Laboratories; associations representing industry, commerce and services and agriculture; trade union confederations; interested ministries; up to five specialists co-opted by the Council itself.

[9] The Scientific Council convenes once a year and produces a report containing its views and recommendations.

[10] We used the script for polytechnics, available at http://www.a3es.pt/sites/default/files/Gui%C3%A3o_ACEF_2011_2012_Poli_PT.pdf

The first section focus on the description of the general objectives of the course, their consistency with the mission and strategy of the institution and ways of disseminating the objectives for teachers and students.

The second section Relates to the internal organization of the study programme and the existing mechanisms for quality assurance, namely asking for: the description of the organizational structure responsible for the study cycle, including its approval, revision and updating of the syllabus and the distribution of teaching service; the way to ensure the active participation of teachers and students in decision -making processes that affect the process of teaching/learning and quality; the eventual structures and mechanisms of quality assurance for the study programme; the mechanisms responsible for the implementation of quality assurance and its role in the institution; the procedures for collecting information, monitoring and periodic evaluation of the study programme; the discussion and use of evaluation results of the course in the definition of improvement actions.

The third section considers the institutional available material resources and partnerships: the physical facilities allocated to and/or used by the study programme (teaching spaces, libraries, laboratories, computer rooms, etc..); the equipment and material resources used by the study programme (didactic and scientific equipment, materials and ICT); existing partnerships (national and international); the procedures established to promote interagency cooperation; the relationship practices with corporate stakeholders and the public sector.

Section fourth asks for a complete and thorough description of the teaching team assigned to the study program[11], namely: category, degree, scientific area, year that was obtained this degree, institution that conferred this degree, time basis at the institution that submits the proposal, 5 papers in international peer reviewed journals, books or chapters of books, technology development activities, services or relevant training in the study programme area and relevant work experience.

The fifth section pertains the description of the students enrolled and the study programme teaching and learning environments: regarding the former subject it asks for: gender, age, region of origin and socio-economic background (education and employment status of parents), as well as the Study cycle demand; regarding this last subject, it asks for the structures and measures of educational support and counselling on the academic record of students, the measures to promote the integration of students in the academic community, the structures and advice measures on funding opportunities and employment, the use given to the results of surveys about students' satisfaction for improving the teaching/learning process and the structures and measures to promote mobility, including mutual recognition of credits.

Section sixth section focus on the teaching objectives, the curriculum and on each syllabus record. It asks respectively for the following: learning objectives (knowledge, skills and competences) to be developed by students, operational objectives and the measuring of their degree of compliance; the demonstration about how the curriculum meets the Bologna Process principles; the frequency of curriculum revision and how is ensured the scientific updating; how the curriculum ensures the integration of students in scientific research; individual syllabus (teacher in charge and their teaching load for the course, other teachers and their teaching loads for the course, learning objectives – knowledge, skills and competencies to be developed by the students, demonstration of consistency of the syllabus with the objectives of the course, teaching methodologies– including evaluation, demonstration of consistency of the teaching methodologies with the learning objectives of the course and main bibliography); methods of teaching/learning.

The seventh section focus on the study programme results: the Graduation efficiency; Employability; Results of scientific, technological and artistic activities; Real contribution to the national, regional and local development in relation to the technological, scientific and cultural domains; Internationalisation level.

The eighth section demands a SWOT analysis of the study programme regarding: the general objectives of the course; the internal organization and quality assurance mechanisms; the material resources and partnerships; the teaching and non-teaching staff; the teaching/learning environments; the processes and results.

[11] The section also asks for the description of assigned staff.

The ninth section refers to eventual proposal of measures to improve the study programme, which must provide the following information: general objectives of the course; mechanisms and internal quality assurance organization; material resources and partnerships; teaching and non-teaching staff; teaching/learning environments; processes and results.

Finally the tenth section open up a space for proposing an eventual curricular reformulation by providing the new study plan and respective syllabus.

Someone who has went through the process, which is our case, knows it has some virtues, being one of the more obvious the fact of inducing HEIS to focus on the quality and consistency of their work. Minimum requirements are checked and an effective 'introspection' about the study programme's objectives and processes could be undertaken. Among the major adverse implications we may refer: the enormous amount of time consumed; the bureaucracy increase; and the (perhaps unintended) consequences of focusing in a shallow 'managerialistic' approach to assess teaching and learning, that could miss the essential by insisting in a quantitative and perfomartive obsession (Díaz 2010, 2012a, b & c; Cachapuz, 2009). Among other things, one could ask why teacher education has been left for so late within this process. Only very recently a report from the High Level Group on the Modernisation of Higher Education (European Commission, 2013), entitled *Improving the quality of teaching and learning in Europe's higher education institutions*, came to stress the need to immediately and effectively undertake pedagogical training for high education teachers. There is a Portuguese saying that states "first of all one must pack the house" and maybe it was this the underlying intention of the planners, however structural changes of education quality are hardly achieved without addressing the referred two aspects simultaneously.

After three years of full operation, A3ES had to correspond to Article 25 of Law 38/2007 that determines a periodic international review of the higher education quality assurance system. In May 2012, the Ministry of Education and Science requested the European Association for Quality Assurance in Higher Education (ENQA) to coordinate the review of the Agency. In Annex 1 we present the SWOT analysis provided by the above quoted report referring to the process. It gives one an insight about the essential achievements so far attained as well as about the gaps to be fulfilled. A main conclusion can be drawn: Portugal is striving to keep up the pace in higher education quality assessment.

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Establishing Sustainable Relations in International Higher Education: An Integrative Consultant Model Position

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ABSTRACT

International collaboration between institutions in the United States and abroad are as complex as they are ubiquitous. Success or failure of these endeavors may be the result of increasing economic pressures on the home institution's campus or institutional capacity of faculty to deliver programs abroad. No matter the cause, the result of a failed or unsustainable program is a negative experience for both the U.S. and international institution. Building on experiences developed over 8 years working with Middle Eastern universities, Ohio University's Global Services Program (OUGSP) and their cadre of experienced consultants have established a unique and sustainable model to broaden the institutional reach without bankrupting the institution or exhausting the capacity of its' faculty. At the center of the endeavor is determining institutional need and creating a workable long term plan to meet that need by developing a mutually beneficial budget, conducting a formative assessment and determining program requirements, developing strategies, providing professional development for onsite faculty and conducting regular program evaluation.

Keywords:

INTRODUCTION

History of the OHIO Global Services Program

The OHIO Global Services Program was established in 2010 after a four-year partnership with universities in Jordan that began in 2006. The OHIO Global Services Program (GSP) is presently in its 8th year of global partnership development. Dr. Teresa Franklin, Ohio University College of Education faculty member, and an Ohio University alumnus living and working in the Middle East, established the original partnership with a university located in the region as part of a program development effort to infuse technology into teaching and learning. This program development eventually spread to four other universities in Jordan.

The program sought to develop a High Diploma Program for teachers to learn how to integrate technology for teaching and learning. At the request of the University's Colleges of Education and Information Technology, a program was developed focused on female teachers in the primary and secondary systems in Jordan who were the least trained in the use of technology. The University felt that help was needed in the development of the curriculum and contacted the Ohio University alumnus who approached his alma mater to provide support in this endeavor. The result was the development of a High Diploma in Information and Communications Technology for Education (ICTE). In the fall of 2006, the ICTE program was approved and the program admitted students.

After the curriculum and program of study were developed and content identified by Ohio University, the ICTE program was reviewed by the deans of the College of Education and College of Information Technology and approved. The curriculum was then sent to the country's Ministry of Higher Education for approval. Once approvals were obtained, Dr. Franklin and a team of faculty arrived at the University and conducted professional development with the institution's faculty who would teach in the ICTE program. Seminars were designed to help the faculty develop syllabi and course materials for their classes, and gain a pedagogical understanding of working with teachers and technology. Each semester for two years, Ohio faculty went to Jordan to conduct professional development and each year Ohio University sent a team of program evaluators to track the progress of the faculty, students and program. From this one effort the OHIO Global Services Program (GSP) at Ohio University was born.

The OHIO Global Services Program Today

Today the OHIO Global Services Program is located in the Vice President's Office of Global Affairs. The GSP is operated as consultant services for international institutions of higher education, business and industry, and technology transfer. The focus of the program is three-fold: (1) develop a consultancy business to support the development of international higher education programs, (2) enhance the global presence for Ohio University, and (3) provide supplemental post-graduate educational experiences for recent graduates, emeriti faculty, and administrators. The GSP has as its mission and vision:

Mission: The OHIO Global Services Program is a consultancy service within Ohio University with the purpose of providing expert assistance to international institutions of higher education, business and industry, and to facilitate technology transfer to international partners.

Vision: Building on relationships with highly successful Ohio University international alumni, faculty and students, the OHIO Global Services Program will create an internationally recognized brand of quality advisors supporting a wide variety of dynamic international institutions of higher education that produce quality graduates that will change the world.

The OHIO Global Services Program is one of three major components of the office of Global Affairs: (1) The Global Leadership Center (GLC); (2) Global Internship and Mentorship (GIM); and (3) The Global Services Program (GSP). Each of these components provides a different type of outreach to the international community.

The **Global Leadership Center** (GLC) provides a certificate to undergraduates at Ohio University that seek to add an international component to their undergraduate degree program. This 19-hour *GLC Certificate* includes both coursework and an international collaborative consulting project conducted in May of each year. The program also offers the opportunity for students to participate in an international internship, employment, or study abroad. A *GLC Cultural Awareness Certificate* is being designed to provide opportunities for both Ohio University students and international students to work together online to learn about each other's culture. This certificate would be lead by native English language speakers to help international students improve their English speaking abilities as they work with Ohio University students to learn about each other's culture.

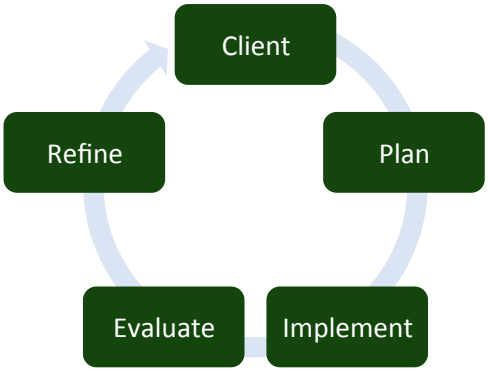
The **Global Internships & Mentorship** (GIM) program, is in the developmental stage, and will be designed to provide post-graduate employment in an international arena. The GIM seeks to place recent graduates in paid internships for up to 2 years with corporations, universities and within industry. Ohio University alumni and emeriti faculty will mentor interns to enable knowledge and technology translation to facilitate global development within the intern's country or employment.

The **Global Services Program** (GSP) is responsible for a much broader range of services within the international arena with targeted work in higher education, business and industry, language learning, and talent placement. Within institutions of higher education, the GSP consults on program design and capacity building, program evaluation, university and program accreditation and specialized professional association review (SPA) and quality assurance review through implementation of performance assessment and key performance indicators (KPIs). Within business and industry, the GSP can provide consultation in strategic planning, as well as the services associated with the aforementioned quality assurance review. Finally, the GSP designs and develops cultural awareness programs to be delivered on the Ohio University campus to visiting clients. Each cultural awareness program is specifically tailored to the needs of the visiting delegation. In the past, countries and universities have sent their teachers from K-12 and higher education to a 10-day workshop that included English speaking activities, courses in the use of technology for teaching and learning in ESL environments, linguistics teacher preparation and American cultural activities. This has at times lead to placement of talent in those countries to continue the opportunities to learn English.

The C-PIER Quality Cycle

The OHIO GSP developed and utilizes a quality assurance process called C-PIER. The C-PIER process was created using W.E. Deming's (2000) PDCA cycle of plan, do, check, and act and is designed to reinforce the organization's focus on quality. The C-PIER process, seen in *Figure 1: C-PIER Quality Assurance Cycle,* contains the following: (1) Client, (2) Planning, (3) Implementation, (4) Evaluation, and (5) Refine. This quality assurance cycle represents the basis for consulting with clients who approach Ohio University seeking higher education services at all levels.

Figure 1: C-PIER Quality Assurance Cycle.



PROCESS

An examination of the component parts of each module demonstrates the quality improvement nature of the C-PIER model. See *Figure 2: C-PIER Process* for a visual representation of the process in flowchart form.

Client

The C-PIER process is based on recurring quality engagement with clients. There are two methods of client identification and recruitment. The first method is through an introduction by a third-party, often a graduate of Ohio University that has an interest in developing a relationship between the two entities. Third-party introductions may be conducted on a fee-for-service basis or at no cost. Fee-for-service introductions must be accounted for in budget planning. Often, the third-party is located within the global region of the client and contributes to project success by serving as "feet-on-the-ground." Third-party service providers often provide cultural orientations and translation services. The second method of client introduction is more direct, and constitutes the potential client contacting the University directly. This method often results from institutional reputation or past work in which the client has reason to believe the institution may be helpful in solving a particular issue or project. On rare occasions, Ohio University personnel may here of a potential client is in need of some assistance and initiates first contact.

Once the client is identified, contact is made by the OHIO GSP Director to determine the project's scope. Depending upon the complexity of the project, this contact may be facilitated via phone call, e-mail, or in more complex situations, onsite face-to-face. At the completion of the initial meeting, the GSP Director will conduct a Project Viability Assessment (PVA) to determine the assets need to produce the best probability for a successful completion of the project. Elements of the PVA include: identification of potential consultants; tasks associated with the project; a budget that includes indirect expenses required by the institution, and direct expenses such as consultant compensation and travel, supplies, translation and finders fees, and cultural experts; revenue necessary to offset these costs; and a timeline for project implementation and completion. During this portion of the process, potential consultants are identified and contacted regarding their possible interest in the project. Consultants are selected based on their knowledge, skills and experience as well as their interest in global consulting. Consultant credentials are verified and vetted by the GSP Director before submitting vitas to the client for final approval. The process is finalized when a timeline is developed and all tasks are placed into project management software that produces a Gantt chart that produces a critical path sequence of project events.

The final stage in the PVA is the determination to proceed or withdraw from the project. Based on consultant and time availability, cost to benefit ratio, and connection to the institutional mission, the OHIO GSP Director will determine if the project should proceed to both the VP for Global Affairs and the client. Once the project is approved, the Director will develop and forward a Service Agreement defining the scope and sequence of the project to the client and VP for Global affairs for signature, prior to initiating the planning stage.

Planning

Much of the preliminary planning was completed in the PVA stage of project development. The planning stage will verify the information collected during the PVA and formalize the processes to be used in the project. Tasks and the project timeline will be revised in the project management software as necessary. Consultants will be contacted, placed under contract and travel arrangements for site visits will be initiated. Relevant materials provided by the client for use in the project will be forwarded during the planning phase and a list of other documents and websites will be generated.

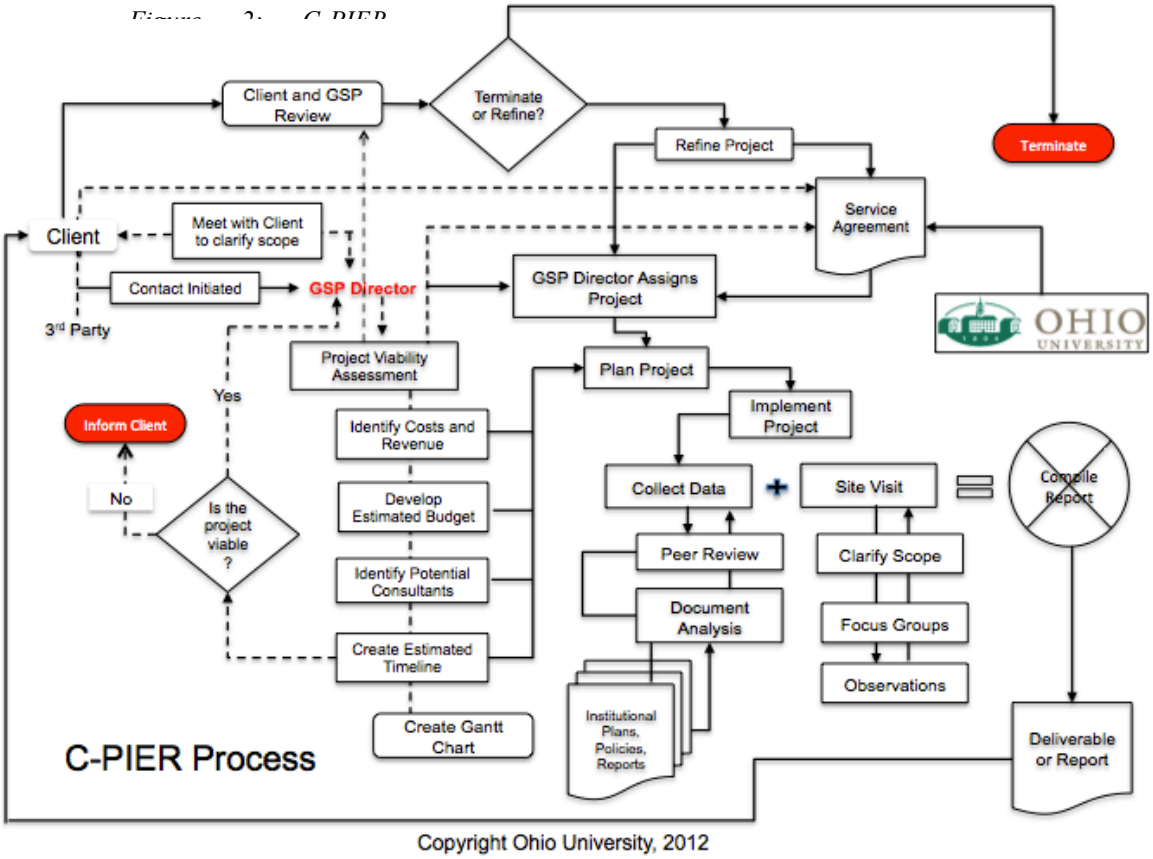
Implementation

There are two stages of project implementation, data collection and report production. The data collection stage is divided into off-site and on-site work. Off-site data collection, conducted before the site visit, consists of a thorough document analysis and peer review. Materials provided from the institution will be supplemented by other documents found on the web and within libraries. When applicable, a review of the relevant literature will be conducted. A summation of the review will be created and presented during the site visit. The initial site visit is used to verify the conditions identified by the client, conduct focus groups and interviews, present the project scope to stakeholders, and enhance the team's cultural awareness. An exit brief, with preliminary findings and areas to consider, is presented to the client and selected invitees.

Upon return to Ohio University, the collected data is analyzed and summarized, and a report is produced. The final evaluation report is forwarded to the OHIO GSP Director for final review and edit. Once approved, the report is forwarded the to the client for review and comment. Results from the client comments are utilized in future stages or phases in ongoing projects.

Evaluation

Once the first phase action report is delivered to the client, OHIO GSP Director and the project consultants conduct an informal after-action discussion to evaluate the project's processes and progress. The evaluation consists of a review of the project's administration, including travel arrangements and payment status, assessment of time commitments and recalibration of requirements, comprehensiveness of data collection, and accuracy and clarity of report writing. The purpose of the evaluation process is to improve the current project as well as provide guidance for future projects.



Refine

Process refinement consists of review, reinforcement, and recalibration. As stated in the **Evaluation** stage, evaluation is critical to the success of OHIO GSP. As a tool of evaluation, targeted review produces positive and productive program change and is essential to the continuous quality improvement process. In addition to the project evaluation, all aspects of the program are reviewed at the end of stage, phase or conclusion of a project. Reinforcement efforts focus on both the client and the process. Continual contact with project partners, including the client, consultant and third party service providers builds a relationship of trust, critical to operational success. Effective processes are reinforced while ineffective or inefficient procedures are refined or eliminated. The result of reinforcement is the development of a more efficient and effective program. Recalibration efforts are focused on program efforts during the planning and implementation phase. While each program has its own unique elements and requirements, task analysis is conducted in a more general way. The primary method to modify and adjust tasks related to budget, resource allocation, revenue, travel and consultant time is to recalibrate the standards and criteria in which the original assumptions were made.

CONCLUSION

The OHIO Global Services Program is uniquely designed to respond to the evolving needs of global higher education. Engaging with institutional alumni to provide in-country support and Emeriti faculty and staff, as well as faculty from other institutions to serve as project consultants, has created a powerful and dynamic organization. Flexibility and agility allows the program to respond to emerging needs of international institutions while meeting its vision of creating an "internationally recognized brand of quality advisors supporting a wide variety of dynamic international institutions of higher education that produce quality graduates that will change the world." The C-PIER process reinforces the program's commitment to excellence and provides an example to clients of the importance of engaging in self-reflection for continuous quality improvement.

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Doctoral studies in global time and change - female doctoral student and individual lifecourse in Finland

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ABSTRACT

Multiple global changes in the form of knowledge and the change in the doctoral education create the need to examine the current practices of doctoral degree. The change forces discussion about the future of doctoral education and the future of the prospective doctors. The doctoral education has to answer the demands set for it. Forming a comprehensive understanding requires an examination at the micro and macro level.

In this article I examine the lifecourse of the under 40-year-old female doctoral student with a family and the significance of doctoral studies at the individual level. I concentrate on the personal lifecourse experiences of the women and on the chronological stories which are based on them. It is interesting to examine the meeting of the public and individual lifecourse and their constant dialogue. The article is based on my doctoral thesis research in education.

Keywords:

INTRODUCTION

In this article I examine the lifecourse of the under 40-year-old female doctoral student with a family and the significance of doctoral studies at the individual level. In the article I concentrate on the personal lifecourse experiences of the under 40-year-old women with a family who study for the doctoral degree, and on the chronological stories which are based on them. In the examination temporality, continuity and comprehensiveness of the lifecourse stages are emphasized. With my definition I direct attention to the lifecourse of women who are living the busy years and to their thoughts concentrating on a family, doctoral studies and work. It is especially interesting to examine the meeting of the public and individual lifecourse and their constant dialogue. The old traditions and norms are no longer suitable for a lifecourse that is individual and coloured by choices. The everyday of the female doctoral student is constant choices according to the individual values.

The article is based on my doctoral thesis research in pedagogy, "The everyday life, lifecourse and future thinking of the female doctoral student with a family". 12 under 40-year-old female doctoral students with a family from three Finnish universities participated in the study. The material is acquired through narrative theme interviews and the analysis of the material is thematic content analysis.

Doctoral studies in time and change

The doctoral students in Finland and even internationally form a heterogeneous group. The graduating doctors meet a very different reality and future compared to how they were in earlier decades. The increase in the number of doctors, the change in the form of information and knowledge and the change in the doctoral education create the need to examine the current practices and grounds of gaining a doctoral degree. The change forces discussion about the future of doctoral education and the future of the prospective doctors. The doctoral education has to answer the demands and expectations set for it, these being set also by the future doctors. (Boud & Lee 2009 1-4.) The subject of the study is rather a topical one internationally and nationally. Often the studies examine doctor education from the macro level with the emphasis on the internationality, financing, effectiveness or the field of science. Doctoral education is a part of the society's operation, which is affected by other development. Forming a comprehensive understanding also requires an examination at the micro level and making visible the

doctoral student's experience. Attention ought to be paid to the everyday and concrete level of the operation.

The lifecourse of the under 40-year-old female doctoral student with a family should be examined and an attempt has to be made to understand it as a whole and temporally continuous one, combining the past, the present and future stages. In the lifecourse, individual factors and ones representing the continuity, of which one significant one is the doctoral studies, are construed. The doctoral studies have become more ordinary and within the reach of an increasingly wider group. The doctoral studies are a multi-dimensional process in which the different starting points, contexts and objectives build different entities, everyday life and expertise. In the lifecourse of the female doctoral student with a family, the doctoral studies are individually placed in the ordinary entity. The doctoral studies are not separate from other life and contexts, but they project their wide reflections both on to the ordinary lifecourse of an individual and to the future. At the individual level, the doctoral studies stand for a target-oriented and long-term effort. The expertise that is achieved through the doctoral studies is valuable to the individual, business and society.

The high-quality skills and the centrality of knowledge are emphasized in many ways in the life of an individual and at the same time also on a larger scale, such as in the global economy. Global and social changes are reflected in the universities and in the doctoral education. The productivity of universities is measured in the degrees, publications, quality, internationality and eventually in the money. In Europe the higher education has been unified, along with others, with the help of the Bologna process and Lisbon Strategy and both have a significant role in the doctoral education (Bitusikova 2009, 200).

Expectations which grow internationally are continuously set for the doctoral education. The objective alongside the comparability of degrees is the promotion of mobility, the shortening of graduating times and the education which is of higher quality than before and which meets the demands of different employment quarters. The starting point is an improvement of the appeal and competitiveness of European science in relation to the other continents. In spite of the common aspirations, the doctoral education is still heterogeneous nationally, according to the university and even according to the field. The objective of the universities and the society's interest is to produce even younger doctors, which the universities are directed towards by financing according to the results and by intensifying the practices in supervision (Julkunen 2004).

The changes also touch Finnish science and the doctoral education is in a central position in its development. In Finland the doctoral education has become more common and it has become feminized during the last decades. In Finland about 1600 doctors graduate every year, of whom more than half have been women since 2007, however, different fields have the majority of men or a majority of women (Hiltunen & Pasanen 2006). Systematized effectiveness and even better relevance to the working life are sought after for the doctoral education. Free doctoral education is arranged in each of the 16 Finnish universities and in principle it is available for everybody, however, the selection for doctoral education is based on the earlier academic performance and on meritorious research plan (Stubb, Pyhältö, Soini, Nummenmaa & Lonka 2010). In spite of the aims for equality the heritability of the level of education is still strong. According to the OECD report (2012) 68% of the Finnish university students' parents are highly educated.

The doctoral degree qualifies the doctor to the different specialist tasks of working life better than before and also the demands of working life towards the doctors increase continuously (Dill, Mitra, Jensen, Lehtinen, Mäkelä, Parpala, Pohjola, Ritter & Saari 2006). The work is often creative specialist work, in which learning new things and at the same time modifying their own skills and occupational identity are a natural and a continuous process. Of the future doctors only a fraction continues their working career in academic tasks, the majority moves to or continues to be employed in other lines of work (Boud & Lee 2009; Baker & Lattuca 2010). According to Julkunen (2004b, 80), leaving the safe context of university for the actual labour market may require more courage and creativity than staying in the familiar environment of the university. The working life does not totally realize the doctors' potential yet, nor do the doctoral students and doctors themselves fully comprehend their wide possibilities. The universities have become aware of the challenge and have taken action to improve the doctoral students' readiness for working life. The cooperation of the universities and economic life is a good option for both the different operators and the students (Aittola 2002, 128-129). According to a general trend the position of research knowledge and skills is emphasized, of which examples are the increased knowledge requirements and the importance of innovations.

Extensive global and social changes become widely realised in the different contexts of life, such as in the women's status in the university, working life and in families. With the development in equality, both men and women earn the appreciation equally at home as well as in the working life (Kiianmaa 2012). The change requires wide adaptation and comprehensive examination. In the families of two careers the challenge is, for example, the insufficiency of time and the constant negotiation for the use of the little time that there is (Julkunen 2004, 116-118; Tammelin 2009.) Nowadays, having a family does not automatically weaken the woman's career opportunities because the individual arrangements are possible. The family is formed of the individuals and of the dynamics of their choices and agreements.

Alongside the changes and objectives, an individual, the doctoral student needs to be considered. In an individual lifecourse the doctoral studies are a significant part of the whole. The diversified lifecourse is strongly a personal project, which consists of different training, relations, networks and family. The diversified lifecourse and the expanded possibilities require

matters to be examined as a whole. Orientation to the future by combining the different areas of life opens a wider perspective to life and to adulthood. The different life choices and decisions are the everyday combining of the different areas of the life. (Puhakka 1998, 204-205.) Each decision opens or closes doors, on the other hand the opportunities to reconsider the decisions reduce risks and provide the opportunity for different experiments. Even if the plans do not even come true as such, an attempt is made to adapt to the prevailing conditions and to experience the matters as proceeding according to their own plans (Nummenmaa 1996, 103). Beck (1992, 92-94) emphasizes that the egocentricity is typical when designing one's own life. People want to develop their life as the one they desire and to operate within their own interests and objectives.

Under 40-year-old female doctoral students in particular have simultaneously several projects which require time and input in their lives. Combining work and family life as well as the challenges with time usage are current and significant subjects from both the individual and from society's point of view. Big and significant choices become concrete in everyday life and tell more in detail about the value choices that have been made than the celebratory speeches, visions and strategies. The unstable education and labour markets as well as globalization have promoted the modernization and the weakening of traditional values. The earlier sets of norms and the common traditions have become looser, in which case individuality is emphasized. The rapidly changing situations require increasingly flexible methods of adaptation. (Aittola 1998, 172-173.) In figure 1, I present the central starting points and concepts for the study.

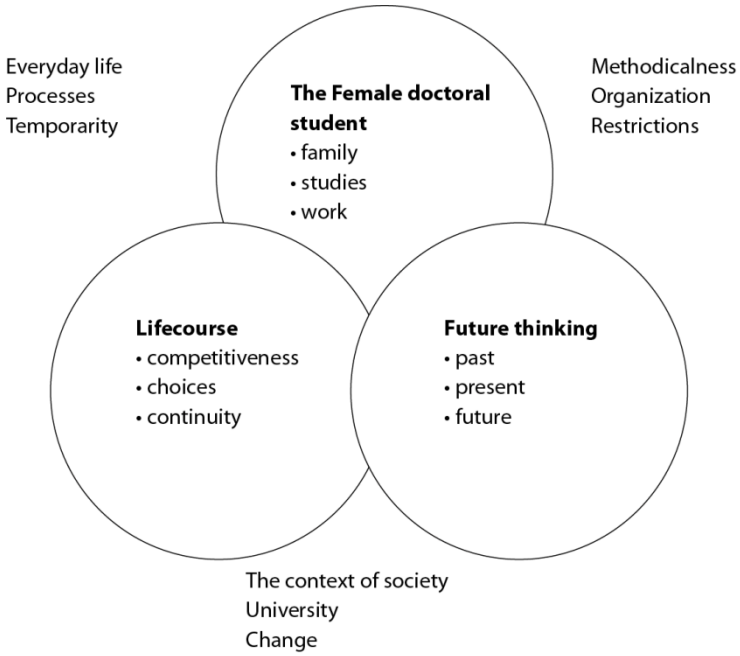

FIGURE 1. Central starting points and concepts for the study.

Methods and procedures

The research material consisted of 12 narrative theme interviews. The female doctoral students in the research carried out their studies in three different Finnish universities and were at different stages in their studies in different fields. The analysis of the material was the content analysis of themes which develop hermeneutically as well as narrative classification stemming from the themes and constructing of types of stories. The study is placed in the area of the pedagogics and represents theoretically and methodologically the pedagogical-sociological lifecourse research examined in a hermeneutical manner as well as applying a phenomenological and narrative approach.

Doctoral studies as a part of the wholeness of the lifecourse

The operator who is central in the doctoral studies is a human being, an individual. Often doctoral students are perceived as a homogeneous group: their role is marginal and narrowed to the context of studying. In reality the doctoral students come

from individual starting points and they have individual objectives. The mission of this article which is based on my doctoral thesis is indeed to bring out the experiences of a female doctoral student with a family more comprehensively, the individuals have several significant roles simultaneously, the doctoral student's role is only one role amongst many others. The experiences of an individual consist of different starting points, of everyday life and of expectations for the future. In the examination of doctoral education attention must be paid simultaneously to the different levels of operation: the international cooperation and the uniform objectives create a large framework for the development, the national operation combines longer term major definitions of policy and the levels of everyday operation. At the individual level carrying out the major lines is eventually everyday actions. The concrete level and its development are the dialogue of both major and smaller lines.

The core objective of my study is to understand the continuity of the lifecourse and future thinking of the female doctoral student with a family. The results of the study conveyed the comprehensiveness and continuity of the lifecourse told by the female doctoral students with a family. The female doctoral students constructed their life actively as directed by their family and their doctoral studies. The lifecourse is temporally continuous and comprehensive, the different factors and wholeness are in the interaction among themselves, which took shape creating both likenesses and individual features of lifecourse as told personally by the women.

The part stages of lifecourse for the women studying for a doctoral degree were fairly homogeneous. Families of their childhood and early school years were described most often as ordinary. The academic careers began varyingly individually and the early stages were reflected in the future stages of academic and other life. A comprehensive style of operation and a way of organizing everyday life that were adopted during the master's degree studies became fairly static. In the whole lifecourse the time of establishing a family in relation to the stage in the studies was also reflected. The ones who started a family early adopted in their circumstances an efficient organization and diverse activity. The significant separating factors proved to be the starting motives of doctoral studies and understanding the demands of the process of gaining a doctoral degree. The motives of examined female doctoral students for starting the doctoral studies were fairly light: over half started the doctoral studies directed by external motivation factors, such as in order to avoid unemployment or because of the lack of other alternatives. The different factors were tightly connected and formed a dynamic wholeness of lifecourse. The past stages of the lifecourse had significance in the present and future of the lifecourse.

According to the results, reflecting on the starting motive of doctoral studies was useful and when the doctoral studies proceeded, its development deepened the experienced meaningfulness and commitment to the studies. The superficial motive was associated with the serious considerations of discontinuing the doctoral studies and with difficulties in everyday organization. If the doctor studies were regarded as meaningful, then the everyday organization also ran well. All the female doctoral students experienced everyday challenges and over half had considered discontinuing their studies at some stage.

The method of undertaking the doctoral studies determined the process of gaining a doctoral degree, the forming of the everyday life's conditions of lifecourse and also partly the future for female doctoral students with a family. The doctoral studies that were undertaken as work fitted well into family and other life. Studying alongside other life threw the everyday life into busy performing and into constant organizing. The study showed that the time of starting the family in relation to the stage in studies was significant: the ones who had begun the family early carried out doctoral studies part-time and drifted to the margins also in working life. All the female doctoral students organized their everyday life to the advantage of the family but did not sacrifice themselves. The family supported as well as challenged the doctoral studies.

The results showed that gaining a doctoral degree was an intermediate stopping point in the lifecourse of a women with a family. After graduating as a doctor new challenges would dawn. The future women doctors were especially worried about their employment in the uncertain labour market of temporary employment. None of the women in my study had permanent employment. To the ones who had studied in addition to working, getting employed was a constant challenge and a primary objective. Gaining a doctoral degree is a big threshold to the ones who had undertaken doctoral studies as their work: the work and the studies would end simultaneously. The women appreciated the work experience they had gained and regarded it as useful from the point of view of future employment. One did not want to expand the proportion of work in the lifecourse and everyday life in the future, their other life also was valuable according to the female doctoral students. Other challenges for the future for the women with a family were internationalization, competitiveness and the conflicts to do with use of time. Meaningfulness, versatility and peacefulness were expected for the future. The opportunities for independent choices were regarded as important.

The prospective doctor´s individual lifecourse

Based on the findings of the study, it is important to personally understand the lifecourse continuity. Comprehensive process of gaining a doctoral degree consists of individual conditions, motives and objectives. The past stages of the lifecourse,

such as the formed idea of the demands of the studying, the nature of the acquired work experience and vision of the development of their own career are reflected in the choices in the present and in the possibilities perceptible in the future. The hopes and objectives for the future direct the operation of female doctoral student in the present.

The doctoral studies and the family are in a significant position in the construction of the lifecourse and everyday life of the female doctoral student with a family. The family and doctoral studies determine the overall context of lifecourse as most central and become attached to the chronological continuum: to past, present and future. The doctoral studies and graduating as a doctor are not only a separate degree but they have the wider effects of which a doctoral student must be aware of from the beginning of the process.

It is beneficial for the one considering the doctoral studies to clarify the stages of doctoral process, advantages and disadvantages beforehand. Studying comprehensively both independently and with supervision helps to form a comprehensive understanding. The female doctoral students of the study were satisfied with the supervision they had received. However, they perceived the supervision to be connected narrowly only to the doctoral thesis. With wider supervision, the mentoring and closer working relationships could be used to strengthen the development of expert identity, reduce the experienced uncertainty regarding employment and relevance of their own skills in working life. Tighter forms of cooperation between economic life and the university would reduce prevailing uncertainty between different quarters. The wider awareness of the common objectives and of the current state is an advantage for all involved in doctoral education, economic life, university and an individual.

Studying for the doctoral degree is, in spite of its far-reaching framework and its high objectives, operation at the individual level which has individual starting points, objectives and contexts. Doctoral studies are undertaken in a number of different ways. It is advantageous for the doctoral student to realize the demands of the process, the available resources, the opportunities and challenges unfolding in the future and to clarify their own objectives. For reaching the objectives and the effectiveness of the doctor production the supervision has risen in a central position (among others; Lautamatti & Nummenmaa 2008; Soini 2008; Sainio 2010; Pasanen & Hiltunen 2006, 36) Simultaneously the effectiveness of the doctoral studies, quality and the significance of supervision are being questioned by the sporadic, uncertain and meagre financing of doctoral studies.

The future of the female doctoral students of my study appears partly steady and continuous, partly changing and uncertain. The family represents the continuity, the studies and work are the changing factors. The female doctoral students' attitude towards the future is mainly trusting, it is believed that things will work out one way or another. The female doctoral students determined as turning points of the lifecourse establishing the family, and graduating as a doctor in the future, as well as the future employment.

Conclusion

The doctoral studies have a deep significance for the individual as well as for society and economic life. Acquiring the doctoral skills in efficient, meaningful and productive use is a common advantage and objective. The changing contexts need to be paid attention to also in the doctoral education. One possibility could be increasing the transparency of different paths of gaining a doctoral degree. Young people aiming for a career in research could continue in the education pipeline to the doctoral degree and graduate to the researcher's tasks. Another route to become a doctoral expert directed to adults would contain a stronger contact with the working life. The graduating expert doctor of the working life would have a strong link to working life during the process of gaining a doctoral degree and after it, an awareness of its demands and expectations. In practice this kind of trend can already be perceived, but in the education and also generally, different doctors are not yet identified. The criteria of the selection for the doctoral education can be tightened and include the claim for a more profound understanding. The doctoral education must not be a choice to fill a lack of choices.

The doctoral studies overlap comprehensively with the lifecourse. The female doctoral students with a family arrange and organize their everyday life actively and individually within the conditions that prevail. The everyday life conditions form the wholeness in which the family, doctoral studies and work are at the centre. The organization of everyday life was determined essentially whether the doctoral studies were undertaken as work or in addition to other life. The doctoral studies that were undertaken as work facilitate everyday life, but being paid for the work does not automatically guarantee experienced meaningfulness. Internal motivation towards the doctoral studies and the positive future which is taking shape through them are reflected positively in the everyday organization. In the individual lifecourse the different factors and stages weave into wholeness. The surprises and unpredictability are part of the lifecourse but rapid changes require continuous planning and spontaneous activity. In the lifecourse of the female doctoral student with a family there are both the factors which represent the continuity and the ones representing the anticipated and unpredictable breaks.

In the different lifecourses the doctoral studies are in any case a demanding project, where the commitment to them is

a precondition for success. The female doctoral students experience enthusiasm and commitment towards their doctoral studies even though the future is open and new challenges arising. The doctoral degree makes the participation in the competition possible and guarantees that the competition steps up. (Saarinen 2003, 16, 86.) The process of gaining a doctoral degree is a target-oriented systematic operation which is directed to the future (Lautamatti & Nummenmaa 2008, 107-108). The individual doctoral student needs to realize wider lines of development, to perceive oneself realistically as a part of the wholeness, to draw up the objectives and the plans of the future. If one does not perceive the prevailing trends or know one's own direction, they may be faced by an unclear jungle of demands, the conflicting ideas and lack of clarity of the future possibilities. (Boud & Lee 2009, 1-3.) The doctoral students' thoughts which project to everyday life or to the future have not been really studied, their voices are in the background and in the adaptable role in the studies (Leonard & Becker 2009, 71). However, the major lines and the small implementors should form a dialogical wholeness and pay attention both in the name of meaningfulness and effectiveness.

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Good Teaching Practices Of Music Teachers In Secondary Education: A Multiple Case Study

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ABSTRACT

In this work we show the most significant features of our research which has been accomplished with the collaboration of the Research and Scientific Politic Department of the University of Valencia. It has been elaborated following a case study methodology, and it analyses the practice of six secondary school teachers who have been able to wake up their student's interest by using an innovative and contextualized methodology that provokes a significant learning.

Instruments for data recompilation have been: in-depth interview, non-intervened observation and the analysis of the multimedia documents produced during their lessons. From the analysis of these data we have reached to the following conclusions among others: firstly, independently of the socio-cultural context and even using different methodologies, these teachers are obtaining good results due to their personal implication in the development of students-based activities; and, secondly, teachers' vocation and motivation are the basis for a good teaching professionalization.

Keywords: Good practice, secondary, music teaching

INTRODUCTION

In this articles I will briefly describe the Research Project called "Good Teaching Practices of Music Teachers in Secondary Education: a Multiple Case-study", which has been financed by the Vice-president of Research and Scientific Policy of the University of Valencia (Spain).

This study surged from the necessity detected by our group of teachers of the Secondary Master Degree to have more knowledge on the practices fulfilled by those teachers of secondary that had a long and consolidated trajectory, in order to show them later to their students of the mentioned degree. This way, we could be closer to the teaching reality at the same time we would have a bank of didactical resources to be part of the different subjects included in the specialty of music.

By means of this Master Degree, students graduated in different fields are trained to be teachers in the secondary education stage. In it, there is a specialization to be teacher of music for high schools, and the main part of these students comes from the Superior Conservatory studies. Nevertheless, training received at the conservatory is oriented to the musical creation or interpretation but it is not valid for teaching. If we add that secondary stage is compulsory for all the teenagers, training at the conservatory is even less adjusted to this educative context.

1. THE CONTEXT

1.1 University of Valencia

The University of Valencia of today is the outcome of more than five centuries of history that have led to the accumulation of knowledge and unique documentary treasures, making it one of the top Spanish universities. In the thirteenth century, higher education was established in the city of Valencia thanks to King James I of Aragon who, in 1245, had obtained a Studium Generale institution from Pope Innocent IV. However, not until 30 October 1499 did the Juries of Valencia draw up the Constitutions of what was to become the first University of Valencia: a university authorized by the Papal Bull on 23 January 1501, signed by the valencian Pope Alexander VI and by the royal privilege of Ferdinand II the Catholic. It was granted on 16 February 1502.

For more than 500 years, the development of the University of Valencia has run in parallel with the development of the city and has been an inextricable part of its urban fabric, creating spaces for teaching, research, creation and dissemination of

culture and science as well as knowledge transfer. Initially dedicated to the studies of medicine, humanities, theology and law, the past two decades have suffered an accelerated process of transformation and growth, incomparable to earlier periods. This significant effort has turned the University of Valencia into a modern, global university. It has become a leader in the application of new technologies, connected to important international scientific and teaching networks.

The University of Valencia has become one to the top five scientific centers in Spain thanks to the wide range of teaching and research activities offered in all areas of knowledge (basic sciences and engineering, health sciences, educational sciences, humanities and social sciences, economics and law) and its commitment to excellence.

1.2 The Master's Degree

The current legal regulations in Spain establish that in order to access to the regulated professions of professor in the different fields of secondary education, the students must have a graduate, or equivalent, qualification, and a pedagogical and educational training with the master's degree level. The Master's Degree in Secondary Education Teaching by the University of Valencia provides this professional authorization required by the educational Administration to practice the previously mentioned professions in secondary education public and private centers. This master's degree is structured in different specialties corresponding to the current specialties of the secondary education.

The Master's Degree provides both a basic training to the teaching practice in the secondary levels of the educational system, and a specific training to one of the areas in which the previously mentioned professions are structured. The qualification also includes a work placement period in educational centers.

All classes, including the tutorials for the practicum and for the Master's degree final project, are taught by the teaching staff of the corresponding university department. If more teaching staff is needed, the call for new places will be published in the DOCV (Official Journal of the Valencia's Community). The information about these places is available on the Human Resources (PDI) website of the University. Teaching staff from the secondary schools –within the framework of schools and tutors determined by the Valencia's Department for Education– and from the corresponding departments of the University will participate in the tutorials for the practicum. The regulations for postgraduate studies confer the Master's Academic Coordinating Committee the competence to approve the teaching staff who will participate in the Master's degree.

3. THEORETICAL FRAME

Broadly and very synthetically speaking, we built the theoretical framework on the basis of the different existing opinions about what was the degree required for teaching music in secondary and baccalaureate degree in this specialty faculty, whether through a degree disciplines of musicology or history and the science of music or Conservatory. Other possibilities in the public service since they can also choose another specialty graduates, whenever they pass tests in the competition specific opposition to this field of knowledge and acquire specialty music (Oriol, 2005) following. Adaptation to the European convergence process and according to the proposals submitted by the Conference of deans and directors of education and teaching this training is done through the Master Teacher of secondary education, which lasts one academic year with a load of 60 ECTS credits and common to all the specialty generic subjects and specific materials for each specialty. Despite the increase in workload of the specialty in this new proposal, different authors (Yanes, 1998) agree that it is still insufficient for the internalization of the teaching skills needed to approach the task of teaching music in secondary education successfully.

4. METHODOLOGICAL FRAME

Our research work is framed within the qualitative methodology, which according to Taylor and Bogdan (1986) is a way of addressing the empirical world in an inductive way, in which the researcher or researchers see the stage and the people from a holistic perspective. In particular we have used the methodology of a case-study (Stake 1998), since by studying an individual in an intense and detailed manner, it offers an extraordinary depth in the study. It is increasing the number of authors who defend its undisputed scientific validity (Yin, 2003 or Kemp, 1993), as it is a very appropriate approach to reveal the diversity and richness of the human behaviour, which is more difficult to study from other methodological approaches.

Besides, this case-study is multiple as we selected 6 cases: three female teachers and three male teachers of different socio-cultural contexts and with different teaching styles. Finally, based on the analysis of the content and the testimonies of the six protagonists we drawn up two reports about the characteristics of each one, and later we made a video which should be projected to the master of secondary students in the master classes as examples of good professional practice.

5. PHASES OF THE PROJECT

The research process was divided into six phases which I will briefly describe below:

Phase A: in this phase we sent a questionnaire to the music teachers of 50 secondary educational centers and high schools of Valencia. Then, taking into account their answers, we selected a group of 10 teachers and reviewed in depth the answers about their teaching practices, so finally we decided to choose three female teachers and three male teachers, who seemed the most outstanding by their activities and the diverse characteristics offered in their practices, diversity that constituted one of the main keys of our study.

Phase B: the authorization to access in the centers. We contacted with the management teams and the selected teachers, and ask them permission to carry out the direct observance and the rest of phases for our research inside their schools. As we did not find any obstacles to do it, we immediately arranged the dates for the first interviews and for the process of obtaining evidences.

Phase C: in this phase we maintained personal interviews with each of the protagonists of the cases that we had selected and visited them at their centers in order to watch them at work. Although we were not allowed by the Ministry of Education to record these observations, these teachers gave us their own recordings, which were publicity owned, to use them as examples of their practices. Then, we analyzed all their educational materials, including the decoration of the classrooms, and asked them all the documentation they could give us, such as concert programs, posters of activities and others. In this sense, they again offered us their support and facilitated what we needed. In this phase we also maintained semi-structured interviews with the students.

Phase D: Once the evidences had been collected and the video-interviews recorded, we turned to the prescription of the audios and videos for the analysis of information obtained in the sense described by Dezin (1989). With the descriptive and interpretative reports in our hands, we went back to the centers in order to compare the information we had and receive the teachers' approval of the content.

Phase E: Having the permission of all the protagonists, we passed to assemble the audiovisual file.

Phase F: Lastly, we are broadcasting the results of this project by means of publications in education magazines and specialized journals, and at the same time, we are presenting it in congresses and workshops around the world.

6. INSTRUMENTS

The first instrument used was the questionnaire, built by researchers with the help of a team of professional experts for validation. This questionnaire intends to get information from those teachers with the specialty of music who are teaching in secondary schools. The processing of data was carried out with the help of a quantitative analysis program, SPSS, which enabled us to segment and recalculate the data in each of the proposed parameters. After the different phases, expressed above, once we have selected the six protagonists of our cases, we used as instruments for collecting information:

a) in-depth interviews which are one of the instruments most used in qualitative research techniques, a very useful method to collect data that cannot be reached by the observation or questionnaires (Blaxter 2008)

b) the analysis of documents such as schedules, magazines, posters of classes, programs of concerts…

c) audio and video recordings of images and assertions of the protagonists in order to make an analysis of content and one rear audiovisual document

7. RESULTS OBTAINED

The procedures, used to obtain the information, the analysis and the audiovisual file, have brought us a large amount of qualitative data that have allowed us to describe different variables of each of the cases as well as comparisons to understand the events experienced by the protagonists of the cases.

7.1 Particular features of the cases

When each of the cases and its most important features are described, it must be pointed out that, of course, in each case we found many common points both in their methodological and didactic aspects, and that our intention was to remark their distinctiveness in order to understand much better their idiosyncrasy, because, in our opinion, it transcends the individual

peculiarities of the music teachers in general. The order followed in the following exposition does not respond to any hierarchical or qualitative criteria, it is a descriptive process indeed:

Case number 1: a teacher whose teaching practices are based in the student's corporal development. He does not guide them, on the contrary, students research the sounds and how it is produced on their own by recording and reproducing it again and again. This teacher uses many sources and elements from the information technologies (TICs).

Case number 2: a female teacher who produces her own musicals in an interdisciplinary and cooperative way with the rest of teachers of her school in order to develop the principles of the connivance plan of the educative centre where she they are working. This way, she offers models of reference to face the quotidian conflicts of a multicultural student body by means of musical activities.

Case number 3: a teacher that arranges musical themes previously selected by his pupils; he adapts those songs to the musical and technical level of his students so these themes can be played with the instruments of his school. During his lessons, he develops the required technique in order to play new orchestrations based on the themes that his pupils like the most, which are later shown in concerts offered both at the school and outside.

Case number 4: a female teacher who basically develops, in all her lessons, a musical sensitiveness through the movement, in order to make a repertory with the student's orchestra and the chorus of her school. With this activity, she does not only approach the contents of the curriculum in music teaching but besides they participate in all the parties that are celebrated at the school. At the same time, one of her goals is to participate in all the musical events that take place in her city which are organized by different public and private institutions, so her pupils can develop their social skills by means of these musical meetings and scholar events.

Case number 5: a teacher who uses the Valencia's traditional music to approach the contents of the music language at the same time that he reflects about the music and the human being evolution, the cultural melt and the human identity, as music is fundamental for any transformation.

Case number 6: a female teacher that uses the chorus and the orchestra of her school as tools for her program. She considers music at the school must be professional music. Therefore students have to experience the diverse emotions and reactions that music produces in other ambits. Feeling the music outside the classroom is the best way to study, to understand and to love music. To do that, year by year the contents of her lessons are adapted to the level of her pupils.

In all these cases we also had the opportunity to interview some of the students, whose declarations were added to the observing and analyzing documentary evidence and videos collected for analysis of the activities and the behavior of the participants.

7.2. Common general features

Main conclusions of our project made us to find out those characteristics in the teaching practices which were common to the six teachers, despite being so different among them:

a) Their initial training: they all had their first relation with music when they were very young; it was a complementary activity to their compulsory education and they all were motivated by members of their family.

b) Their prompt vocation to be teachers of music: They all have in common that, at the time they were studying music in the Conservatory as a professional activity, they felt the necessity of teaching music with a method that was different to that they were learning, so they leaned towards teaching instead of being professional musicians as they had being prepared at the Conservatory.

c) The meaning of "teaching music" in Secondary: playing music in order to understand it. This is a common characteristic to the majority of the methodologies in the XX century such as Dalcroze, Orf or Willems. Music has to be lived and explored in order to intellectualize it later. All the protagonists of our research follow this line.

d) The importance and dedication given to their professional activity at the high school: It is part of their life's project and makes them to feel complete both as human beings and as teachers who are committed with the society.

e) Their altruist spirit, their capacity to work in a team and be leaders that are continuously developing new educative projects.

f) The way the consider teaching: a horizontal scheme where teacher and student work together towards a common finish without any kind of hierarchy.

g) Their empathy with teenagers and their knowledge about the psychological factors that evolve young people, and

their good relationship with them both inside and outsider their classroom.

7.3 Concept of the didactic of music

There are other characteristics, more linked to their musical education, which are common to these teachers too:

a) They all use and give importance to the different functions of the musical education, such as the sense-motor, the audio-perceptive, the cognitive, the ideational and the denotative. This means that there are different ways to understand and fulfill the educative program contents.

b) They all consider that students must be approached to the knowledge of the music language basic elements. For that, they start from their own compositions and no-conventional graphics in order to reach this level.

c) It is essential for them to teach all the procedural blocks of musical education, that is, movement, dance, instrumentation, voice… but each teacher give more emphasis to one or other depending on their previous knowledge and experience.

d) Finally, they all share what it is done into the music classroom with their colleagues in similar activities and also with the rest of the educative sphere. Therefore, they offer concerts to other students and teachers and also to the student's families.

8. CONCLUSIONS

As we have observed through the documental evidences and the analysis of the data obtained during the whole researching process, we can affirm the following:

a) Teachers feel completely satisfied when their educative labor is accepted by the student body and the rest of the educative community.

b) At the same time, the educative community appreciates this type of musical practices that are contextualized with their environment and produce shared activities.

c) Teaching music at high schools must be useful for students to know the multiple possibilities they can find at a musical level, not only as music lovers or enthusiastic public in the future, but also as a way to work as professionals by means of the different jobs related to the music industry.

d) Students enjoy much more those activities that are translated into significant learning. Staging of musical activities motivates them and increases their interest to learn and participate in the classroom.

e) Music turns into a powerful tool for global education, education for the citizens, human being values and fundamental rights, etc.

f) Music, in the XXI century, may be understood as a basic subject whereas it can be used as the axis to access to the whole knowledge and contents included into the curriculum in order to generate a significant learning.

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Architectural Design In A Broader Spectrum Of Cultural Experiences: A Case Study For Hermeneutics In The Architectural Education

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ABSTRACT

While there has been a growing number of attempts, since late 1980's, to bring pressing questions of cultural relevance into architectural education, from issues of globalization and sustainability to philosophical discussions of socio-symbolic values and cultural mobility, the architectural design studio, the pedagogical core of architectural education, is still mostly formulated and conducted on the basis of a traditional pragmatic model of making buildings with a given set of parameters. Seemingly going beyond architecture as making buildings as a determination of form and perception, the attempts to weave architectural education into a broader cultural sphere usually fall back onto another way of making buildings, this time under other parameters than just form and perception, but actually without questioning the traditional modalities of place, program, occupation, or structure. From one extreme of Gestalt geometries and phenomenological fundamentalism to the newly emerging techno-scientific determinism, the *commonsense* understanding of buildings as responders to psychological / environmental / social *givens* form the underlying operational structure of the traditional architectural studio. While architecture is inevitably tied to other cultural constructs, the traditional studio setting falls short of addressing these other cultural constructs as themselves narrative structures and runs the risk of overlooking the inherent modal bond between architectural making and narrative construction. In what follows, I argue for a narrative modality for architectural studio education that levels architectural work with other cultural work in the making of our reality, rather than taking these as givens, and is formed around a hermeneutic exchange between various cultural experiences in the making of architecture. My presentation uses an architectural design studio conducted under these premises as a case study and critically presents the outcome of this studio as a model for an architectural education that is more responsive to representing our historical reality as it is constructed and re-constructed through cultural dialogue.

Keywords:

INTRODUCTION

One of the most important insights offered by architectural theory is that a building task cannot be solved through intuitive improvisation. (Norberg-Schulz 1965, 217). There are days when no one should rely unduly on his 'competence'. Strength lies in improvisation. All the decisive blows are struck left-handed. (Benjamin 1928, 447)

When Norberg-Schulz was critical of an interiorized knowledge of making architecture under the characterization of 'intuitive improvisation', he might have been overlooking the fact that our relation to objectivity outside of us has always some degree of epistemic unpredictability. Our actions in the immediacy of here and now of concrete situations indeed necessitate a kind of practical judgment / imaginative projection (thus 'intuitive improvisation') beyond our categorical knowledge and theoretical judgments. Aristotle called this kind of judgment 'phronesis' realizing the limits of 'theoria'. Thinkers of the twentieth century, like Martin Heidegger (1927), Ernst Cassirer (1960), Hans-Georg Gadamer (1960), Ernesto Grassi (1980), and Jacques Derrida (1973) among others, have constantly returned back to some form of this Aristotelian notion of practical judgment to reflect upon the problems of a pseudo-rationalized techno-bureaucratic modern world. Rather than focusing on possible structural epistemic conditions as with the Enlightenment philosophies, thinkers of the practical judgment take the meaning horizon one lives in as a starting point for the conditions of our knowledge of ourselves and the world around us. Marking the cultural unity as the background, the operating premise of phronesis is the interwovenness of various modalities of meaning in a broader field of consciousness. Unpredictable as to its historical movement, this broader view of knowledge leaves room for human agency, critical dialogue, and constructive imaginative leaps in the making of culture beyond the confines of a scientific or historical deterministic trajectory.

With the aim of bringing this insight into architectural education, I conducted a series of elective design studios between 2010 and 2013 at the University of South Florida School of Architecture and Community Design, where the emphasis was not on making buildings per se with a given set of parameters but thinking possible architectures to come within a larger set of cultural experiences derived from other narrative modalities like art and literature. Varied as to their specific contents, the underlying pedagogical core of these studios formed around the Aristotelian phronesis as a guideline for a critical formulation of architectural design as a hermeneutic action and unfolding the design process in terms of an internal unity of thinking in / through making beyond established disciplinary knowledge. In the following section, I present one of these studios where we investigated a city through the lenses of a filmic narrative with the aim of bringing forth unforeseen phenomenological structures that may overlay on our day to day interactions within the city, thus enriching the sense of urban life towards a more human and poetic modality.

HERMENEUTIC MEMORY AT THE EDGE OF MEANING:

RE-CONSTRUCTING COPENHAGEN

Because it is a world, the world of the text necessarily collides with the real world in order to 're-make' it, either by confirming it or denying it. However, even the most ironic relation between art and reality would be incomprehensible if art did not both disturb and rearrange our relation to reality.

(Ricoeur 1983, 361)

Architectural making is an act of speculation[i] to the degree that the architectural construct offers a new way of seeing and framing things in the way it narrates a life. The narrative possibilities of architectural space, the way the architectural object interprets life in its narration, are directly related to the structures of our lived experience where spatio-temporal consciousness is inseparably tied to our socio-psychological sense of being. However, the mainstream conceptions of architectural experience in contemporary literature mostly revolve around an idea of phenomenological consciousness which views our engagement with architecture at the level of a subject – object relation. The subject, however much her intentionality is embedded in her surroundings and life traditions, is still a subject as one hermeneutical node confronted with architectural objects. On the other extreme, there is also a strong literature in contemporary theory that dismisses the notion of experience altogether from the field of architecture. This latter view, in direct opposition to phenomenological approaches to experience, tends to understand architectural making solely based on socio-historical codes as part of a larger cycle of cultural production. I think that neither of these extremist views can fully account for the speculative nature of architectural making and our engagement with architecture when we understand architecture as a narrative intervention in the event space of life above and beyond a subject – object relation or a socio-economic determination.

Building on the interpretative and speculative nature of making architecture as a way of thinking in and of life, the studio first articulated on the narrative aspects of organizing space and time as making of an event in the texture of life, and then further explored these conceptual findings on a particular design exercise. The main conceptual apparatus of the study developed upon the notions of architectural image and design process by visiting writings of Gaston Bachelard (1958), Vittario Gregotti (1996), and Bernard Tschumi (1981, 1975). These two architectural issues were then discussed in a broader frame of the narrativity of artworks which is explored through the writings of John Dewey (1934), Theodor Adorno (1970), Martin Heidegger (1971), and Hans-Georg Gadamer (1986). Beyond the notions of place or a particular programme or typology, the notion of image holds a poetic seed for an architectural unity that is cultivated in the multiplicity of mostly unpredictable life events. As an ensemble of things and events, and associations, projections, image goes beyond architecture and becomes a specific node in the texture of lived experience. Thus, with this notion of image as the starting point of design process, process becomes a hermeneutic journey into the possibilities of a given content. Much more challenging than a traditional setting where the design process usually starts with a given site and a program, image based design process forces the designer to cultivate a deeper sense of experience and understanding of constructed environment beyond habitual ways of making architecture. Of particular significance in this conceptual frame is the idea that our engagement with architecture is a function of a deeply layered memory where organizing space and time through objects is also a thinking of possible subject – subject relations in the experiential texture of life. This act of organizing space and time through architectural making is beyond a conception of making in the Platonic sense of concretization of a collective ideal because here the design act always involves an imaginative projection that re-informs reality through an individual interpretation.

Almost at random, our choice for a city to study was Copenhagen. Random, because any city can be a potential case when paired with a strong narrative. In this particular case, the choice was based on a film that takes place in Copenhagen (Christoffer Boe, *Reconstruction*, 2003) and opens up for different readings of the city in a rather convoluted socio-psychological terrain. In order to discuss the idea of city as a socio-phenomenological construct beyond the physicality of built environment, the students were asked to 'look at' Copenhagen through the interpretative lens of the film that has direct references, albeit in a dispositioned temporality, to its places as they become event-places within the narrative structure of the film. In a sense, the film was used as a probing device into the city, dissolving Copenhagen into a more fluid condition of memory-places beyond its tangible physical structures.

UNFOLDING THE FILMIC AND THE URBAN

Beyond a construction of the physical environment, the studio encouraged the students to unfold the indispensable narrative constructs that give shape to our experience of the city and architecture. Critically interpreting in collage studies how the film establishes its plot through making episodic event-places, the students further investigated the construction of their own Copenhagen as a new synthetic entity between the film and the city. Deriving heavily on the memory of event-places of the film, this new Copenhagen was first studied as a two dimensional map which reconstructs the existing map of the city according to the narrative structure of the film interpretations, literally by dislocating portions of the city and arranging them in a new order and scale. In the following phases, this imaginary map of Copenhagen was then interpreted to construct three dimensional models of the new city as a synthetic memory context that transposes both the existing Copenhagen and the filmic structure into a new narrative unity.

The film, with a photographic reference to memory, consisted of a series of distinct episodes which are place-time bound and shorter transitions between these (Figure 1). While viewing the film, the students

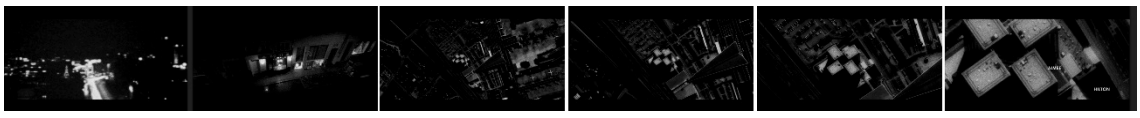

Figure 1.

were asked to pay close attention to the multiple camera angles strategically chosen to construct the layering of episodic place-events and characters' inner worlds. Of particular importance for us in our speculative readings of the film were the

following interrelated parameters:

1. Multiplicity of scales at any given moment: scale as an analytical too to establish relations. Physical scale and event scale.

2. Spatio-temporal distinctions: in-out / scale / vertical-horizontal / time-

pace / intersection- threshold-boundary.

3. The moving frame sequence and the narrative (story as one imagines it).

4. Characters' stream of consciousness.

5. Concealing-revealing, presence-absence, of things, characters, visions. Unfolding of place.

6. Gaze, parallax, act of framing and layering information on a filmic strip: camera movements (spatial and focal), angle of views, movement as measure, movement as making space, movement as revealing, body-vision-camera dialogues, reciprocity of things, characters, visions, movements.

7. Light / texture / space: the materiality of the filmic image.

8. The score and its relation to the moving image.

Thus, the initial objective in the studio was to unfold the construction of the filmic tectonic beyond the literary narrative, focusing on how the events of the movie were embedded and depicted through the construction of certain spatial conditions between objects and people and between people that have a specific bearing on the urban condition they are located in. The first set of studies were memory mappings that discussed the construction of the episodic urban locales in terms of the parameters listed above (Figure 2).

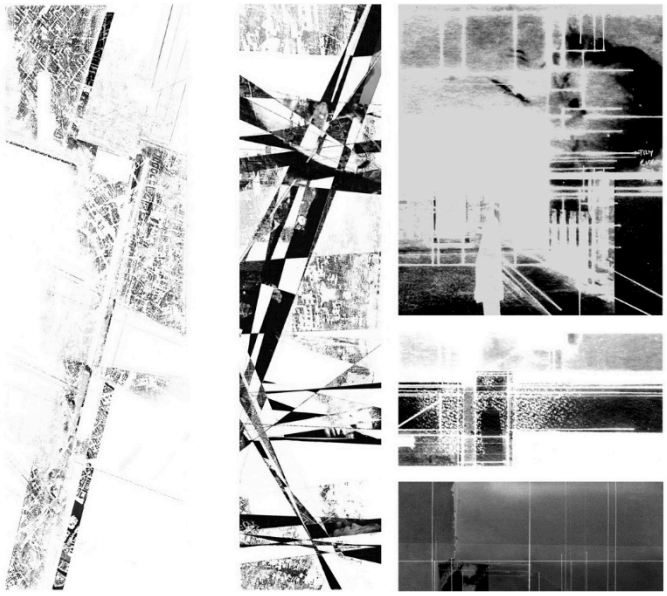

Figure 2.

Our second iteration was collage studies that further explored the construction of events and places as they unfold into an urban structure fluctuating between the physical and the phenomenal in an unlimited web of mnemonic trajectories. Special emphasis here was given to translations of the perspectival images into planar organizational ideas as a distinct moment of being in some place and in some situation (Figure 3).

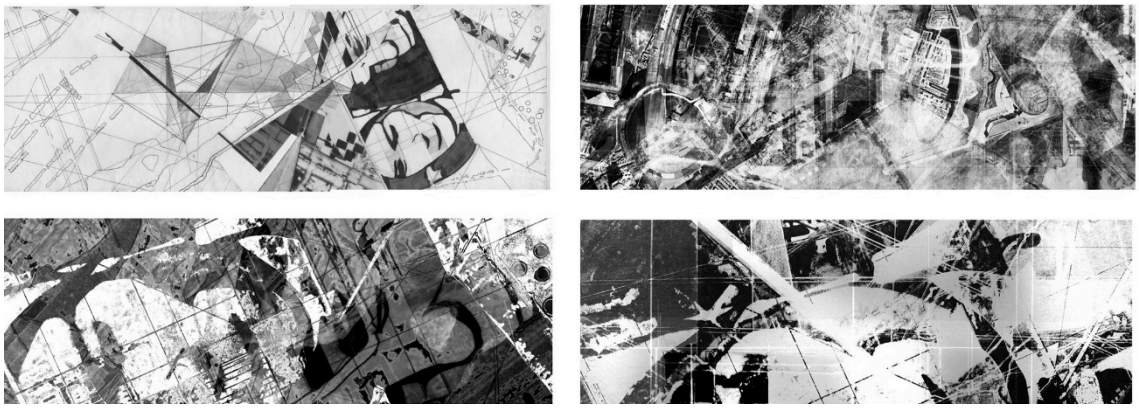

Figure 3.

The collage diagrams were more about capturing the phenomenal unity of places and events as they are constructed in time and space through various experiential modalities. In this sense, they were beyond any literal depiction of place-events as with traditional notations. Sublimating the original maps of Copenhagen, these diagrams can be understood as notational devices that could be translated into architectural possibilities in terms of the experiential content they embody without specifying a context of meaning or scale yet. They are at the edge of architecture, but not architecture yet. In the multiplicity of their synthetic references, they project architectural images, some being-in-such-and-such-a-condition, before the concretization of architectural forms or objects.

With this in mind, our next step was to look at projections of possible plan and section ideas for a construct-to-come out of these diagrams that will carry the experiential qualities of the interpreted episodes / scenes unified with a transformed Copenhagen (Figure 4). At this moment in the exercise, our relation to the city split into two related but distinct contexts of meaning. First, it was to be looked at as tectonic ground that could hold a multiplicity of experiences. Second, as the melting pot of the multiple experiences, it was also a fluid and layered matrix that was open to transformations as its narratives changed from moment to moment. These two conditions of the city were further investigated separately in changing scales of drawings and models. The first condition, city as the tectonic ground, was studied in mostly linear and planar diagrams where the aim was to establish a possible three-dimensional matrix structure that could accommodate plug-in interventions at different scales (Figure 5). The second condition, city as a morphing structure, gave way to larger scale diagrams that looked into possible ways of transforming the city texture by programmed interventions that opened up questions of occupation and lived experience as a knot tied between the larger patterns of the city morphology and the micro scales of the intervention (Figures 6-7).

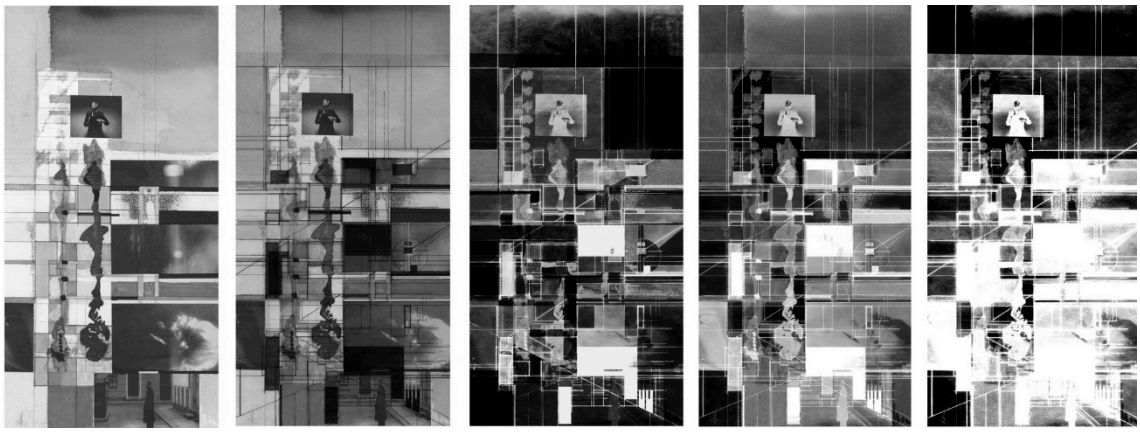

Figure 4.

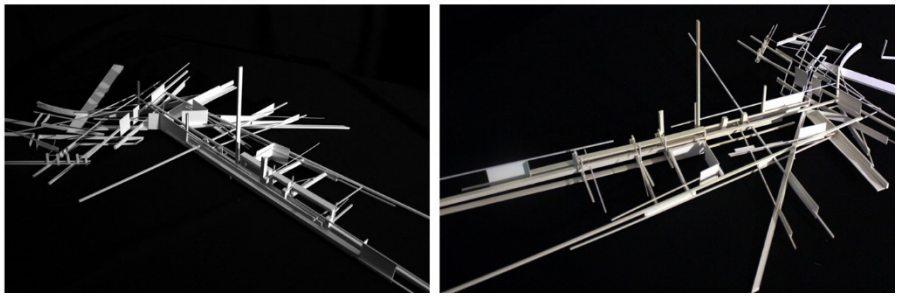

Figure 5.

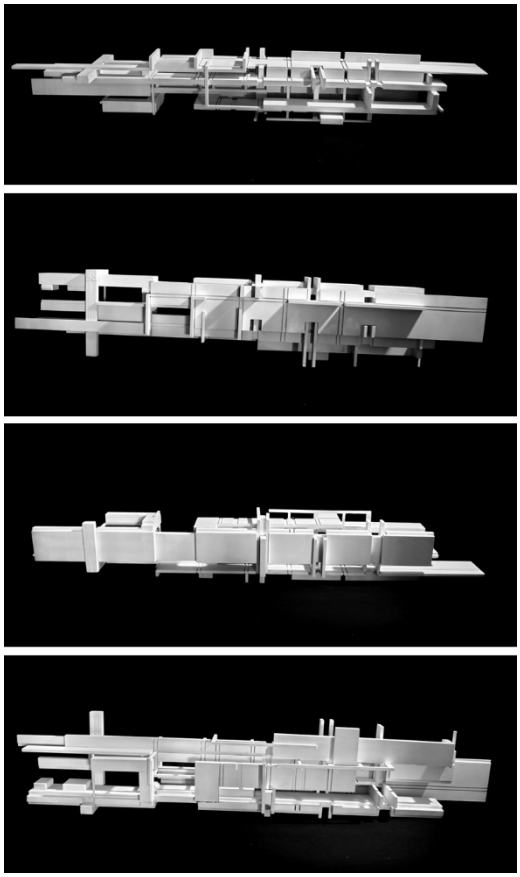

Figure 6.

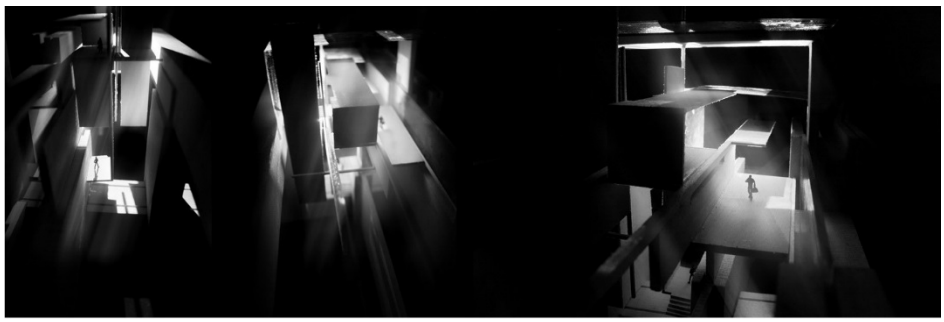

Figure 7.

At the intersection of the physical, the phenomenal, and the social, the work in the studio at various scales and with various intentions, formulated a sense of place-events that were neither the filmic nor the architectural as we knew them prior

to this exercise. Beyond using the filmic narrative as a structural / symbolical analogue for architecture, beyond a metaphorical translation between the film and architectural space, this exercise through its intuitive steps shows the possibilities of using cultural catalysts in meaningful ways that contribute to our understanding of the nature of place making in the contemporary society not only as a distinct cultural modality but in its embeddedness within other modes of cultural experience, in the broader spectrum of a hermeneutic texture. This view is important in order for a healthy assessment of the value of cultural narratives in the making of architecture. While architecture is inevitably tied to other cultural narratives in the way it sets and regulates specific life conditions in the texture of life, to make these cultural narratives authoritative in architectural experience, or rather, to make these cultural narratives a necessary condition for experiencing architecture, misses the agency of architectural making in culture as a speculative act of thinking and making that forms new pieces of reality through imaginative interpretations that project possibilities out of the existing texture of culture. [ii]

DISCUSSION: HERMENEUTIC CATALYSTS IN THE DESIGN STUDIO

While using catalysts from various cultural modalities has been a common practice in architectural design since 1980's, the epistemic grounds of this practice and its pedagogical implications remain yet to be fully analyzed. The mainstream arguments in favor of using catalysts from other fields of culture in the making of architecture usually advance a sense of autonomy of the architectural design process in the construction of our cultural reality. However, a critical examination of the use of non-architectural cultural artifacts as generative devices in the architectural design process leads not only to an understanding of architectural making as a specific medium of intentionality, as the mainstream arguments conclude, but also underlines the organic embeddedness of this intentional modality within a broader space of experience, thus within the broader space of cultural making. In our first-person phenomenal experience, various works of art and culture stand in different experiential modalities. However, the possibility of translations between these, in particular the possibility of interpreting different cultural artifacts into architectural space and place, also points to a common ground of spatio-temporal consciousness that holds various modes of experience and media of intentionality together.

If our main mode of existence is a series acts of phronesis in a mainly hermeneutic universe, the web of cultural constructs that give shape to reality, the architectural design studio presented here acknowledges the multiplicity of narrative possibilities in the making of architecture. Rather than being in the service of this or that cultural narrative, architectural design registers its agency in a critical dialogue with other cultural constructs, and shows its ability to bring a new light into the larger texture of culture that holds various narratives, attempts at meaning, together. On the contrary to its traditional counterparts, where architecture is mostly left at the level of cultural re-presentation, where buildings respond to certain givens, this studio embraces a performative space for architecture, where the act of building is preceded by a thinking of the conditions of the object as a hermeneutic moment embedded in a larger dialogue. This performative space for architectural design merges the notions of thinking and making in the unity of a single action which is very different from the traditional notion of making as making within or upon received notions of what the object to be made is.

While not easy to argue for in the face of increasing conservative demands on architecture, because there is nothing architecturally produced in the traditional sense, no plans, sections, etc. of buildings or urban designs, a studio education like the one presented here may help cultivate a new generation of architects who do not just answer the questions posed upon them by society and culture at large, but can become agents that not only transform existing questions but also can register new questions with the intention of a better realization of our historical existence.

NOTES

[1] 'Speculation' is used here in reference to Igor Stravinsky's idea of poetic making as speculation: "The phenomenon of music is nothing more than a phenomenon of speculation. There is nothing in this expression that should frighten you. It simply presupposes that the basis of musical creation is a preliminary feeling-out, a will moving first in an abstract realm with the object of giving shape to something concrete" (1947, 28).

[1] The view that takes cultural narratives as the necessary condition for the meaningfulness of architectural experience is well exemplified in the writings of Marco Frascari and Dalibor Veslely. Underlying both authors' thinking on the value and role of cultural narrative is what Gunter Bandmann calls 'a wider nexus of ideas' as the source of any meaningful making in the broader space of culture. "To say that a work of art has a meaning is point to something, to some arrangement within a wider nexus of ideas that transcend the material and formal organization of the work of art. The realm of artistic is transcended in that the work of art comes to be understood as a metaphor, as a representative, as the material emanation of something else" (Bandmann 1951, 19). See also Frascari 1984 and 1991, and Vesely 2004.

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Rhetorical Reading In Law I: An Important Strategy For Meeting Essential Academic And Professional Skills Requirments

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ABSTRACT

New law students often see law school as a foreign land with its own culture, literacy and language practices. How quickly and well students adjust to this new community reflects how they will perform in their first year of study. All students come with higher level reading skills. However, foundational law texts have a different content, form, language and syntax to texts previously studied. This paper posits that using rhetorical reading strategies as part of case method pedagogy in Law I helps students meet academic and professional learning outcomes. This is achieved by quick assimilation and into the legal culture. It also scaffolds learning, enabling students to integrate old and new knowledge and experiences and develop problem solving, critical thinking, and analysis and evaluation skills. In addition, it promotes metacognition by encouraging students to think about how they are learning.

Keywords:

INTRODUCTION

The first year law (L1) teaching and learning experience is more complex than simply learning the substantive law or skills content of courses. It is often the first step in the process by which students are acculturated into the legal community and sets the stage for their transformation from student to lawyer. The teaching and learning strategies used in the L1 classroom are crucial to academic success and building student confidence.

Most, if not all, L1 professors teaching substantive law courses on common law degrees in Canada use the case method of teaching. In case method, students learn an area of law through reading case law (i.e. the case reports or excerpts of cases) to find the underlying principles that will determine the outcome of the case and the subtle factual differences in related cases that influence the outcome. Case law, which is comprised of case reports, is the narrative produced by the client's story. This narrative is initiated by the client, reframed by counsel to best support their client's strongest legal arguments and then further refined by the judge(s) deciding the case (Law School Admission Council, 2013).

Unfortunately, many professors still provide students with prodigious reading lists and little guidance on how to read the cases or instructions on what they expect students to take from the case. Students are expected to come to class having completed their reading prepared to answer questions in front of the mass lecture class (Eisele, 1994). This is often a stressful and intimidating learning experience that reduces students' confidence. This paper posits that the challenges faced by L1's in the early days of law school are easily resolved when case method is taught using rhetorical reading strategies that require students to read cases by previewing, questioning, reading and reviewing the text. At the beginning of their legal study, students are often able to appropriately question the text themselves. Guided questions that accompany each week's reading scaffold learning and help students read with purpose.

Part I of this paper examines some the challenges facing new law school entrants. Part II sets out the academic and professional skills acquired by graduates of Windsor University's Law School. Part III demonstrates the significance of rhetorical reading strategies in helping LI's meet these learning outcomes.

THE CHALLENGES OF LAW 1

To be a good lawyer you need to be able to read a variety of legal texts well. Upon entering law school, students join their upper year peers, professors, lawyers and judges in a new, arcane discourse community called "law," which has its own literacy and language practices. The speed with which students attain basic competency in this new discourse is a predictor of how well they will perform in their first year of legal study (Christensen, 2008). Anecdotal evidence suggests that students who are familiar with legal culture and equipped with rhetorical reading strategies are quicker to participate in and reach higher degrees of discourse competency because they are more able to discern from their reading what is important and what can be ignored.

Many new law students experience the same difficulties on entering law school as some new migrants: they are confronted with a new language, which for L1's is paradoxical being familiar and yet strange and a unique culture with its own norms and mores. The quickest road to assimilation is immersion, which typifies the L1 experience, where students are required to think, read, speak and write in their new language, with little or no prior preparation. To be able to do this well means much more than knowing or being able to recite a set of repeatable legal propositions. It is the ability to be fully oneself yet think, feel, communicate and act like a lawyer in multiple spheres of life. In short, to learn how the legal culture functions and become functionally adroit. White describes this: "as being able to speak truthfully to the conditions of the world and take positions (and offer them to others) which seem to you to be right. In doing all this you will subject your own views and inclinations to the discipline of the inherited culture and the conditions of the world" (1982, p. 3).

Reading is central to the transformation from student to lawyer. According to Weaver, (1991) done well, it produces the requisite knowledge of substantive law and the means of "thinking like a lawyer" (p. 518). This is an underlying tenet of Langdell's case method, which revolutionized American law teaching in 1870. This method is still widely used in varying degrees throughout North America. Case method is a form of self-directed learning where students read through case reports and work out for themselves what the dominant rules or principles are, how the judges' decision fits into the existing corpus of law and how it applies to their client's case. In essence, students are expected to review how the litigation developed and then extract four essential components from the case for future class discussion: (1) the material facts; (2) the issues(s) i.e. the legal question(s) to be answered; (3) how the court decided the case – the court's answer(s) and (4) the court's reasons for so deciding. Yet little time is set aside in the L1 curriculum for teaching students how to read a case well (Lundeberg, 1987; Christensen, 2006-7).

It is not surprising that for a twenty first century student in the first weeks of a North American law school reading morphs from a familiar, comfortable task to an incomprehensible one that is a strange, painful and disconcerting experience (Lundeberg, 1987, p.408; Christensen, 2008). A seemingly short case list takes on the appearance of an Olympic athlete's regimen and from the outset, many, if not all, L1's struggle to complete their assigned weekly readings and case briefings. By the onset of fall examinations some have fallen so far behind in their readings, that "catching up" seems impossible and they flounder or turn to online case summaries and canned notes.

Turow, in his book L One, described his first year at Harvard law school in the following way:

"In baseball it's the rookie year. In the navy it is boot camp. In many walks of life there is a similar time in trial and initiation, a period when newcomers are forced to be the victims of their own ineptness and when they must somehow master the basic skills of the profession in order to survive. For someone who wants to be a lawyer, that proving time is the first year of law school" (1977, p.9).

It is very easy for professors who read law cases with speed and ease, to forget how much longer it takes L1's to read and brief a case. Sullivan et al. (2007) citing Mertz's study (2007) of contract law students showed that it takes at least a full semester for students to "internalize the shift in understanding necessary to identify a legal point of view" (p. 53).

The nature of primary legal sources, either full case reports or selected excerpts from prescribed casebooks, acts, or

statutory instruments are simply very different in content, form, language and syntax to the texts students have previously engaged with. Anecdotal evidence suggests that even students with previous legal or law firm exposure find the weekly case briefings more difficult and time consuming than expected.

Fajans and Falk (1993) found that even the brightest and best students "too often scan judicial opinions for issue, holding and reasoning and call that 'reading'" (p.163). This approach enables readers to move more quickly through their case "reading" but falls short of the reading required for academic excellence and professional success**.**

New readers initially find it difficult to separate legally significant facts from the irrelevant in their client's case and distinguishing the ratio(s) in the judgment (the judge's reasons for deciding the case as she did) they are reviewing from obiter observations (incidental observations). This is not surprising because case reports are traditionally dense, written by judges for a legal audience familiar with the law and contain legal terminology and sub-text inferences, which are not easily understood by new case readers. As Williams (2006) affirms, "[t]he finding of the ratio decidendi is not an automatic process; it calls for lawyerly skill and knowledge" (p.98).

Reading strategies that proved highly successful for undergraduate and postgraduate reading do not always work well in the beginning months of law school. For example, strong readers outside of law are often able to "read into" the text i.e. fill in comprehension gaps by resorting to "rules of thumb" drawn from the reader's mental lexicon (Morris, 2003, p. 273). Being new to law students must rely on their existing knowledge which is not law specific and is of limited use because law requires precision of meaning. In case reading difficulties arise when L1's understand the text in its ordinary English meaning, but particular words carry a specific legal meaning that goes beyond the English meaning (Lundeberg, 1987, p. 415). This is illustrated in the case of *Purcell v Taylor*, [1994] OJ no 2845. Here, counsel asked the appellate court in an action for damages for personal injury to interpret the meaning of 'harbours' in section 1 of the *Dog Owners Liability Act,* RSO 1990 ("*DOLA*"). In doing so, Borins J., referred to the meaning provided by the Shorter English Oxford English Dictionary, which describes "harbours" as: "to provide a lodging for; to shelter; to lodge, or entertain" (para. 15). This grammatical meaning is consistent with the legal meaning ascribed to the term by the American and English courts. However, Borins J., in rendering judgment held that "harbouring" for the purposes of sections 1 and 2(1) of the *DOLA* means more than the common English language meaning of "to offer shelter" to the dog and requires the person to exercise dominion, care and control of the dog (para. 30).

When faced with "foreign" legal terms, occasionally in Latin e.g. *mens rea*" ("guilty mind"), the reader realizes that their word recognition skills, which have previously stood them in good stead, are now deficient. Added to this, is the challenge of determining whether the words used are literal or legal. As Mellinkoff (1963) states, new readers have little or no previous knowledge to help them establish whether they are reading English language words or "words peculiar to law (p. 437). Lundberg, (1987) found that students tended "to blame themselves not the text" for their reading difficulties (p. 665). This still holds true today.

The organic and dynamic nature of common law is also confusing to new readers. Readers find the same rule or word applied or interpreted differently by different courts at different times. This is the natural process by which common law develops, either through the creation of new principles or rules or through reinterpreting, revising and elaborating existing law precedent by precedent. For example, Sharpe J writing for the Ontario Court of Appeal in *Jones v Tsige,* 2012 ONCA 32 confirmed the existence of a new tort of intrusion upon seclusion. He described this new right of action as an "incremental step" to develop the common law "in a manner consistent with the changing needs of society" (para. 65).

Another difficulty is case structure (Lundeberg, 1987 p.413). As Dewitz (1995-6) states, "case structure is unique" (p. 658). It is framed differently from standard reports such as business, history, science or policy reports, which are commonly encountered in undergraduate study. Case reports are usually structured with headings and sub-headings and are comprised of the following components: a brief synopsis of the case, the procedural history, if relevant, a facts section, a statement of the issues to be addressed by the court, the legal reasoning for each issue and the disposition. Old seminal cases, like *Carlill v Carbolic Smoke Ball Co* [1892] EWCA Civ 1, or *Donoghue v Stevenson* [1932] UKHL100, are more problematic to L1's because many originate in England and have a slightly different structure. They are often written as unbroken text without headings or sub-headings for guidance. Also, society, artifacts, culture, and literal and legal language meaning has changed over time which can cause confusion. As Martin Davies (2003) reminds us, an old judgment is a reported experience not a lived experience. Hence it is natural for L1's to reframe old cases by reading into them current legal, social, economic and political understanding.

Students also tend to overlook the fact that, rather like a book, case headings and sub-heading provide the reader with a map of the case (Dewitz, 1997). Until students become familiar with case structure they read linearly from start to finish because it is difficult for them to move backwards and forwards in the text with ease.

Also, if L1's are simply provided with a case list with no guidance or focus for the reading, they are more likely to become lost or frustrated in the reading process and be unsure of whether the points they have drawn from the case are correct. Hence some students prefer to read post lecture rather than pre lecture.

The combination of a weak knowledge base, unfamiliar text structure and some L1's initial inability to move beyond linear reading means they spend a great deal of time and effort performing the simplest type of case brief. This leaves students unwilling or unable (due to time constraints and work pressure) to delve deeper into the cases to search for inconsistencies, points of analogy and distinction or consider why the judgment might be wrong.

ACADEMIC AND PROFESSION SKILLS COMPETENCIES

Unlike the United States, Canada's common law school graduates were not held to a national standard of competence for professional licensing admission until 2010. In 2010, Canada's law societies agreed on a uniform national requirement for common law graduates effective from 2015. The national requirement specifies the competencies and skills graduates must possess, as well as directives for law school program content and resources. As a result, in 2015 law Deans in common law provinces must demonstrate how their J.D. programs equip students with the mandated competencies required for Bar admission. Competencies include *inter alia*: problem-solving, legal research, statutory interpretation, communication, professional and ethical competency and specified knowledge.

Rhetorical reading addresses *Problem-solving* which includes the ability to: identify relevant facts; identify and evaluate the appropriateness of alternatives for resolution of the issue or dispute; analyze research results; apply the law to the facts of a client's case and identify and evaluate the appropriateness of alternatives for resolution of the issue or dispute. *Legal research,* which includes the ability to: identify legal issues; …. use techniques of legal reasoning and argument i.e. case analysis and statutory interpretation to analyze legal issues; identify, interpret and apply the research results and effectively communicate the research results. *Communication* includes the ability to communicate clearly in the English or French language; identify the purpose of the proposed communication; use correct grammar, spelling and language suitable to the purpose of the communication and for its intended audience; and effectively formulate and present well reasoned and accurate legal argument, analysis, advice and submissions.

These competencies and others are reflected in the learning outcomes for the University of Windsor law school.

Elizabeth Mertz (as cited in Sullivan et al., 2007), aptly described the sum of these competencies as the ability to:

"[T]ranslate messy situations into the clarity and precision of legal procedure and doctrine and then to take strategic action through legal argument in order to advance a client's cause before a court or in negotiation" (p. 54).

This ability demonstrates how well graduates can think and act like in-firm lawyers who bring to their everyday tasks "professional, careful, critical thinking" (Morris, 2003, p.268) and can think rhetorically within a problem solving context" (Saunders & Levine, 1994, p.125). This is more easily achieved by those who have been acculturated into the legal community and have a strong grasp of legal language. Morris (2003) concretely describes how rhetorical legal discourse is predicated on understanding the language, conventions and practices of the legal community and how they apply in the multifarious contexts of professional practice.

Rhetorical reading strategies quicken acculturation and are a useful tool for developing and honing rhetorical thinking because they push students out of default strategies such as highlighting or verbatim quoting (Dewitz 1995-6), towards resolving points of confusion when they arise, questioning the text and making predictions. This opens the way for students to see connections between concepts, principles, rules and ideas. L1's first exposure to rhetorical thinking of this kind is found in the judicial reasoning of case reports, which is premised on the rhetorical thinking of counsel in their selection of sources and their skillful manipulation of law to facts when crafting their arguments. In addition, appellate case reports often reveals how judges reframe the issue(s) put forward by counsel, tailoring them to their own reasoning and subsequent disposition of the case.

SIGNIFICANCE OF RHETORICAL READING

Robinson (1961) described the steps of rhetorical reading as preview, question, read and review (PQRR). The results of Christensen's study (2008) suggests that law L1's should be advised to: "(1) read with purpose, (2) use background knowledge to situate the case, (3) establish the context of the case before beginning to read, (4) evaluate the case and have an opinion about its outcome and (5) read flexibly; skim and skip when appropriate" (p. 53).

For new case readers, it is essential that professors bring the case into focus for the reader. This is easily accomplished by asking the reader to begin with a quick skim reading that previews the case and requires them to identify the people, place and

events in terms of: who, what, where, when, how and why of the case. This enables readers to place the case in context. The next step is to ask students to consider the historical, social, political, cultural and moral context of the case, before moving on to the legal issues, concepts and disposition. Having answered these questions the reader has a sense of the case and is better able to formulate their own questions that they want answered by the text. As students become more familiar with rhetorical reading their questions will change and become more elaborate as their conceptual knowledge expands and their reading skill increases.

A quick and easy way to introduce case structure to L1's is to ask students to read a case for the purpose of creating a "roadmap" of the case from the judge's headings and sub-heading. The roadmap should include: the style of cause, citation, procedural history of the case, an issue(s) statement (legal issue before court, a ratio for each issue (legal answer) and the disposition. By working with the structure of a case to produce a mapped overview of the case students see at once how knowing case structure can help them read case law more efficiently and effectively.

Some of the benefits of rhetorical reading are that it helps students attain higher order reading skills by: problem solving, fostering critical reading skills and language cognition, discouraging linear reading, allowing readers to consider a case from its historical context as a pinpoint in time and then reframe it for the present. All of these facilitate legal skills learning (Dewitz, 1995-6; Lundeberg, 1987; Christensen, 2006-7; Christensen, 2008).

Fosters Critical Reading Skills and Language Cognition

Rhetorical reading is a strategy that enables new legal readers to read a case report for its full worth. In other word readers learn to comprehend complex legal material and identify the legal terminology necessary to summarize, analyze, and convey the meaning of the text concisely with precision and logic. Rhetorical reading is especially helpful to new case readers who are reading for content knowledge and understanding but at the beginning of their legal studies find it difficult, through lack of legal knowledge, to create their own directional reading questions (Dewitz, 1995-6; Lundeberg 1987; Christensen, 2008) As students become more familiar with guided case reading for specific purposes and in particular contexts they are able to spot recurring language patterns, which over time become embedded in their everyday language. In addition, language recognition and meaning make it possible for students to become adept in defining legal problems, identifying legally significant facts and then analogizing and distinguishing these facts from those in a client's case.

Discourages Linear Reading

Lundberg (1987) found that expert readers looked at headings and other indicators of text content before reading the text in depth, so as to mentally orientate themselves to what they were about to read. This places them in a better position than novices to take in what they read because they can move backwards and forwards in the judgment with ease.

A common rhetorical reading strategy is to ask new readers to read in role. In doing so, readers learn how to find and follow a specific line of reasoning. When a reader is asked to find and determine the reasoning of the appellant, opposing counsel or a dissenting or concurring judge, the reader has a clear focus and purpose for reading. Consequently, they actively look for and note the directional guides in the text that help them to find the information that they are reading for rather than skimming over them. This technique increases the reader's familiarity with case structure. Once readers are familiar with the structure and layout of case reports, they are able to navigate through a lengthy case text by moving between different blocks of text. For example, the reader who knows case structure can jump from the facts to the disposition or from one point of analysis back to the facts, then forward to the next point of analysis. This is a high level reading skill prevalent in proficient legal readers (Christensen, 2008). Increased reading efficiency reduces the amount of time and effort the reader expends on extracting the relevant information from the case and frees up time for critical thought.

Encourages Textual Reframing

Case reports are different from other reports in many aspects, particularly the interchange of narrative text and expository text. Narrative text reads like a story and records the history, facts of the case and the disposition, while expository text relays the judge's legal reasoning and analysis**.**

Once new readers become accustomed to reading rhetorically they can ask their own questions of the text. A common starting point is to take the expository text headings and sub-headings and reframe them as questions to be answered by deconstructing the text and predictive analysis. The critical search for answers from within the text produces a richer understanding and knowledge of the case. Readers discern connections to their prior knowledge and experience and consider how they might fit with their new knowledge gleaned from the text **(**Bernadowski & Kolencik, 2010**).** This engages critical

thinking and problem solving to identify legal doctrine, rules and principles from legislation or case law, synthesis and analysis of law, and evaluation of past and present legal knowledge to construct a deeper meaning that incorporates or rejects new knowledge drawn from the case. This experience moves the reader beyond what the text says to what it means in substance and in practice. This forces the reader to decide what elements of the case are important and how the legal reasoning of the case addresses the questions they have raised.

Promotes Thoughtful Categorization of Legal Knowledge and Process Knowledge

Professors advocating rhetorical reading also instruct students to find themes, assumptions, missing information and underlying policy in the case text**.** When weekly rhetorical reading is married to Socratic questioning and in-class problem solving exercises, the instructor is able to check what L1's have learned from their readings and how well they have learned. Class dialogue and student answers to the in-class problem demonstrate whether students were able to: read and process the case appropriately, analyze and apply the case correctly to a novel problem and situate the case within its appropriate time frame and the topic being studied. The professor can step in when learning errors are found or gaps are highlighted. The professor's role is to correct the errors and explicitly state what the missing connections are, where to find them in the text, how they relate to prior material studied in class, why they are important and provide examples of how the new information fits with prior learning. This clarifies and consolidates the students' understanding of the law and enables the class to check that their categorization of what has been read into blocks of content and process knowledge is correct. By modelling how to think about organizing and integrating new knowledge gleaned from case reading and its application to future cases, the professor models how to think like a lawyer. This also re-emphasises to students the professional importance of high level legal reading skills.

Keeping it Real

When L1's are simply asked to complete a list of case readings without further instructions, the parties and circumstances of the case take on the character of abstract puzzle pieces that band together to make the legal argument. As Mertz (cited in Sullivan et al., 2007 p. 54) states, this creates a relational distance and removes bias, which is not always a good thing. In removing bias caused by the parties' social class, education or socially unacceptable or egregious actions, issues of unfairness relating to these matters also becomes distanced. Rhetorical readers instructed to objectively consider the political, social and economic contexts of the case and how this impacts the parties cannot "distance themselves beyond the point of objectivity." This makes it possible for the reader to keep the narrative and expository text in its proper time frame i.e. when the case was tried (Davies, 1987). This is important because similar fact cases from different time periods involving social issues illustrate how the law, societal norms, values and social and economic policy have matured, developed or adapted, often in an effort to resolve unfairness. It also highlights instances where unfairness or injustice remains unresolved.

Helps Students Acquire Skills Competency

Lawyers read rhetorically as a matter of course in their day to day practice (Christensen, 2008). Hence this strategy is instrumental in developing the core skills for LSUC competency: problem-solving, critical thinking, analyzing and synthesizing the law to the point where the distilled law can be applied to novel client problems to create elegant solutions that are clearly and concisely communicated.

Active Problem Solving

Rhetorical readers question the text and problem-solve as they move through the text resolving points of confusion in the facts or legal reasoning as they arise. Deegan found that new readers who question and hypothesized as they progressed through the text and sought out external sources to help them resolve points of confusion were more likely to be high achievers at the end of Law I (1995, p.160). This is not surprising since this type of problem solving is what lawyers do every day and calls for critical, analytical and creative thinking. Deegan (1995), like Spiro (1980), found that less successful readers were those who found the text difficult to understand, did not question or engage the text, skipped over points of confusion and resorted to passive "default strategies" akin to cataloguing (cited in Deegan, 1995 p.161).

Contextualizing is a core component of rhetorical reading and is instrumental in problem solving. Rhetorical method stresses the importance of student exposure to fuller accounts of cases rather than casebook excerpts, so students become familiar with the idea that facts are used differently by the parties to emphasize their side of the case (Mertz cited in Sullivan, 2007).

L1's initially fall into the trap of considering cases individually because all cases turn on their own unique set of facts. This

temptation should be avoided because common law courts never consider the case at bar in a vacuum, isolated from the history and the development of the jurisprudence that preceded it. As Edmund Burke remarked, "laws like houses lean on one another" and each fresh legal action in Canada grows out of others that preceded it. While this creates certainty in the law, there is no guarantee that a later case with substantially similar facts will not be decided differently because the later court finds grounds to distinguish it.

Reading a case report is a limited one dimensional view of how a particular court applied the law at a given point in time to a specific set of facts resulting in a particular outcome. If the reader only views the law through the prism of the final appellate decision they are left with a blind spot seeing only the final part of a much larger picture. Readers are likely to gain a clearer and fuller understanding of the legal arguments if they trace legal arguments back to their point of origin. Then, readers can see for themselves how the facts and legal arguments of the case are changed by the legal process as it makes its way through the courts to the point of final resolution.

Context is also a central component of factual analysis. Students learn that a difficult fact narrative in an appeal case can often be mastered by returning to the trial judgment. At trial, the facts of the case are comprehensively reviewed and determined. The import of which, is often lost in the redacted facts stated on appeal.

Critical Thinking

Purposeful questioning, which is the hallmark of rhetorical reading, promotes critical, reflective thinking. Questions are usually framed as "what if" questions addressing how the case might be decided if certain facts had been present or omitted. This allows L1's the opportunity to extrapolate the findings in the case by considering whether or not the new facts create a new legal problem and if so, reframe the issue and apply the same rules and reasoning to predict the probable disposition of the new case. This type of problem solving requires an accurate understanding of the pith and substance of the law, how the law applies to the facts of the case, why the judges decided the case in the way that they did and the readers' evaluation of the quality of the original judgment. Purposeful questioning of this sort helps L1's to form and use their observations and opinion of the case to resolve the new legal problem.

L1's substantive legal knowledge and the skills developed through rhetorical reading strategies are further consolidated when students are asked to apply their knowledge to create a "diagram of action" or write a case summary (Oates 1997, p.30). Both tasks should set out: the cause of action by answering the: who, what, where, when, how and why questions of the trial action and then moves on to consider who appealed and on what grounds, the disposition of the appeal and why the court rendered judgment as it did. These simple exercises can be completed in or outside of class and can be peer or self assessed by model answers. As Oates states, to chart the progress of a case in this way requires retention of the key points drawn from the text, clarity of thinking, comprehension, legal analysis and integration of new legal knowledge with existing knowledge (1997, p.30).

Factual Analysis

Facts can be a stumbling block to students. Law school is all about "law" and L1's are keen to gather as much legal knowledge as they can, as quickly as they can. However, the quest to find and apply the relevant law often overshadows the facts of the legal issue(s) to be resolved. It takes L1's a while to grasp that a judicial decision is tied to the specific facts of the case and the judge's reasoning cannot be meaningfully discussed outside of the facts that created it.

Determining which facts are significant looks deceptively easy. However, when L1's are asked to trace the procedural history of a case they are alerted to the way in which factual significance is open to change on appeal as the legal issue(s) are modified or elaborated (Mertz cited in Sullivan et al., 2007). This draws L1's attention to the way in which facts are simultaneously fixed and malleable. Facts are fixed, in so much as they are verifiable or the witness has been found credible at trial and malleable in their use by counsel to forge equally valid but opposing legal arguments. Through this exposure, students soon realize that the term "facts" has a specific meaning in the common law context, is qualified by the term "material" and refers to only those facts which precedent decrees support the parties' claims. As Mertz states, legally significant facts are revealed through "complex processes of interpretation that are shaped by pressures of litigation" (2007, p.53). The contextual reframing offered by rhetorical reading provides learning scaffolding that gives L1's the confidence to grapple with these interpretations rather than running from them.

Statutory Interpretation

An important step in legal analysis is to review cases that explain and interpret the applicable legislative authority. When reviewing cases, students must be mindful to only draw from those cases that speak directly to the current wording of the provision under review and not an interpretation of an outdated, amended or repealed version of the provision.

Purposeful questioning is a good technique for alerting L1's to the fact that sometimes the meaning of legally significant words in a legislative provision may not be provided within the Act, in which case it is necessary to see how the courts have interpreted it. This is illustrated in *Purcell v Taylor* [1992] OJ no 2554, above. The court was asked to consider whether homeowners, who were away at the time, incurred liability as dog owners for "harbouring" the dogs of an unannounced guest residing at their home for the purposes of section 1 of the *Dog Owners Liability Act*. At first instance, Justice Blair applied the ordinary meaning of harbours, i.e. "to shelter or provide lodging" concluding that the legislature did not intend for homeowners in these circumstances to become "owners" under the *DOLA*. On appeal, justices Hartt, Campbell and Dunnet found that the trial judge erred in too narrowly interpreting the word harbours. The homeowners had provided a dog run or dog house for the dogs on at least twelve occasions. This was sufficient to establish harbouring on a temporary basis ([1993] OJ no 1935 at paras 5-6). In a further action for personal injury, Justice Borins held that the *DOLA* does not apply where a guest is allowed to bring his or her dog into the home of a host ([1994] OJ no 2845 at paras 30-34).

Purposeful questions for the reading of *Purcell v Taylor*, might ask L1's to consider how the court interpreted the word "harbours" in section 1 of the *DOLA* and whether that interpretation could be distinguished if the defendant was a pet friendly hotel?

Legal Analysis and Synthesis

As L1's become practiced in rhetorical reading their perception of legal analysis broadens. They begin to see legal analysis and synthesis in a new light i.e. not as a static, rigid process but "a dynamic iterative process" that calls for creativity and flexibility in the blending and redaction of similar fact and issue cases to a common thread germane to all. Smith refers to this as the "structured manipulation of information" (1998, p. 2).

Readers who can identify themes and patterns are able to concretely synthesis the law, create lines of argument and rebuttal and make predictions. At this point in learning, readers know that points of confusion are glossed over at the reader's peril. Every time the reader resolves a point of confusion their mental lexicon expands, deepening and extending the connections they can make. This lies at the heart of case synthesis and inductive reasoning where numerous cases can be blended together on the basis of legally significant factual similarities or differences and then parsed down to a controlling authority statement that is germane to all and extrapolated to the problem at hand. The result is a strong, cohesive legal argument that is organized around a controlling authority rather than a weaker argument comprising a myriad of overlapping cases.

Communication

Students learn that through reading cases at a deeper level of comprehension they are able to understand and "talk about human conflicts in a distinctly legal voice" (Mertz, as cited in Sullivan et al., 2007, p.53). Rhetorical reading socializes students into the legal language culture enabling them to communicate effectively within the legal community. However, it does not readily lend itself to the task of simplifying complex language. This said, without an accurate understanding of the substantive law and language of the case which rhetorical reading provides, it is very difficult to reduce the case to plain English that can be understood by the lay client.

Metacognition

Metacognition occurs when students are aware of their cognitive processes and are able to able to reflect on how they learned as well as what they learned. This is often referred to as "thinking about thinking." Metacognition is a key step towards becoming a reflective practitioner (Schön 1983). Reflection, like any skill needs to be learned and practiced. Reflection is fostered when professors set reading tasks requiring students to read in role (counsel for the claimant or defendant, or judge) and then note how they read the case to find: the legal reasoning for their role, the rules and principles that govern the case and points of analogy and distinction within the legal arguments. By reflecting on the reading process, students become aware of themselves as legal readers and can consider what they might do differently next time to improve the efficiency and effectiveness of their reading.

When students are asked to orally present their finding from reading in role, it gives L1's the chance to hear the case from different perspectives and an opportunity to practice communicating complex ideas simply and concisely in plain English. It also enables the professor to check and correct errors in understanding and extend the dialogue to involve the class.

Another reflective technique that offers an alternative to journaling is the "letter to a friend" exercise. For this exercise, students are asked to write a letter to a hypothetical friend (Biggs & Tang, 2007). In the letter, students explain to their friend how they read the case, hindrances they encountered, how they overcame them, what went well and what did not and any changes they are considering making to their case reading process.

CONCLUSIONS

Rhetorical reading strategies equip L1's with the language cognition needed to acculturate more quickly into the legal community. They also foster a deeper understanding of the substantive law while developing the academic and professional skills needed for academic success and admission to the Canadian Bar.

Linear, one dimensional case reading is as different from rhetorical reading as looking at a picture of an object in a book and seeing the object itself. In the words of the famous French artist Robert Delaunay, "our understanding is correlative to our perception." Like a picture, one dimensional reading offers a limited means of understanding the true nature and qualities of the case. Rhetorical reading on the other hand allows the reader to comprehend complex and lengthy case test and identify the legal terminology necessary to summarize, analyze, and convey the meaning of the case precisely and with clarity and precision.

For rhetorical reading strategies to be successfully combined with case method and yield the greatest benefits to L1 students, professors must ensure that students know why they are reading the case, what they are to look for in the case, why they are looking for it, what they are expected to learn from their reading and how and why they expected to organize the information taken from the case text in a particular way. Otherwise when L1's are presented with a case list and little, or no instructional guidance or feedback, case reading becomes an obligatory chore from which many procrastinate and then end up relying heavily on canned notes.

Without timely feedback through in-class activities, many who diligently case brief are left wondering whether what they have done is good enough and uncertain if the rules and ratios identified are correct. This is easily mitigated when professors take the time to clarify terms, explain new terminology and concepts and show the relationship between concepts in a diagram in advance of reading, provide questions to be answered from the reading or assign reading in role tasks.

Rhetorical readers are patient and willing to engage fully with the text until they understand what are reading. They are willing to thrash out the meaning of complex sentences or paragraphs they find difficult to comprehend by asking questions and consulting secondary sources such as legal dictionaries, textbooks, annotated acts and monographs. Rhetorical readers do not exchange highlighting what they perceive to be important for engaging and questioning the text. Instead, both strategies are used.

Conversely, for students who are not practiced in rhetorical reading and read linearly, highlighting information is the central focus of case reading. They are so involved in highlighting large chunks of text they have difficulty understanding or remembering what they have read. Points of confusion or incomprehension become stumbling blocks that either halt reading or are glossed over. This makes it more difficult for students to retain what they have read because their thinking and analysis is unclear. Therefore, trying to integrate new and existing knowledge becomes problematic for them. When errors are corrected and points of confusion resolved in class those who have not learned to engage with the case text through rhetorical reading are more likely to simply to record what the professor has said and leave it at that.

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Change In Undergraduates' Research Self-Efficacy: A Pilot Study

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ABSTRACT

Research self-efficacy is defined as confidence in one's ability to successfully execute research-related tasks. This pilot study investigated the effect of a semester-long active-learning, course-based approach to the instruction of social science research methodology on undergraduates' research self-efficacy. Undergraduates (*N* = 32) completed the semester-long social science research methods course involving didactic and experiential components including a 10-step process for the development of an original research project. They completed measures of research self-efficacy (conceptualization, early tasks, implementation, and presenting the results). RMANOVA revealed that all facets of research self-efficacy significantly increased by post-test. Implications for undergraduate curricular planning are discussed.

Keywords:

INTRODUCTION

The critical importance of research training has gained greater attention across higher education (e.g., Boyer Commission, 1998) including within the social and behavioral sciences (Dunn, McCarthy, Baker, Halonen, & Hill, 2007; Parker, 2010; Shostak, Girouard, Cunningham, & Cadge, 2010). Undergraduate research experiences are valuable for a number of reasons; for example, they socialize undergraduates to the career field, improve practical skills, and enhance global skills such as critical thinking, problem solving, and communication (Hunter, Laursen, & Seymour, 2006). Moreover, research training is also associated with increased likelihood of graduate educational pursuit (Hathaway, Nagda, & Gregerman, 2002).

Engaging Undergraduates in Research Training

Given the importance of research at the undergraduate level, actions to expand the number of students involved in research have been implemented across a number of academic disciplines (May, Cook & Panu, 2012). Likewise, greater emphasis has been given to scientific training in undergraduate social and behavioral sciences programs, with research methods course offerings growing substantially in U.S. institutions over the last several decades (Perlman & McCann, 1999; Shostak et al., 2010).

Although efforts to involve students in undergraduate research training have expanded, challenges do exist (May et al., 2012; Perlman & McCann, 2005). For example, opportunities to participate in undergraduate research may be few due to limited institutional resources. Additionally, extramural undergraduate research assistantship opportunities may also be limited. Moreover, experiences such as these are typically highly competitive and available to only a limited number of students; thus, they have limited utility for providing research education to a general undergraduate population (May et al., 2012).

Another option to enhance students' exposure to research is through undergraduate coursework. However, research training at the course level is often textbook-based with students relying upon class readings to orient them to methodological terminology and concepts (Ciarocco, Lewandowski, & Van Volkom, 2013). Utilizing this approach, students may gain knowledge, but not true comprehension of research methodology because they have not experienced science "in action" (Ciarocco et al., 2013, p. 21). Engaging students in a more hands-on and personalized approach to research methods training can help students fully recognize the worth of research to their discipline; moreover, it may also improve undergraduates' perceived efficacy for various facets of the research process (Ciarocco et al., 2013). Improving undergraduates' efficacy for research may be one of the best ways to increase their future involvement in scholarship (Love, Bahner, Jones, & Nilsson, 2007).

Research Self-Efficacy

Research self-efficacy is a form of self-efficacy. Self-efficacy refers to individuals' beliefs that they possess the skills necessary to accomplish a goal (Bandura, 1977). Self-efficacy varies in generality (Bandura, 1977, 1982). For example, self-efficacy may be broad; individuals may possess confidence in their overall ability to master a variety of tasks. However, self-efficacy may also be specific and vary from domain to domain (Bandura, 1977, 1982). For example, an individual may possess self-efficacy for mathematics but not for athletics. Self-efficacy also varies in magnitude (Bandura, 1977). The greater magnitude of self-efficacy an individual possesses for a task, the greater the likelihood that the individual will attempt that task (Bandura, 1977; Phillips & Russell, 1994). Moreover, self-efficacy also varies in strength; the greater an individual's self-efficacy for a task, the greater effort the individual will devote to that task, even in the face of challenge (Bandura, 1977, 1982, 1989). Additionally, self-efficacy is dynamic, developing in response to an individual's experience. Following perceived successes, individuals engage in positive self-attributions for favorable outcomes; in turn, these positive self-attributions heighten the individual's confidence and strengthen expectations for future success. With a heightened sense of self-efficacy for the task, the individual is more likely to tackle more challenging domain-specific goals in the future (Bandura, 1989).

Research self-efficacy is defined as confidence in one's ability to successfully execute research-related tasks (Bieschke, Bishop, & Garcia, 1996). Bieschke et al. (1996) conceptualized research self-efficacy as four related components: conceptualization, early tasks, implementation, and presentation of results. Conceptualization encompasses the ability to generate research ideas, both individually and collaboratively. Early tasks refer to the ability to locate resources related to one's

research topic as well as consider ethical concerns related to that idea. Implementation incorporates behaviors related to the execution of the study such as development of experimental procedures, selection of measures, instruction of research assistants, data collection, and data analysis. Finally, presentation of results involves tasks necessary to present and publish one's results (Bieschke et al., 1996).

Studies investigating correlates of research self-efficacy have yielded positive results. For example, research self-efficacy has been predictive of interest in doing research (Bishop & Bieschke, 1998; Kahn & Scott, 1997; Lambie & Vaccaro, 2011) and research productivity (Lambie & Vaccaro, 2011; Phillips & Russell, 1994; Syzmanski, Ozegovic, Phillips, & Briggs-Phillips, 2007). Additionally, the research training environment has been found to be related to research self-efficacy in graduate students (Gelso, Mallinckrodt, & Judge, 1996; Phillips & Russell, 1994; Syzmanski et al., 2007). Furthermore, early research training experiences enhance research self-efficacy; positive experiences with faculty mentors, peers, and research teams have all been predictive of research self-efficacy (Love et al., 2007). Unfortunately, studies of research self-efficacy typically focus on graduate students; little is known about this construct in undergraduates.

The Current Study

Given the importance of early research training experiences on research self-efficacy (and indirectly, later scholarly interests), the purpose of the current pilot study was to investigate the effect of a semester-long active-learning, course-based approach to the instruction of social science research methodology on undergraduates' research self-efficacy. An active-learning approach was chosen because research indicates that these instruction methods produce better learning outcomes (Prince, 2004). Active-learning's central characteristic is student engagement – students are not passive recipients of information (e.g., sitting in a lecture hall); rather, students actively use course information in discussions, writings, and activities (Prince, 2004; Unrau & Beck, 2004). A course-based approach was chosen because it can be utilized to educate a general undergraduate population (as opposed to the limited opportunities available through independent faculty/undergraduate research partnerships and external research placements). It was hypothesized that all facets of participants' research self-efficacy (conceptualization, early tasks, implementation, and presentation) would significantly improve following this semester-long research methodology course.

Method

Participants

Power analysis was conducted using G*Power 3 (Erdfelder, Faul, & Buchner, 1996; Faul, Erdfelder, Lang, & Buchner, 2007). A power of .90 and an alpha level of .05 were used to calculate the minimum number of participants needed to detect a medium effect size. The analysis indicated that data from a minimum of 32 participants would be needed for this pilot study. Data collection occurred over the course of two semesters; 20 students participated during the Spring semester and 16 participated during the Fall. After completion of the two semesters, the initial sample was composed of 36 participants; however, data from four participants were excluded because these individuals withdrew from the course prior to completion of the study. Therefore, the final sample included 32 undergraduates (n = 23, 71.9% female; n = 9, 28.1% male). Participants' age ranged from 19 to 36 (M = 23.03). The sample was ethnically diverse; 62.5% (n = 20) identified as Latino/a, 15.6% (n = 5) identified as Black, and 15.6% (n = 5) identified as White. The remaining participants identified as either Asian (3.1%, n = 1) or multiethnic (3.1%, n = 1). Finally, the sample was comprised of 5 sophomores (15.6%), 12 juniors (37.5%), and 13 seniors (6.3%). Two participants (6.3%) chose not to provide information about college classification.

Participants were recruited from a medium-sized university in the southwestern United States. All participants were enrolled in research methods for the behavioral sciences courses during the Spring and Fall semesters. This course is required for all psychology, sociology, rehabilitation science, and athletic training majors and optional for criminal justice majors. Participants were offered five bonus points toward the first course assignment as incentive for participation.

Materials

Demographic information. Participants completed a questionnaire to gather information about age, sex, ethnicity, college class, and major.

Research Self-Efficacy. Participants completed the Research Self-Efficacy Scale (Greeley et al., 1989; Bieschke et al., 1996). The Research Methods Self-Efficacy Scale is a 51-item measure of confidence in one's ability to successfully execute tasks related to the research process. It has four subscales (Conceptualization, Early Tasks, Implementation, and Presenting the Results) that represent the different stages of the research process. Respondents rate their confidence on each research-related task using a scale that ranges from 0 (*not confident*) to 100 (*very confident*). Higher scores are indicative of greater confidence in one's ability to complete research-related tasks. Bieschke et al. (1996) reported internal-reliability coefficients for the full scale (α = .96) and Conceptualization (α = .92), Early Tasks (α = .75), Implementation (α = .96), and Presenting the Results (α = .91) subscales. In the current study, the internal-reliability coefficient for the full scale was α = .98. The Conceptualization (α = .97), Early Tasks (α = .90), Implementation (α = .97), and Presenting the Results (α = .97) subscales also had high internal-reliability coefficients.

Procedure

A repeated measures, fully within-subjects (pre-test, post-test) design was utilized to examine change in participants' research self-efficacy over the course of the 16-week semester. Participants completed all study measures during class time; measures were administered on the first and last days of class. The Institutional Review Board reviewed and approved this study.

In addition to doing readings and attending classroom lessons on research methodology in the behavioral and social sciences, participants progressed through a semester-long, 10-step process to develop and present an original research project related to one of their personal interests. First, participants identified two topics of potential interest for a research project. Second, they conducted literature searches to identify a minimum of five scholarly sources related to each potential topic. Third, participants selected a final research topic, generated a preliminary research hypothesis, and located an additional 10 scholarly sources related to this topic. Fourth, participants created a final research hypothesis, operationalized the relevant variables, identified a population of interest, and specified the research design necessary for the study. Fifth, participants completed an annotated bibliography of a minimum of 10 scholarly sources related to the research hypothesis. Participants then organized information from the annotations into a minimum of three themes; these themes were used to organize the sixth step, the introduction and literature review. Seventh, participants designed and wrote the methodology for their studies. Eighth, participants described the analyses that would be appropriate for the data, as well as anticipated results of those analyses. Due to time and resource limitations, participants did not conduct the actual data collection for their studies. However, students were offered the opportunity to generate random data (using a statistical software package) to use for practice with data analysis. Ninth, participants submitted a final research project, incorporating faculty and peer feedback received through the previous steps. Finally, each participant provided a conference-style presentation of the final project.

To mimic the "real-world" research experience, elements of independent, supervised, and team research approaches were integrated into the projects. For example, participants completed all tasks independently (via class assignments), but also utilized feedback provided by a research supervisor (the instructor of the course provided personalized written feedback reports to each participant following each assignment). To mimic the research team experience, portions of class time were devoted to group discussion of individual projects throughout the semester. Participants provided suggestions to one another on issues such as literature searches, refinement of research hypotheses, operational definition of variables, selection of measures, and selection of appropriate analyses.

Results

It was predicted that all facets of participants' research self-efficacy (conceptualization, early tasks, implementation, and presentation of results) would significantly increase over the course of the semester. A RMANOVA was conducted to investigate change in these variables over time. As predicted, participants' self-efficacy for conceptualization, early tasks, implementation, and presentation of results significantly increased over time, all with moderate effect sizes. Means, RMANOVA results, observed power, and effect sizes are presented in Table 1.

Table 1

Means, Repeated Measures Analysis of Variance for Research Self-Efficacy

Variable	Mean Pre	Mean Post	*F* (1, 31)	*p*	Observed Power	η_p^2
Conceptualization	7 1.18	8 8.75	1 9.00	< .001	.99	38
Early Tasks	7 5.55	9 2.41	2 0.00	< .001	.99	39
Implementation	6 6.26	8 0.73	1 4.68	. 001	.96	32
Presentation	3 9.42	5 2.64	1 5.12	< .001	.96	33

Discussion

This pilot study investigated the utility of an active-learning, course-based approach to the instruction of social science research methodology on undergraduates' research self-efficacy. It was hypothesized that participants' research self-efficacy would increase through participation in this educational intervention. As hypothesized, participants' confidence for executing research-related behaviors increased. Participants reported greater confidence in their abilities to generate research ideas, alone or in collaboration with others (conceptualization), locate scholarly resources related to the research topic and plan for potential ethical concerns (early tasks), operationalize variables, design the study's methodology, and conduct data analyses (implementation), and organize results for presentation and publication (presenting the results). Students seemed to benefit from an approach that allowed them to experience research "in action" while concurrently learning about methodology in class and through readings. It is interesting to note that students' confidence in their ability to implement a research study increased, despite that they did not actually implement the research projects developed during this course. This suggests that research-related activities such as locating and critiquing journal articles, operationalizing variables, and planning analyses are beneficial for overall development of scientific confidence and potentially skill.

Improving undergraduates' research confidence and potentially skill may have implications for these students' future job search. The majority of individuals who earn a bachelor's degree will directly enter the workforce (versus enter graduate school); this underscores the importance of marketable job skills in a competitive job market (Landrum & Harrold, 2003). Although employers seek a diverse range of skills in their new hires, research skills are commonly sought after (Aubrecht, 2001; Casner-Lotto, Barrington, & Wright, 2006). With a heightened sense of efficacy for research, new graduates may feel more comfortable discussing their preparedness and fit for positions involving research skills. Moreover, they may be encouraged to consider how findings of applied research may apply to improving their daily work.

Implications for the Scholarship of Teaching and Learning

Given that enhancing undergraduates' research self-efficacy may be one of the best ways to facilitate their involvement in future scholarship (Love et al., 2007), these findings have implications for curricular planning in higher education. This active-learning, course-based approach could be a way to provide research skills training to a broad student population. This approach could be particularly useful in universities with resource limitations that preclude undergraduates from engaging in independent research with faculty mentors (e.g., limited research funding, limited faculty release time to mentor students) or in external research placements. In situations in which practical issues limit students' opportunities to participate in research, this method may provide a functional approximation of the training, enabling undergraduates to be socialized to the research process and develop foundational research skills. Additionally, experiences such as these that allow students to build confidence in their research skills. This may translate into students seeking out more real-world research training opportunities; increased confidence may facilitate student engagement in additional research-related behaviors. It is possible that this could also increase students' interest in research-related careers or the incorporation of research into practice-related careers (for example, conducting outcome research as a part of one's clinical practice); however, there is an equivocal relationship between research training and intention to engage in future research (Lambie & Vaccaro, 2010; Sizemore & Lewandowski, 2009).

Changes in research self-efficacy also have implications for outcome assessment in higher education (Holden, Barker, Meenaghan, & Rosenberg, 1999; Unrau & Beck, 2004). In addition to changes in specific domains of knowledge or skill, educational programs could also incorporate assessment of research self-efficacy change into program evaluation (Unrau & Beck, 2004).

Limitations and Directions for Future Research

The self-report nature of the dependent variable (research self-efficacy) in this pilot study is a limitation of the current study. Although participants' confidence regarding execution of research-related activities increased, their proficiency to perform these activities may remain unchanged. Confidence in one's ability to do a particular activity does not equate with competence; it is possible that participants may have overestimated their ability to perform these tasks. Kruger and Dunning (1999) and Dunning, Johnson, Ehrlinger, and Kruger (2003) emphasize that individuals with the lowest degrees of competence tend to overestimate their ability to perform tasks the most. Future research may include assessment of participants' ability to execute research-related tasks to determine if enhanced research self-efficacy is related to performance change.

The absence of a control group from this pilot study is an additional limitation of the current study. Without this control group, causal inferences regarding the effect of this educational intervention are limited. Future research is planned to incorporate a control group, such as undergraduates who are enrolled in general education courses. Inclusion of a control group of participants who are not currently undergoing formal research methodology training will enable causal inferences regarding the effect of active-learning research instruction on undergraduates' self-evaluation, specifically research self-efficacy.

Conclusion

In sum, this pilot study supports the use of an active-learning, course-based approach to social science research methods education as a means to enhance undergraduates' research self-efficacy. This approach may provide a practical solution for orienting a general undergraduate population to the research process, especially in institutions with limited resources for independent undergraduate research. Enhancing undergraduates' research self-efficacy may enhance their workforce readiness. Measurement of research self-efficacy may also have implications for undergraduate curricular planning and program assessment.

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Analysis of distance learning in smart schools in Iran: A case study of Tehran's smart schools

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ABSTRACT

In the paradigm of information society the structure and facts have become flexible and subjective. In the recent social - economic order, IT and communication have taken over the leading role. Distance learning in smart schools is one of the flexible realities in the education field that has crossed the format of the hard and inflexible traditional schools such as boundaries of time and place and has provided educational content by using multimedia and networking software and computers. This study analyzed distance learning in smart schools within the regions of education of Tehran. The subjects for study were teachers and administrative staff of Tehran's four smart schools. Their opinions were collected according to Likert spectrum. Then we attempted to test the hypothesis using Pearson's correlation and regression testing. Results indicated that there should be an emphasis on systematic approach in distance training and also that one-dimensional view lead distance learning objectives to fail. There was a significant relationship between elements of software and hardware infrastructure and distance learning in smart schools and also between the ability of teachers and the establishment of distance education.

Keywords: distance learning, smart schools, infrastructure, software and hardware, Tehran

INTRODUCTION

Society is in transition to a new model of economic – social order based on knowledge and information processing. In other words, knowledge and information are the raw material for a new society. The new structures and factors associated with structures that do not completely conform to the requirement of industrial paradigm. While in preceded diverse range of industries often faced with hard facts, and structures, uncompromising physical and material, in the paradigm of information society, these facts and structures are flexible and subjective. In the recent economic- social order IT and communication have taken over the leading role so even workers become knowledge-based workforce. This technology is actually a set of tools and methods that collect, store, retrieve process and distribute the information in variety form and provide means to overcome the problem of unresolved historical detachment and lack of access to information and knowledge which are the main obstacles to the development of education.

ICT created new look in educational landscape due to changes in content and methods of learning and the function of educational institutions (Salimi & Ghonoodi, 2011). Use of these technologies has changed the educational system (Ozpolat & Akar, 2009; Liu, Liao, & Pratt, 2009; Liaw, Huang, Chen, 2007) and strengthens the processes of learning and teaching (Paechter & Maier, 2010). On the basis of previous concept, learning is fundamentally changing that it is no longer limited to attend classes (Wang, Wang, Shee, 2007). Distance learning is described "as instructional delivery that takes place when learners and teachers are separated throughout the learning process by time and physical distance" (Motamedi, 2001, 386). Distance learning is a phenomenon that has been established due to the learners' tendency to seek non-personal access to course material, limitations of time, place, and problems of mandatory attendance and on time attendance in academic classes. Computer networks, especially the Internet and the World Wide Web in this way have created a special facility.

In distance education, students can take courses without reference to their own school buildings to register and can participate in virtual classes without limits of time and place. Therefore, the role of information technologies, the Internet,

software for distance learning, virtual libraries, web and its interactive capabilities specially link technology, hypertext, and meta-data models is undeniable. These cases as a robust and secure infrastructure support the process of distance education via the Internet. As a result of the interactions between the system and the students, the classroom environment and human communication are simulated and even by providing answers to possible questions students may complete the training process. In the field of distance education in addition to the various technologies that are used, items such as the ability of teachers and students, available library facilities, network support, software facilities, elementary training, study skills, improving procurement procedures, transmission, delivery and evaluation of training materials, types of IT-based training, and training management also arise; that all of these play an effective role in improving the quality of learning and solving problems of absence in traditional classroom and promote scientific relations.

Iran is still in the early stages of planning and implementation of smart schools plans. According to the Supreme Council of Information and Communication Technology of Ministry of Education, pilot implementation of the model began 2008 in four schools in Tehran (Absal Girls High School in district 4, Call Liberty School in district 5, Dr. Mosaheb Boy High School in district 7, and Workers Martyrs Boy High School in district 15). In the 2011-12 school years, the majority of nationwide education institutions have decided to implement the smart schools project. The research questions for this study are:

- What facilities and equipment required for classes via the Internet?
- What skills are smart schools teachers and staff required to execute distance learning courses and what skills do they have.
- What is the current status of the smart schools facilities?

Purpose

Given that distance education has become prevalent in the last two decades, it seems to have had a good result in different disciplines and countries and has changed the category of education from teaching to learning (Berge & Colllins, 1995). In addition, smart schools in the world have had good growth even in Asia (Norman, 2001). However, in Iran we are facing the changed nature of smart school's pattern. Up to now what has been done in smart schools was at the level of installing projectors and smart boards. While looking at the various components of this model implies that both the hardware infrastructure such as computer accessories, Internet networking and LAN systems, designing classrooms to suit the needs of smart schools and software infrastructures such as backup rules and regulations and smart schools teaching and learning, digital libraries, and skilled and trained manpower should be seriously considered. Therefore, further study is necessary to assess the facilities of smart schools.

What is Smart School?

Smart schools are schools that are flexible with respect to the features and capabilities of students (Salimi & Ghonoodi, 2011). Computer also has affects in teaching and evaluation
and changing of curriculum. As the Internet and accessing web sites are of major infrastructure planning in smart schools, students gain the ability of processing information so they can increase their amount of learning (Rahimah, 2003). The Malaysian Smart School Roadmap (2005) states that these kind of schools are learning institutions in which all the processes of learning, teaching and management processes reinvent in information age to help students to be effective and able. Smart school is not limited to the use of ICT in teaching and learning but national curriculum and pedagogy, teachers, school administrative staff, parents and the community that enhance the education of Malaysian students have important role. In the definition of smart schools in Iran, it is also stated: Smart schools in Iran are schools that are developed schools that for the transmission of traditional concepts, information and communication technology tools will be used. These tools include computer programs, specially the use of applications, such as slides (PowerPoint), lexicography and spreadsheets and Internet facilities (Education and Training Organization of Tehran, 2005). In the smart schools, using the Internet, students have access to vast reservoirs of information. In case of not getting answers to their questions, students interact not only with teacher but also with other students. Content is presented electronically and teacher acts as a guide (Nozari & Nozari, 2013).

Literature Review

The use of distance learning in smart schools of America has begun in the United States and has found its way into other countries (Norman, 2001). In the study conducted in India, the author has tried to change the world of computers and communications and explained its role in providing the resources required for Internet-based training course in smart schools and discussed distance education in smart schools in India as case study (Sign, 2007). In a study by Dringus and Scigliano (2000), writers reviewed history of academic courses via the Internet at Nova University in the United States from1980 to 2000 and explained problems and obstacles in the way to do this and discussed how to solve them. In this study the systems and technologies for distance education programs, facilities and capabilities of the system and how is the relationship between students and teachers, and software used in teaching courses and presentations of conferences and remote resources were discussed and analyzed. In another study learning using information technology is classified and explained that in the first stages, available scenarios have discussed this kind of training and methods of preparing materials for them and then the communication services required for each scenario are described. According to this analysis components and features required for each scenario are included in the three protocols – components used in communications, data management and special functionality for learning. The author has tried to analyze all sorts of aspects of distance education with special situations of communication between teacher and student, student and student, and the students with the system (Knierriem-Jasnoch, 2001).

Methodology

The present study was a descriptive –analytical research. As it assesses the feasibility and implementation of distance learning of smart schools in Iran, there is a need to review, identify and compare the available facts. Survey research method was used. This means that at first a set of cases were identified as facts of possibility of holding distance learning via the Internet for smart schools using materials, policies have been determined. Then using a questionnaire, Smart School teachers' comments were collected andanalyzed. Using a Likert 5 spectral pattern (totally agrees 5, and completely disagree 1) in the form of questionnaire, indicators were identified.

The population of this research is the smart schools in Tehran. Given the widespread pattern of Tehran, four top smart schools in Tehran have been identified as sample (Absal Girls High School in District 4, Call Liberty School District 5, Dr. Mosaheb Boy High School District 7, and Workers Martyrs Boy High School District 15). These four schools were selected because the model of smart schools in Iran started in 1997 by these schools on an experimental basis.

Our sampling method is two-stage cluster sampling and census. At first among smart schools in Tehran, four clusters were selected with indicators such as history, area ofeducation, student population, and gender.

Data collection was conducted in two phases and with two methods. Firstly, through interviews with some of the teachers of smart schools, information obtained about the facilities, equipment and conditions required for distance courses and online classes especially in the smart schools then specified conditions assessed in the form of questionnaire.

Data Analysis

Computer Technician: The teachers and administrators were asked whether it is necessary to have computer technician to administrate distance education.

Table 1

Likert for items related to computer technician

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	4%	3%	7%	56%	30%

Having laboratory specialized to smart schools: The teachers and administrators were asked: for holding distance education courses whether smart school groups should have LAB? Their answer according to the Likert scale is as following table.

Table 2

Likert scales for items related to having LAB.

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	8%	12%	5%	48%	27%

The necessity of having a digital library in school: in this school administrators and teachers were asked about the necessity of having a digital library on the Internet for distance education in smart schools, and their responses are summarized in blow table.

Table 3

Likert scales for items related to having a digital library

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	8%	12%	5%	48%	27%

The necessity of having an electronic and smartboard: The teachers and administrative staff were asked whether it is necessary to have electronic and smartboard for distance education courses in smart schools. Their answers are as following:

Table 4

Likert scales for items related to having electronic and smartboard

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	12%	12%	7%	40%	29%

Internet Networking: Administrative staff and teachers were asked whether it is necessary to have online networking with other schools and the necessary resources and databases that they respond following

Table 5

Likert scales for items related to having internet networking

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	12%	12%	7%	40%	29%

Familiarity with software related to distance education: In this case, the respondents were asked :is it necessary to be familiar with software related to distance education that the responses spectrum is shown below.

Table 6

Likert scales for items related to being familiar with related software

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	13%	8%	3%	53%	23%

The history of holding classes via the Internet: Teachers and administrators were asked whether the history of distance education courses via the Internet is essential that the response spectrum is as follow:

Table 7

Likert scales for items related to history of holding Internet classes.

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	195%	20%	9%	33%	29%

Using online resources as subsidiary: Teachers were asked whether using online resources by teachers is essential that the response spectrum is as follow:

Table 8

Likert for items related to using online resources.

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	10%	5%	9%	54%	25%

Having specialized LAN system in smart school: Teachers were asked whether designing LAN system is essential to create proper communication with environment and students parents? The responses spectrum is as follow:

Table 9

Likert scales for items related to having specialized LAN system

1	Completely disagree	Disagree	No idea	Agree	Completely agree
2	15%	9%	8%	21%	27%

Testing Hypotheses

Hypothesis 1

Hypothesis H1: There is a significant relationship between the hardware and software infrastructure in smart schools and distance education courses.

Hypothesis H0: There is no significant relationship between the hardware and software infrastructure in smart schools and distance education courses.

A - Pearson correlation test

Table 9

Pearson correlationTestof Hypothesis 1

Correlation coefficient	The number of responder	Significance level
R=/785	N=120	α=/43

This test revealed a weak positive correlation between the independent variable of the hardware and software infrastructure and distance education variable in smart schools. Results show that for a unit change in the independent variable, the value .785 unit changes in the dependent variable can be expected. This prediction is bilaterally significant at the level of 95% based on the above test.

A) Regression testing

Table 9

Regression testing of Hypothesis 1

β	Sig. F	F	Adjusted R^2	R^2	R
0.785	0.047	22.886	0.061	0.565	0.245

The above table shows the regression output. According to this table, F test which is the test of approve or reject a hypothesis, is significant at the level of 95% and conforms the relationship between two variables. β is the kind of statistic indicates that 0.785 changes are predictable. R^2 represents the identified amount of variable "Y" in relation to the variable "X". R^2 indicates that 0.565, it means 56% of variations of variable "Y" is because of inserted "X" and the rest is related to other "Xs".

ResultsoftestF,Pearson correlation, andregression analysisshow that there is significant relationship betweenhardwareand softwareinfrastructure insmart schoolsandthe possibility of establishing distance education.Then hypothesis H1 is conformed andnullhypothesisH0is rejected.

Hypothesis 2

H1: There is a significant relationship between capabilities of teachers and school administrative staff and the possibility of establishing distance education.

H0: There is no significant relationship between capabilities of teachers and school administrative staff and the possibility of establishing distance education.

A - Pearson correlation test

Table 9

Pearson correlationTestof Hypothesis 2

Correlation coefficient	The number of responder	Significance level
R=/654	N=120	α=/000

This test revealed a positive and high correlation between the independent variable of the needed capabilities of teachers and school administrative staff and the dependent variable of distance education. Results show that for a unit change in the independent variable, the value .654 unit changes in the dependent variable can be expected. This prediction is bilaterally significant at the level of 99% based on the above test.

B - Regression testing

Table 9

Regression testing of Hypothesis 1

β	Sig. F	F	Adjusted R^2	R^2	R
0.654	0.047	26.054	0.077	0.533	0.284

The above table shows the regression output. According to this table, F test which is the test of approve or reject a hypothesis, is significant at the level of 99% and conforms the relationship between two variables. β is the kind of statistic indicates that 0.284 changes are predictable. R^2 represents the identified amount of variable" Y" in relation to the variable "X". R^2 indicates that 0.533, it means 53% of variations of variable"Y" is because of inserted "X"and the rest is related to other "Xs".

Results of test F, Pearson correlation, and regression analysis show that there is significant relationship between capability of teachers and school administrative staff and the distance education. Then hypothesis H1 is conformed and null hypothesis H0 is rejected.

Discussion and Conclusion

Planning distance education courses in smart schools is one ofthe key elementsofinformation andknowledge basedsociety in field of training. It is affected by rapidtechnologicalchange and requires systemic programming of all elements. As it is obvious from analysis of structures of research variables, both the teachers andthe administrative staff of smart schools (Absal girl high school, Freedom Call girl high school, Dr. Mosaheb boy high school, and worker Martyrs boy high school) insiston asystem approachin administeringdistance education and reject the one-dimensional approach.In thissystemic approachallelements ofsoftwareand hardwareinfrastructure fordistance education insmart schoolsshouldbe present; andtheprovision ofelectronicboardsor set upaspecialized site causeto fail thereachinggoalsofdistance education.Astheconceptual modelreveals, theseinfrastructures have mutually relationship with each other.Hence,it is necessary that the country's education system administrators take in to consideration theintegrity ofelementsof distance education.In our opinion,by considering the requirementsof the information societyand theincreasing demandfor distance educationbydifferent socialclasses,planning andformulation ofrelatedlaws andregulationsshould bethe most important challenginginfrastructure. Then the following cases should be examined: a)ruleson how toevaluatea distance educationdegree; b) rules onhow to establishdistance education(focusedorbydifferent institutions); c) rules concerning thedefinitionofauthority ofinstitutionsinholdingdistance education; d) rulesrelating tothe requirements forparticipation indistance education; e) ruleson how toreform andstate the opinion of teacher; and f) rules regardingonline networksecurity system.

It should be notedthat many of thesocial issuesof educationalaffairsafter administeringtraining programsandthrough observationsandsurveysand feedbackcan be studied.

Through this study three overall results were obtained:

1 - Smart Schools do not have thepotential functionality and capabilityfordistance educationcourses.

2 - It is necessary that the teachers and administrative staff could investigate further the distance education following up its implementation at different levels and in different classes.

3 – With regard to the first case and havingthe potentialperformance ofsuch workandalong withthe progress made inthis area,it is essential thatschoolshave asystematicplanforthedistance educationand with thesystematicand purposefulstances pavethe wayto achieve it.On the other hand, observing the Pearsoncorrelationbetweenthe independent variables, including the capability of teachers and administrative staff toestablish, it is essential that theauthorities ofthe country's educationsystem act toward holding classes to be able better act in continuing toapplythenew teachingmodel.

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Malaysian Students Learning The Arabic Language In Arab Schools In Malaysia: A Future Study

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ABSTRACT

This article aims to investigate the future of teaching Arabic Language in Arab schools in Malaysia. The method used here is called Fuzzy Delphi, and the data were collected from a group of experts containing teachers, parents and school principals in order to predict the situation of these schools in the next 10 years, and to overcome the challenges of teaching Arabic language with innovative activities and a modern curriculum. The issue here discusses the role that should be played by both Arab schools and authorities in order to fulfil parents' expectations. The results obtained out of this study indicates that more modern and computer based learning materials must be provided by Arab schools to enhance the learning of Arabic language. In addition, students must be enough motivated to learn Arabic.

Keywords: Arabic, Languages, Teaching, Learning, Schools.

INTRODUCTION

Arabic language is under big concern by Malaysian people, it has been noted a lot of Malaysian families are sending their children to learn Arabic language and that is because Arabic is related with their own culture as well as their religion which most Malaysians follow (Teh, Embi, Yusoff, & Mahamod, 2009). Hence, Arabic has been started teaching in several places such as schools, institutes, Islamic classes, and universities (Zubairi & Sarudin, 2009). In addition to that it has been observed recently there are many Arabic international schools are opened around Malaysia especially in Kuala Lumpur and surrounding areas where Arabic is being taught in these schools beside the other subjects such as Maths and Science. The idea of Arabic schools obtained a big acceptance in the Malaysian society at the beginning and accordingly the number of Malay students getting in to Arabic schools started increasing. There are more than 5 Arabic international schools in Malaysia. However, only three schools are having Malay students in their class rooms. These schools are the International Modern Arabic School (IMAS) with almost 100 Malay students, next is the Saudi School with 40 Malay students, and finally comes Al Baseerah School with around 30 students. In IMAS they offer an Arabic curriculum enriched with international curricula and delivered by English and Arabic. However, a complete idea about the teaching program could not be found on their websites, which forced the researchers to visit these schools. The teaching quality of Arabic language became a big question mark. Where the students spend most of their time with several subjects without concentrating on neither Arabic nor other subjects, hence leading to switching from one subject to other without a perfect knowledge on either. In fact, there are several teachers and school principals declared that the number of Malay students in Arabic schools started decreasing, and some of them transferred to other local schools leading to fluctuation (between increase and decrease) in the number of students per year registering and leaving the Arabic schools. There is no study so far done on this topic which explains the reasons in details behind registering and leaving the Malaysian students the Arabic schools. Hence, this study aims at investigating the future of Arabic language in Arab schools in Malaysia and this goal will be investigated through the following objectives:

- To identify the reasons that make Malaysian families send their children to Arab schools.
- To identify the role that should be played by Arab schools to attract Malaysian students.
- To identify the characteristics of the ideal curriculum for teaching Arabic language.
- To investigate the role that should be played by the authorities to improve the educational process of Arab schools.

Three research questions were formulated for the purpose of study as follows:

1. What are the factors that motivate the parents to send their children to Arab schools?
2. What is the role that should be played by the Arab schools in order to establish an effective Arabic program?
3. What are the characteristics of the ideal curriculum that should be used to teach Arabic language?
4. What is the role of the authorities that should be played to improve the educational process?

Literature Review

Several studies have been done to motivate Malaysian students to learn foreign languages. A recent study done by (Zubairi & Sarudin, 2009) which investigates the Malaysian students motivation to learn a foreign language. This study concluded that Malaysian students learn a foreign language for extrinsic and intrinsic reasons. Compulsory foreign language requirement in the school's curriculum may enhance intrinsic motivation. This study also concluded that the content of the courses and the methods of classroom teaching can then be planned based on the different needs and motivation of the learners. Another study done by (Mustapha, Mustapha, Daud, & Wahab, 2013) which focuses on self-efficiency in Arabic language learning. This study concludes that measuring students' efficacy on specific language task will enhance the instrument and see its specific impact on students' achievement. This instrument would then have a direct practical impact on the teaching and learning processes. When Arabic learners believe that they are good readers, writers and able to use correct grammar in their communication, the effect of these beliefs is observed in the improvement of their performance. Finally an old study has been done by (Ismail, 1993) on teaching the Arabic language in the National University of Malaysia. This study has concerned with the teaching and learning of Arabic as a second or a foreign language in Malaysia in general and in the Faculty of Islamic Studies of the National University of Malaysia in particular. The main purpose of this study was evaluating the existing Arabic language program in the Faculty, and to provide some suggestions for its improvement.

Methodology

In this section we will describe first the algorithms used in the questionnaire for the purpose of the data collection and analysis.

3.1 DELPHI TECHNIQUE

Delphi technique has been chosen to perform the data collection and analysis. This technique is about gathering information from highly qualified experts to develop the predictions about future events. A panel of experts is chosen and their opinion is released for each feature where the responses of experts are collected and analyzed statistically. This method is broadly used by researchers in the various fields of Science, Technology and Management (Cheng & Lin, 2002; Kaufmann & Gupta, 1988; Murray, Pipino, & van Gigch, 1985). There are several methods of Delphi Technique; The Basic FDM has been used in this study. The steps for Basic FDM are as follows:

1. Selection of experts
2. Collection of opinions of decision group: Finding the evaluation score of each alternate factor's significance given by each expert by using linguistic variables in questionnaires.
3. Setting up triangular fuzzy numbers: Calculating the evaluation value of triangular fuzzy number of each alternate factor given by experts, finding out the significance triangular fuzzy number of the alternate factor.
4. Calculating threshold value, d to determine consensus of experts' opinion.
5. Defuzzification: Using simple centre of gravity method to defuzzify the fuzzy weight.
6. Ranking of items (alpha-cut)

3.2 PARTICIPANTS

Selection of experts can be done in two ways:

- Determine the experts.
- Numbers of experts:
    i. 10-15 respondents (Adler & Ziglio, 1996)
    ii. 10-50 respondents (Jones & Twiss, 1978)

In our approach we have used the first option which is determine experts.15 experts have been selected to answer the questions. These experts are schools principals, Arabic language teachers and parents.

3.3 SETTINGS

These experts were gathered two times. In the first time an open question about the future of Arabic language in Arab schools in Malaysia was given. During the discussion the facilitator noted their different opinions and wrote them down to create the questionnaire.

3.4 PILOT TEST

After the questionnaire was set the facilitator passed the questionnaire to the experts for amendments. The experts joined some items and changed some items in the questionnaire. In the final step the final questionnaire was created with consideration of experts' amendments.

3.5 DATA ANALYSIS

According to Fuzzy Delphi method calculating the evaluation value of triangular fuzzy number of each alternate factor given by experts is done as shown in Table 1. Where r1, r2 … are the experts participated and 1.1, 1.2 are the number of questions. The values inside the table are rated as follows:-

Strongly Agree	0.60 0.80 1
Agree	0.40 0.60 0.80
Neutral	0.20 0.40 0.60
Disagree	0.10 0.20 0.40
Strongly Disagree	0.00 0.10 0.20

Experts	1.1			1.2		
r1	0.6	0.8	1	0.4	0.6	0.8
r2	0.6	0.8	1	0.4	0.6	0.8
r3	0.2	0.4	0.6	0.4	0.6	0.8
r4	0.6	0.8	1	0.6	0.8	1
r5	0.6	0.8	1	0.6	0.8	1
r6	0.6	0.8	1	0.6	0.8	1
r7	0.4	0.6	0.8	0.4	0.6	0.8
r8	0.4	0.6	0.8	0.2	0.4	0.6
r9	0.4	0.6	0.8	0.6	0.8	1
r10	0.4	0.6	0.8	0.2	0.4	0.6
r11	0.2	0.4	0.6	0.4	0.6	0.8
r12	0.4	0.6	0.8	0.4	0.6	0.8
r13	0.4	0.6	0.8	0.4	0.6	0.8
r14	0.6	0.8	1	0.4	0.6	0.8
r15	0.6	0.8	1	0.6	0.8	1
Average	0.467	0.667	0.867	0.44	0.64	0.84
Fuzzy evaluation	7	10	13	6.6	9.6	13
Defuzzification	10			9.6		

Figure 1: Alternative

The above Figure 1 shows the average that is M1, M2 and M3 which is the fuzzy evaluation divided by 15 (number of experts) step 3 in the basic FDM. It shows also the fuzzy evaluation this is the total of the columns and finally Defuzzification which is total of fuzzy evaluation divided by 3.

Next we have calculated the threshold value using the formula below as observed in the following Figure 2.

$$d(\tilde{m},\tilde{n}) = \sqrt{\frac{1}{3}\left[(m_1-n_1)^2+(m_2-n_2)^2+(m_3-n_3)^2\right]}.$$

Expert	1.1	1.2	1.3
1	0.02074064	0.00186667	0.0168
2	0.02074064	0.00186667	0.0168
3	0.08296317	0.00186667	0.00746667
4	0.02074064	0.02986667	0.00746667
5	0.02074064	0.02986667	0.00746667
6	0.02074064	0.02986667	0.00746667
7	0.00518524	0.00186667	0.0168
8	0.00518524	0.0672	0.00746667
9	0.00518524	0.02986667	0.0168
10	0.00518524	0.0672	0.0168
11	0.08296317	0.00186667	0.00746667
12	0.00518524	0.00186667	0.00746667
13	0.00518524	0.00186667	0.00746667
14	0.02074064	0.00186667	0.0168
15	0.02074064	0.02986667	0.00746667
Average	0.34222222	0.29866667	0.168

Figure 2: Threshold Value

According to (Chen & Lin, 2002) percentage of consensus should be more than 75%, otherwise subsequent

rounds of questionnaire needed and each item needs to be less than or equal to 0.2. In our case the percentage of consensus is 100% which is considered to be a good result of consensus and all items of the questionnaire were less than 0.2. In the final step the ranking of items is done. The following Figure 3 describes the ranking process.

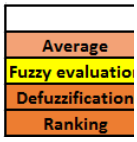

Figure 3: Ranking

The ranking (con't) sorts the items by the importance according to experts opinions. They are as shown in Table 1.

Table 1: Ranking

Ranking	Item Number	The item
1	1.4	Students should have intrinsic motivation to learn the Arabic Language.
1	2.2	Schools should establish an Arabic proficiency test.
2	2.4	Schools must have language laps.
3	1.6	Students who speak Arabic have a better understanding for Quran and Islam in general
3	2.5	Schools need to focus on extrinsic motivation (trips, awards, debates) in order to encourage students to learn Arabic Language.
3	3.3	Arabic language textbooks should be supported with up to date teaching methods such as CDs & Internet.
3	4.1	Authorities Should provide facilities for opening new Arabic schools.
4	4.2	Authorities Should offer scholarships for excellent students to Arab countries.
4	4.3	Authorities should establish a committee to supervise the performance of Malaysian

		students in Arab schools.
5	1.3	Students should be engaged with authentic materials.
6	2.6	A website should be designed to help students to interact with native speakers. (forums, chat rooms)
7	2.3	The teacher of Arabic Language should be a native speaker.
7	3.1	Arabic Language textbooks must focus on teaching the language skills rather than teaching the religion.
7	3.5	The curriculum should discuss fundamental social issues especially those concerned with the issues of youth.
8	1.1	Students should study a preparatory year in Arabic language.

As observed from the table above ranking of some items are positioning in the same level. For example item number 1.4 and 2.2 ranked in the first position. And 1.6, 2.5, 3.3 and 4.1 are ranked in the third position. This is because according to the questionnaire some experts had a common opinion about answering certain questions.

DISCUSSION

4.1 FINDINGS

This study investigated the situation of Malaysian students learning the Arabic language in Arab schools. It has been conducted by 15 participants from IMAS, Saudi school, Baseerah school, and some parents. Some interesting findings emerged from this study. Learning Arabic language relies on the intrinsic and extrinsic motivation of the students, which necessitates parents and schools to increase the motivation of students to learn Arabic.

The Findings of the study in relation to objectives as summarized as following:-

a) To identify the reasons that make Malaysian families send their children to Arab schools.

Parents are highly motivated to send their kids to Arab schools to learn Arabic in order to have better understanding for the holy Quran and Islam. In their opinion Arab schools are the best place for their kids to practice Arabic language due to availability of Arabic native speakers (teachers & students) in these schools.

b) To identify the role that should be played by Arab schools to attract Malaysian students.

Since there is no proficiency test to measure the level of the student like TOEFL and ILETS, Arabic schools need to prepare such proficiency tests for the non-native speakers.

It has been also noticed that the Arab schools must improve their current facilities such as setting up computer labs, using different computer based learning materials and developing a better curriculum supported by up to date methods. Effective Language activities such as debates, competitions and field visits need to be considered.

c) To investigate the role that should be played by the authorities to improve the educational process of Arab

schools.

Depending on the motivation of the parents to send their kids to Arab schools, more encouragement is expected from the authorities such as facilitating for opening new Arabic schools in different parts of the country to shorten the distance, providing awards and scholarships for excellent students to complete their higher education abroad in Arab countries, and close supervision of Arab schools' performance.

5.2 LIMITATION

This study has been done with consideration of two selected schools only that is The International Modern Arabic School and the Saudi School in Kuala Lumpur.

5.4 RECOMMENDATIONS

Arab schools management needs to give special considerations to Arabic departments because it is the core of their schools. This can be achieved by offering/providing awards to distinguished students, creating activities, improving curricula, and enhancing the computer labs.

The Arabic syllabus must be enhanced with self-learning materials such as CDs, games and online materials.

Arabic language students should be engaged with activities and events that organized by embassies of Arabic countries.

An Arabic proficiency test must be created (such as TOEFL and ILETS in English language). This may be done by international organizations.

5.5 FUTURE WORK

As observed from Table 1: the ranking shows that four aspects have been taken under high consideration by the experts:

1. Student's intrinsic and extrinsic motivation
2. Multimedia and language teaching tools.
3. International proficiency test
4. Understanding the holy Quran and religion.

The researcher will conduct an ISM (interpretive structural modeling) study to investigate the relation between the four factors above.

Conclusion

In the final conclusion of this study, it has been observed that for learning Arabic language self motivation of the student plays the most important factor. The motivation can be enhanced by first parents at home and then teachers in the school. Students must be categorized in proper groups where a curriculum must be set for each group of students. This can be achieved by setting a placement test for the students at the admission time in the school. It has been observed from this study that the Arab schools in Malaysia are in lack of professional language learning computer labs and computer based learning materials. This facility should be provided in order to enhance the capability of learning Arabic language. It has been also observed from this study that the Arab schools in Malaysia are very few, and they are available in certain areas only. For more convince the higher authority should encourage the Arab business men to open more schools in different areas of the country. Proper facilities must be provided by the high authorities such as lands where these schools can be built and scholarships for distinguished students.

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