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MIDDLESEX UNIVERSITY

INSTITUTE FOR WORK BASED LEARNING

DOCTORATE IN PROFESSIONAL STUDIES

DPS 5240

RESEARCH PROJECT

**‘An investigation on the role of team work to improve current entrepreneurship
module used in vocational and technical high schools based on a constructivist approach
within the North Cyprus context’**

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CYPRUS

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ABSTRACT

The objective of this study is to conduct an investigation in order to develop a new entrepreneurship module for vocational and technical high schools in North Cyprus. Based on a review of the relevant literature on entrepreneurship, entrepreneurship education, curriculum development and the experiences and the views of the target audiences, this action research study examines how to improve the current entrepreneurship module in order to develop a good framework for vocational and technical high schools in North Cyprus. The research paradigm of my research is interpretive. Action research has been used as a research approach because of its distinctive characteristics of combining theory and practice, giving the opportunity to work collaboratively with the partners of the project and improving education by positively changing it. Data has been collected through semi-structured interviews, questionnaires and documents. I have also used a diary and recorded my experiences and the actions throughout the process which enabled me to be more reflective. The data analysis includes both qualitative and quantitative methods; content analysis was used for the semi-structured interviews and a statistical program was used to assess the data collected from the questionnaires. In addition I have carefully analysed documents. In my research process, semi-structured interviews demonstrated that there is a lack in the current module of issues of relating to 'North Cyprus and Entrepreneurship', feasibility studies, information about an entrepreneur, presentation of the role and the importance of entrepreneurship, CV writing techniques, professional development and know yourself. Inviting entrepreneurs to the classroom and organizing visits to work places has also been suggested. EU practices are also presented to be used as activities. The results of the questionnaires showed that the module should incorporate more information about the three skills of an entrepreneur; the ability to telescope, future orientation, opportunity and goal oriented. With these results, the relevant documents have been reviewed in order to provide the necessary information and knowledge.

In the end, the results have been combined, so that by adding sections about those issues identified and leaving out ones which do not correspond to the analysis of data, I have re-designed the current entrepreneurship module. I have used a module-writing guide in order to use the right structure while re-designing the module, as suggested by an expert from the Ministry of Education, Sports and Youth. A curriculum development expert suggested that a philosophical base should be considered while re-designing the module. The new module has been used at vocational and technical high schools for one semester by the teachers who took part in the project and those who have chosen the subject of entrepreneurship for that semester. Therefore, in total, eleven teachers were interviewed at the end of the semester, and I have made the last changes to the module based on the analysis of these interviews. Recommendations are also presented in the project which focus on areas for further study and the actions that could be taken to increase the awareness of entrepreneurship and maintain the sustainability of improvement in entrepreneurship education in vocational and technical high schools in North Cyprus. The research concludes with a reflection addressing the objectives of the study, a contribution of the project to the knowledge base and suggestions for future research in this area. The project consists of two documents as evidence of its achievement: the new (revised) module.

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CHAPTER 1 - INTRODUCTION

This chapter presents an outline of the project. Firstly, I provide information on the background to the problem, so that the reader will have an idea about what the problem is and why a need has arisen to produce applicable solutions. Then I explain the areas of entrepreneurship, entrepreneurship education and curriculum development, which form the basis of my research project, and then discuss their significance. I provide this explanation as it also one of the main reasons for focusing on this particular area for my research project. I then clearly define the reasons for conducting this research project.

Later, I will explain why I am the right person for this project. This section is important as it helps the reader to clearly see the relationship between myself as a researcher and the work based project I am conducting. I also argue the benefits of the project for different parties within the country.

Finally, I define the process and the actions to be followed throughout the chapters of the project. This will ensure that the reader understands the structure of the process and its steps. In conclusion, I provide information on how I deal with the works of others and state that I have accomplished my aims by creating a new module which is defined from the evidence of this project.

1.1 Background to the Work Based Research Project

North Cyprus with its current political situation has a small island economy, with a very limited number of public job opportunities. It has a business climate which is coping with embargoes for years, making it unique compared to almost all other countries. Education is a key factor for shaping opportunities in this country with limited resources. Entrepreneurship refers to creating new ideas through collective efforts and establishing new businesses or

actions for improvement. As entrepreneurship provides new actions to change current situations, schools need to be improved within this framework. Schools are using an entrepreneurship module which is prepared and based on Turkey which is helpful, but cannot wholly satisfy the needs of students who are planning a business future in North Cyprus to catch contemporary competitive standards. Therefore I planned to re-design the current module to develop a good practice in schools' module regarding entrepreneurship based on a constructivist approach implementation.

In this respect, the work based research project aims to examine the role of team work to improve the current entrepreneurship module used in vocational and technical high schools based on a constructivist approach within the North Cyprus context.

1.2 The Significance of Entrepreneurship and the Reasons for Conducting My Work-Based Research Project

This study is significant for the Ministry of Education and Culture as the module has been re-structured considering the needs of the teachers and the students. Thus, this will increase the motivation, help the promotion of entrepreneurship and direct the policy makers appropriately, which is important for creating a sustainable framework in the education system.

This study did not only fulfil the needs of the teachers and the students and build a more effective learning environment, but it also fulfilled the needs of the business world and those of entrepreneurs. Therefore this project prevented the occurrence of possible gaps between the real business environment and the classroom environment.

This study is important as it covers both theoretical and practical data about entrepreneurship. Including the voices of entrepreneurs and executives of civil society organizations who have

been working for years in the North Cyprus business environment, has improved the level of authenticity and made it more usable and real for the North Cyprus business context.

Another significance of the project is the importance of entrepreneurship for our country because of its feature of creating job opportunities, bringing about improvements, creating competencies and its being a solution for uncertainties. Therefore, if it is presented by considering its environment conditions, it will contribute to the long-term developments regarding entrepreneurship. Therefore this project is an investment for the younger generations and for the growth of the economy of North Cyprus.

1.2.1 Entrepreneurship

There are many approaches to the definition and description of entrepreneurship. Freeman and Soete (1997, in Dodgson, 2011) maintain that innovation and entrepreneurship are variously defined terms. Similarly, when Augustin-Jean (2010:319) writes that ‘the definition of entrepreneurship itself is subject to debate’, he is emphasising that there is no one correct definition. Spencer et al. (2008) assert that despite increasing interest in the field of entrepreneurship, a universally recognised definition has not yet been produced. Gartner (1990, in Seikkula-Leino, 2011) asserts that the meanings and foci of entrepreneurship show differences according to context. Of course, this uncertainty may mean an agreement on the definition seems a distant possibility; however, there is one important point that most authors would agree about, and I would refer to this as the ‘positive relationship of entrepreneurship with economic growth.’

Regarding the above mentioned issue, many authors (e.g. Schumpeter, 1936; Hayek, 1937/1949; Casson, 1982) believe that even though there are many different factors that drive an economy, entrepreneurship has been accepted as a main condition of positive economic movement (cited in Aoyama, 2009). Equally, Carree & Thurik (2003, in Koster and Rai,

2008) explain that entrepreneurship is mostly recognised as a necessary source when long-term economic development is considered. Likewise, many authors (e.g. Baumol, 1968; Stevenson & Jarillo, 1990; Wennekers & Thurik, 1999; Van Stel & Caree, 2004) state that the attention paid to entrepreneurship is due to the acceptance of its value for economic growth (Spencer et al., 2008). According to Lundstrom & Stevenson (2005, in Hadjimanolis, 2007), entrepreneurship is accepted as a necessary factor in a knowledge-based economy in order to support employment, economic development and innovation (Stel, Carree & Thurik, 2005). This relationship is also stated in the web page of the summary of the EU legislation (europe.eu, 2007). In that report, entrepreneurship is mentioned together with the word 'creativity', and it is defined as one's creative capacity to notice an opportunity and follow that opportunity to produce new value or economic achievement. It is further explained that creativity is emphasised because of its role in bringing competitiveness to the environment of enterprises. It is stated that new entrepreneurial movements would promote both productivity and improvements in efficiencies of organisations, markets, sectors, etc. The ultimate outcome would be greater competitiveness in the economy, which would mean new enterprises, new job opportunities and decreases in the unemployment rate. This is also the focus of this thesis regarding entrepreneurship. The discussion so far demonstrates that in today's world, when countries consider economic development, they cannot ignore 'entrepreneurship'.

Given the 'good relationship' of entrepreneurship with the economy, it is clear that countries should pay a great deal attention to entrepreneurship education, and be careful about the corresponding approaches and policies. As a teacher caring about education, awareness of the role of entrepreneurship in creating new enterprises and new job opportunities, as a person believing in change, and as someone with an entrepreneurial spirit, it was not surprising for me to start my research journey by questioning whether there was an entrepreneurship module

in vocational and technical high schools in North Cyprus that meet the needs of the country. This is reflected in this project, and my description and perception about entrepreneurship and starting up new businesses, as it has effects on the economy and creates job opportunities for others.

1.3 Why I am the Right Person to Carry out this Project

I have been teaching for years. Through this time, I have worked at different schools, with different colleagues and different students. During my teaching journey I have attended many seminars and conferences regarding developments and innovations in education. Through these I have grown to enjoy my profession more, and become more confident with more control over my profession. As a person who always wanted to develop my educationalist side, I believe that I am the right person to do this project. Secondly, my entrepreneurial spirit, especially my poet and writer side, has always pushed me to think creatively and look forward. My experiences of creating poetry, and discovering innovation and creativity, have lead me to find a link with entrepreneurship which is mostly defined with these two words. Undoubtedly I have had important experiences relevant to this project: as a TV presenter and director, a member and chair of different associations, an organiser of international poetry festivals, a part-time instructor in a university, the awards I have gained, and being an essayist on Cyprus' most popular newspaper. These have helped to expand my knowledge and improve my planning, teamwork, leadership, ethical insight, communication and presentation skills, responsibility, and self-confidence. These are all explained as properties of an entrepreneur as well, and so as a person with entrepreneurial spirit and practical experience of entrepreneurship skills, I believe that I am the right person to undertake this project.

Having searched on the subject matter, I have found out that entrepreneurship is included in the national curriculum for vocational education in North Cyprus. It is taught at grade 10 in all

vocational and technical high schools in North Cyprus as an elective course under vocational development. However, analysing the current entrepreneurship module to ascertain how relevant it was to the North Cyprus environment, I found that some sections of the module were not relevant. This irrelevance creates a gap between the needs and expectations of the real environment and the vocational technical high schools. As Edelman et al. (2008) emphasised, in order to make entrepreneurship more legitimate for all stakeholders, the course content should correspond to reality. In other words, it should guide students towards the prospect of starting up a business, as this will encourage students and other stakeholders to see the course as more relevant and legitimate. For the above reasons, it seems that there are reasons to re-design the entrepreneurship module for North Cyprus.

It was also my personal observation in the classrooms that the relation between course materials and reality is very important, as it impacts upon students' learning, teachers' motivation, and the work environment the students would be working in. All these considerations have enabled me to structure my project and define its title: 'An investigation to improve the entrepreneurship module in vocational and technical high schools in North Cyprus.'

Knowledge about my perspective and values helped me position myself in relation to my project, and design it in a way that is consistent with my personal beliefs, professional outlook, and approach to practice. My personal perspective influenced what I wanted to achieve, my attitudes to other people, and my views of concepts such as knowledge, power relationships, and systems. Consequently, my perspective has had a great impact on the frame of my project and the development of my methodology. While deciding on the research approach and methods, I thought about the fitness for purpose of the approach, as well as the benefit of the research to improve my knowledge, skills, profession, and the organisation I work for. I also considered its acceptability to policymakers, the applicability to the

workplace, and its contribution to the society I live in (and the education system in general). Further concerns included the data I needed to obtain, the format of the data, and from whom I had to collect it. I decided on action research because its distinct features enabled me to combine theory and practice, work collaboratively with the partners of the project, and improve education by changing it. I believe that this methodology strengthened the viability of the study. As Arhar, Holly and Kasten (2001, in Koch et al., 2009) stated about action research, 'it is distinguished from other traditions of research in its emphases on a participatory world view, an ethical commitment to improving the quality of life of others, reflective practice and making findings public.' Meanwhile, Greenwood & Levin (1998, in Snodgrass, 2009) drew attention to the way action research combines practice and theory by stating that 'action research is an encounter between the worlds of practical reasoning and the worlds of scientifically constructed knowledge'.

My past professional experience, along with my academic knowledge and background, helped me on this journey and were my guidance at each stage. However, completing this research required a great deal of new learning. For example, reading the literature on the subject area enhanced my ability to demonstrate systematic understanding of knowledge, and critical issues such as entrepreneurship, entrepreneurship education, curriculum development and module writing. Conducting interviews and surveys, and analysing the collected data, enabled me to advance my capacity for research and development. I was very much aware of the ethical issues, and showed an understanding of the project's underpinning values. I considered the ethical implications involved in the project's development process, and showed ethical understanding of the institutions in which the project took place. I used an informed consent form, and asked permission from the Ministry of Education, Youth and Sports. I maintained the anonymity of the interviewees. Throughout the process, I reflected critically on my own and my research development. This showed the reader that this process was not just a

mechanistic processing of data, but also involved coping patiently with challenges, finding quick solutions to unforeseen problems, strongly believing in what you are doing, and being aware of why you are doing it. I believe that being reflective allowed me to make a better personal contribution to the research process.

1.4 Products and Outcomes of My Work-based Research Project

My work based project is intended to meet the needs of a wide target audience, including the teachers of entrepreneurship, students of vocational and technical high schools, the Ministry of Education, Culture and Sports, successful entrepreneurs, the related chambers and associations, and related department of universities which are also working in cooperation with the vocational and technical high schools.

The project is intended to deliver the following products and outcomes:

- Putting forward an action plan for quality improvements in entrepreneurship module that is used in vocational and technical high schools in North Cyprus based on the data collected from the relevant and related partners of North Cyprus
- Creating a teamwork culture within the work environment
- Creating awareness on entrepreneurship through action research
- Growing professionally and personally
- Writing academic papers for conferences and publications about conducting action research into module development in order to develop new lesson material that is adapted to the environment.
- Disseminating the results of my project with the public, media and professionals.

1.5 The Process and Actions of My Work-Based Research Project

As my research project relies on the phenomenological perspective through action research it aims to investigate the role of:

- the collaborative work of ‘human experiences’ in implementing a constructivist approach to improve a new entrepreneurship module used in vocational and technical high schools, based on the North Cyprus context.
- the constructivist approach in the improvement of module design and its impacts on creating better working practice and its contribution to the vocational and technical high schools in general.

The project is organised into seven chapters. Chapter One outlines the general framework of my project. Chapter Two highlights the aims and objectives of the project, its relation to previous related works, the project’s limitations and offers a brief overview of the technical education system in North Cyprus. Chapter Three explains the project methodology, approach and techniques. Chapter Four describes the project activity, the designing and conducting procedures of the techniques. Chapter Five presents the research findings and results. Chapter Six is the conclusion chapter of the research and it also provides recommendations. The last chapter portrays a reflective account of my personal learning and professional journey.

1.6 Conclusions

I believe that the conflicting issues raised by the literature have helped me to think about and justify what I have done. They opened a window on the theoretical base of the research. They contributed to my work by expanding my perspectives, and enabled me to comprehend and interpret my work more fully.

In conclusion, I identified the areas in need of development and confirmed these with the interviews I implemented and questionnaires I conducted. Consequently I re-designed the module by making the necessary additions and amendments and leaving out irrelevant sections. Thus, a new module and a question booklet are the evidence of the project's achievements, and demonstrate the accomplishment of its objectives.

CHAPTER 2 - RESEARCH AIM AND OBJECTIVES, TERMS OF REFERENCE, RESEARCH STATEMENTS AND QUESTIONS

2.1 Introduction

Aims are the basis of the research. They have a very important role in shaping the research project; thus in each step of it, they have to be taken into account in order to reach an achievement. So in this chapter I provide the aims for my project and list my objectives that define what I want to achieve in this project. I also present my research questions which define the problems I will be studying in order to reach the aims. Moreover, I discuss the significance of my project and make it clear for the reader why this project is important in many aspects. The limitations that I considered while undertaking my investigation are also presented in this chapter. In the literature review I have critically described and discussed the work done by the other authors relating to entrepreneurship education; carefully choosing the most related and most recent research. I emphasize the significance of entrepreneurship education for the economic growth by supporting my views with the references of others. In my project entrepreneurship is linked to the material that is used in the classrooms, which is the entrepreneurship module. Therefore, I make a careful investigation of the high school entrepreneurship resources. Then in the next section I provide information which concentrate on the development of technical education in Europe and present an overview of European countries regarding entrepreneurship education. In addition, I provide a summary of the current entrepreneurship module (old module). Later, I list the areas of the current module that need to be improved so that the reader will have a clear understanding of the deficiencies of the module considering the aims of the research project. I believe that doing all of this has

increased my knowledge and understanding of the subject matter I have been studying and has developed my skills of critically identifying and synthesising knowledge. I correctly reference the works of others while paraphrasing facts or arguments. Therefore, to sum up, the chapter comprises an overview of the project and its objectives, the works of other authors, and an explanation of the module.

2.2 Aims and Objectives of My Work Based Research Project

The improvement of the entrepreneurship module is necessary both within the context of the education system and business in North Cyprus, which are needed to be in a parallel to be able to get the expected and relevant outcome in the future. In this respect, my work based research project aims to undertake an investigation in order to define the deficiencies of current entrepreneurship module and to develop a good framework for vocational and technical high schools in North Cyprus based on collective efforts within a constructivist approach implementation. Thus, the project aims to bring about improvements by defining and clarifying deficiencies, identifying and implementing change oriented actions to improve the current entrepreneurship module, and testing and implementing to identify the impact of the changes made through the action research process. In addition, the project seeks to foster entrepreneurship and to present a guide that would assist other researchers who plan to conduct a project in the field of education and entrepreneurship.

Considering the aims of the project, the main research questions addressed are as follows:

- RQ1. What are the deficiencies of the current entrepreneurship module?
- RQ2. How can these deficiencies be improved?
- RQ3. What kind of framework needs to be adopted to develop a good practice?
- RQ4. How is the newly adopted module on entrepreneurship performed in the specific context?

2.3 My Research Process

Having realised the problem of the irrelevancy of the entrepreneurship module in the North Cyprus context, this made me an insider researcher who tries to bring improvement to the education system and the work environment by undertaking this project in order to find feasible and workable solutions to the problem.

Having identified the deficiencies of the entrepreneurship module within the context of North Cyprus, I intended to make an investigation in order to improve the entrepreneurship module for the North Cyprus context regarding the framework of constructivist approach. With this intention, I determined the aim of my project and formulated the research questions appropriately in order to measure what I set out to research. This also helps to ensure the implications of my project. Later, I decided on my research design by considering the aim of my project and the research questions. Thus, I started out by choosing a qualitative design considering the data I needed to obtain. Then I choose my research approach; action research, and determined the data collection techniques and analytical methods. Throughout the process I considered the ethical considerations.

In order to find the best solution to this problem and complete the process properly, cooperation from relevant partners who will be affected by this change and whose experiences and opinions will be enlightening is necessary. This means that the subject teachers of entrepreneurship who have used the current module in their classes, the top executives of the civil society organizations including the chair of the Union of the Chambers of Cyprus Turkish Engineers and Architects, Chamber of Commerce, Chamber of Industry, the president of craftsmen and artisans, the representative of the state planning office, successful

entrepreneurs, Deputy leader of the EU VETLAM¹ Project and Vocational Education Professional, the chair of the department of the School of Computing and Technology at Eastern Mediterranean University, the curriculum development expert and all of the grade 12 students of vocational and technical high schools who have studied the current module when they were grade 10 students, become the main stakeholders of this project.

In order to be successful in accomplishing the aim of my research project, I believe that the professional experience and knowledge I have gained over the years in education are crucial in facilitating my job to conduct and implement this project.

My specific objectives as they relate to my current position and the proposed project are:

- To gain an overview of the current module about entrepreneurship in this specific context
- To make changes and develop the current entrepreneurship module
- To create a collective view and opinion on change
- To co-construction of knowledge based on experiences and views
- To increase public awareness of entrepreneurship
- To provide a guide for the related field of education

¹ VETLAM” (<http://www.vetlam.eu/v1/>) is an EU funded project managed by the European Union. The purpose of the project is:

- to establish a system for upgrading skills of employed and unemployed labour force;
- to improve functioning of employment services;
- to improve the inclusion of disadvantaged groups in the labour market;
- to raise public awareness about the importance of the VET education reform process and secure the support and involvement of the population and the business community.

The project started in February 2009 and will be finished in February 2012.

2.4 Terms of Reference

In fact, the literature review is not only limited to the following section. All the chapters of this research project include a literature review that is relevant to the topic. This is so that they provide information that has previously been undertaken and contribute to creating ideas on the development stage of my research process.

The literature review section of this chapter includes a critical analysis of the literature in relation to the role of education and entrepreneurship, entrepreneurship education, the importance of educators in improvements and teaching entrepreneurship, and a discussion that draws on this critical engagement with the literature to develop a theoretical and conceptual map for my own research project. It also provides information about the development of technical education in Europe and an overview of European countries regarding entrepreneurship education. The chapter also presents information about the current entrepreneurship module and the areas that are needed to be improved.

2.4.1 Entrepreneurship Education

My research area is about entrepreneurship education in general and specifically the development of an entrepreneurship module. Therefore, I have carefully chosen the appropriate context for my literature review. The importance of education as much as entrepreneurship and its necessity for economic growth has been noted by a number of authors.

Development theory has traditionally emphasized the role of education as a key factor of economic growth while many economists and sociologists have argued for the crucial role of entrepreneurship, both in economic theory and economic development. Therefore it is no surprise that the notion of two necessary conditions for economic growth in developing

countries are education and entrepreneurship and this now seems common place (Vetrivel, 2010). I have reviewed this particular knowledge as it emphasizes the role of education and entrepreneurship, which I believe are the two concepts that also refer to my project. Because I believe that with this project and the methodology I have chosen, my project combines the theory side which could be accepted as the education and practical side and can be defined as the entrepreneurship side of my project.

Some authors associate entrepreneurship education with creativity and this to the development of entrepreneurial culture. For example, Bennet (2006, in Hadjimanolis, 2007) stated that entrepreneurship education contributes to the creation and improvement of entrepreneurial culture and a rise in the levels of entrepreneurship in an economy. I believe that this information hides many important points by making entrepreneurship a cultural issue. This is significant because once it becomes cultural it becomes the way people behave, and it also becomes something which belongs to society, which is transferred from generation to generation. Thus, this expression actually stresses the sustainability of entrepreneurial thinking.

When it comes to entrepreneurship education, the contribution and the European steps cannot be ignored. Hajikokis (2007) believed that the EU is one of the main actors in entrepreneurship education as it guides member states. The entrepreneurship education policies are intended to increase the level of competitiveness and foster the economic development of EU economies.

Certainly the role of entrepreneurship in accelerating the business environment is another positive aspect of entrepreneurship. When Schumpeter (1926, in Taatila, 2010) said 'it is difficult to see how economic regions would compete without individuals who constantly renew business process', he was emphasizing the important role of entrepreneurs and their

actions in business which could be defined by entrepreneurship. I have found this relevant to my project, because in my project I have considered the students who studied the module as entrepreneur candidates of the future. This is why I have made them part of this project and given them a questionnaire asking them to state the entrepreneurial characteristics they have gained through the course. This means that I will be able to provide them with the necessary information following the data collected from them.

With the realization of the importance of entrepreneurship to the economic development of countries, entrepreneurship education has gained a lot of importance. The Commissioner of the European Communities (2006) stated that the EU stresses the significance of developing an entrepreneurial culture by increasing the relevant mind-set, skills of entrepreneurship and awareness of career opportunities. Similarly in China, Xingsun (2007) highlights that a decision has been taken by the central government of China aiming to develop an innovation based nation by 2020. He states that they would achieve this by following the process of integrating entrepreneurship education to improve entrepreneurial spirit, achieve more active research about entrepreneurship, and build creative, multifunctional platforms of entrepreneurship by developing entrepreneurship education.

Educators are the main stakeholders of education. Neck and Greene (2011) state that educators have a role in improving the discovery, reasoning and implementation skills of their students, in order that they can execute these in unfamiliar environments. They emphasize that through these skills, students would determine and grasp the opportunity at the right time in the right place. Neck and Greene (2011) express the opinion that entrepreneurship educators teach many principles of many aspects, such as living with uncertainty, diagnosis of opportunity, social responsibility, etc... and the combined content of this education does not only add value to their careers but also to their way of life. I found this review to be very close

to my role as an agent of change in my work environment, as bringing improvements or innovations to my workplace is one of the rationales of starting this project.

Some authors emphasize the importance of the way of teaching entrepreneurship. Zakaria and Yusoff (2011) state that entrepreneurship education should be designed in a way that helps students to be equipped with innovative entrepreneurial skills so that they will be able to grasp the opportunities that come their way. They also suggest that the teaching approach shouldn't focus on traditional examinations; rather it should foster the students to be part of real life projects such as preparing a business plan, and presenting it to a committee which is responsible for entrepreneurship development in order to get authentic feedback. Gibb (2005), in the study of Seikula-Leino (2011) suggests that the pedagogy of entrepreneurship covers activities which promote interactivity, cooperation and also problem-based learning. According to this study, mistakes help learning and should be seen as an important part of the learning path when considering entrepreneurship education. To sum up, the researchers believe that teaching entrepreneurship should be different to traditional teaching and learning. This is also important as one of the questions of the research project asked to the teachers involves the teaching methods used to teach the current module. Therefore at the end I will be able to see how these responses match with those of the teachers and am able to make an analysis of the information as to whether they agree or not with the ideas of the teachers.

Collaboration of entrepreneurship with other fields or areas is also important. It is suggested (Mangan, 2004, in Shinnar et al., 2009) that with entrepreneurship courses, students create the opportunity to improve their teamwork skills, stimulate innovative thinking and experience risk-taking. Jesselyn and Mitchell (2006, Zakaira and Yusoff, 2011) say that entrepreneurship education deals with two components: education about entrepreneurship and education for entrepreneurship. Education about entrepreneurship holds the objective of improving, constructing and studying the theories that are related to entrepreneurs, the creation of a firm

and covers the contribution made towards the development of an economy, the entrepreneurial process and small and medium sized firms. Whilst education for entrepreneurship involves improving and encouraging the entrepreneurial process, making all the tools available that are essential during the start-up process of a new venture, both inside and outside of an existing organization.

To sum up, focusing on the references of the researchers on entrepreneurship education, the themes they have underlined, can be summarized as follows:

- Its relation to economic development of countries
- The necessity of education and entrepreneurship
- The creation of an entrepreneurial culture
- The positive effect of entrepreneurship in the business world
- How it should be taught

2.4.2 Brief Overview of Entrepreneurship Centres

There are many centres and institutions around the world which provide high school entrepreneurship resources. One of these centres is the Lyles Centre (<http://lylescenter.com>) for innovation and entrepreneurship, which helps students of all ages. Two programs, the entrepreneurial pathway program and the network for teaching entrepreneurship, were founded by this centre aiming to help students to prepare for entrepreneurship. This was accomplished by providing a better understanding of entrepreneurship, and inspiring young people living in low-income homes not to drop out of school and raising their awareness about business opportunities and planning for successful futures. The centre also provides offices for the students who want to work on their own projects or businesses while going to school.

The goal of the Collegiate Entrepreneurs Organization (<http://www.c-e-o.org/>) is to educate, help and encourage college students to become entrepreneurial and discover opportunities by creating enterprises. There is a guide to this organization which is called 'a guide for building a successful collegiate entrepreneurs' club' and ten units are presented. These include units about the plan, e-team, organization, membership, marketing plan, events and activities, the network, financing, competitions, conference and awards and turning the plan into reality.

As entrepreneurship material the Consortium for Entrepreneurship Education (<http://www.entre-ed.org/>), which is a national network of entrepreneurship education, suggests the use of stories of successful entrepreneurs in order to show students that it is possible to create something. It is stated that through these case studies students see experiences and opportunities that they can find in their lives. It is stated that by using active participation in the learning process, the programs can be made interesting and memorable. In this network, entrepreneurship presentation masters which present short statements about the concepts and classroom materials including journals, magazines, are provided.

One of the textbooks published by the international non-profit organization NFTE (National Foundation for Teaching Entrepreneurship) (<http://www.nfte.com>), includes eight units and twenty two chapters, including: what is an entrepreneur, preparing for a business, opportunity recognition and market analysis, marketing plan and sales, analysing finances, starting your business, managing your business and growing your business.

Classroom based programs which have been prepared for students in grades 9-12 by junior achievement (<http://www.ja.org/>), include: banks in action, which informs high school students about the principles of the banking industry and presents the challenges of operating a bank successfully in a competitive business environment; be entrepreneurial, which motivates students to start their own businesses while they are still at school; business ethics, which promotes ethical decision making; careers with a purpose, which teaches students the

significance of looking for a career that would help them to be aware of their potential and aim; economics, which investigates the main concepts of micro-macro and international economics; exploring economics, which gives information about the working of an economy; personal finance, which emphasizes that importance of taking a decision, and success skills.

Three modules on ‘supplemental entrepreneurship curriculum for the high school classroom’ are presented by the young entrepreneur foundation which is a national federation of independent businesses (www.nfib.com/page/YoungEntrepreneurFoundation.html) . Module one investigates the definition of entrepreneurship and small businesses by presenting a view of the past and present small business environment. The second module involves turning ideas into reality, determining a passion or hobby that will offer a product or service, market research and risk-calculating. The last module deals with the basic points of a business, writing a business plan, funding and learning about the agencies that businesses are in contact with.

According to the EU Best Project (<http://ec.europa.eu>), in order to have a coherent framework for entrepreneurship education, firstly a committee should be created which will include representatives of the Ministry of Education and the Ministry of Economy, plus relevant organizations, associations and departments of society. This also promotes cooperation among stakeholders and the relevant partners of entrepreneurship education across the nation. It is stated that through this cooperation, entrepreneurial attitudes are developed and then reflected in the education policy, curriculum of vocational and technical schools and the plans of teacher training programs.

In the outcomes of the Oslo Agenda (<http://ec.europa.eu>) for entrepreneurship education in Europe, fifteen key points have been announced regarding entrepreneurship activities in schools and higher education. These include: making children aware of the role of

entrepreneurship and entrepreneur starting from childhood; introducing books into schools that include success stories of young entrepreneurs; disseminating innovative pedagogies into all courses; evaluating the acquisition of entrepreneurial skills of students; engaging students with real companies and meeting business people; being supportive of spontaneous initiatives of student associations; integrate alumni into the activities of a school; not ignoring disadvantaged groups while offering entrepreneurship education; engagement of higher education establishments with entrepreneurship among the different subject of their study programmes; engaging students directly in enterprise projects; using concrete frameworks from Europe; supporting the academic basis of entrepreneurship; encouraging students with sustainable business ideas to improve them into companies; and systematically evaluating the programmes.

2.4.3 Brief Overview of Vocational Education and Training in Europe

The European Commission works together with EU member states and other countries to strengthen vocational education and training (VET) across Europe. The ‘Copenhagen Process’, which was established in 2002, presents information on the basis of co-operation in VET for the 33 European countries involved.

The European Commission introduced a 10 year vision for the future of VET in the communication "A New Impetus for European cooperation in Vocational Education and Training to support the Europe 2020 strategy", on 9th June 2010.

(http://ec.europa.eu/education/lifelong-learning-policy/vet_en.htm)

2.4.4 Brief Overview of European Countries on Entrepreneurship Education

Entrepreneurship education became popular in European countries. In Australia, all VET schools and colleges contain some entrepreneurship component in the curriculum. In Belgium, many entrepreneurship activities are offered by both public and private actors in

order to complement the traditional education and training system. Entrepreneurship is not integrated into the curriculum, so in some fields of study student participation is compulsory. Mostly, it is a teacher or school director that makes the choice of whether students participate or not. In Bulgaria, this changes according to the levels. For the third-level vocational qualification, entrepreneurship is compulsory while for the first and second level entrepreneurship is optional. Student –mini companies are part of the subject for 10th and 11th grade. In Cyprus, the national curriculum for all schools of technical and vocational education includes entrepreneurship. Entrepreneurial components are integrated into all of the subjects depending on their needs. Providing entrepreneurship training for all teachers in technical and vocational education is the aim of the National Strategy on Entrepreneurship in Education (2010). Practice Firms and the Junior Achievement Student Company Programme (student mini-companies) are two programmes that are offered by the Czech Republic. Both of these programs are based on practical experience. However, entrepreneurship education mostly depends on schools' willingness to participate in these programs. In Estonia, all vocational education and training provides entrepreneurship programmes and activities. In France, although some steps have been taken enterprise and entrepreneurship are not very well recognised in the French education system. In Germany, despite some steps, entrepreneurship has not been included in the future modernisation of VET. In Estonia, all vocational education and training provides entrepreneurship programmes and activities. In Hungary, 422 qualifications are offered in the competence-based modular vocational training system. Most of these modules include entrepreneurship programmes, so that entrepreneurship is involved in the majority of qualifications. The national curriculum for vocational education does not contain entrepreneurship in Italy. However, promoting a link with the labour market is promoted by the legislation but the participation of students is optional. Entrepreneurship education can appear in some school curricula or schools can offer

it in elective courses or as an extra-curricular activity. In Lithuania, although national framework documents on vocational education explain that entrepreneurship should be integrated into all programmes, no steps have been taken in order to implement it. Thus, entrepreneurship is not seen in the training programmes offered by vocational schools, so students graduate with a specific entrepreneurial competence only if schools promote it. In Malta, there is no specific national curriculum for vocational education and entrepreneurship is not offered formally as a school subject, with the exception of one course. However, most of the courses include activities and initiatives aimed at fostering entrepreneurship. In Norway, entrepreneurship education is not compulsory and it depends on the local school to decide on the methods to be used, and on whether and how to introduce the subject of entrepreneurship. In Poland, basic entrepreneurship is included in the curricula for all types of secondary and post-secondary non-tertiary schools, and students' participation is compulsory. In Romania, secondary school technical and vocational education and training includes entrepreneurship. In Slovenia, an entrepreneurship module is compulsory in the national curriculum both in upper secondary vocational education and in upper secondary technical education. In Spain, entrepreneurship education occurs in the national framework curriculum and is compulsory for all VET fields. Entrepreneurship is part of the national curriculum either as a compulsory or as an optional subject. In Sweden, currently there are some optional courses regarding enterprise. In the UK, there are no vocational schools in England, Scotland and Wales and all secondary schools are expected to create opportunities for vocational training(http://ec.europa.eu/enterprise/policies/sme/promotingentrepreneurship/index_en.htm)

2.4.5 Entrepreneurship Education and the Entrepreneurship Module in Vocational and Technical High Schools in North Cyprus

The Current Module

Entrepreneurship is included in the national curricula for vocational education in North Cyprus in the 10th grade as an optional subject under the vocational training/development programme. There are eleven other optional subjects offered under this programme: Communication in Social Life (establishing and maintaining effective and efficient communication in one's social life); Communication at Work (establishing and maintaining effective and efficient communication at work); Elocution (Speaking accurate Turkish); Personal Development (keeping up-to-date with the latest developments in their profession and continuing to self-develop); Environmental Protection (being sensitive to the environment and protecting it); Work Ethics (complying with work ethics), Organization at Work (planning, programming and organizing at work); and Work safety and Worker health (complying with the rules and regulations of worker health and taking measurements towards work safety) (www.mebnet.net)

The entrepreneurship module is valid for all branches of vocational education. In the module, entrepreneurship is defined as 'an instrument through which one gains the skill and knowledge of integrating business, staff, equipment, funding and sponsorship and sources as such in order to set up and develop a business.' It includes an explanation about the subject area and a cover page about the module. Each section is defined as a learning activity. At the beginning of each activity, the aims and the research that students need to do in order to prepare themselves are listed. Through this research section it is aimed to develop the research, their understanding and comment on the abilities of students.

The module is designed to promote a range of skills and competencies. These are presented as seven learning activities: 1. Defining a Successful and Applicable Business Idea; 2. Types of Business Enterprises; 3. Preparing a Work Schedule; 4. Preparing a Business Plan; 5. Establishing a Business; 6. Improving an Enterprise; and 7. Business Law. Additional to these headings are: application activity, a checklist, measuring and evaluation, and assessment of the module (Ministry of Education, Sports and Culture, (2006), Entrepreneurship, Ankara)

The Areas in Need of Development

Considering the rationale and the aims of the project which refers to the locality component, I have determined the sections that are in need of improvement in order to create a better framework for the North Cyprus environment. These sections include:

Learning activity 2: All sections of this activity includes types of business enterprises according to the laws of Turkey. Similarly, the information given for the explanations for some enterprises depends on Turkish law. For example, Craftsmen (Artisans and Craftsmen Law number 507) on p.19, Artisan (Artisans and Craftsmen Law number 507) on p.19 or Tradesman (Turkish Commercial Law number 6762) on p.19 are examples of this.

Learning Activity 4: The 'Preparing an Applicable Business Plan' section needs improvement. Currently it includes an example of the business plan of a man in Ankara who is planning to start his own business in the field of accounting which is enacted with law no 3568, independent accountant financial consultant and certified councillorship.

Example:

- Description of the business

- Name – Surname: Oktay KÜTÜK
- Address: Posta Street 48/3 Ulus / ANKARA
- Phone number: 0312....
- Date of birth: 1978
- Educational Background: Trade Vocational High School
- Work Experience: 7 years in accounting office

Learning Activity 5: The following sections, ‘Legal Establishment Transactions of an Enterprise (The relations with the Government Agencies during the establishment of the business place)’, ‘Necessary Transactions for Credit’ and ‘Starting the Activity of the Enterprise’ all need improvement as the subjects mentioned are different according to the laws and legal regulations of North Cyprus.

2.5 Significance of the Research Project

This project is important due to a number of reasons. Firstly, it fills a gap in the module by taking the ideas of all the related stakeholders into account, and re-designing it for vocational and technical high schools in North Cyprus. This will result in innovation and change for my work environment, education.

Secondly, and more broadly, the success of this module is important for the future of North Cyprus. One of the biggest problems of North Cyprus is unemployment, especially among young people and job opportunities in the public sector are limited. Therefore, this is a problem for both the individual and the country. The long-term effects of this situation will be to introduce great risk for the competitiveness of the economy. Thus, I believe that an entrepreneurship module that considers the realities of the country’s environment will be the

best solution. This will create more well-equipped entrepreneurs, who are more aware of their country's realities and its work environment.

Considering the teachers' side, from my own experiences, I know that unless the course material matches the demands of the students, then teachers can spend huge amounts of time trying to re-structure or reorganise materials, tests, or the context of the materials to increase their applicability and usefulness, which can lead to de-motivation. Teachers have to spend extra time making the module interesting, familiar and understandable by taking into consideration their students' living environment, giving real examples, adapting it to the context they are living in, and to the culture they know, etc. This costs them, and the education system, precious time.

This project was also important for being a model for other studies in North Cyprus and beyond, related to this area.

Although I have searched the archives, they have not revealed any recent research regarding entrepreneurship in North Cyprus. One of the few relevant studies was undertaken by the Prologue Consulting Centre, in November 2007, for a businesswomen's association. The aim of the project was to evaluate the entrepreneurial spirit of the people, to find out what obstacles they encounter, who wanted to establish a business, and the possible ways to facilitate the process. The result of this project demonstrated that although participants had a positive approach to entrepreneurship, they were not sufficiently conscious of its meaning. My project would therefore be helpful in raising such awareness, and promoting entrepreneurship in society more broadly.

Also, through this project I was also able to produce sustainable feedback for the policymakers in the Ministry of Education, Youth and Sports. This will prevent time-wasting

in education, and help to develop the applicable and necessary steps for education by education-conscious investors.

2.6 Limitations of the Project

There were some limitations that needed to be acknowledged and addressed regarding the present project. One is that the project consists of semi-structured interviews only with successful entrepreneurs in North Cyprus who are defined as opinion leaders. It focused on the Northern part of Cyprus and therefore it was possible to interview seventeen successful entrepreneurs.

Plus, the project was limited to grade 12 students of vocational and technical high schools who had studied the current entrepreneurship module when they were in grade 10.

Another problem was the time. I have considered the focus, task, target audiences and the time I determined in my action plan I presented in my DPS 4561.

CHAPTER 3 - METHODOLOGY

3.1 Introduction

This chapter details the process which I considered to carry out my work based research project. In this respect, the chapter reveals how I achieved my perspective and values with regards to my project and designed it in a way that is consistent with my personal beliefs, professional outlook and approach to practice. In this chapter, indicators of the rationale of my research process are underlined and are reflected upon based on the particular reasons for deciding on the research design, approach, data collection techniques, analysis and the inductive process. In this chapter, I also discuss the issues of sample selection, and gaining and maintaining access. Furthermore, I discuss the constraints, strengths and potential weaknesses.

Since I have come to realise the power of education, I have been taking an active role in the education process. Currently I am working as a teacher in a college which depends on the Ministry of Education and Culture. I have a reasonable amount of knowledge and experience about the activities involved in the development of education and can also be described as an entrepreneur, as I described in DPS 4561 of this study. Therefore, I aimed to further improve my knowledge and ability to support entrepreneurship education in North Cyprus by undertaking this research project.

I aimed to conduct an investigation to improve the current entrepreneurship module teaching for vocational and technical high schools in North Cyprus. My aim was to create a model of entrepreneurship module that is best suited to the North Cyprus environment so that it would be more beneficial for every stakeholder. To 'frame' the research to fit in with these concerns I moved on to identify the stakeholders of this study considering the factor of who are related

to the issue, who will be affected from these improvements and who were affecting improvements in North Cyprus.

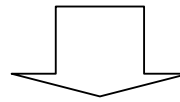
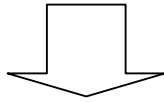
There were two main aims of this project; to diagnose the deficiencies of the current entrepreneurship module and to improve it in order to provide a good framework for vocational and technical high schools. While deciding on the research approach and methods I intended to use, I thought about the fitness of purpose of the approach to my research project, the benefit of the research to improve my knowledge, skills, profession and the organization I work for, its feasibility, sustainability and the applicability to the workplace, its contribution to the society I live and the education system in general.

Knowledge about my perspective and values helped me position myself in relation to my project and design it in a way that is consistent with my personal beliefs, professional outlook and approach to practice. My personal perspective influenced what I wanted to achieve, my attitudes to other people and my views of concepts such as knowledge, power relationships and systems. Consequently, all these had a great impact on the frame of my project and the development of my methodology.

The title of my research project is “an investigation on the role of team work to improve current entrepreneurship module used in vocational and technical high schools based on a constructivist approach within the North Cyprus context”. This was chosen because my aim was to investigate the deficiencies of the current entrepreneurship module and to make changes in the light of output to adopt a good practice.

Table 3.1 – Indicators for the rationale of my research process

AIM
<ul style="list-style-type: none"> • to undertake an investigation in order to define the deficiencies of the current entrepreneurship module and to develop a good framework for vocational and technical high schools in North Cyprus
OBJECTIVES
<ul style="list-style-type: none"> • To gain an overview of the current module on entrepreneurship in this specific context • To make changes and develop the current entrepreneurship module • To create a collective view and efforts on change • To co-construction of knowledge based on experiences and views • To increase public awareness of entrepreneurship • To provide a guide for the related field of education



<p>RESEARCH FAMILY</p> <ul style="list-style-type: none"> •Qualitative Research 	<p>RESEARCH APPROACH</p> <ul style="list-style-type: none"> •Action Research 	<p>DATA COLLECTION TECHNIQUES</p> <ul style="list-style-type: none"> •Reviewing and Analysing Documents •Conducting Interviews •Implementing a Questionnaire <p>(Researcher’s Diary)</p>	<p>ANALYSIS</p> <ul style="list-style-type: none"> •Analysing the Documents •Content Analysis •Descriptive Statistics
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According to Table 3.1, I described and justified my choice of research family, research approach, data collection techniques and analysis. While making my decision on this inductive process, I always considered my role as a work-based researcher. I reflected on my learning from my work continuously. I became critical of the methodology I had chosen and discussed the particular methods. I discovered advantages and disadvantages of the methods I have used for approaches and data collection techniques. I have also dealt with ethical issues considering the three main key partners of this research; me, the organization and the

Middlesex University. In this chapter, I explain how I found answers to my research questions during the process with regards to the methodological perspective.

3.2 Phenomenological Philosophy in my Research Process

Tymieniecka (2003), Wojnar and Swanson (2007) argue that phenomenology as a philosophical perspective has shed light on the ‘previously ignored phenomena of the human experience, reformulated philosophical questions, and penetrated thought in almost all fields of scholarship.’ *Webster’s Collegiate Dictionary*, Mish (2002, in Wojnar and Swanson ,2007) give the description of phenomenology as:

(a) the study of the development of human consciousness and self-awareness as a preface to philosophy or a part of philosophy

(b) a philosophical movement that describes the formal structure of objects of awareness and of awareness itself in abstraction from any claims concerning existence

(c) the typological classification of a class of phenomena

(d) an analysis produced by phenomenological investigation

From Greek phainomenon, appearance

In this respect, this work based research project relies on the natures of phenomenological research that Polkinghorne (1989, in Garza, 2007) identifies as ‘phenomenological research’ as a specific subset of the more general term qualitative research which concentrates on the ‘lived meaning’ of the investigated phenomena and defines human experience as the ‘locus’ of phenomenological research. Eckartsberg (1998, in Garza, 2007) points out the ‘life world’ focus of the phenomenological research which explains ‘the locus of interaction between ourselves and our perceptual environments and the world of experienced horizons within which we meaningfully dwell together.’

3.3 Qualitative Research Journey in My Research Project

According to Sale (2002, in Slevitch, 2011) the ontological paradigm considers that objective reality stands independently from human perception. Sale et al. (2002, in Slevitch, 2011) argues that the investigator and the investigated are two different things and they are independent from each other. Thus the investigator is not affecting it or being affected by it. Quantitative positivists assume that the facts can be keep apart from values. On the other hand, qualitative tradition according to Deshpande, 1983; Sale et al., 2002 (in Slevitch, 2011) stems from interpretivism and constructivism, both of which come from the idealist outlook.

Guba and Lincoln (1994, in Slevitch, 2011) suggest that idealism is an ontological view and reality, different from the quantitative approach, and not separated from human's mental structure and activity. Smith (1983, in Slevitch, 2011) states that idealism highlights that there isn't one reality but many, and it changes according to peoples understanding and interpretation. Hellström (2008, in Slevitch, 2011) claims that people re-write reality depending on their intersubjective perception of it. Thus, unlike the quantitative approach, reality and our perceptions of it are dependent on each other. Guba and Lincoln (1994, in Slevitch, 2011) suggest that there are multiple realities coming from individuals or groups. Putnam (1981, in Slevitch, 2011) suggests that because of its mind-dependent characteristics, the social reality cannot be separated from values, people's thoughts, purposes or interest. According to Smith this is the reason why qualitative epistemology is identified as subjective.

Bryman (1988 in Slevitch, 2011) argues that the purpose of qualitative scientific enquiry is to obtain a better understanding of the phenomena from the perspective of the study participants. As qualitative research relies on in-depth interpretations, insights and socially constructed meanings from others' point of views and experiences, it can reveal credible results from experienced events for change and development within the research context. Consequently, it

is the right choice of research family for me to use to investigate the entrepreneurship module, adapt it to the specific context for change and develop it through involved parties' experiences and interpretations.

3.4 Approach Chosen for My Work Based Research Project

In order to define the most appropriate approach for my work based project I have considered the aims of my research, my research questions, personal strengths and preferences and opportunities available to me. My entrepreneurial personality, which has always liked to learn, question and improve the environment I am placed in, made me want to engage in many endeavours which contribute to my personal development, learning and experiences. Through all these endeavours I developed my knowledge on entrepreneurship and education. Also I have improved my skills of communication, self-evaluation, planning, organization, presentation and leadership. Being aware of all these strengths made me feel confident about interacting with entrepreneurs, establishing good dialogues with teachers, dealing with students, giving presentations and undertaking literature research. I preferred to learn both from people and from books. I felt confident being in front of a desk and in front of people. I made use of both fieldwork and deskwork while undertaking my research. Therefore, learning from books and people at the same time, and combining the theory and practice in the same project, increases its realness and also makes it more enjoyable for me.

Determining the appropriate methodology to get to the required information which would guide me to reach a rational conclusion, was as important as formulating the appropriate research questions. Therefore, action research was chosen as I tried to change and improve modules of schools based on entrepreneurship within collective efforts.

3.4.1 Research Approach: Action research

In order to understand the right choice of research approach, it is important to internalize the research questions, and the aim and objectives of my research process as a working researcher. In addition, it is vital to know and differentiate between the advantages and disadvantages of the research approaches. In this respect, action research is the right choice for my research approach.

Considering the aim and the vision of Kurt Lewin regarding action research; he is not only the inventor of the term but is a reformer of the new vision about the world of research. Holter&Schwartz-Barcot (1993, Koch et al., 2009) recognized this by stating that Lewin has developed this method in order to refer to the necessity of bringing research to the workforce. So it is not wrong to say that he achieved something to fill the gap in the workforce and bring about change. Lewin's aim was based on the improvement of social formations through the involvement of participants 'in a cyclical process of fact finding, planning, exploratory action and evaluation.' This cyclical process has been identified by many researchers. For example Gerald (1983) and McKay (1992, both in Yasmeen, 2008) have described this cycle as the identification of a problem, postulation of solutions, creation of an action plan and implementation. After the data has been analysed and the success of the action evaluated, then the problem is assessed again and another process begins. The process finally ends when the problem is resolved. So the main point is that the process steps continue until the problem is solved. Similarly, Hart and Bond (1995, Blaxter et al., 2006) discuss this 'cyclical' value of action research by stating that it includes a cyclic process in which research, action and evaluation are connected. Thus here again, the emphasis is on the connection of action and research. However, some authors discuss that this engagement of research and action has not yet been achieved. Bassey and Furlong (2003, Durrant and Holden, 2006) note that teachers and head teachers do not easily take part in educational research and trust is still missing

between the 'practitioner' and 'academic' research communities, although their collaboration and contribution is significant.

In later times the process was not only identified but also was advanced by some authors Winter (1996, Wamba, 2011). For example, advances have been made in the six principles that are central to the action research process. This involves a 'reflexive critique or the awareness of our perceptual biases, dialectic critique, collaboration of views, risking disturbance, plurality of structures, the internalization of theory and practice as two interdependent yet complementary phases of the change process.'

The cyclical nature of the process and all the other features which form this process, allow it to be explained and accepted as the distinguishable nature of action research. As Stringer and Dwyer (2005, Koch et al., 2009) argue, the cyclical, dynamic and collaborative nature and its emphasis on planning effective actions to resolve a problem or issue are the characteristics of action research that makes it different from the other research traditions. This work based research represents the roots of action research by considering collaborative world views and entrepreneurship. Similarly, Arhar, Holly and Kasten (2001, Koch et al., 2009) stressed that because of its emphasis on a collaborative world view, an ethical commitment to developing the quality of life of others, reflective practice and making findings known to the public, are the features of action research that separate it from other research traditions.

As evaluation and/or change are one of the features emphasized in the cyclical process, there is one important point which should be underlined based on these features. That is the functionality of this change/improvement. Greenwood and Lewin(1998, Blaxter et al., 2006) recognized this when they described action research as a way of producing 'tangible and desired' results which could be explained as workable and necessary results for the people who participate. Costello (2003, Blaxter et al., 2006) underlined the problem solving

characteristics of action research by stating that it places an emphasis on that point. Greenwood and Levin (1998, Snodgrass, 2009) have pointed out the significance of this participatory work in research by highlighting the diversification-side of it and stated that this diversification leads to reaching more creative solutions to the problem identified.

Of course being the facilitator or the agent of this change is not easy, and as an insider researcher, there are difficulties waiting for you, and like all other methods, there are disadvantages. According to several authors (Bailey, 1999; Burns, 1999; & Wong, 1993, Cochran - Smith and Lytle 1993, in Brown, 2002), time is shown as one of the main disadvantages of action research. They state that it is difficult to find enough time to conduct action research. Another two disadvantages that are summarized in the dissertation (Brown, 2002) are the lack of distance from the research situation, and conflicts between researching and teaching roles. Although I am aware of all these, I do not see these as disadvantages, rather I see them as the challenges of action research. In order to achieve the process successfully and not simply undertaking a project for the sake of doing it but rather implementing something new and sustainable for the work place and also for society has crucial importance. Since I realize the role of teachers in leading a change in education, I have used my preference for choosing to ask which method would be the best for what I want to achieve and why. This is why action research became my chosen method.

Education is one of the areas that needs to be updated and changed in the quickly changing global world, and action research is one of the most popular research traditions when talking about these improvements in education. This places an emphasis on both improvements in education and the improvement of the teacher researcher who undertakes the project. Many authors believe that through action research teachers grow professionally and develop themselves in many ways. Emphasizing the use of action research in professional development is significant in a work based research project.

Hopkins (1985, Cohen et al., 2007) believes that both action and research are disciplined enquiries where one can grasp what individual endeavours mean as well as reinforce the improvement and reformation of practice, once action and research are joined together. Thus, this statement emphasizes the power resulting from when theory and practice come together. Ebbut (1985 Cohen et al., 2007) views action research as a systematic study, where one should be able to bring action and reflection together to improve practice. I believe that reflection is one of the best friends of action and practice. This is because it helps the researcher to observe his/her actions objectively and to maybe take immediate steps in his/her project aiming to create viable consequences and sustainable recommendations. In my opinion, it enables the researcher to critically judge her/his actions and to find the balance of being an 'insider researcher' and a 'researcher'. For action research, Cohen and Manion (1994 Cohen et al., 2007) define it as 'a small scale intervention in the functioning of the real world and a close examination of the effects of such an intervention.' Therefore, all these features of action research strengthen the relationship between research and policy makers, as the researcher will the raise issues (Weiskopf and Laske, 1996, in Cohen et al., 2007).

As I have mentioned above, action research's collaborative and cooperative nature enables the researcher and participants who will be affected by the change and improvement to join in the activity and take responsibility for change in the research project. By defining these communication processes as 'symmetrical communication', Grundy and Kemmis (1984, Snodgrass, 2009) point out the fact that the contributors to the communication become individualistically equivalent members. The authors expressed that there is one major principle resulting from the article 'Peace Education in Multicultural School: An Action Research Approach'. In this, action research indicates the fact that all human beings have 'detailed, complex and valuable knowledge about their lives, environments and goals...'

To sum up, in respect to the research questions, aim and objectives, action research is the right choice for this process for change and development in the work context in order to investigate the entrepreneurship module and adapt it to the specific context with cooperation from related partners.

In this respect, my aim was to bring about improvements by defining and clarifying deficiencies, identifying and implementing change oriented actions to improve the current entrepreneurship module, and testing and implementing to identify the impact of the changes made through the action research process.

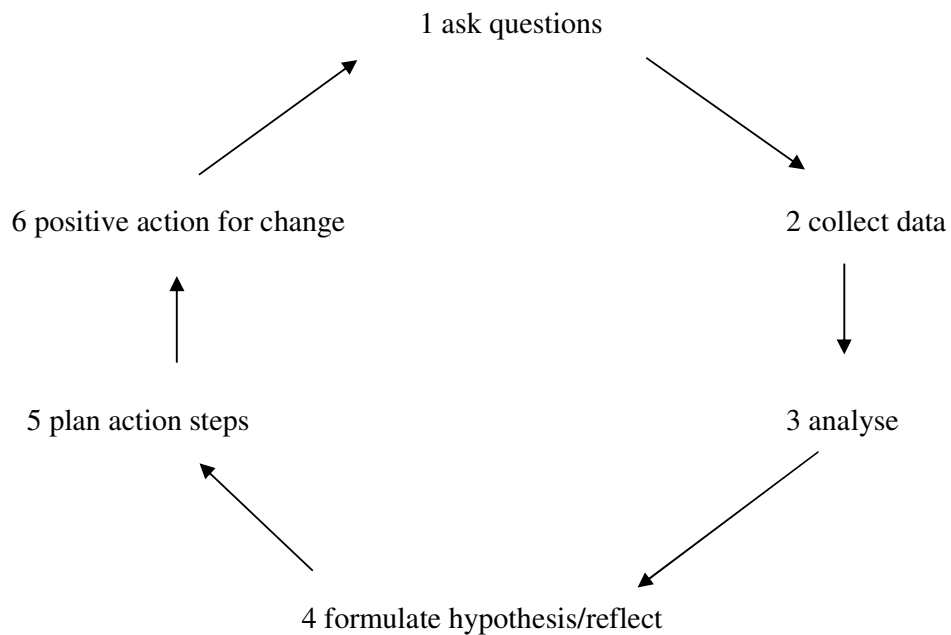


Figure 3.1 – Action Research Cycle

(Middlesex University Module Handbook, 2008:70).

The cycle in Figure 3.1 was used in my work based learning and project as it focuses on the researcher as a worker needing to improve the entrepreneurship module used in vocational and technical high schools in North Cyprus. My project was grounded in an action plan to change and implement a new entrepreneurship module.

I present the stages of my action research plan in Figure 3.2 along with a justification for the choice of approach.

Inductive Process Focus: An investigation to improve entrepreneurship module in vocational and technical high schools in North Cyprus'

Action Research Cycles

Cycle I

<p>Objective: Evaluating the current entrepreneurship module</p>	<ol style="list-style-type: none"> 1. Asking Questions 2. Collecting data 3. Analyzing 4. Reflecting 5. Planning actions 6. Positive action for change 	<p>Action I:</p> <ul style="list-style-type: none"> •Reviewing and analysing the documents, conducting semi-structured interviews and implementing questionnaires <p>Focus: Defining and clarifying the deficiencies of the current entrepreneurship module.</p> <p>(Keeping a Research Diary)</p>
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Cycle II

<p>Objective: Re-designing the Current Entrepreneurship Module</p>	<ol style="list-style-type: none"> 1. Asking Questions 2. Collecting data 3. Analyzing 4. Reflecting 5. Planning actions 6. Positive action for change 	<p>Action II: Content Analysis and Frequency Analysis</p> <p>Focus: Analyzing the results of the outcomes</p> <p>Action III: Analysis of documents</p> <p>Focus: Reviewing and analyzing the documents based upon the analysis of data</p> <p>Action IV: Improvement of the current entrepreneurship module</p> <p>Focus: To formulate the framework that is needed to adopt to develop a good practice for North Cyprus context.</p> <p>(Keeping a Research Diary)</p>
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Cycle III

<p>Objective: Implementing the new module to the vocational and technical high schools in North Cyprus.</p>	<ol style="list-style-type: none"> 1. Asking Questions 2. Collecting data 3. Analyzing 4. Reflecting 5. Planning actions 6. Positive action for change 	<p>Action V: Putting the new module into action to the vocational and technical high schools in North Cyprus.</p> <p>Focus: Examining the adaptation process (Keeping a Research Diary)</p>
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Cycle IV

<p>Objective: Evaluating the outcome of the process</p>	<ol style="list-style-type: none"> 1. Asking Questions 2. Collecting data 3. Analyzing 4. Reflecting 5. Planning actions 6. Positive action for change 	<p>Action VI: Semi-structured interviews with the teachers who have used the module in their classes.</p> <p>Focus: Testing to identify the impact of the changes made through the action research process</p> <p>Action VII: Making last changes to the module with the lights of outputs collected from the teachers.</p> <p>Focus: Examining necessary changes in order to improve the current entrepreneurship module in order to develop a framework that adapts to a good practice for North Cyprus.</p> <p>Action VIII. Workshop and Dissemination</p> <p>Focus: Examining the impacts of work-based research project (Keeping a Research Diary)</p>
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Feedback on success and efficiency



The New Entrepreneurship Module

Figure 3.2 - Justification of the chosen research approach and the stages involved

(Adapted from Freebody, 2003; Mills, 2003; Middlesex University Handbook, 2008).

I made use of both fieldwork and deskwork while undertaking my research. My research took place in my own work environment, and involved visiting schools, work places, institutions and organizations, handing out questionnaires and conducting interviews. However, at the same time, it involved researching the previous works of others, literature, library visits, documentation, etc.

3.5 Sample Selection

Addressing the relevant partners and making the best selection is another important step required in order to accomplish the aims of the study. I had taken a decision on sampling at an early stage of my research process. Considering the judgments that have to be made about sampling, which include sample size, representativeness, access to the sample and the sampling strategy to be used (Cohen, 2007:100), I have made my selection based on the population of the participants.

First of all, I have selected the whole population of top executives of the chambers that are related to entrepreneurship (see Table 3.2). Similarly, I have purposively selected all eleven teachers who have used the current module, and I have selected entrepreneurs who were successful in establishing, maintaining and growing their businesses over the years. Plus, I have considered factors such as the type of business, age and region whilst making this selection. I wanted to have a variety in terms of these factors. According to the records published on the web-site of the Ministry of Education and Culture, there are eleven vocational and technical high schools in North Cyprus. The total number of students attending these schools were 685 and 290 of these students have studied the entrepreneurship module. I have selected all grade 12 students who had studied the current module when they were grade

10 as the participants of this study. The reason for this was that they are mature enough to analyze their learning.

Table 3.2 - Top executives from chamber who participated in the study

<u>The chambers included</u>	<p>The President of the Union of the Chambers of Cyprus Turkish Engineers and Architect</p> <p>The President of chamber of commerce</p> <p>The President of chamber of industry</p> <p>The President of craftsmen and artisans</p>
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The number and the schools of subject teachers of entrepreneurship module who participated in the research are listed in Table 3.3.

Schools	Number of teachers
Karpaz Vocational and Technical High School	1
Haydarpaşa Vocational and Technical High School	1
Güzelyurt Vocational High School	1
Haspolat Vocational and Technical High School	1
Dr.Fazıl Küçük Vocational and Technical High School	1
Cengiz Topel Vocational and Technical High School	1
Atatürk Vocational and Technical High School	2

Table 3.3 - Schools and teachers who participated

The successful entrepreneurs are as follows:

- The director of İtimat Business and Shipping Co.
- The director of Semra Ltd.
- The director of Dagli Trading Ltd.
- The director of Akay Optic
- The director of Channel T
- The director of Oza Coffee Ltd.
- The director of Acapulco Resort & Convention & SPA

- The director of Deniz Shops Ltd.
- The director of Journey Stores in North Cyprus
- The director of Exotic Hotel
- The director of A.Gazioglu&Sons Ltd.
- The director of Siba Imports and Exports Ltd
- The director of SBC Ltd.
- The director of İnce Electronics Ltd.
- The director of Arsal Food Industry
- The director of Cangar Motors Co. Ltd.
- The director of Metropol Supermarket

3.6 Gaining Access and Ethical Considerations

One of the significant features of this study is that it bridges theory and practice which will give it a chance to be used in the environment where it would be carried out. Therefore, it starts with cooperation in the work environment. In order to undertake this research, to maintain access to places and institutions where the necessary data can be collected, there are some important steps that need to be followed and accomplished. This again links to the aim, main research questions, the data needed and the partners that need to be contacted.

The main aim of the project is to study the entrepreneurship module with respect to the conditions of North Cyprus and to develop it. Together with this study, the proposal will portray the needs of the entrepreneurship module, in an effort to determine how it can be developed. So having listed my stakeholders, I have detailed the ethical implications that I had to consider.

I was guided by the principles suggested by Bell (1999, in Middlesex University Module Guide 2008-2009) while taking into account the ethical implications. First of all I requested

permission formally from the department of vocational and technical institutions in the Ministry of Education, Sports and Youth in order to undertake my investigation in schools as soon as I had an agreed project outline. I also prepared an informed consent form explaining the purpose of the research, what participation in the study will involve, the anonymity of participants and the confidentiality of information.

I considered all the ethical considerations during the process as I was honest about the purpose of the study and the conditions of the research. I informed them that I was a DProf candidate and that this project was to change and develop a specific context. Being aware of the favour participants were making, I thanked to them through e-mails, telephone or visiting them at their work places. I also was always in contact with my advisor and negotiated the issues raised through the research process considering the ethical implications in order to develop process and change oriented actions through action research.

This contact with participants prevented any conflicting issues or misunderstandings regarding the project from being raised. It also ensured that the participant was more aware of the study he/she would take part in. It also gave me the opportunity to increase the level of professionalism of the project and address confidentiality.

Thus, considering the set of principles for action research presented by Kemmis and McTaggart (1981, Cohen et al., 2007), I was sensitive to consulting the relevant persons and authorities. I encouraged people who could provide contributions to the improvement of the module to become part of my project. I took into consideration the wishes of others and respected their rights of not participating in my project.

I have ensured ethical considerations through respecting the privacy, anonymity, confidentiality, betrayal and deception rights of the participants in order to increase the validity and reliability of the research project. I have made clear to participants that they have

the right not to be interviewed, and referred to the right of privacy and codes which would be used instead of names for identifying them to ensure anonymity. I have explained to participants that I would be the only one who would have access to the data, and the data would be stored carefully to protect the right of confidentiality.

As a researcher I was always honest to the participants about the research I was conducting in order to respect to the right of deception. Plus, I didn't use any information I had obtained through everyday interactions which refers to the term of betrayal. I have also considered the factor of the maturity of participants.

I think that besides the ethical considerations and the formal necessities of the project, having a strong ability to communicate and present, plus taking on responsibility and leadership has played a significant role in reaching the minds of people. Throughout the process I have realized that permissions sometimes do not mean anything unless the people believe you as a researcher. Therefore, presenting the project clearly and effectively, explaining its significance, choosing appropriate ways of talking, informal dialogues and taking a lead role in the project, were all important in gaining access to the ideas and experiences of the partners.

3.7 Choice of Data Collection Techniques

After deciding on the methodology, I made my decision on the most appropriate instruments to collect data and to design those instruments taking into account my research questions, my chosen approach, time and the resources available. I have used a combination of techniques for collecting data in order to investigate my research questions and to increase the validity of my research findings. I have used three main data collection tools in my research. I have conducted semi-structured interviews, administered questionnaires and reviewed and analyzed

documents. In addition I have kept a diary throughout the process in order to be aware of the stages of the process.

During the planning stage of my research I also thought about how I would use the data I would collect and I was aware that it needed to be interpreted carefully. Therefore, by considering what kind of data I would reach at the end of the analysis of data, I was able to decide on the most suitable techniques for my research. Considering the analysis of the techniques was also important so that I was able to ask the appropriate question while formulating the questions of the data collection techniques. Thus, in order to reach reliable and valid results in the findings I have used a combination of three research techniques which are reviewing and analyzing documents, un-structured in-depth interviews and questionnaires as shown in Figure 3.3.

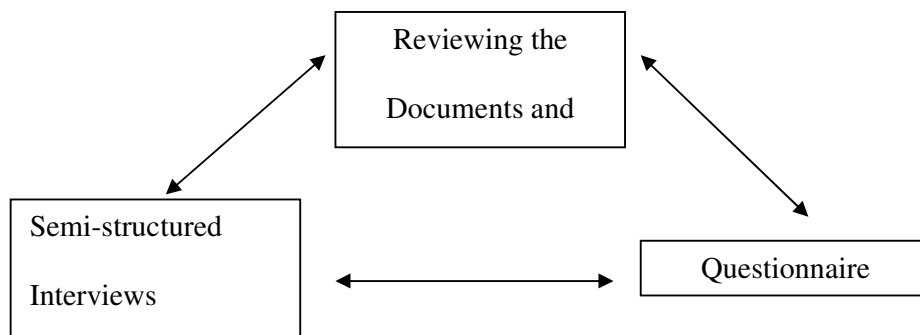


Figure 3.3 – Data collection methods used

3.7.1 Semi-structured Interviews

The objectives of the research involve making a change and improving the current entrepreneurship module in the context of North Cyprus. Therefore interviews would be the most appropriate way to formulate solutions in order to determine the points that need to be developed or changed and to reach a deeper knowledge of the issue I was studying. Another reason to choose interview as one of my data collection methods is that it helps participants express their ideas and opinions more freely with respect to the circumstances and situations

of the world they live in. According to Kvale (1996, Cohen et al., 2007), an interview basically means a discussion and exchange of ideas over a particular subject, topic or issue between two or more people at a time. Hence this marks the crucial element of human interaction for knowledge production and emphasizes the social situation of research data. Similarly, Tuckman (1972, Cohen et al., 2007) stated that accessing what is “inside of a person’s head” enables one to find out and measure what s/he knows as well as his/her likes, dislikes and thoughts.

Un-structured, structured and semi-structured interviews are three of the most common types of interview. Unstructured interviews are sometimes named as life history interviews as they are used for life history research. In semi-structured interviews, the researcher wants to learn specific information which later can be compared and contrasted with the information collected from other interviews. Thus, a set of specific questions is produced by the researcher and the same questions are asked in each interview. Structured interviews are highly structured and most preferred in market research. They are employed in quantitative research and can be conducted via different ways, e.g. face to face, over the telephone or with the help of lap-top computers (Dawson, 2002:40).

The semi-structured interview is explained as a qualitative data collection method. The researcher who uses semi-structured interviewing may have a specific list of questions or topics to be covered. The interviewer may follow the order of the questions or the researcher may change the order of the topic list depending on the informant’s response. In both cases, the topics or the questions are based on the research question and the ‘tentative conceptual model of the phenomenon’ that structures the research. Many types of open-ended questions are used in semi-structured interviews. (Given, L. M. (Ed):810)

It is highlighted that a feature of semi-structure including a list of questions or themes with the flexibility of following interesting or useful raised issues, often best fits the work based researcher as there is 'inherent flexibility' (Middlesex University Module Handbook, 2008)

The reason for this is that this type of interview would enable me to hear in detail the experiences, suggestions and ideas of the stakeholders. Thus I could collect the data necessary for my research questions. In my research project, interactive conversations ensured I would receive real life feedback, would reach unique thoughts and experiences, and allowed me to listen to the problems or current situation of business life in detail through semi-structured interviews. These allowed me to improve the 'realness' and the level of 'workableness' of the current entrepreneurship module. Also, I felt that interviews made people put themselves in a natural conversation setting and they expressed their ideas voluntarily. My frequent visits made them feel like they were not an object of the study but we were working together to bring improvement to our system. Their participation and spending time on reviewing the modules were evidence and signs of this collaborative work. However, it was both time consuming and difficult.

3.7.2 Questionnaires with Grade 12 Students

There are two reasons for making students participants of this project. One is giving them an opportunity to become part of the project based upon the collaborative nature of my research process. I wanted to make the students' experiences and opinions part of this project as they are not generally involved in the process of education matters and are not generally given any responsibility or asked about their learning in the education system. Therefore, based on the collaborative characteristics of action research, I wanted to make their voices heard. Rudduck and Flutter (2000, in Durrant and Holden, 2006) emphasized that:

‘Children are not learning to become members of society, they are already members of society and as such we should put in place structures that enable their legitimate voices to be heard. As well as looking at where these voices may be heard and thinking critically about them, we need to find new opportunities for ‘dialogic encounters.’ This is educative for both researchers and the researched.’

Secondly, student studied this module when they were in grade 10, and now being grade 12 level students they are mature enough and will be able to identify the issues that need to be developed.

Rudduck and Flutter (2000, Durrant and Holden, 2006) highlight that children already exist within the society and they cannot be separated. Therefore their voices must be heard and their views must be valued. Learning does not make them members of the community, which they are already inseparably members (Durrant and Holden, 2006). Fielding and Bragg (2003, Durrant and Holden, 2006) put forward the suggestion that children should already be actively contributing to the decision making process concerning the issues about them or directly influencing them.

Questionnaires are one of the most commonly used data collection methods in work based research and are often a characteristic of action research. The aim is to develop specific precise questions for a group or sample that has been determined before. If closed questions are employed, it gives the researcher the opportunity to collect data from a wide range of respondents in a short period of time. (Middlesex University Module Handbook, 2008:85)

Close-ended, open-ended and a combination of both are the three main types of questionnaire. Close-ended questionnaires are mostly used to ‘generate statistics in quantitative research’. On the other hand, open-ended questionnaires are used in qualitative research even though some researchers may prefer to quantify the responses while analysing the data. Instead of

containing boxes to tick, it includes spaces for the respondent to write an answer and they might be asked about their thoughts. Not having standard answers to the questions makes the data more complex to analyse. Many researchers prefer using a combination of both open and closed questions (Dawson, 2002:42)

On the other hand, it is stated (Given, L. M. (Ed):241)that although many researchers tend to use questionnaires as it less time consuming, the procedures like contacting a school, getting permission from senior management, teachers, and parents to distribute a questionnaire are very much time-consuming for those involved.

I have used questionnaires with tick boxes and an open ended question in order to collect data from the students who had studied the module when they were in grade 10, considering the time span, their population and their position on being helpful for the improvement of the module.

3.7.3 Researcher Diary

I kept a diary throughout the process which helped me to record the steps of the process, my experiences, feelings and my attitudes to the current situation. It ensured I had a whole picture of the details of the actions and the problems I dealt with. Throughout this I become able to see the process in a more reflective way as it gave me an opportunity to look at the actions taken with an outsider's eye and increased my objectivity in my behaviour and attitudes regarding certain situations. It also helped me to see how I have developed my skills and how and in what way I have made use of them. It enabled me to realise what has worked well and what hasn't during the process, and how I have reflected my learning in the next steps.

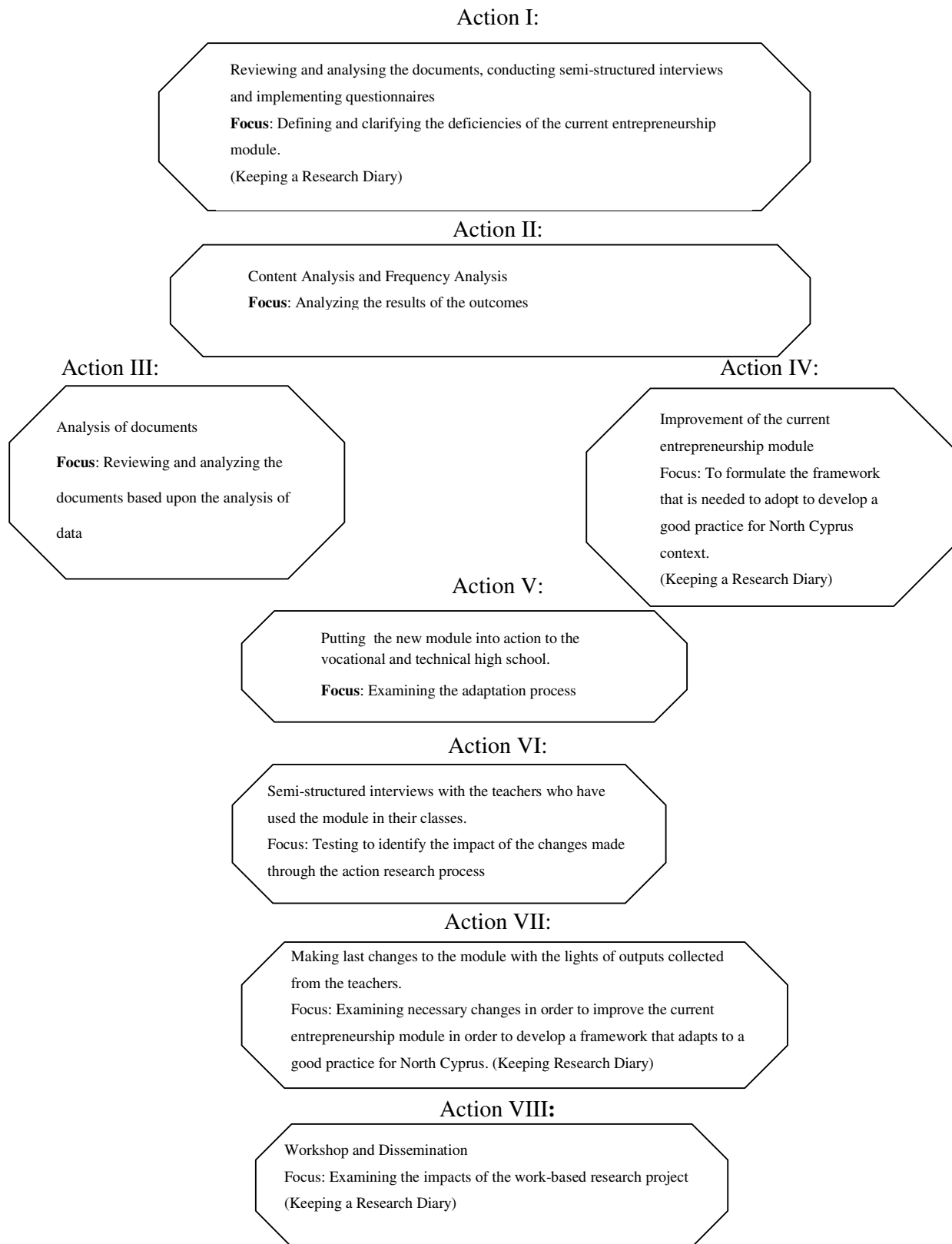


Figure 3.4 – Inductive Process by Action Research: Justification of Data Collection Techniques

Furthermore, it was helpful for analysing my learning while making judgements on the difficulties I faced. It also became useful in evaluating my actions. Plus it gave me an opportunity to link the parts of the chain and arrange and organize the process considering the limits of the whole project.

3.7.4 Validity, Reliability and the Process of Triangulation

The main aim of the project is to make investigation on the entrepreneurship module to improve it considering the conditions of North Cyprus. In order to accomplish the aim of the project, the opinions, knowledge and experiences of the participants who will be affected and could be considered as the part of this issue, needed to be heard. Thus, from this point, the interviews became the most appropriate method in order to reach to a solution for the sake of identifying the sections that are needed to be improved or changed. On the other hand, considering the time span, their population and their position on being helpful for the improvement of the module, questionnaires are the best instrument to reach the data. Thus I chose the right instrument to measure what I wanted to measure. This helped me to achieve validity in the research.

I have made use of both quantitative and qualitative data which helped me as a researcher to map out the situation from different perspectives. In this study data triangulation entails the combination of qualitative data received from semi-structured interviews with the subject teachers of entrepreneurship who have used the current module in their classes, the top executives of the civil society organizations including the chair of the Union of the Chambers of Cyprus Turkish Engineers and Architects, Chamber of Commerce, Chamber of Industry, the president of craftsmen and artisans, the representative of the state planning office, successful entrepreneurs, Deputy leader of the EU VETLAM² Project and Vocational Education Professional, the chair of the department of the School of Computing and

Technology at Eastern Mediterranean University, the curriculum development expert with quantitative data received through questionnaire from all of the grade 12 students of vocational and technical high schools who have studied the current module when they were grade 10. Thus, as a result of a triangulation, I as a researcher became more able to reach richer information, deepen knowledge on the investigated phenomena, reduce the impact of bias and increased the confidence, affectivity and meaning of the research which ensured me to achieve reliability of the research.

3.8 Data Analysis

Content analysis is defined as the intellectual process of categorizing the textual data into similar small groups or categories aiming to identify 'consistent patterns and relationships between variables or themes' (Given, L. M. (Ed):120) Berelson (1952, Stepchenkova et al., 2009) summarized content analysis as a "research technique for the objective, systematic, and quantitative description of the manifest content of communication." Similarly Neuendorf (2002, in Yu, 2009) has identified content analysis as 'the systematic, objective quantitative analysis of message characteristics'. Weber (1990, in Stepchenkova et al., 2009) identified content analysis as "a research method that uses a set of procedures to make valid inferences from text." Many researchers (Milne and Adler, 1999; Weber, 1988, 1990, in Yu, 2009) state that this method organizes the text or content into groups based on defined criteria. Some authors underline that content analysis 'examines textual data for patterns and structures, singles out the key features to which researchers want to pay attention, develops categories and aggregates them into perceptible constructs in order to seize text meaning' (Gray and Densten 1998; Shoemaker and Reese 1996, in Stepchenkova et al., 2009).

I have used content analysis to analyse the data gathered through semi-structured interviews and derived categories from the data. As the questionnaires produced a large amount of

numerical data, I analysed the data statistically using SPSS (Statistical Package for Social Scientists). I have used questionnaires to generate qualitative and quantitative data from 259 respondents from ten vocational and technical high schools. I have used the statistical package program and drawn tables and charts to depict the results. All of the students filled in tick-box questions and none of them filled in the blank space left if they had anything to add. Thus, the numerical data I collected at the end of the project helped me to obtain the specific pieces of information I needed to determine the needs of the students in terms of the skills of entrepreneurship. I believe that I considered the concept of reliability as they would come up with essentially the same results, if another researcher were to ask the same questions in the same setting. Plus I ensured validity as a questionnaire is the best method to reach such a large number of students considering the time span, their age and the issues I have been exploring.

3.8.1 Reviewing and Analysing the Documents

I reviewed and analysed documents as a data collection technique within the action research process. I have analysed documents in two stage of the process. Firstly, I have searched for documents which enabled me to see the other research undertaken related to the issue I am investigating and provided me with an idea of what kind of improvements steps have been taken regarding the issue. Doing this helped me to broaden my vision on seeing how the methodology, techniques and the aims of the research link together in order to reach the solutions to the problem one is investigating. From this point, I think that this is very helpful in evaluating the steps of my project I am studying, and comparing and contrasting the knowledge and the information in a collective view. The documents also supported my arguments by providing evidence. They helped me to clarify my claims, to review my project and be more reflective on what I am writing. They made my project richer by presenting a background basis to it and reflecting on different perspectives.

I have also analysed documents in order to access information suggested by the participants at the end of the analysis of the outcome. In order to reach the documents that are needed to fulfil the gaps in the module. This gave me the opportunity to think creatively regarding the resources and to use them effectively. As a researcher I control the information that I gained through the resources. This was also time consuming as I checked the information in the resources did not contradict each another. What I mean by being careful about contradiction was that sometimes when it was suggested I use one booklet to find a piece of information. However I would then find that the web-site of the institution presented up-dated information.

3.9 Constraints of Implementing Action Research

It was necessary to carry out all of the activities in a certain time interval, thus time could be defined as the constraint of the project. The communication system between the schools and the Ministry of Education, Sports and Culture was not fast enough therefore although I obtained a permission letter from the Ministry of Education, there were delays in the arrival of the letter.

Another constraint was the continuously changing political structure of the education system, its dependency on politics and its slowness in implementing new essential policies. For instance, the Ministry of Education, Sports and Youth has changed three times while I was undertaking my research. All these changes made society and even the teachers lose their motivation in approaching something 'new'. They didn't believe that the system would use the knowledge obtained from them adequately. Thus I had to persuade individuals many times before informing them about the interview and the research. This could be described as a constraint as de-motivation of participants might prevent replying to the interview questions voluntarily.

Another matter was cooperation among schools as this was not well-established and there was a gap which needed to be filled in exchanging ideas about what they were doing at their schools. The system could be changed from school to school or teacher to teacher. The point of view of teachers and schools has shown lots of differences; therefore this was also a constraint for me as I had to start from a different point when I visited the schools.

3.10 Strengths and Potential Weaknesses

The main strength of the project is the feature of the methodology which gave me the opportunity to bring innovation to the work place I have been working in for years. Therefore, being an insider researcher enabled me to diagnose/determine the problems of the system and work effectively to find solutions to improve the deficiencies. This study contributes to the data available to the Ministry of Education regarding vocational and technical education.

Involving the subject teachers was strength of the research. They had to believe in the material they have been using in order to motivate the students, so their evaluations in terms of identifying the problems and deficiencies of the module, the activities they have suggested and their recommendations about the content of the module, made the research stronger. Likewise, the students are not generally asked about teaching materials. Thus administering questionnaires to the students made them feel responsible for their learning and increased awareness of entrepreneurship among them. Therefore the research didn't focus on those with power in terms of status but gave opportunities to every partner and gave the research democratic strength.

Conducting interviews with successful entrepreneurs and senior executives of civil society organizations and institutions made the project more realistic in terms of the Cyprus context and practical in terms of its applicability. This helped to present the entrepreneurial world as it

is and so the students will not be disappointed when they graduate from schools and enter into the work force. Therefore this binding of the theoretical and practical sides made the project very suitable for the North Cyprus context.

The interviews with EU experts of entrepreneurship brought the advantage of bridging the gap between EU countries and North Cyprus regarding entrepreneurship education in vocational and technical high schools. Their experiences helped me to create a module which also included examples from the EU and activities/programmes used in EU countries to promote entrepreneurship that were the most applicable and useful for North Cyprus. Thus the issue of diversification was achieved by getting ideas from many different partners and this has increased the importance and creativeness of the research.

3.10.1 Potential Weaknesses of a Work Based Research Project

Being an insider researcher sometimes was weaknesses of the project as I was too close to the problem and sometimes it was difficult for me to protect objectivity and not be influenced by my perceptions, experiences and ideas.

Another weakness was the lack of international entrepreneurs' ideas in the research. These might add something valuable to the project. Equally the teaching of this subject in other countries was not looked at. Although the suggestions of EU experts were used, maybe the involvement of other countries' experts who are not members of the EU could play an important role in the development of a good framework on entrepreneurship.

The voices of graduate students could have been listened to. This would have been useful because they have entered the business world after graduating and could have told me about the skills they needed to be developed. This could be defined as a weakness of the study.

CHAPTER 4 - PROJECT ACTIVITY

4.1 Introduction

Writing about the research project and conducting it are totally different things. Following the methodology chapter where I have underlined why I have chosen a particular research approach and data collection techniques in order to reflect on actions during action research process, in this chapter I have clearly identified how I implemented all the research activities. The main focus of the chapter concerns the data collection stages including the semi-structured interviews, and questionnaires. I have provided information on why I have selected the particular stakeholders to conduct interviews or questionnaires with and explained clearly how their partnership is necessary to reach the aims and objectives of the project and at the same time answering the research questions raised at the beginning of my research project. At the end of each activity, I provide information on how the activity has helped me accomplish my aims, objectives and how I have reflected on the process.

Undertaking the research shows me that although I as a researcher have got a carefully prepared action plan, there might be unplanned actions and you might need to be able to deal with all of these patiently and manage time effectively. Therefore in order to cope with all the difficulties and not to have problems while conducting the research project, I reflected on my skills and knowledge very carefully and respected the ethical considerations when working collaboratively with others, institutions or organizations that need a high level of sensitivity.

4.2 Reviewing and Analysing Documents and Literature, Conducting Semi-structured Interviews and Implementing Questionnaires

My research journey starts with reviewing and analysing documents. In order to learn about what had been done before my project, I have searched through the work of previous researchers. In order to collect data for my literature review, I have used libraries, electronic data bases, and web sites of institutions.

I searched for knowledge and information that is relevant for my study and then critically reviewed the documents and sources collected. I believe that doing this type of search and learning from other author's has given me new ideas, different insights and allowed me to learn from their experiences. It has helped me to improve my ability to analyze academic knowledge and theory that are relevant to my profession and research project. It can be concluded that in a general sense, it has lead me to undertake advanced research and develop the capability and advanced project management skills which need to be applied to the professional area of study. However, I believe that although I have detailed the literature review in an earlier section, it is one of the most important parts of research as it helps the researcher to improve his/her academic side and gives a clear route to follow; thus it continued throughout the process.

4.2.1 Discussing and Getting Feedback from the Participants

Although I was very certain of what to look for and where I wanted to go, it was very important to make the best plan and design the most appropriate questions that would be helpful for me to get the answers I needed. In order to accomplish the aims of the research, to reach satisfactory answers for the main questions which would help me to create applicable solutions for the problem, to make logical conclusions and interpretations and to produce

meaningful recommendations, I got feedback from some of the stakeholders who are directly involved in the process and would be addressed in the questions. They gave their ideas on designing and shaping the interview questions. This was very important for me because this type of research relies mostly on the goodwill of the stakeholders, they do not have to join all the steps of the research project. Plus in my project, there are many participants from a variety of fields of society. So I believe that this action highlights my achievement for persuading people about the research project and its characteristics of collaborative work. In my opinion this action demonstrates that I am able to communicate effectively with the stakeholders of this project, show a high level of responsibility to the others in order to create a workable framework for the practice by discussing and considering their thoughts, and working collaboratively with the others showing the role of leadership.

4.2.2 Designing and Piloting the Interviews

Based upon the discussions I had with the participants and the feedback I collected throughout this stage, I carefully designed my interview questions and piloted them with the participants. This action enabled me to formulate the questions to get the answers that best meet with the needs of the research project and enhance the feasibility of my research on implementing the interviews.

I prepared the interview questions considering the aims of the study and the benefits of the stakeholders in being part of this project. In other words, I took into consideration in what ways the stakeholders would benefit in the process of analyzing the module to develop it. I have formulated and prepared four different sets of interview questions, based upon who is being interviewed:

- Teachers and the head of the committee who approved the module
- Successful entrepreneurs, top executives of the chambers and the head of the state planning office, the chair of the department of the School of Computing and Technology at Eastern Mediterranean University
- Deputy leader of EU VETLAM project and vocational education professional.
- Curriculum development expert

The reasons for this are as a stakeholder of this project teachers used the module and had ideas about it. Therefore they are able to review the module in terms of its problems and deficiencies according to the conditions of a class setting. As an educationalist, they had experiences of teaching and learning based issues considering teaching techniques, methods and the education system. Plus, they would provide significant information on the content of the module from the theoretical perspective. Thus they would fill the theoretical part of the current module from their educational knowledge and practical experiences.

The top executives of chambers, successful entrepreneurs the head of the state planning office are experienced in the business life of North Cyprus and they could provide valuable information on the structure that best suits the North Cyprus environment. The main aim of these interviews was to meet the practical needs of the module adequately. Their ideas were crucial as they have been actively taking part in the business of North Cyprus. Therefore they were close to the problems of business world, more aware of entrepreneurs' needs and the weaknesses of the current system, and they knew the ways of how to become a successful entrepreneur in North Cyprus.

The deputy leader of VETLAM project added his point of view on the need for a structure that best suits North Cyprus and the most applicable activities for North Cyprus considering European Union programs and activities. The ideas of the curriculum development expert will be beneficial regarding the points to be considered while designing the module. Thus the

interviews didn't include the same questions. The interviews ensured that I received more business life feedback from selected entrepreneurs and this allowed the practical side of the current entrepreneurship module to be improved. The curriculum development expert gave her ideas on the necessary points that should be taken into consideration while designing a new module so her ideas will be helpful on the basis of the educational perspective.

4.2.3 Implementing Semi-structured Interviews

Semi-structured interviews: Professional development lessons within an entrepreneurship module

Teachers of entrepreneurship who have used the module in their classes are one of the partners of the research project. I interviewed them aiming to draw a clear picture about the deficiencies, problems of the current module, and to determine good teaching techniques and methods to teach the module and to have their suggestions about the content of the module. This action helped me to internalize the current situation of the module.

There were ten subject teachers of entrepreneurship who have used the current module in their classes. Two of the teachers didn't want to be part of my research. The reasons were that one was retiring the week after I contacted him, and although the other one agreed to be part of my research he didn't answer my phone calls. Thus, I held interviews with eight of them. I respected their rights with regards to confidentiality.

Before I started to collect data I thought it would be very easy for me as I had self-confidence in dealing with people and in establishing a dialogue. However, the process showed me that these skills were not sufficient to obtain the data. Entrepreneurship is a course that is taught by professional development teachers and it is optional. Therefore the teacher might be a professional development teacher but had never taught entrepreneurship. Another point was

that I wasn't looking for the teachers who had only taught entrepreneurship throughout their teaching journey, but I was looking for the ones who had used the current module in their classes as course material and were to review it. Thus my job didn't finish by going to schools instead it started when I went there. At the beginning of this stage I tried to do this with the help of my friends in schools and I asked them to help me find the right teachers for my project. However, this was too time consuming. The other difficulty in finding teachers were the non-matching of the lesson hours. For example, I was going there during my free hours at school, however at that time they might be in a lesson. Therefore it took a considerable amount of time until I found all the professional development teachers and then distinguished the ones who had used the current module in their schools. After I met them once, I contacted them again by telephone and then organized my visit according to the time they suggested.

Visiting schools and taking on board the suggestions of subject teachers has increased my awareness of entrepreneurship education in schools. The teachers at different schools come together ideologically in order to discuss the problem and the deficiencies of the current module. Therefore this project has brought cooperation among teachers. Considering the small population of teachers, I took this as an opportunity to obtain a deeper knowledge of the issue I was studying. Plus, considering the aims and objectives of the research project, the teachers needed to spend time on the current module, work on and review it depending on the interview questions. Thus, some preferred to do this face to face, some felt comfortable sending his/her ideas through e-mails and some expressed their ideas over the telephone.

My frequent visits to schools made them feel like they were not the object of the study but we were working together to bring improvement to our system. Their participation and spending time on reviewing the modules were evidence and signs of this collaborative work. I became able to establish a good relationship with the participants and also created the opportunity to inform them about the development process of my action research.

The results of this interview enabled me to identify the deficiencies of the module from the perspective of the teachers, and made a great contribution in developing the deficiencies based on the facts dependent on the classroom environment.

Semi-structured interviews for the top executives of chambers, the representative of the state planning organization and successful entrepreneurs

The other stakeholders of this research project are the related chambers, the state planning organization and successful entrepreneurs of North Cyprus. The reasons for interviewing these partners was to meet the needs of the ‘real-life’ side of the module, to obtain knowledge about the current situation of entrepreneurship and today’s business context of North Cyprus.

Conducting interviews with business people, especially with the successful entrepreneurs was another journey for me. They were all busy people and it was difficult to find them and also ask them to do a favour in their busy agenda. Sometimes I was surprised how easy it was to reach some of them, while for others it took weeks to get an appointment. I started to worry about time when I started my interview stage with entrepreneurs.

First, I tried to reach them through their secretaries. However almost always I got no reply. The rest of them who I did reach, asked me to send the questions through e-mail and after that I couldn’t reach them. Thus after this experiential learning, I decided to go to their workplaces directly and explain my project to the entrepreneurs and the importance of their participation. For example, I went to the work place of one of the successful entrepreneurs three times and waited there for hours to see him. However, one week later his secretary called me and asked me to go as the entrepreneur was interested to hear my project and could help. Thus, experienced that when I went to the actual business premises and left my number and a summary of my project, they never responded to me. Considering the time of my project and the importance of entrepreneurs for this project, I needed to take steps, so I went to the

business premises and waited there until I could see the entrepreneurs personally and explain my project to them and ask for their participation. Some of the interviews took more than two hours which was really difficult during the transcribing stage.

However, being part of all these actions demonstrates that I learnt a lot autonomously and this enabled me to be more innovative in finding the right solutions at the right time, to think critically and to be aware of the action process I was involved in. Through this awareness, I felt more responsible for the achievement of this process as it directly related to finding a practical, feasible and sustainable solution to the problem of my country. Therefore, being aware of all this made me feel a high level of responsibility for my project. Collecting the data and reaching the necessary answers made me to feel more confident about myself as I was able to overcome complex and unpredictable situations. To sum up, considering the research questions of my action research project, I believe that their opinions enabled me to answer my research questions related to the improvement of the deficiencies of the module and form a good framework to develop a good practice.

Semi-structured interviews with the EU expert on entrepreneurship education

I conducted a semi-structured interview with the Deputy Leader of the EU VETLAM Project and Vocational Education Professional as the other stakeholder of the project. There were two reasons for this; the first one is the EU's continuing activities promoting entrepreneurship education in vocational and technical schools, and the second one is to benefit from his experiences resulting from the project carried out in North Cyprus. Therefore, the aim of this semi-structured interview was to gather data about the framework that was needed to develop a good practice of entrepreneurship in vocational and technical high schools in North Cyprus by looking at it from the EU perspective and getting ideas about the most applicable and useful ones for North Cyprus considering the entrepreneurship education activities and

programmes in EU countries. The results of this interview ensured me to bridge the gap between North Cyprus and the EU regarding entrepreneurship education vocational and technical high schools.

Semi-structured interview with the Chair of the Department of the School of Computing and Technology at the Eastern Mediterranean University

I administered a semi-structured in depth interview with the chair of the department, as the school is one that offers vocational and technical education. Also, in terms of providing the necessary bridge between the relevant partners and creating team work, the involvement of the university's related department is vital.

Semi-structured interview with the curriculum development expert

I have conducted a semi-structured interview, with the curriculum development expert. The main reason for this is to follow the right steps while re-structuring the current module. Although, as a researcher I will have the analysis of the data, the re-structuring of the module is another matter, so the expert is the person who can advise on the framework for the new module.

4.2.4 Questionnaires with Grade 12 Students

Considering the aims of the questions, target group, time span and their attention span, I have used questionnaires to gather data from the grade 12 students of vocational and technical high schools who had studied the current module when they were in grade 10. The reasons for this were that they are more mature and are able to evaluate their learning. I have asked about the properties of entrepreneurs as a certain amount of time had passed since they studied the subject and this would test its impact on their personality. Another reason was that they are

the learners so they would be affected by the module and creating a module that they like was also important

I used questionnaires as this gave me an opportunity to collect data from a wide target population in a short period of time. I didn't use postal questionnaires as I wanted to be sure that the students would take it seriously when completing the questionnaires, plus they would feel more confident in my work if they see me there and I could help them with explanations when needed. Thus I visited schools, went into classrooms with the teachers and conducted the questionnaires face to face.

I conducted a pilot study with a representative sample of students with the aim of getting feedback about the quality of the questions, time required to complete the questionnaire and to identify the words or clauses that caused misunderstandings. I used the outcome of the pilot study as the basis of the questionnaire. The results ensured that I had checked the quality of the questions. I re-designed these after the test and used them for the larger scale survey. Using a pilot study helped me to improve the questions and ensured that the design of my research was effective.

Considering the specific skills that an entrepreneur has if he/ she plans to establish a business, I have designed a list of entrepreneurial skills in order to assess how well the module helped students to develop their skills and to find out the skills that require development. The form was organized into three sections. The first section gathered very basic data about the students; school, sex and address. The second section was to see how useful the module was to the learner to gain skills of entrepreneurship and included: *Leadership*: the ability to build a consensus in the face of uncertainty, *Communication*: the ability to keep a clear and consistent message, *Decision-making*: knowing when to make a decision, *Being a good team player*: knowing when to trust and when to delegate, *Ability to telescope*: to focus in on the details

and then move back to the bigger picture, *Self-confidence in their ability to succeed, Future orientation: foresight, Imagination, creativity, innovative, Opportunity and goal oriented and Realism*. The last question/last section provided space for any comments of the students. All information was kept anonymous and privacy was also protected.

According to the records published on the website of the Ministry of Education and Culture, there are eleven vocational and technical high schools in North Cyprus: Atatürk Vocational High School, Cengiz Topel Industrial and Vocational High School, Dr. Fazıl Küçük Industrial and Vocational High School, Güzelyurt Vocational High School, Gazimağusa Vocational High School, Gazimağusa Commercial High School, Haspolat Vocational High School, Haydarpaşa Vocational High School, İskele Commercial High School, Karpaz Vocational High School, and Sedat Simavi Industrial and Vocational High School. Four of these schools are located in the Lefkoşa district, one is located in the Lefke district, one in the Güzelyurt district, one in the Girne district, two in the İskele district and three in the Gazimağusa district. There are 22 grade 12 students in Iskele Commercial High School, 26 students in Gazimağusa Commercial High School, 22 students in Gazimağusa Vocational High School, 115 (one hundred fifteen) students in Dr Fazıl Küçük Industrial Vocational High School, 29 students in Haspolat Vocational High School, 103 students in Haydarpaşa Vocational High School, 50 students in Cengiz Topel Vocational High School, and 44 in Güzelyurt Vocational High School. The total number of grade 12 students was 411. However this was not the research population. In these schools only 214 students had studied the current module as it was an elective course. None of the students studied the module at the Atatürk Vocational High School. The schools and the number of students is given in Table 4.1.

Schools	Region	Total No. of Students	Students who have used the module	%
İskele Commercial High School	İskele	22	17	77.27
Karpaz Vocational High School	Karpaz	58	26	44.82
Gazimağusa Commercial High School	Famagusta	26	15	57.69
Gazimağusa Vocational High School	Famagusta	22	4	10.18
Dr.Fazıl Küçük Industrial and Vocational High School	Famagusta	115	13	11.30
Haspolat Vocational High School	Haspolat	29	27	93.11
Haydarpaşa Vocational High School	Nicosia	103	66	64.07
Sedat Simavi Industrial and Vocational High School	Nicosia	216	50	23.14
Cengiz Topel Industrial and Vocational High School	Lefke	50	40	80
Güzelyurt Vocational High School	Güzelyurt	44	32	72.72

Table 4.1 - Student participants

According to the results, the percentages of the students in İskele Commercial High School, Haspolat Vocational High School, Güzelyurt Vocational High School and Haydarpaşa Vocational High School were higher compared to the other schools. The schools in Famagusta had the lowest percentages compared to the other cities. Haspolat Vocational High School had the highest rate compared to the rest of the schools.

In my experiences in schools, students generally do not volunteer to complete questionnaires and many times complete them without reading the questions. Therefore, when I entered the

classroom and the teacher presented me, I then introduced myself to the students, explained the aim of my project and expressed that their help would be very helpful for the improvement of the module that their friends would study. I also explained to them that they are the part of this education and they had to take responsibility for all the studies aiming to bring improvements to student learning. I made them understand that all of the stakeholders of this project are working together and they were also part of this team. Thus I think that this persuaded them to be part of my project.

Being a teacher has helped me to understand their language as well. I went to each class with the teachers and I asked for their help with participation. I emphasized that they are the partners of the study now, more than a student and they would be helpful for the future of the next generation of friends. I answered their questions patiently. Another difficulty with the students was they were not always at the schools where they had studied the module because of being in the last year of high school. Therefore this was another constraint for me to match my working time and their time. I often had to go many times to the same school to conduct the questionnaire.

Using the questionnaire helped me to obtain an appropriate level of answers and was easy to analyze the responses. It also enabled the students to analyze their learning about entrepreneurship and identify their skills, knowledge and abilities. It also increased the sense of responsibility and involvement of the students in the action. The ideas of the students who had studied the current module were beneficial and necessary in order to analyze the needs of the module from the perspective of the students who studied it. I conducted questionnaires to highlight the skills and competencies of the students that needed to be developed. Thus it enabled me to re-design the module to meet the expectations and demands of the students.

4.3 Analysis of Data: Content Analysis and Frequency Analysis

4.3.1 Content Analysis (Semi-structured Interviews)

I used content analysis to analyse the data gathered through the interviews. I have categorised the data from the reports which includes the participants' statements. I used quotations from the participant to support the data and this enables the reader to make sense of the reality of the situation where the research is taking place.

I took photographs of all the interviews and the schools I visited, however I didn't take any photographs when conducting the questionnaires as I didn't find this ethical. I was entering the classrooms of teachers and taking up their teaching time, also it was easy to lose the attention of students. Therefore I felt uncomfortable taking photographs during the lesson time of another teacher.

4.3.2 Frequency Analysis (Questionnaires)

As questionnaires produced a large amount of numerical data I analysed the data statistically using SPSS (Statistical Package for Social Scientists). Frequency analysis was done within this process. I analysed the data by dividing it into regions: İskele, Gazimağusa, Lefkoşa, Lefke and Güzelyurt. I used tables and charts to make it easier for the reader.

4.4 Analysis of Documents

By analyzing the data I collected, I have determined the deficiencies of the module and found the points that needed to be changed, added or discarded. With this output I was able to determine the sections/points that needed to be added to the module in order to make it more relevant to North Cyprus. After I had identified these sections/points, I have used the sources in order to obtain the information and knowledge I have concluded through analysis.

I have visited institutions like the State Planning Office, Company Register Office, the Cooperative, and Department of Social Insurance. I have also used official websites of institutions, such as the websites of the Cyprus Turkish Investment Agency, courts, state planning organizations and the association of Turkish language. Plus I have searched in books.

4.5 Improvement of the Current Module

Curriculum development is explained as a cyclic process by many authors (Argyris, 1993; Kolb, 1984; Roffe, 2004, in Roffe 2010). The process involves four stages which are the identification of needs, the design of a course study, delivery of the learning programme and the evaluation of the outcomes in relation to the initial objectives. Similarly Wraga (2006) states that curriculum development, generally relates to the matters of planning, organizing, implementing, and evaluating curriculum.

After identifying the necessary areas and acquiring the information needed, I have re-designed the module after negotiating with an expert of the Ministry of Education, Sports and Culture and curriculum development expert. Plus I have followed the guidance of the Module-Writing Guide as suggested by the expert from the Ministry of Education, Sports and Culture.

4.6 Putting the New Module into Action in the Vocational and Technical High Schools in North Cyprus

After I had re-designed the module, it was suggested to the vocational and technical high schools by the Ministry of Education, Sports and Culture and has been implemented in schools for a semester. It was used for one semester only as the teachers make their selection of modules based on semesters rather than an academic year.

4.7 Semi-Structured Interviews with the Teachers who have Used the Module in their Classes

Apart from the eight teachers who agreed to be part of my project, three more teachers have used my module in their classes, so in the end there were eleven teachers who cooperated with my project. Two of these teachers were from the Dr.Fazıl Küçük Vocational High School. Another teacher who was also the expert on entrepreneurship at the Ministry of Education, whilst also a deputy headmaster at the Atatürk vocational technical high school, also agreed to join my study after reviewing the module I had prepared.

Thus I would say that being a teacher and having friends in schools has worked well. It was helpful in conversation with teachers and also I felt that the teachers felt confident themselves, as I was not there as a research assistant who sometimes visited the schools and leaves as soon as his/her work done. I was there as a colleagues who shared similar problems, was aware of the education system, schools and the students. I was always there and ready to answer all the question they could think of. This also made them how serious the project was. Plus, it was not one question, one visit and one answer, rather it was a process and we were all in contact during the development of the process. This created an opportunity to discuss and brainstorm on many issues. They shared with me their experiences in the class room regarding teaching entrepreneurship and what could work in classes and what couldn't. Visiting the schools enabled me to see that the opportunities could be changed from region to region. This helped me while writing activities for the students.

Although North Cyprus is not a big country I thought about distance, however, I have concluded that it is not about distances, it is about people and work time. Conducting interviews was too difficult and I might not use interviews of entrepreneurs another time because they are very busy people and interviews take time. Instead, I would prefer to use a

questionnaire so that I could reach more entrepreneurs in the same amount of time. However, through the use of interviews I had the opportunity to hear the information in depth.

4.8 Making the Last Changes to the Module in Light of the Output

Collected from the Teachers

After the module had been used in schools for a semester I interviewed the teachers in order to evaluate if there is anything that didn't work well in the classes and made the last changes to the module based on the analysis of these interviews.

In conclusion, all these actions provide evidence that I applied my learning to the activity process carefully and managed to implement what I had designed for my process effectively. Reviewing the resources enhanced my knowledge and understanding and the actions proved that I critically analysed and synthesised the ideas and justified the information I have obtained. Collecting data from the stakeholders reminded me that the skills of communication and leadership are the keystones in establishing good communication with others and because of these I succeeded in working collaboratively with others. With the ethical process, I demonstrated that I have gained an ethical understanding and critically applied it carefully, taking into account the needs of the context. I felt that I have grown intellectually and improved my vision of seeing the world from a professional context and the research area I am working on.

However, besides its positive aspects, action research also has disadvantages. When considering my research it was too time consuming, and as a researcher I had to be very careful about my action plan. The lateness of something or occurrence of an unplanned action might cause a domino effect to the action plan. Another disadvantage which could also be described as strength, was that it doesn't finish with the analysis of the results whereas it

finishes with the impact of its implementation, therefore it takes time. Another matter was that combining theory and practice together may also cause conflicts sometimes, therefore as a researcher I had to deal with the conflicts raised. This was difficult because interpreting the situation in its own context and at the same time trying to see it from the perspective of the author was difficult. So my project was very much related to the others, and I worried about what would happen if circumstances beyond my control caused difficulties in conducting my project. Although there are disadvantages and worries about carrying out a research project, I handled all the possible dilemmas during the process as a worker researcher.

4.9 Workshops and Dissemination

4.9.1 Workshop with all the Teachers of Entrepreneurship

The Ministry of Education and Culture organized a workshop for teachers and headmasters. The subject of the workshop was ‘Promotion of Entrepreneurship Training and Entrepreneurial Learning in VET Schools.’ The event took place in Güzelyurt, Famagusta and Nicosia. It was held in two days in each city, one for teachers and one for supervisors. I attended two of the events which were organized for the teachers. At the end I was asked to give a presentation about my research. Through this presentation I had the chance to discuss my study in an interactive way and inform related staff.

This gave teachers the opportunity to listen to the different voices coming from different schools, they had the chance to correct their misunderstandings and to become clear on what they had been taking part in. Misunderstandings have been removed through this interaction. The participants took control of the discussion process and they felt good as their opinions were being valued, as they were seeing the result and the re-designed book.

At the end I was asked to give a presentation about my research. Through this presentation I had the chance to discuss my study in an interactive way with all the entrepreneurship teachers of the future. In this presentation I had the chance to disseminate my project amongst the teaching population who were directly related to my field. I had the opportunity to gather data about the opinions, different views and also the general problems of the teachers communicatively. It allowed me to obtain more than one teacher's expressions and ideas in one session and it enabled me to obtain feedback on the new module. It enabled me to gain access to the experiences of participants and as they heard from each other, created a more qualified discussion environment to exchange their ideas in light of the shared interest.

4.9.2 Presenting the Research Results to the Public and the Stakeholders

I presented the results of my research to the public and the stakeholders in the Management Centre on 17th November at 14.30. Academicians, business people, teachers and doctoral candidates attended the presentation. The presentation included the results of my investigation to improve the entrepreneurship module in vocational and technical high schools in North Cyprus. In this presentation I summarized the steps of my project and at the end I presented a hardcopy of the current entrepreneurship module, the new module and the question booklet to the participants. The news of the presentation had been published in the newspaper, thus this also helped to disseminate the project findings. This presentation gave me the opportunity to share and discuss my project which I am very grateful for. It helped to clearly identify my reasons and final aim for choosing the role of being the agent of change in this journey.

Presentation to Entrepreneurship Students of Famagusta Commercial High School

One of the teachers who participated in my study and implemented the module in her classroom invited me to be a guest speaker for her students. We talked together and organized a day and a lesson time which suited both of us. The day of the visit I went to the school,

found the teacher and we went to the class room together. The teacher presented me as the designer of the new-module. Then I briefly explained the stages of the preparation of the module to the students and shared my journey with them. Being a teacher helped me to feel comfortable and confident in front of them and I also found it easy to use appropriate language whilst talking to them. Throughout this visit to the class I had the opportunity to express myself and my project clearly. I also used this opportunity to contribute the ideas of my dissemination project among students.

Presentation to the teachers and students of Dr.Fazıl Küçük Vocational and Technical High School

I was also invited to give a presentation to students at Dr.Fazıl Küçük Vocational and Technical High School. Again by contacting and talking with the headmaster we organized a lesson time that was suitable for both of us. The headmaster invited all of the teachers in the staff room to listen to my presentation. The headmaster also asked me if one of the grade 10 classes who studied entrepreneurship could also be part of the audience of the presentation and I approved this suggestion. I used power point to give my presentation which made it easier for me to talk to them in a constant manner. The presentation gave me an opportunity to openly discuss my project with my colleagues and to answer questions about my project which could be beneficial for the other candidates. It also strengthened my ability to work with computers and improved my presentation skills. I believe this project became a model for my colleagues and a guide for people who would like to bring improvement to the education system regarding their interests. Almost all of the teachers showed their pleasure about the project and they expressed that it would contribute to the modular system as well.

During the presentations, the feedback from the teachers and students were very valuable about this project I have conducted. They proved that I have accomplished my aims. A group of students after the presentation in the Dr.Fazıl Küçük vocational and technical High School demonstrated their positive thought by expressing the following:

‘First of all as a group we would like to thank you for doing this kind of Project. We think that is very good Project for the next generation.’

Another student stated that:

‘This is very important step in the area of entrepreneurship. The entrepreneurship module of North Cyprus was missing and this module is for North Cyprus.’

The teacher’s thoughts on my project were very positive also:

‘The presentation of Beste Sakallı that was hold in our school was very explanatory for us. One of the biggest problems of us as teachers is that the modules are irrelevant to our country and there were insufficient information about the descriptions. With this study that adapted the module to our country and added the necessary information, made the module more explanatory for us. Plus, I believe that receiving feedback from teachers, students and the representatives of associations and chambers became helpful to reach good conclusions. I believe that if such a study is undertaken for the other modules, it will be very beneficial. I am congratulating Beste Sakallı for this study.’

4.10 Participating in a Conference at Oxford Brookes University

As part of my project I was one of the participants of the 4th International Conference on Service Management, which was held at Oxford Brookes University. This conference provided me with a platform for sharing my project with an international academic world. I had the opportunity to discuss and justify my project with various academicians coming from all around the world and I believe that my project became a model for those who are also

interested in doing research in a similar field. In my opinion, the conference furthered my knowledge and at the same time helped me to see my project from a wider perspective. It enabled me to feel more confident about my project as I had the opportunity to discuss improvements, the appropriate methods to be used, the contexts, the structure of the project and how to deal with the results. Discussing these dynamics made my project stronger theoretically and disseminated my project to an international audience.

CHAPTER 5 - PRESENTATION OF THE RESEARCH FINDINGS

5.1 Introduction

This chapter introduces, analyses, and discusses the research findings collected from the interviews and questionnaires of this research project as presented in the methodology and project activity chapters. There are two types of data in this research project; the data obtained from semi-structured interviews and that obtained through administering questionnaires. The results are divided into three sections. The first section deals with the presentation of the interview findings and their analysis, while the second section describes the results derived from analysis of questionnaires through descriptive analysis. The last section includes a critical analysis and a discussion of the research findings. This section focuses on the findings of the research project in relation to the research objectives which aim at answering the main research questions.

5.2 Analysis of Interviews

Through the interviews and participants, based on their opinions, experiences and perceptions, I have determined the themes that needed to be improved and suggested ways to make the required changes for the development of the module. These themes helped me to formulate the categories for the content analysis.

5.2.1 Interview Analysis of Teachers

Interviews with teachers had a crucial role as they are the guides to exploring the deficiencies of the current entrepreneurship module. This was also very important for the project as the question would be very helpful for achieving the aims of the project. Four questions were asked to the teachers. One was about the problems and deficiencies of the module, the second

one was about the teaching methods, the third one was about the content of the new module and the last one was if they would like to add anything else.

The majority of the teachers preferred answering the questions one by one, while the others preferred answering the entire question with one paragraph. Therefore I had to pull out the answers from these paragraphs. While categorizing the answers for question three, which was about the content of the new module, I used the determined deficiencies as subjects to be added to the content. For example in the first question, P1 and P2 mentioned that interesting and concrete examples are not included in the module and they thought this was a deficiency. Then I have accepted ‘interesting and concrete examples should be included’ as an answer for the content of the module. This was necessary, because deficiencies told me the points that require changes.

Table 5.1 – Interview analysis of teachers

<p>Q1: What do you think about the current module? What are the problems and deficiencies?</p>	<ul style="list-style-type: none"> •Introduction of basic concepts are missing •More concrete and interesting examples are needed •Explaining topic point by point make the subjects confusing for students •Techniques of writing a CV is not included •Topics are explained in a detailed way •There are topics and business issues which are not relevant to Northern Cyprus
<p>Q2: What kind of teaching techniques, methods, or types of applications could make it stronger?</p>	<ul style="list-style-type: none"> •Inviting entrepreneurs to the classroom and organizing visits to workplaces
<p>Q3:What kind of context should it be? Please indicate your suggestions.</p>	<ul style="list-style-type: none"> • North Cyprus and Entrepreneurship • Presentation of the role and the

	<p>importance of entrepreneurship and an entrepreneur</p> <ul style="list-style-type: none"> • Topics that meet the needs of North Cyprus • CV writing techniques • Know yourself • Success stories from North Cyprus
Q4:If you have any more thoughts you want to add, please specify.	<ul style="list-style-type: none"> • Modules should be designed suitable for North Cyprus

From the above mentioned issues on deficiencies, the teachers underlined four main issues about the content of the module; the introduction of basic concepts, concrete and interesting examples, CV writing, and North Cyprus specific business related topics. The other two issues were about the presentation of the topics; explaining topics point by point and the detailed explanations of the topics. Here there is an important point that the teachers asked for a balance between these two issues. Regarding the introduction of basic concepts, teachers emphasized that the role and importance of education of entrepreneurship are not included in the module. They also mentioned using interesting examples, which actually underlined the significance of preparing a module that meets the levels of the students. By saying concrete examples, the teachers stated the importance of the reality of examples so that it will help students to understand clearly and digest what they have learnt from the theory. Explaining the topics point by point was also defined as a deficiency of the module. They also mentioned that the module should include CV writing techniques that would be necessary when applying for jobs. A detailed explanation of the module is also listed as a deficiency of the module. This also referred to the module which will consider the level and the needs of the students.

The majority of the participants revealed that meeting with entrepreneurs, taking students to the workplaces of entrepreneurs would make the module stronger. For example P1 and P2

stated that instead of explaining in a classical way, the lesson could be more interesting if a successful entrepreneur is invited to the school and they suggested that the owner of 'Mardo' ice-cream would be a good example for the students. Similarly, P5 expressed the opinion that 'trips to workplaces could be advised.'

The issues mentioned above, starting up a business, work program and business plan are already included in the current module. For the presentation of basic concepts, the participants gave examples of the role and the importance of entrepreneurship and the entrepreneur, therefore I combined the issues of presentation of basic concepts and entrepreneurship. Although two of the participants mentioned personal development, I haven't used this as they asked me to take their suggestions into consideration if the modular system was different to today. Therefore, I have summarized the issues that are new for the new module and prepared another list as: North Cyprus and Entrepreneurship, topics that meet the needs of North Cyprus, CV writing techniques, knowing you, success stories from North Cyprus and business related topics in North Cyprus. I also combined the issues of North Cyprus and Entrepreneurship with business related topics about North Cyprus. With the current issues, the participants emphasized that the information included should be updated. Therefore in terms of content, seven main issues could be interfered from the answers of Q3.

In the last question, participants gave a general overview of the modular system and the modules. They underlined the importance that all the modules should be adapted to North Cyprus which can be accepted as evidence that this project was appreciated by the teachers and was seen as a model study. They also stated that the modular system is not sufficient. This also emphasized that looking from the teachers perspective, it is not sufficient to meet the needs of the teachers and but also that of the students. Therefore, this also emphasizes the importance of my study not only in this subject but also in the modular system in general.

5.2.2 Interview Analysis of the Top Executives of Chambers

Table 5.2 – Interview analysis of top executives of chambers

<p><u>Q1:</u> What do you think about the structure of entrepreneurship module of North Cyprus should be? What should it definitely include?</p>	<ul style="list-style-type: none"> • Needs of North Cyprus
<p><u>Q2:</u> What kind of roadmap should be followed to adapt the module to North Cyprus? How can be the relevant sections improved/developed?</p>	<ul style="list-style-type: none"> • Adaptation of Smaller Countries Module Models for North Cyprus
<p><u>Q3:</u> What kind of mechanism do we need to be informed about the developments of entrepreneurship in the world and to provide required improvement and variation in our relevant systems?</p>	<ul style="list-style-type: none"> • Cooperative Work of All Stakeholders
<p><u>Q4:</u> Finally, is there anything you would like to add?</p>	<ul style="list-style-type: none"> • The Importance of Entrepreneurship and Entrepreneurs • Establishment of Project Evaluation Office in order to Support Entrepreneurship and entrepreneurs • The Need for Satisfactory Training of Technical Staff • Emphasizing the Importance of Business Education

Firstly, I have determined the key issues from the answers to the questions posed. The first question of the interview sought information on the structure and the content of the module. Although many key issues have been pointed out to answer this question, the majority of the participants were agreed that the structure of the new module should include the needs of

North Cyprus. For example, P1 states that: 'A module is needed to raise the awareness of young people, to guide them and increase their knowledge about the country's needs.' Similarly, P3 expresses that: 'This module should be as a router to guide the students, it should inform them about the environment, the country, country needs, and raise their awareness about the qualities that they should have to be an entrepreneur.'

The second question was about the way to adapt the current module to North Cyprus. In this question most of the participants indicated that the structure of North Cyprus should be considered and compared with Turkey or other countries, North Cyprus is a small place. Therefore, most of the participants suggested that the best way to proceed is through the adaptation of a small country module modelled to the North Cyprus case. For instance, P2 states that 'So in terms of economy, compared to Turkey, North Cyprus is a very small economy, and an economy which has its own characteristics. So, it should be appropriate for the environment.' P4 expresses that: 'Even if Turkey is taken as a model; the model should be adopted according to the conditions of our country. But, as I said before, I think smaller societies will be more suitable for the structure of our country.'

All the participants stated that in order to have a mechanism which informs about the developments of entrepreneurship in the world and provides the required improvement and variation to our relevant systems, all the stakeholders, including the relevant institutions and associations regarding this issue should work cooperatively together. Analysing the interviews and forming a sub-group for 'stakeholders', a group involving relevant institutions, related organizations, government, representatives of the private sector, representatives of chambers, and universities. For example, P1 stated that: 'In such a mechanism, all related parties; the government, the professional chambers, the ministry of education and of course universities need to make studies together.' Similarly, P2 expressed that 'This is very difficult and in this regard both relevant departments of public, issues related to its units which we have

mentioned before and relevant civil society organizations should work in a cooperation and coordination, possibly on a web-based system. So all the information from one side, that is ministry of labour, universities, schools, civil society organizations, all these things should be shared and these must be updated continuously.’ Moreover, P3 stated that: ‘It is possible with a structure which monitors the developments related to the entrepreneurship in the world in a healthy way, which the institutions and related organizations (professional associations, the government, private sector representative s, etc...) come together, listen to each other, offer suggestions and cooperate.’ Furthermore P4 said that: ‘to reflect and instil the development and variation on entrepreneurship to our society, a union should be created which the non-governmental organizations industry representatives and the government will take place.’

The last question covered any additional issues that the participants wanted to mention. In this question, apart from expressing their ideas or suggestions regarding the module, they focused on the general issues related to entrepreneurship. They recommended that entrepreneurship and entrepreneurs are important, the establishment of a project evaluation office in order to support entrepreneurship and entrepreneurs would be beneficial, and there is a need for satisfactory technical staff. They also underlined the role of education when planning to start a business. For example P1 said that: ‘It will be useful to create a project evaluation office to examine the projects. The important thing is to support entrepreneurship in our country.’ Likewise, P2 stated that: ‘Technical staff is a big problem in this country. The solution lies on creating proper, vocational training.’ Again, P3 regarding this issue, expressed that: ‘Related to the business, it is necessary to be educated and experienced and to know the environment and the world.’ Similarly, P4 said that: ‘Entrepreneurs are needed for the development of a society, in order to increase the level of welfare. Entrepreneurs, with the help of entrepreneurship, they convert their initiatives into an investment, the investments turn into the production.’

Considering the aims of the study which referred to the improvement of the module for developing a good framework for vocational technical high schools in North Cyprus, the findings of these interviews revealed important points on achieving this. Summarizing the analysis of these interviews, the responses of the questions state that the main needs of the module to create this framework is the involvement of the needs of North Cyprus in the module. Its structure could be redesigned by taking into consideration the small countries module models and the sustainability of this improvement in the module could be obtained through the cooperative work of the stakeholders.

5.2.3 Interview Analysis of the Representative of the State Planning Office

The representative of state planning office expressed that we need a system which fosters creativity, free thinking and free behaviour. He said that only through this system could we have creatively minded students. He expressed that in order to adapt the module and improve the relevant sections we need to integrate examples derived from our own country; however he stated that we should also follow what is happening in developed countries. Regarding the mechanism, he declared that the internet is the main way in today's world to catch up with developments. But pointing out the teachers' role in education, he stated that teachers should coordinate meetings from time to time and organize seminars and conferences in order to inform the system about developments. His last words were concerned with the module that would be used. He underlined that in developing the module it should consider the condition of the people, geographical factors and the level of education. In summary:

- a module should be created which considers people, geographical factors and the levels of education
- integrate examples to the module derived from our own country

- developments could be known through internet and the conferences and seminars organized by the teachers

5.2.4 Interview Analysis of Successful Entrepreneurs

Table 5.3 – Interview analysis of successful entrepreneurs

<p>Q1: What do you think of the structure of entrepreneurship module of North Cyprus should be? What should it definitely include?</p>	<p>Real Life Stories of Entrepreneurs in North Cyprus Sectors in North Cyprus Laws of North Cyprus Procedure for Establishing a Business in North Cyprus Feasibility Studies Entrepreneur</p>
<p>Q2: What kind of roadmap should be followed to adapt the module to North Cyprus? How can be the relevant sections improved/developed?</p>	<p>The Procedure to Establish a Business in North Cyprus Entrepreneurship in North Cyprus Laws of North Cyprus</p>
<p>Q3: What kind of mechanism do we need to be informed about the developments of entrepreneurship in the world and to provide required improvement and variation in our relevant systems?</p>	<p>Media Internet Organizing or Attending Conferences or Seminars Cooperation Among Stakeholders</p>
<p>Q4: Finally, is there anything you would like to add?</p>	<p>The Government Support to Entrepreneurs Fulfilment of Responsibilities by People, Institutions and Government Consideration of the Realities of North Cyprus</p>

I have used the same questions for the entrepreneurs as described in the previous chapter. Five issues were raised by the majority of entrepreneurs considering the content and the structure of the new module. This mostly included North Cyprus specific issues and two others. North Cyprus specific issues were real life stories of entrepreneurs, sectors, Laws, and the procedure for establishing a business in North Cyprus. For instance, P1 expressed that: ‘In the module that will be prepared, including the life stories and opinions of the well-known companies will

be beneficial.’ Similarly, P3 expressed that: ‘Case studies which are being applied in entrepreneur and business programs in developed countries in the world and examples taken from North Cyprus can be added to the program.’ Also, P2 said: ‘As we all know, as we don’t have an economic structure that depends on natural resources, underground mines or heavy industry, the resources we have, what comes first is tourism sector, and then higher education, agriculture, animal breeding and fishing. An entrepreneurship module which will be created for these sectors would be the most suitable module for the realities of our country.’ Plus, P8 stated that: ‘While establishing the business in North Cyprus., they should know what the procedures are and what the laws to follow.’ Similarly P14 expressed that: ‘The module emphasizes to the entrepreneur candidates, who think to establish a business, not to skip the legal processes of the business. To implement this properly, registering and accounting of must be taught as well.’

The other two issues were the involvement of feasibility studies and information about the entrepreneur in the module. Regarding this, P10 said: ‘In addition, it must include North Cyprus’s business law, the ways to be followed while establishing a company; it should include an example of a feasibility study.’

For question two, the majority of the participants indicated that by adding some issues such as the procedure to establish a business in North Cyprus, banking and finance issues in North Cyprus, laws in North Cyprus and entrepreneurship in general, or adapting the existing ones would be the right roadmap to adapt the relevant sections to North Cyprus and improve the relevant sections. For instance, P9 expressed that: ‘Relevant sections can be adapted by investigating the conditions of North Cyprus.’ Similarly, P12 stated that: ‘To direct students correctly, the module should be adapted according to North Cyprus.’ P5 mentioned that: ‘The module that will be prepared here should reflect laws of North Cyprus, especially the laws of trade and business, custom, tax, bank, credit loans.’ Likewise, P4 stated that: ‘By paying

attention to the business laws and procedures of establishing a business, relevant parts can be improved.’

For the third question, the majority of the participants emphasized the role of four issues; the media, internet, organizing or attending conferences and seminars, and the cooperation of stakeholders, regarding the question which sought information about the mechanism needed to be informed about the developments of entrepreneurship in the world and to provide required improvement and variation in our relevant systems. For the media, P8 said: ‘paper containing the entrepreneurship news in the world and a monthly magazine can be published.’ Similarly P13 said: ‘magazines such as Para, Kapital, Ekonometri which are available in our country should be followed.’ Regarding the internet, P6 said: ‘If you are an entrepreneur and you are ready to accept new ideas and to improve yourself, you can become aware of the improvements through the internet or you can visit different countries and learn about the improvements yourself and share the things you learn with people in your country.’ Likewise, P7 said: ‘All changes and developments can be followed through the internet.’ Another issue that was raised by the majority of the participants was organizing and attending conferences and seminars. For example, P1 stated that: ‘The European Union is producing projects on these matters and arranging conferences. By attending these conferences, you can become aware of the improvements and the changes.’ Similarly P5 said: ‘You can become aware of the current improvements through conferences.’ Also P12 pointed out that: ‘People who specialize in entrepreneurship can give seminars at certain times and inform the relevant sections of the society about these innovations and changes.’ For the cooperation of stakeholders, P9 said: ‘Related stakeholders in the country; professional associations, entrepreneurs and teachers can come together at certain times and create a platform. In this platform, the ideas and developments can be discussed.’ Likewise, P11 stated that: ‘A mechanism would be useful that people can follow the developments by themselves,

universities will play its part on disseminating information; studies will be done in cooperation with professional chambers.'

For the last question, participants made recommendations about the fulfilment of responsibilities. For instance P1 said: 'We can create a more reasonable system if everyone does what they are supposed to do.' Similarly, P8 said: 'All relevant parties, including the government, should do their own responsibilities.' The other key issue that was raised by the successful entrepreneurs was the support of the government for entrepreneurs. Regarding this, P9 said: 'The government, of course, should support this with credits and opportunities.' Similarly, P12 stated that: 'I suggest young entrepreneurs not to give up their initiatives. However, for this, I think the government should make necessary legal arrangements and pave the way for entrepreneurs.' With regards to the issue of not ignoring the realities of North Cyprus before taking any steps, P15 stated that: 'As I said at the beginning, I think we should make production and initiatives according to the conditions of the country. In other words, we must remember that we live on an island and we should do initiatives according to the island's economies.'

Addressing the aims of the study, regarding the improvement and adding the perspectives of the practical world to the module, the findings of these interviews played a significant contribution to diagnosing the issues which were necessary for the improvement of the module for North Cyprus. These issues included: Real Life Stories of Entrepreneurs in North Cyprus, Sectors in North Cyprus, Laws in North Cyprus, Procedure for Establishing a Business in North Cyprus, Examples about Feasibility Studies and information about an entrepreneur. They stated that the adaptation of the Procedure to Establish a Business, Banking and Finance and laws in North Cyprus and informing students about entrepreneurship, would be the right roadmap to be followed. They explained that sustainability could be ensured through the internet, media, conferences and seminars and

cooperation among stakeholders of the relevant partners. They also added as a recommendation that the realities of North Cyprus shouldn't be ignored when taking any steps.

5.2.5 Interview Analysis of the Deputy Head of the VETLAM Project

In his response to the first question, he emphasized the importance of the cooperation of stakeholders in the determination of the 'standards' and the 'qualification criteria' of entrepreneurs. He suggested that there should be a training program in order to achieve the agreed standards and this program should also include a business preparation plan. At this point he declared that the plan should be compatible with the banking sector for start-up credits. In his responses, he also underlined the role of Life Long Learning programs with targeted courses to enhance 'the quality of existing entrepreneurs.' Thus, in short, he mainly talked about four points;

1. Programmes that part of them teach 'preparation of a business plan' meeting the requirements of banking sector for starting up credits
2. The importance of the cooperation of stakeholders,
3. Life Long Learning (LLL) courses
4. As activities: mini companies, virtual companies and virtual Office for North Cyprus.

5.2.6 Interview Analysis of the Chair of the Department of the School of Computing and Technology at Eastern Mediterranean University

For the content and the structure of the module, he stated that there are some points that should be taken into consideration while designing the module. These points involve the structure of production, economic structure of North Cyprus, technological background, culture and the people of Cyprus. While doing this, he expressed the view that we have to be aware of what is happening in the world as well. He emphasized that the best model could be

designed by determining the needs of the country. Also he mentioned that we should make use of entrepreneur examples from our country. He stated that in order to have a sustainable mechanism, we have to examine what is happening in the world and adapt it to our country. He added that the changes should be compatible with the environment in which they are applied. Therefore he mentioned that the needs of North Cyprus, use of entrepreneur examples from North Cyprus and the adaptation of good models to our country.

5.2.7 Interview Analysis of the Curriculum Development Expert

During the interview, the curriculum development expert mentioned that in the first place there should be awareness about the research topic. He then emphasized the necessity of considering the needs of the society and the target group. Having these issues completed, he highlighted the need to move on technical planning after filtering everything in terms of philosophy and psychology. He talked about nine points of technical planning. These nine points are ; the aim, objective, content, learning activities, teaching techniques, evaluation, place, time and grouping.

5.2.8 Evaluation of the Interviews

Table 5.5 Content-Related Issues

<p>Interview analysis of teachers</p> <ul style="list-style-type: none"> • Topics that meet the needs of North Cyprus • North Cyprus and Entrepreneurship • Success stories from North Cyprus • Presentation of the role and the importance of entrepreneurship • Introduction of basic concepts • More concrete and interesting examples • CV writing techniques • relevant topics for North Cyprus and business issues • Know yourself • Professional Development 	<p>Analysis of the interview with the successful entrepreneurs, top executives of the chambers, the representative of the state planning Office and the chair of the department of the school of computing and technology at Eastern Mediterranean University</p> <ul style="list-style-type: none"> • The Needs of North Cyprus • a module should be created which considers people, geographical factors, economic structure of North Cyprus and the levels of students • integrate examples to the module derived from North Cyprus • Entrepreneurship in North Cyprus • Real Life Stories of Entrepreneurs in North Cyprus • The Importance of Entrepreneurship and Entrepreneurs • Entrepreneur • Sectors in North Cyprus • Laws of North Cyprus • Procedure for Establishing a Business in North Cyprus • Feasibility studies
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The module was formed in light of the views and thoughts taken from different groups during the interviews. When we look at the questions directed to all related parties, different questions were prepared for the teachers, the head of EU project and the curriculum development expert. On the contrary, same questions were asked to successful entrepreneurs,

to the head of professional chamber, state planning office and the chairman of the school of computing and technology department at Eastern Mediterranean University. As a result, this table was prepared after considering all the questions that were asked.

The table is divided into two sections. The first table consists of the teacher's analysis and the second part consists of the analysis of the successful entrepreneurs, top executives of the chambers, the representative of the state planning office and the chair of the department of the school of computing and technology at Eastern Mediterranean University.

The result reveals that teachers and the second group views on the module's content are parallel on 'North Cyprus and Entrepreneurship', 'The Real Life Stories of Entrepreneur's' and 'The Needs of North Cyprus' topics. This shows us a module that would fit North Cyprus's environment, can only be designed by considering the needs of North Cyprus and by presenting examples of success stories from the country.

In addition to this, the participants in both groups were advised that the students should be enlightened about who the entrepreneur is and at that point, they made an emphasis on the goal of this new module which is to create a successful entrepreneur. Besides, the second group widely examined the subject of North Cyprus and entrepreneurship and in a sense, they made clear what should be listed and included under the heading, which is similar for both groups. In addition to this, both groups pointed out that importance of entrepreneurship should be emphasized. This can be summarized as a necessity by making the students aware why they are studying that actual lesson. The students should also be informed about the target. The teachers also made an emphasis on the topic 'knowing yourself'. This proves that they agree with the other group who think that the entrepreneur should know who he/she is and that there is a need to educate conscious entrepreneurs for the society. In addition to this, the

teachers, unlike the other group, mentioned that CV writing techniques are also necessary. The second group emphasized feasibility studies.

Table 5.6 Suggestions for teaching techniques and presentation strategies.

<p>Suggestions from teachers</p> <ul style="list-style-type: none">• Inviting entrepreneurs to the classroom and organizing visits to workplaces <p>Suggestion from deputy head of team of VETLAM Project:</p> <ul style="list-style-type: none">• As activities: mini companies, virtual companies and virtual office for North Cyprus

5.3 Questionnaire Analysis

The questionnaire was designed and formulated considering the aims of the study in order to find the deficiencies of the module in terms of acquiring the skills regarding entrepreneurship. In order to do this, the specific skills of an entrepreneur have been determined through the analysis of books and choosing the skills which were common in the majority of the books. Thus implementing the questionnaire played a significant role in determining the deficiencies that needed to be improved from the students' side.

The questionnaire were given to all of the grade 12 students of the 2009-2010 academic year who had studied the current module when they were in grade 10. Thus the population for this questionnaire was the whole population. The number of students was 298 and all of the students participated in the study; this included 43 students in İskele, 32 in Güzelyurt, 32 in Gazimağusa, 142 in Lefkoşa, and 40 in Lefke (Figure 5.1).

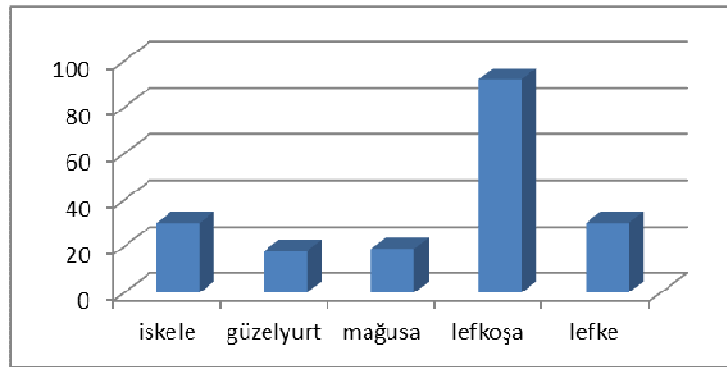


Figure 5.1- Participating students from different regions.

In percentages, 49.1% of participants were from schools in Lefkoşa, 14.9% were from schools in İskele, 13.8% were from Lefke, and 11.1% from Güzelyurt and Mağusa (Figure 5.2).

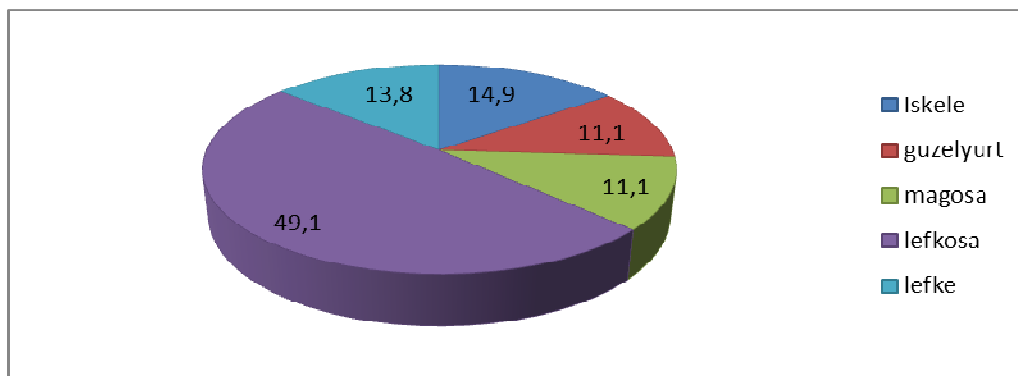


Figure 5.2 - Percentages of participants.

I have used SPSS in order to analyse the results of the interviews. I have coded '1' for those who put a tick in the box for skills. Then the frequencies, percentages, validity and cumulative percentages have been calculated. I have provided a summary of the findings that show the statistical results skill by skill. The question asked the students to tick the skills that they have acquired through the module they columns show the ones which were average and more than the average, whereas the red columns show the skills that were below average and required improvement. Therefore, skill numbers 5, 7 and 9 needed to be developed in order to create a

good design for a good module for vocational and technical schools of North Cyprus. These skills were:

- Ability to telescope: to focus in on the details and then move back to the bigger picture
- Future orientation: foresight, Imagination, creativity, innovative
- Opportunity and goal oriented

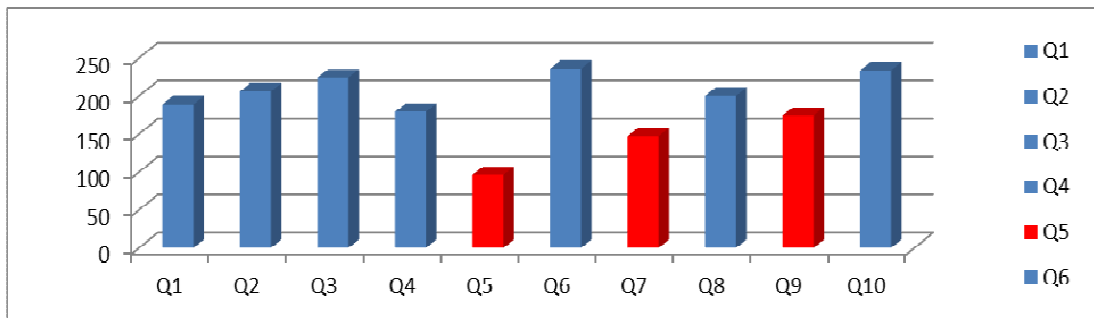


Figure 5.3 – Questionnaire analysis skill by skill.

5.3.1 Evaluation of the Results

When all results are considered, it is obvious that the student's do not have enough information on any of the three skills, which are ;

- Ability to telescope: to focus in on the details and then move back to the bigger picture
- Future orientation: foresight, Imagination, creativity, innovative
- Opportunity and goal oriented

The results also show us that students feel insufficient and they need help on the three topics in the module, which will be created. Based on this, the point that emerged during the interviews, is that student's in a sense, expanded the necessity of being enlightened about who the entrepreneur is and explained which skills should be emphasized.

To sum up, the survey was very important because they were the students who would use the module themselves and the students who had used the module for two years are now mature enough to evaluate their education. This was also important in terms of guiding the study appropriately and correctly. As a result, it can be claimed that, although different research techniques were applied to different groups, the results formed the missing pieces of the puzzle and created a picture without any gaps.

5.4 Reviewing and Analysing the Documents in Lights of the Analysis

With the determination of the deficiencies and finding the themes that needed to be added to the module, I made a plan on where and how I could find the information needed to design the new module and make it relevant to North Cyprus.

In order to make the best decisions I talked to experts on the issues on where and how I could reach the best, most up-to-date and the most useful information, and which institutions I could visit.

Therefore, following the suggestions of the experts I used websites of institutions, used the archives of newspapers, and searched in books in libraries in order to reach the information and knowledge necessary to re-design the module.

5.5 Changes to the Module

As the previous module was detailed on its functions plus regulations, the new designed module covered key functions of entrepreneurship in order to bridge theory and practice efficiently. The new module focused on entrepreneurship in relation to learning activities.

What is Entrepreneurship and who is an entrepreneur?

Sections including the definition of entrepreneurship, its importance for economic life, and an entrepreneur have been added to the new module. Thus a new learning activity has been added to the current module as an ‘Introduction’ activity which introduces the basic concepts of entrepreneurship and an entrepreneur. Besides this, for presenting real life stories of entrepreneurs in North Cyprus, I have written a practice activity for the students which will also give them an opportunity for learning actively. I added this at the end of the learning activity so that they will be able to put their learning into practice:

Practice Activity 1

a. Interview with an entrepreneur around you about his/her success story. (Learn: Who? How did s/he succeed? Which problems did s/he overcome? How did s/he overcome problems?

What can s/he advise to people who want to establish businesses?)

Share the results of your interview and your learning with the class.

Defining Successful and Applicable Business Idea

For this activity, the sections which do not focus on emerging business ideas related to education, have been removed. Also the definition of the markets, customer base and the demand characteristics of the products or services are not needed in the module that set re-designed module is based on educating for North Cyprus context. Only the main sections which give focused and general information have been used. The last section ‘ Presenting the main features which will be emphasized during the presentation of the products and services to the target customers’ were also used in the re-designed module.

Types of Business Enterprises:

This learning activity has not been used because of all sections of this activity include types of business enterprises according to the laws of Turkey.

Preparing a Work Programme

All sections of learning activity 3 have been used.

Preparing a Business Plan

In this learning activity, only the section of ‘Preparing applicable work plan’ has been removed. Instead an exercise has been added which asks the students to get a model work plan.

Establishing a Business

Sections about ‘Establishing a business’ and ‘Renting a place for a business’ have been used in the new module. However, the rest of the sections have been removed as they were about the laws in Turkey. Instead sections titled” Establishing a business in North Cyprus, the procedure in North Cyprus to establish a business, labour law in North Cyprus have been added to the new module. Plus, legal terms dictionary has been added at the end of the activity considering the level of the students.

Improving the Enterprise

All sections of Learning Activity 6 have been used.

Learning Activity 7: All the sections in this activity has been removed as it was about labour law and I have already mentioned that in Learning activity 5.

For measurement and evaluation, I have written questions for Learning Activity 1 (introduction), learning activity 2(Defining successful and applicable business idea),learning activity 5(Business Establishment). For the other learning activities, the questions of the current module have been used.

5.6 Re-designing of the module

I have re-designed the module according to the framework of content summarized in Table 5.6, based upon the module-writing guides, the expert from the Ministry of Education, Sports and Culture and the interview analysis of the curriculum development expert regarding the framework to be formed.

First of all, the curriculum development expert mentioned that published materials on the subject should be used to get some information and ideas. When my study is regarded, this advice was taken into consideration throughout the research process and the results were obtained on curriculum survey process. After, he mentioned that the needs of society and the target group should be taken into consideration. The target groups' and the society's views and thoughts, demands and needs were specified with the help of the interviews and the questionnaires prepared throughout this study. Having those set, they were filtered in terms of philosophy and psychology. These issues were completed to redesign the module and the next step was technical planning regarding nine main points. These points were the goal, target, content, learning activities, teaching techniques, evaluation, place, time and grouping. When I regard this road map, first of all, the goals and targets of each learning activity were mentioned at the beginning. While there wasn't a necessity to interfere to the goals and targets of some learning activities, the goals and targets of re-formed or newly added learning activities were written according to the content and the aim of those particular activities. Accordingly, as a result of the interview and questionnaire applied to the target group through chosen research techniques, the content of the module, learning activities and teaching techniques were determined. The students were encouraged to evaluate their education using the questionnaire that were prepared for each and every unit. Time and place, students'

accessibility and facilities were taken into consideration while preparing the activities and tasks.

5.7 Implementation of the New Module in the Vocational and Technical High Schools

After I had re-designed the module and made the necessary changes, the module was implemented in vocational and technical high schools for a semester by the teachers who were stakeholders in the project.

5.8 Last Interviews with the Teachers

I implemented interviews with the teachers after they had used the module in their classes and they expressed their positive thoughts. For example, T1-T2 stated that: ‘As a result of changes, I think the module has become much more available.’ Similarly, T 3 expressed that: ‘It is a module that contains information that we need to.’ T4 emphasized the relevancy of the new module to the conditions of the country and stated that: ‘In the light of feedback; it is appropriate with the conditions of our country and the level of the students. Both the practice and activities are appropriate with the standards of the country and it was developed and improved with the meaning and significance of the questions and the meaning and importance of entrepreneurship is explained quite well.’ One of the benefits and rationale of the project mentioned in the introduction, is it will be helpful for the teachers in terms of saving their time for teaching. Thus, one of the teachers referred to this point by expressing that: ‘Purifying the module from the details wouldn’t be a waste of time, the students don’t get bored. Adding pictures, cartoons, photographs, and stories have been good in terms of visuals. Also it is good that the activities and samples are appropriate for our country.’ Another teacher (T7) underlined the content of the module by addressing its nature that is participatory

and attractive for the students. The teacher also highlighted that it is a good guide for those that plan to establish a business in North Cyprus: 'First of all, congratulations, it was a work with a strong attraction. The module was got rid of being boring. You made a module which the students study more participatory instead of getting bored and reluctance, and they work with desire and wish instead of pessimism. It's necessary to be a guide to those who will establish a business in our country, and the realities in Cyprus should have to be written. For me, it's a positive study. Congratulations again. I can say that we have reached the module which we will follow without getting bored.'

The necessity of this project was another point that I emphasized in the beginning, therefore one of the teachers (T8) also supported this by stating that: 'This was a necessary work. Thank you very much.' Similarly, T9 made positive comments about the module and stated that such a module that was adopted to the country's conditions will be very helpful for the students in order to digest the subjects they learn and the information will not be too abstract for them: 'I think the increase of adjusted examples to the country would provide a better understanding of the subject. It would be useful in this context. I believe that Cyprus and entrepreneurship title contains interesting and current topics. This will provide them to understand the business life more in the future or at least it will provide them to make guess.'

To summarise, the responses from the teachers are proof o that I have found answers for the main research questions of the project. Considering the stakeholders of the project, the responses are proof that the module satisfies the needs of the students within its context and design, plus it also satisfies the needs of the teachers by creating an effective learning environment and preventing them from not wasting their time searching for extra material in order to make the subject more understandable and real for the students. Moreover, the content of the module will be useful for the students as they will be more knowledgeable about North Cyprus and entrepreneurship, and this will reflect on the business environment in

North Cyprus positively. As it is a collaborative study, the students would meet the needs of entrepreneurs, the chambers, the related unions and universities. Therefore, as mentioned in the introduction and addressed in the literature review, it will have a positive effect on the economic development of North Cyprus in the long term. With the data collected, two main questions regarding the definition of deficiencies and their improvement have been successfully answered, and the module has been re-designed in light of this data. The book, 'How to Write a Module', and the views of the curriculum expert was helpful and beneficial on the route to forming the framework that needs to be adopted. Implementation of the new module in the vocational and technical high schools for a semester identified its applicability in the specific context and the last interviews with the teachers is evidence that the module has worked well in the classrooms.

5.9 The New Module

In this research, I have re-designed the new module according to the outcomes of the data collected. Therefore, I have made the necessary changes to the current module in order to improve it for vocational and technical high schools in North Cyprus.

I have added three new learning activities to the new module. The first activity is 'Entrepreneurship and an Entrepreneur.' In this unit, 'Entrepreneurship', 'The Importance of Entrepreneurship for the Economy', 'Entrepreneur', 'The Characteristics of an Entrepreneur' (team work and communication, self-confidence about success, leadership, the importance of focusing, seeing the opportunities, creativity and innovation) are explained.

For Learning Activity 2, I have removed the sections which were related to business areas in Turkey as they were different from the sectors in North Cyprus. I have added photos which are related to the subject and the level of the students.

In the current module, the next learning activity was about the types of business. I combined this activity with activity 5 of new module, which is about 'North Cyprus and Entrepreneurship.' Thus, the next activity of the new module became 'Preparing a Work Program.'

In Learning Activity 4, I have removed the sections that were about how to prepare a business plan and the business plan types sections.

I have removed learning activity 5 of the current module which was all about starting up a business and mostly focussed on the necessary procedures in Turkey. Instead, I have added another new unit to the new module; 'North Cyprus and Entrepreneurship.' This unit involves general knowledge about North Cyprus, its investment climate, its investment procedure, business law in North Cyprus and business types in North Cyprus. I have also added an explanation of some of the legal terms at the end of the unit which might not be understood clearly by the students.

For unit 6, there wasn't any need to make a change.

Unit 7 of the current module was about the business law in Turkey. Therefore I removed this unit as the explanation about business law in North Cyprus is presented in learning activity 5; North Cyprus and Entrepreneurship.

The question booklet includes the questions for the units 1-6. I have used a variety of question types, such as multiple choice questions, classic questions, fill in the blanks, and True or False. I have prepared this booklet as there was a list of questions at the end of each unit of the current module. As there were changes in the context of the module, the questions needed to be re-written.

Besides the questions I have written, I have used a questionnaire from the development bank as an example, which is about being an entrepreneur and one of the activities that was used in the countries in the EU as suggested.

5.10 Evaluation of the Results on the Basis of a Constructivist

Philosophy

Some authors (Clements, 1997; Fogarty, 1999; Forman, 1993; Walker & Lambert, 1995, in Ray, 2002) state that since the mid-80s, constructivism is a theory based on the work of Dewey, Piaget, and Vygotsky. The main focus could be explained with its feature that addresses the combination of 'the natural' and 'the social science.' Delanty (2002) states that unlike all alternative positions, constructivism avoids making a separation between society and nature, and instead focuses on the construction of 'new realities' based on knowledge.

According to constructivists, 'our personal world is constructed in our minds' and 'our personal realities' are identified through these 'personal constructions.' Mind is defined as the 'instrument of thinking' and it 'interprets events, objects and perspectives' instead of trying to 'remember and comprehend an objective knowledge.' The main epistemological assumption of constructivism lies in the meaning they give to 'knowledge.' They believe that knowledge is a function of creating meaning based on an individual's experiences rather than 'what someone else says is true.' We merge reality differently based on our 'unique set of experiences with the world and our beliefs about them' (Jonassen et al.,1995).

5.11 Overall Evaluation of the Research Results on the Basis of the Research Objectives

The following list summarizes how I managed the research process in relation to the research objectives and what was achieved in the process. My specific objectives as they relate to my current position and the proposed project are:

1. Research Objective: To make a change and develop the current entrepreneurship module

Evidence of Achievement: Each action in the action research ensured that I achieved the expected outcomes. With the analysis of the semi-structured interviews, questionnaires and documents, the module has been re-designed.

2. Research Objective: To create a collective view and efforts on change

Evidence of Achievement: Based on the nature of action research, collaborative work has been achieved. The participants worked together by stating their ideas on the related field and their branches. The participants put their effort into helping this change.

3. Research Objective: To increase public awareness of entrepreneurship

Evidence of Achievement: The workshops and seminars held in different places with different audiences helped to share the experiences and the knowledge I gained through this research journey.

4. Research Objective: To gain an overview of the current module about entrepreneurship in this specific context

Evidence of Achievement: To design a new module regarding constructivist approach

5. Research Objective: To co-construction of knowledge based on experiences and views:

Evidence of Achievement: To re-design entrepreneurship module based on the views, experiences and opinions of the relevant partners.

6. Research Objective: To provide a guide for the related field of education:

Evidence of Achievement: The internalization of entrepreneurship education through the workshops organized for the teachers and stakeholders.

CHAPTER 6 - CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter in my project will address the conclusions and recommendations derived from my work based project. It investigates my model for the change and development in the entrepreneurship module through action research, and attempts to highlight the evaluation of the project outcomes and assess my knowledge and understanding, cognitive and practical skills.

6.2 Discussion on the Evaluation of the Research Outcomes

Entrepreneurship with its feature of creating job opportunities, bringing diversification and competitiveness to business and having a positive impact of the economy, is a key factor that countries today cannot ignore. Hence, entrepreneurship education is of vital importance looking from these perspectives. In this respect each country should play a role in making its entrepreneurs ready for the business world by equipping them with the knowledge that will best fulfil their needs in terms considering the business context they will be involved in with the right methods and techniques that will be identified by teaching experts. In this respect, this project had a very important role in fulfilling the gaps by creating a new module that fulfilled the needs and expectations of both the system and its members.

My work based research project aimed to investigate the entrepreneurship module in order to provide a better framework for vocational and technical high schools in North Cyprus regarding the framework of constructivist approach. In the project I employed action research to propose a change and develop institutional practice. In terms of these broader aims, my research project included particular research objectives such as gaining an overview of the

current module on entrepreneurship in this specific context, creating awareness of entrepreneurship through action research, and making a change and developing the current entrepreneurship module, creating a collective view and efforts on change

and providing a guide for the related field of education. In order to achieve the best possible practice for change and development in my work context, I put all my efforts and expertise into the action research approach through a series of actions.

I selected three different research techniques to collect data; semi-structured interviews, questionnaires and documents. Furthermore, I kept a research diary. I believe that using this combined technique enabled me to obtain the data I needed to collect in order to accomplish the aims of my research project. Keeping a research diary throughout the actions ensured that I could see the process clearly, develop my skills and follow my action plan properly. Through the data collected I was able to create a new module that best suits the needs and expectations of North Cyprus. Positive feedback addressing the different issues about the module is evidence that the module is beneficial on many different aspects and this project has brought development to the work setting in which I work.

The project has successfully gained approval from professional bodies; so this is inarguably a form of outcome. The Ministry of Education, Sports and Youth agreed to the module, and it is recommended to students as the module for used in vocational and technical high schools, which all serve as evidence of its evaluation. The last interviews proved that it satisfied the requirements for the procedures to be adopted. Therefore, I suggested something new and creative and added value to my work situation. This is a beneficial outcome of the research.

I believe that this project is important as it brings a change and creates an effective solution to the problem of the mismatch of the entrepreneurship module to the North Cyprus environment by the involvement of the partners that are part of this issue.

First of all, it is very important for the education system because it provides a large contribution to education by bringing a change with the new entrepreneurship module which is also identified as evidence of the achievement of this project. It could also be used as a guide for the policy makers of The Ministry of Education, Sports and Youth. With the cooperative work nature and its feature of combining theory and practice, it forms a bridge between vocational technical high schools and the business environment of North Cyprus. In relation to the problems mentioned in the introduction, with this project I believe that I can provide recommendations on how to make sustainable solutions.

There are many benefits for teachers, such as the fact that their teaching material would have their own personal input and is not directly presented so there will be a decrease in preparation time for the lesson, motivation in their profession, more satisfaction from the lesson, more reliable information and examples leading to activities that match the environment.

Benefits to the business world of North Cyprus can also be noted. For example, educating the students on entrepreneurship based on the North Cyprus context results in more people starting their own businesses and has a positive impact on the business world. This also has a positive impact on the economy. As mentioned in the introduction, the relationship between economy and entrepreneurship is a factor that is shaping the future of North Cyprus.

There are also benefits for the students in that the module is designed considering their needs and they are included in all areas of this project. Due to the fact that the project consisted of material collected from the particular environment, this means they will be able to visualize and digest what they have learnt and will be able to put these easily into practice.

Another benefit of this research project is for the research world. It will also be a model for other researchers who would like to conduct a similar project in a related field.

6.3 Products and Outcomes of My Work-based Research Project

This project enabled me to suggest something new and creative to my work setting by working collaboratively with the target audiences. Through the new module, I believe that I added value to the system I am working for. Moreover, I felt and proved by undertaking this project that I have grown professionally by improving my in-depth knowledge on education and entrepreneurship and developed my personal skills in many ways.

In conclusion, having spent a great deal of time and effort on this project I am very content to be the agent of change and improvement that I have positively contributed to my work area. This work also proves the fact that through motivation and enthusiasm one can easily convince others to work cooperatively, which may possibly result in a great and positive change.

6.4 Comparison of the Research Outcomes with the References

Referring to the materials presented by entrepreneurship centres, the use of stories of successful entrepreneurs was also suggested by the consortium for entrepreneurship education. Similarly, the context of the textbook presented by the international non-profit organization NFTE has similar units, such as what is an entrepreneur, starting your business, and growing your business. On the other hand, the analysis of finance and market analysis could be identified as different units when compared. While classroom based programs which are prepared for students in grades 9-12 by junior achievement included many issues about banks, I didn't reach any result regarding the banking issue in my research. In the EU Best Project, it has been stated that a committee should be created with representatives of the Ministry of Education and the Ministry of Economy, plus relevant organizations, associations and departments of the society. Thus, I believe that this project with its cooperative nature has

succeeded in creating this 'committee' and has included the voices of the relevant stakeholders as relevant partners in the research. Through this cooperation a new module has been improved which could also be reflected in the education policy and curriculum of vocational and technical schools.

6.5 Some Analytical Generalizations

From the research findings and major conclusions of my research project process, the analytical generalizations are listed below:

- Action research provides change and development in practice for the new entrepreneurship module.
- Collective efforts of the professionals become strategic to develop a new module upon action research process.
- Change and innovation for quality in education was enhanced through deliberate actions.
- New module and quality in teaching practice regarding the entrepreneurship developed a team work culture, policies and procedures.
- Professionals who were involved in the process developed in-depth internalisation regarding the entrepreneurship and enhanced their professional development.
- The constructivist approach in new module was experienced and developed to promote learning and competence development.
- The ground for the practice of the constructivist approach was planned and professionals provided in-depth perspectives to be implemented into their teaching practice.
- In the constructivist learning environment, group activity and collaboration increases interaction and learning.

- The constructivist learning experience increases multiple perspectives of the learners and the same time teachers.
- The constructivist learning environment helps students to develop self-responsibility, reflection and team work skills.
- Communication, reflection and team work competences were developed based on the mode of the constructivist based module.

6.6 Major Implications

My research investigated the role of team work to improve the current entrepreneurship module used in vocational and technical high schools based on a constructivist approach within the North Cyprus context. It concluded that employing a constructivist approach in entrepreneurship module design is one of the critical success factors in developing quality in online practices.

Implications for Practice

- My work based research project revealed that action research contributes change and development within working practice.
- My work based research project provided participants with a deeper understanding of the pedagogical and organizational aspects of module design.
- The collaborative research process provided participants with an awareness of the importance of team work in working practice.
- The participants gained in-depth insights into the principles of the constructivist approach in entrepreneurship module design.
- Organization members extended their knowledge and experience of entrepreneurship education.

- Research participants' involvement in action learning within an action research process increased their professional growth.
- The collaborative efforts of the research participants and myself ensured personal and professional development in our academic careers.

Implications for Further Research

- For further studies, case studies could be used to investigate the role of team work to improve the current entrepreneurship module used in vocational and technical high schools based on a constructivist approach within North Cyprus context
- In addition, each principle of the constructivist approach within the module design could be a distinct research focus and the subject of a detailed investigation.
- Further research could incorporate a mixed approach to integrate qualitative and quantitative research design to increase the validity and reliability of the research.

CHAPTER 7 - DISCUSSION

This section includes a critical commentary on my project and its impact on my professional knowledge and practice. My research aimed at undertaking an investigation to improve the entrepreneurship module in vocational and technical high schools in North Cyprus.

My research project and action research cycle provided in-depth knowledge and experience for myself and the participants regarding change and development in working practice. The results of my action research and the collaborative efforts of volunteer participants contributed to change and development in creating a new module.

Evidence of the impact and success of my project include my participation in international conferences, my published paper in the Turkish Online Journal of Educational Technology, a submitted abstract to an international conference on service management, the presentations at vocational and technical schools and the positive approaches of teachers, and presenting my research project to the public, media and professionals in the Management Centre.

7.1 Reflections on the Research Focus and Method

Regarding the focus of the project, the following objectives were outlined to be achieved through action research. The objectives also show the significance of the project and its expected impacts and outcomes.

- To gain an overview of the current module on entrepreneurship in this specific context
- To create awareness in teachers of entrepreneurship through action research
- To make a change and develop the current entrepreneurship module
- To create a collective view and efforts on change

Regarding the nature of the project's objectives, a qualitative research design was chosen in which socially constructed meanings, experiences and perceptions of the research participants would lead to practical realizations of the objectives through an inductive process.

In my opinion, this project proved that action research can help change and improve practice with the active participation of the relevant partners. In this regard, the development of a team work culture is one of the key issues that institutions cannot ignore if sustainable and workable solutions are expected. It is also very connected to the system and its cooperation with its members/staff. The changes could be accepted if they match the needs and expectations of the partners who are part of it. Thus, the cooperative nature that has been developed throughout the process, considering the needs and expectations of the relevant partners of the system, I think created a sustainable solution to the problem of the module, which needed to be improved in order to match the needs of North Cyprus. This project is one of the best models of cooperative work, as it allows the voices to be heard part of those working in educational institutions and others who are very much involved in the business world in North Cyprus. Therefore, I believe that it will be a good example on how a change could be undertaken in systems.

My research investigated how to improve the entrepreneurship module in vocational and technical high schools in North Cyprus. It concluded that working collaboratively with the related staff, combining theory and practice, is one of the critical success factors in proposing innovation and change. The positive feedback has shown that it could be used as a model for other countries and education institutions that plan to make changes and develop their entrepreneurship module for their own countries. I think that this project will motivate and activate other countries and institutions to plan this kind of change and improvement. Another outcome of the project is the publication of an academic paper so that the project will reach out to a specific target audience who can volunteer to study a similar or specific subject area.

Thus, this proves that my research has filled a gap in the literature regarding undertaking an investigation to improve a module for a country. It further contributes to the academic world by opening a debate about the value of work based projects through action research in bringing about change and developing quality improvements within education institutions. I think that for further studies, the project has brought new policies and guidelines on the way of change especially in institutions. The positive feedback shows that the project is adequate in quality, rigour and practical significance to satisfy the needs of the organizational and academic world. It proves that the quality is adequate, and the new module is well organized and effective for the beneficiaries of the project.

The new module is evidence of this research and the last interviews were direct feedback that the new module designed by the research findings met the needs. While doing this research, I have taken full advantage of the use of resources effectively, managed my time carefully and followed the action plan of my project. Being an insider researcher with good skills of communication, my relationships, sharing responsibility and considering the ethical considerations enabled me to deal with key figures, participants and institutions much more easily and allowed me to achieve the best outcome possible. I was always patient and managed not to become demoralized when unplanned actions occurred or things did not go the way I'd planned. As an insider researcher I participated in all stages of the research project. Throughout all stages I always valued finding the middle ground with the stakeholders who were the main partners of this project and with whom I worked collaboratively. Due to its cyclical nature, I used and implemented action research in my project. Based on the output and data collected from the stakeholders I implemented the new amended module and at the end of the semester I also interviewed the teachers who in the main used the module in their classes. Even though I took the first step of this cycle, the other researchers are welcome to contribute, amend and improve this cycle since it is an apparent

fact that the education field requires constant reforms and refinements as well as restructuring of the system.

7.2 Professional Knowledge and Practice

My work based project is intended to meet the needs of a wide target audience, including the teachers of entrepreneurship, students of vocational and technical high schools, the Ministry of Education, Culture and Sports, entrepreneurs, deputy leader of EU VETLAM Project and Vocational Education Professional the related chambers and associations, and related department of universities which also work in cooperation with the vocational and technical high schools.

I put forward an action plan for improvements in the entrepreneurship module. With this project, the current entrepreneurship module has been re-designed based on the data collected from the relevant and related partners of North Cyprus and created a teamwork culture within the organizational context. Undertaking this project, presenting the research results to the public, presenting the project to teachers and students at some schools, participating in a conference at Oxford Brookes University, and publishing an academic paper in an academic journal, all prove that I have created awareness of entrepreneurship. Through the research project I built on my knowledge and developed my abilities and grew personally. Through the research diary I kept, I became more aware of my learning, dealing with conflicting values that arise in professional practice and formulating solutions in dialogue with stakeholders. As I mentioned in the introduction, my academic and professional background proves that I was the right person to carry out this project. I believe that the research methodology I have selected and the combined research techniques I have employed, prove that I used the appropriate and critical selection in order to formulate an effective solution to the problem. Being aware of the rights of the stakeholders, gaining access to institutions and finding

solutions when contradictions occurred, demonstrated that I was very much aware of the ethical understanding.

I became reflective throughout the process and shared my experiences, my learning and these feelings. This helped me to improve my actions and those of others who plan to undertake similar projects. This reflection helped me to evaluate, assess and critique my actions and improve my practice. The academic paper I have published and the presentations I have given at the university, and in workshops with teachers prove that I can engage in professional and academic communication with others in their field and place of work, and at the same time I can give presentations to specific target audiences for developmental purposes. Working collaboratively with others and combining theory and practice, required a high level of leadership ability and I think that the outcomes of the research demonstrate that I am able to do this responsibility.

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APPENDIX A - PRESENTATIONS

Dr. Fazıl Küçük



Workshop 1



Workshop 2



ENTREPRENEURS



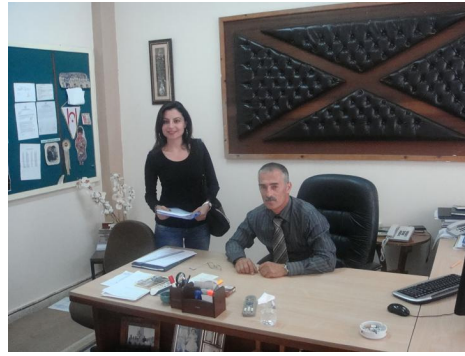
CHAMBERS



SCHOOLS



TEACHERS/HEADTEACHERS



PRESENTATIONS TO STUDENTS



APPENDIX B - INFORMED CONSENT FORM

I agree to participate in a research study of education. I am aware that the purpose of this study is to improve my students' academic performance and that there is no risk involved in my participation. I understand that I may withdraw from the study any time.

I will respond to interview as part of this study.

Name: _____

Signature: _____

Date: _____

If there are any questions about this study, you may contact either the researcher:

Beste Sakalli

Contact address: bestesakalli@hotmail.com

Phd Candidate

Or the study advisor:

Prof. Dr. Mehmet Altınay

Contact address: mehmet.altinay@emu.edu.tr, 6301486

**An investigation to improve entrepreneurship module in vocational and technical
high schools in North Cyprus**

Participation Informed Consent Form

This research study seeks to improve entrepreneurship module in vocational and technical high schools in North Cyprus. This is a study undertaken by Beste Sakalli, phd candidate at Middlesex University.

1. I have read and understood the information about this study and have had the opportunity to ask questions. I have considered all the risks involved with this research.
2. I understand that I can withdraw from the study without consequence at anytime simply by informing the researcher of my decision.
3. I understand who will have access to identifying information provided and what will happen to the data at the end of the project.
4. I am aware of who to contact should I have questions following my participation in this study.
5. I understand that this project has been reviewed by and received ethical clearance through the Middlesex University.

I agree to participate in this study.

Name: _____

Date: _____

Signature: _____

**INFORMED CONSENT FORM
for participation in research.**

The purpose of this document, in accordance with the requirements of the University's code of research ethics is to make explicit the nature of the proposed involvement between the researchers and the person or organisation agreeing to supply information (the participants) and to record that the research subjects understand and are happy with the proposed arrangements.

The researchers: The researcher in charge of this study is of the Centre for Research on Language in Education and Work (in school of linguistics and Applied Language Studies), Carleton University, Ottawa: address etc above. He is assisted by..... Complaints about the conduct of the research may be addressed to the principal researcher's head of department at the above address. The study is a continuation and extension of a project. *Comparative Study of Co-operative Education in high School, College and University*, that was funded by the Social Science and Humanities Research Council of Canada.

The Research: The purpose of the SSHRC project was to investigate modes of co-operative education in high school, community college and university. The most productive part of that research was an investigation into experiences of the transition from education to work in architecture. The present phase concentrates on that aspect, both within co-op and after graduation.

What participation in the study will involve: Participants will be asked to grant one or more interviews of up to an hour and a half's duration. The interviews will be recorded on audiotape. It is understood that the interviewee is free to decline to answer any question, to terminate the interview at any time and to require that any section or the whole of the recording be deleted.

Use of data: The aim will be eventually to present the research along with data collected in other parts of the study (school and college co-op schemes), in appropriate contexts, academic and professional, through publications, conference presentations, teaching and so on. If so requested, the researcher will refrain from using data that the subject considers sensitive. The participants will be given copies of any publications based on the research.

Anonymity of participants: All information acquired will be treated as confidential. Unless specifically agreed otherwise, references in publications, talks etc to particular jobs, organisations individuals etc will be anonymised and features which might make identification easy will be removed.

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Declaration by the research subject(s): I /We have read and am/are happy with the arrangements as set out above.

Signature of participant(s)

Researcher's signature:

Date:

APPENDIX C - SEMI-STRUCTURED INTERVIEW QUESTIONS

The interview questions for the top executives of the chambers, representative of the state planning organization and successful entrepreneurs I have listed below:

1-What do you think of the structure of entrepreneurship module of North Cyprus should be? What should it definitely include?

2- What kind of roadmap should be followed to adapt the module to North Cyprus? How can be the relevant sections improved/developed?

3- What kind of mechanism do we need to be informed about the developments of entrepreneurship in the world and to provide required improvement and variation in our relevant systems?

4- Finally, is there anything you would like to add?

The interview questions for the EU :

1-What kind of framework/structure is needed to develop a good practice of entrepreneurship for vocational and technical high schools in North Cyprus?

2-Which activities/programmes used in the EU countries to promote entrepreneurship, are the most applicable and useful for North Cyprus case?

The interview questions for the teachers:

1. What do you think about the current module? What are the problems and deficiencies?

2. What kind of teaching techniques, methods, or types of applications could make it stronger?

3. What kind of context should it be? Please indicate your suggestions.
4. If you have any more thoughts you want to add, please specify.

The interview question for the curriculum development expert:

1. What are the points that needed to be considered while re-structuring the current module?

APPENDIX D - ETHICS RELEASE FORM FOR DPROF PROJECTS

1. Has the project proposal and ethical considerations in draft
 Been completed and submitted to the advisor or consultant? Yes No

2. Will the research involve an intervention or change to an
 Existing situation that may effect people and/or an evaluation Yes No

Of outcomes of an intervention?

If yes, have participants been given information about the aims,
 Procedure and possible risk involved in easily understood language? Yes No

(Attach a copy of any information sheet you may have provided)

2. Will any person's position, treatment or care be in any way
 Prejudiced if they choose not to participate in the project? Yes No

4. Can participants freely withdraw the project at any stage
 Without risk or harm prejudice? Yes No

5. Will the project involve working or
 studying minors(i.e.< 16 years)? Yes No

If yes, will signed parental consent be obtained? Yes No

1. Are there any questions or procedures likely to be considered
No

In any way offensive or inappropriate?

7. Have all necessary steps been taken to protect the privacy
Of participants and need for anonymity?
Yes No

8. Is there provision for safe-keeping of written data
And/or video/audio recordings of participants?
Yes No

9. If applicable, is there provision for de-briefing
Participants after the intervention or project?
Yes No

10. If any specialist instruments, for
Example psychometric instruments
Yes No

Are to be employed, will their use be controlled or supervised

By a qualified practitioner e.g. A psychologist?

11. Will you need to put your proposal through an ethics
Committee related to your professional work?
Yes No

If you have placed an X in any of the bold boxes, please provide further information

National Center for Work Based Learning Partnership

Middlesex University

Trent Park, Bramley Road

London, N14 4YZ

Student's name: Beste SAKALLI

Award Programme: DProf

Title of your Project: 'An investigation to improve entrepreneurship module in vocational and technical high schools in North Cyprus'

Name of Adviser: Prof.Dr.Mehmet Altınay

I confirm that the information provided is correct.