A TECHNOSTRUCTURE PROPOSAL FOR ONLINE DELIVERY OF STPS GRADUATE PROGRAM

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ABSTRACT

A TECHNOSTRUCTURE PROPOSAL FOR ONLINE DELIVERY OF STPS
GRADUATE PROGRAM

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The purpose of this thesis is finding out whether offering an Online STPS Graduate Program with a tuition fee is feasible or not. Firstly, definition and brief history of distance education is given. Secondly, distance education applications in the world and in Turkey are studied. The main part of the thesis is the cost analysis made about the online delivery of STPS Graduate Program. The cost items of offering an online course are determined and then specific cost values are assigned to these items. By determining the cost items and related cost values, course development cost is calculated. In the course development cost calculation, fixed and variable costs are seperated. Fixed cost are the set-up costs that do not depend on any variable. Variable costs on the other hand are the costs that change with the number of students attending to the online course. A specific price value (100$) is assigned as the tuition fee for one credit hour of an online course. At the end of the cost analysis, the number of students required to meet the total cost of an online course is calculated.

In addition, a questionnaire made on STPS students by STPS department is used in the thesis. The results of the questionnaire and the cost analysis are combined in order to analyze the feasibility of offering an online STPS Graduate Program.

Keywords: Online Education, Feasibility, Cost Analysis, Questionnaire, Science and Technology Policy Studies, Course Develpoment Costs.

ÖZ

STPS YÜKSEK LİSANS PROGRAMININ İNTERNET ÜZERİNDEN VERİLEN BİR PROĞRAM OLMASI ÖNERİSİ

Deli, Fatma

Yüksek Lisans, Bilim ve Teknoloji Politikaları Çalışmaları

Tez Yöneticisi : Doc. Dr. Erol Sayın

Ağustos, 70 sayfa

Bu tezin amacı, Bilim ve Teknoloji Politikaları Çalışmaları (STPS) Yüksek Lisans programının internet üzerinden sağlanan ücretli bir program haline getirilmesinin mümkün olup olmadığının araştırılmasıdır. İlk olarak uzaktan eğitimin tanımı ve kısa tarihçesi verilmiş, sonra, Türkiye'deki ve dünyadaki uzaktan eğitim uygulamaları incelenmiştir. Bu tezin asıl önemli kısmını STPS Yüksek Lisans programının internet üzerinden verilen bir program haline dönüştürülmesi üzerine yapılan maliyet analizi oluşturmaktadır. Bir dersin maliyetini oluşturan maliyet kalemleri belirlenmiş ve her bir maliyet kalemine belirli bir maliyet değeri tahsis edilmiştir. Maliyet kalemleri ve bu maliyet kalemlerine ait maliyet değerleri bir dersin toplam maliyetinin hesaplanmasında kullanılmıştır. İnternet üzerinden verilen dersin maliyeti hesaplanırken sabit ve değişken maliyet kalemleri birbirinden ayrılmıştır. Sabit maliyet kalemleri sistemin kuruluş aşamasındaki maliyetleri içerirken, değişken maliyet kalemleri dersi alan öğrenci sayısına göre değişmektedir. İnternet üzerinden verilecek bir dersin her bir kredisi için 100 $ tayin edilmiştir. Maliyet analizi sonunda, internet üzerinden verilecek bir dersin toplam maliyetinin karşılanması için kaç öğrencinin o dersi alması gerektiği hesaplanmıştır.

Ek olarak, STPS öğrencileri üzerinde STPS bölümü tarafından yapılmış bir anket bu tezde kullanılmıştır. Yapılan anketin ve maliyet analizinin sonuçları birleştirilerek yorumlanmış ve STPS Yüksek Lisans programının internet üzerinden

sağlanan ücretli bir program haline getirilmesinin maliyet ve programa katılım açılarından mümkün olduğu sonucuna varılmıştır.

Anahtar Kelimeler: İnternet Üzerinden Sağlanan Eğitim, Fizibility, Maliyet Analizi, Anket, Bilim ve Teknoloji Politikaları Çalışmaları, Ders Hazırlamanın Maliyeti.

To My Parents And My Brothers

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TABLE OF CONTENTS

LIST OF FIGURES

FIGURE

CHAPTER I

INTRODUCTION

The term "distance education" conveys different things to different people. But, if it is thought in general terms, it is a type of education given to the students who have some obstacles to take conventitional education. The physical distances and time mis-matches between the students and the teachers are not important in distance education. Because, students can reach the course materials at any time, from any place. Offering online education by internet has been widely used in recent years. Since all the computers consequently all the people in the world can be connected to each other by internet, using internet for distance education has become very applicable.

Science and Technology Policy Studies (STPS) Graduate Program is an interdisciplinary program. Its students come from very different disciplines. Both Social Science and Natural and Applied Science graduates can be the students of this program. Most of STPS students are working. So, their attendance to the courses are not very easy.

The subject of this thesis is that "A technostructure Proposal for Online Delivery of STPS Graduate Program". The purpose of the thesis can be summarized as finding out whether offering an online STPS Graduate Program with a tuition fee is feasible or not.

In this thesis, firstly, distance education alternatives will be reviewed. Among the distance education alternatives, the emphasis will be given on online distance learning. Then, the distance education applications in and out of Turkey will be examined. The main part of the thesis will be the cost analysis part. The cost analysis of offering an online course will be studied in this part. The job of offering an online course for a specific number of students will be seperated into small items. And specific costs will be assigned to these small items. By doing so, total cost of offering an online course for a specific number of students will be calculated. Then, a specific price for one credit hour of an online course will be determined. By using the price and the total cost of an online course, the number of students at break-even point at which total cost of a course equals to its price will be calculated. Lastly, the questionnaire made on STPS graduate students will be presented. By using the results of the questionnaire and the cost analysis, a decision about the feasibility of offering Online STPS Graduate Program with a tuition fee will be made.

CHAPTER II

DEFINITION AND HISTORY OF DISTANCE EDUCATION

There are many ways to define distance education. But, if we use the definition of distance learning made by The Washington State Higher Education Coordinating Board for the 2000 Master Plan for Higher Education:

> Distance learning takes place when teachers and students are seperated by physical distance for most of the instructional delivery. The term "Distance Learning" course or program should only be used if,
>
> - Teachers and students are seperated for a predominance of the instructional contact hours;
> - The content has been specifically designed as a course of study to increase and assess student knowledge or skills; and
> - An education institution provides the course content and is responsible for assessment of student achievement through credits, certification, or degrees.[1]

Telecommunication technologies are driving higher education towards significant cultural changes. In particular, the development of computer-based online instruction creates the potential for students to access instruction anywhere and at any time. The proliferation of e-commerce applications, increasing computer ownership, and access to a worldwide information network are redefining how education is delivered and offering learners exciting and diverse new education opportunities.

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[1] Source: "Feasibility Study: Distance Learning Enrollments in Independent Institutions" Washington State Higher Education Coordinating Board, 1999

While the term "distance education" has been used for some hundred years, recently the field is reborn parallel to the new developments and innovations at technology. Substantially, rapid progress in technology changed the nature of distance education.

The roots of distance education are at least 150 years old. The milestones in the history of distance education can be stated as follows[2]:

In 1833, an advertisement in a Swedish newspaper opened the opportunity to study "Composition through the medium of post".

In 1840, England's newly established penny post allowed Isacc Pitman to offer shorthand instruction via correspondance. This type of instruction was formalized by the foundation of the "Phonographic Correspondance Society" three years later. Charles Toussaint and Gustav Langenscheidt established Distance Education in the form of correspondance study in Germany to teach language in Berlin. Correspondance study crossed the Atlantic in 1873, with founding by Anna Tickner to encourage study at home.

Between 1883-1891, academic were authorized by the state of New York, through the Chautauqua School of Liberal Arts to students who completed the curriculum of the required summer schools and correspondance courses.

Correspondance studies became integral to some universities and correspondance institutions (such as Skerry's College, University Correspondance

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[2] Source : Project Team, "*Feasibility Analysis of Nation-Wide Distance Education Alternatives Final Report*", 1997

College) and some universities (Illinois Wesleyan, 1877, University Extension Department of the University of Chiago, 1892, University of Wisconsin,1885). Distance education began to enrich the secondary school curriculum in the 1920's.

In Europe, there was a steady expansion of distance education without radical changes in structure, but more sophisticated methods and media have been employed gradually. Advances in electronic communications technology helped determining the dominant medium of distance education in the United States.

In the 1920's, at least 176 radio stations were constructed at the educational institutions, although most were gone by the end of the decade.

In the early 1930's, experimental television teaching programs were produced at the University of Iowa, Purdue University, and Kansas State College. In 1950's, college credit courses were offered via broadcast television. Satellite Technology, developed in the 1960's and made cost-effective in 1980's, enabled the rapid spread of instructional television.

The University of South Africa became a distant teaching university by bringing a fundamental change in the way at which distance was practiced in much of the world in 1962.

In 1971, the Open University in the United Kingdom was founded. Being a distance teaching university, it was offering full degree programs, sophisticated courses, and the innovative use of media.

In 1990's, New desktop computers have allowed users to combine text, graphics, video, audio and virtual reality to communicate. At the same time wider bandwith, and new standards such as Integrated Services Digital Networks (ISDN) have provided networking of computers. Networking of computers are used for live video conferencing, collaborative computing, holding forums and chat sessions.

CHAPTER III

REVIEW OF DISTANCE EDUCATION ALTERNATIVES

Distance education is the type of education that takes place when the teachers and student(s) are seperated by a physical distance. Distance education programs can provide adults with a second chance at higher education. The adults having limited time, distance or physical disability can reach the learning materials at any time, from any place. Moreover, distance education can be used to update the knowledge level of the workers at their places of employment.

The technologies used in distant education fall into four groups, namely, print, voice, data and video: Print is the first generation distance education system from which all other delivery systems have evolved. Available print tools are textbooks, study guides, workbooks, course syllabi and case studies. Instructional tools include the interactive technologies like telephone, audioconferencing, radio and passive (one-way) ones like radio transmission and distribution of tapes. Instructional data tools are basically computer applications that facilitate the delivery of education. Examples include electronic mail, fax, real-time computer conferencing and world-wide-web applications. Instructional video tools include passive technologies being distribution of pre-produced moving images (e.g., film, videotape) and interactive ones which are one-way or two-way transmission of real-time moving images combined with two-way audio conferencing. (Project Team, 1997)

7

3.1 Instructional Audio

The telephone, audioconferencing, and short-wave radio are the interactive instructional audio tools used for the distance education. Audioconferencing can be audio-only conferencing typically utilises the public telephone system to link people together at two or more locations.

Audiographic conferencing combines technologies for voice communication with image or data transmission. While voice remains as the principal communication medium, audiographic peripherals provide a visual component. Audiographic peripheral devices include the electronic blackboard, still video technology, and the personal computer. (Project Team, 1997)

While major advantage of audioconferencing is its two-way interactive capability, its major limitation is the absence of visual communication.

To minimise the lack of the visual component, some strategies like reducing interpersonal distance, nurturing interaction, increasing feedback, and enhancing learning and message transfer are recommended (Project Team, 1997).

3.1.1 Reducing interpersonal Distance:

Teachers who use audio-based systems should establish a classroom atmosphere in order to enhance the learning. They can send a welcome letter, course syllabus, relevant course materials and available resources to the students before the class meets. Moreover, students should be encouraged to meet and communicate with each other. This goal can be achieved by encouraging students to exchange

photos and short personel information. Students should present their comments and questions without any hesitation. Created classroom atmosphere should provide a friendly environment for the students.

3.1.2 Nurturing Interaction :

Since student-to-student and student-to-teacher interaction is very limited in distant education, some cautions should be taken. For example, student-to-student interaction can be encouraged by engaging students in discussions, debates, or role playing. Encouraging the usage of e-mails and assigning some responsibilities for a particular question, activity, or portion of discussion to a different group or individual can also be helpful.

Student-to-teacher interaction can be increased by creating a friendly classroom atmosphere. The behavior of the teacher is the most important factor effecting the student-to-teacher interaction. The teacher should show his/her interest to the students and their questions. Students should be encouraged to telephone or write their questions and comments. The instructor should respond directly to individual questions in a reasonable time.

3.1.3 Increasing Feedback :

By taking the questions and comments of the students by telephone or e-mail, the teacher can get feedback about his/her course. A friendly class atmosphere increases the amount of feedback students supply. The effectiveness of the course can be increased by evaluating the feedbacks.

3.1.4 Enhancing learning and message transfer:

As distance teaching requires a great deal of independent learning, teachers need to motive students and provide them with a framework that facilitates memory and comprehension. To enhance motivation, learning, and comprehension a student-centered approach should be taken for teaching and students should be provided with opportunities to set some of their own objectives and work toward their own goals. The instructor should be realistic in the amount of content presented and the assignments given. Beacuse, teaching and learning at a distance takes more time than the standard education. (Project Team, 1997)

3.2 Instructional Data

Computer applications are basically used for distant education. Electronic mail, electronic bulletin boards, computer teleconferencing and the web sides are applications that fall into this category. Web applications have been widely used in distant education in recent years.

The web, with its ability to include a range of powerful media forms and its interactive capability, enables us to support a sophisticated range of interaction and provide a rich environment for teaching. (Ryan, Scott, Freeman and Patel, 2000)

Web sides are the main tools in internet used for the education. From the web sides designed for the online education, the students can easily reach the texts, examples, graphics or other visual sources of the course. Therefore, using web sides as an educational tool is very useful for both teachers and students. The teachers can

put any material about their courses on course web sides and the students can get them easily.

3.3 Instructional Video

Instructional video (IV) is an effective distance education system that can be integrated into the curriculum at three basic levels:

- Single lesson: Programs address one specific topic or content, providing a lesson introduction, overview, or summary.
- Selected unit: A series of programs providing the content foundation for a learning unit in the course curriculum.
- Full course: Programs from one or more ITV series may be integrated into a full semester course typically in conjuction with instructional print materials.

IV include second-generation systems with one-way broadcasting (i.e., passive systems) and third-generation ones with interactivity. Passive IV typically involves distribution of preproduced programs by video cassette or by video-based technologies such as broadcast, cable, or satellite. Interactive IV, on the other hand, is a combination of a second-generation system with an audio and/or video line for viewer interaction. Two–way television (TV) with two-way audio, namely interactive videoconferencing, is an example to this technology where all students view and interact with the instructor and cameres at remote sites allow the instructor to view all participating students. It is also possible to configure the system so that all student sites may view one another. This can also be carried via terrestrial lines or by satellite. (Project Team, 1997)

CHAPTER IV

DISTANCE EDUCATION APPLICATIONS

There are lots of distance education applications in and out of Turkey. In this section of the thesis, some distance education applications will be presented.

4.1 Distance Education in the World

There are a lot of universities and colleges that offer online programs and degrees in the world. In general, they offer bachelor, master and doctorate degrees. Online degrees offered differ from one university or college to another.

In order to collect data on distance education enrollments, a survey was done by the Higher Education Coordinating Board (HECB) in United States. This survey called The Independent Distance-Learning Provider's Survey was initiated in spring 1999 to develop a picture of the role that out-of-state and independent distance learning providers might play in accommodating higher education needs in Washington State. The HECB sent surveys to the 277 institutions listed in "Petersen's Guide to Distance Education" as offering degrees and programs to Washington students. The state-by-state listing in Peterson's Guide included any institution offering on-line classes nationally. One hundred and one institutions returned the survey, producing the following findings:

i. 43 currently have or project having students in Washington State by 2010.

ii. Most of the responding institutions had few Washington students and most of those could be found in graduate, certificate, or special programs.

iii. 29 reported one or more students from the state enrolled in degree programs.

iv. 21 respondents reported students enrolled in individual courses.

v. 13 reported enrollment in both individual courses and in programs.

The average age of distance learners was 36.8. As could be expected, respondents reported a slightly lower average age in lower-division programs and a higher average age in graduate programs. As could be expected, the gender balance of such programs matched the proportions represented in the professions. For example, nursing programs have more female students and engineering programs enroll more males. Distance learning students tended to be working adults with full-time jobs. Students in professional niche programs tended to have prior experience in their fields of study (Washington State Higher Education Coordinating Board, 1999). The results of the survey are seen in the graphs given below.

Students Taking Individual Distance Education Courses

Year	Students
1997-98	7,457
Fall 1998	7,929
Projection 2010	15,476
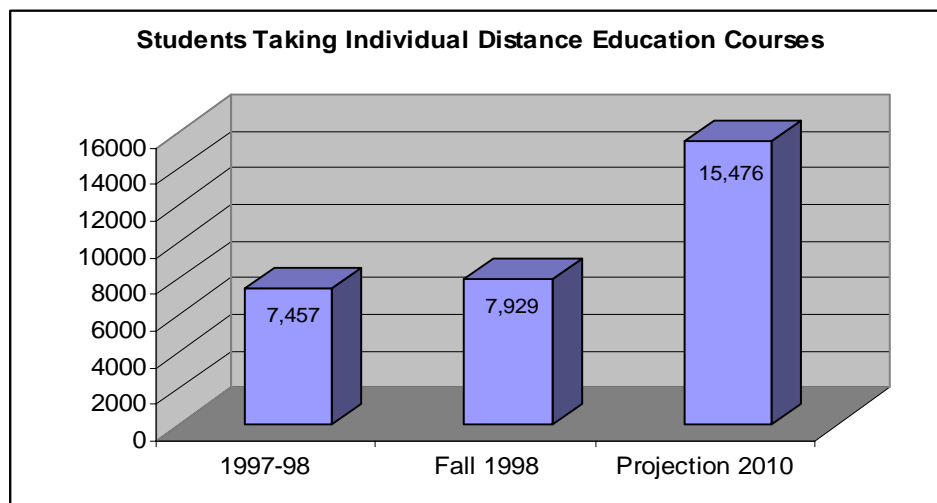
Figure-1 : Students Taking Individual Distance Education Courses[3]
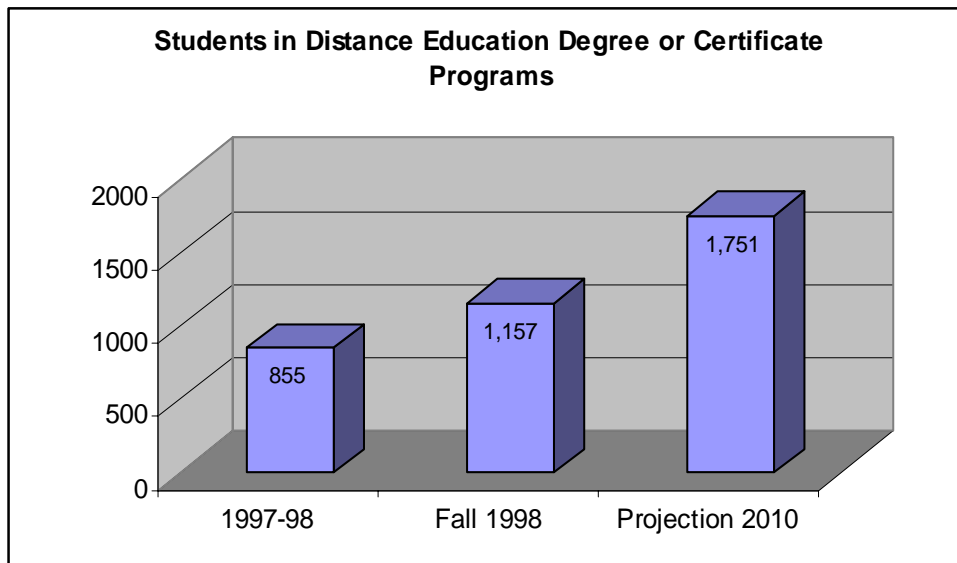
Figure-2 : Students in Distnace Education Degree or Certificate Programs[4]

The results of the survey given above indicate that both the number of students taking individual distance education courses and the number of students in distance education degree or certificate programs increase as the years pass. In 2010, the number of distance education students is expected to increase. So, it can be said that online education will be more important in the future. Some examples about universities that offer online degree programs will be given in the following sections.

4.1.1 Online Degree Programs in the University of Phoenix

The University of Phoenix offers online bachelor, master and doctorate degree programs. It also has online Continuing Teacher Education program. The university started offering online programs in 1989. The online program

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[4] Source : "Feasibility Study: Distance Learning Enrollments in Independent Institutions" Washington State Higher Education Coordinating Board, 1999

uses the power of the internet to deliver online learning which is independent of time and location.

In the online programs of the University of Phoenix, there is a strong interaction among the students. Each class has its own group mailbox by which they communicate among themselves. In addition, each class uses a group forum where students put their work and ideas so that the classmates can make comments about them. This upgrades the quality of the works before the academic review of the instructor.

The students can access research material from the university's electronic library. The working people can also be students in the online programs. Classes are offered one at a time, in sequence. Since there are no defined semesters, students can begin a course of study in any month of the year. Since time is very flexible, students can concentrate on any subject at any time that suits them.

The degree programs offered by the university :[5]

Bachelors

- Associate of Arts in General Studies

- Bachelor of Science in Business / Accounting

- Bachelor of Science in Business / Administration

- Bachelor of Science in Business / e-business

- Bachelor of Science in Business / Management

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[5]Source: University of Phoenix, www.phoenix.edu

- Bachelor of Science in Business / Marketing

- Bachelor of Science in Criminal Justice Administration

- Bachelor of Science in Information Technology (BSIT)

- Bachelor of Science in Management

- RN to Bachelor of Science in Nursing

Master's

- Master of Arts in Education/Administration and Supervision

- Master of Arts in Education/Teacher Education for Elementary
  Licensure

- Master of Arts in Education/Teacher Education for Secondary
  Licensure

- Master of Arts in Education / Curriculum and Technology

- Master of Arts in Education / Curriculum and Instruction

- Master of Arts in Education / E-Education

- Master of Arts in Organizational Management

- Master of Business Administration

- Master of Business Administration in Accounting

- Master of Business Administration in e-Business

- Master of Business Administration in Global Management

- Master of Business Administration in Health Care Management

- Master of Business Administration/Human Resource Management

- Master of Business Administration/Marketing

- Master of Business Administration in Technology Management

- Master of Health Administration

- Master of Science in Computer Information Systems

- Master of Science in Nursing

Doctorate

- Doctor of Business Administration

- Doctor of Education in Educational Leadership

- Doctor of Management in Organizational Leadership

Continuing Teacher Education

- Adolescent Psychology

- Arizona Constitution

- Assessment and Evaluation

- Characteristics of Learning Disabilities

- Characteristics of MR & Developmental Disabilities

- Characteristics of Emotional & Behavioral Disorders

- Characteristics of Physical & Health Disabilities

- Classroom Management

- Elementary Reading Methods

- Inclusion Strategies for the Special Educator

- Instructional Techniques and Methods of ESL

- Methods of Bilingual Education

- Orientation to the Exceptional Learner

- Secondary Reading Methods

- Secondary Methods for Classroom Teachers

- Special Education Assessment & Interpretation

- Special Education Methods

- Teaching Students with Gifts or Talents

- Teaching With the Internet

- Technology Integration in P-12 Curriculum

- United States Constitution

In the application process, Admissions Counselors guide to the students. When the application process is completed and the fees are received, the Admissions Counselors ship the Online Learning Software, and help the students order the textbooks and course materials, and get them into their first classes. All the courses can be registered by phone and the students can sign up via internet - no waiting in line required. Textbooks can be ordered in the same way and shipped directly to the students. After the first class, an academic counselor will replace the Admissions Counselor as a guide for the rest of the program. The academic counselor of a student will provide a schedule indicating which classes he/she needs to take and when during his/her education.

Online students are eligible to take advantages of the university's full range of student services. They can access to the University of Phoenix's library by internet. They can also visit the student union to exchange job tips, share travel information, and meet other online students living in the same area. They will be able to arrange their schedules, review their academic records, and order books online via their student services web page.

4.1.2 Online Degree Programs in the Kennedy-Western University

Kennedy-Western University was established in 1984. It offers Bachelor, Master and Doctorate degrees in many disciplines especially for mid-career professionals. Since the courses are given by internet, the students can arrange their own time and can follow the courses at any time, from any place.

Since the students of the university are mid-career professionals, their previous educational and professional experiences are taken into account and the qualified students do not have to repeat the basic courses that have already been mastered. Therefore, five years of full-time work experience are required to be considered for admission to the university. The study areas in the university are applicable to the student's professional environment and serve to enhance previous knowledge and skills. Therefore, they are encouraged to select courses that are compatible with their occupational and professional objectives.

In order to reduce the physical gap between the students and the teachers Kennedy-Western University offers some services like tutorial assistance, moderated live online chat sessions and online discussion boards. In addition, students are paired with a qualified Student Services Advisor, whose expert advice helps to facilitate students through their program.

The degree programs offered by the university :[6]

Business Programs:

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[6] Source: Kennedy-Western University, www.kw.edu

- Business Administration

- Finance

- E-Business/E-Commerce

- Management and Leadership

- Executive Business Administration

- International Business Administration

- Human Resource Management

Health Programs :

- Health Administration

Technology Programs :

- Computer Science

- Electrical Engineering

- Environmental Engineering

- Safety Engineering

- Quality Control

- Mechanical Engineering

- General Engineering

- Engineering Management

- Management Information Systems

- Management of Technology

- Software Engineering

4.2 Distance Education in Turkey

There are also some universities that offer distance education in Turkey. Anadolu University is the oldest one that offers distance education. There are some other universities offering online education besides Anadolu University. In this section, some of the distance education applications in Turkey will be presented.

4.2.1 Anadolu University Distance Education System

There are some universities that give online education by internet in Turkey. But Anadolu University is the one that supply distance education by the tools other than the internet. It has three faculties which constitite the distance education system of the university. Open Education Faculty (OEF), Faculty of Economics and Faculty of Business Administration are the faculties that constitutes distance education system of Anadolu University.

The distance education system in Anadolu University was establised by the foundation of ETV (Educational Television) Institute within Eskişehir Academy of Business and Commercial Science (EITIA) in 1970's. It was a Turkish - German technical aid program and joint project that contained the acquisition of audio and video technology, establishment of production studios and training of technical personnel. Educational activities are organized at the Communication Sciences Faculty.

In 1982, Anadolu University is reorganized by joining with EITIA (Eskisehir Academy of Business and Commercial Sciences) and DMMA (State

Academy of Engineering and Architecture) and assigned with the task of conducting "open education" in Turkey by Law No. 2547. Starting with the 1982-1983 academic year, a dual education is initiated at the Open Education Faculty of Anadolu University. Economics and Business Administration with a total enrollment of 29.471 students commenced to education. (Team Project, 1997)

Faculty of Economics and Faculty of Business Administration were established in 1993 in addition to Open Education Faculty.

Three faculties that constitute the distance education system of Anadolu University have their own organizational structures. The organizational structures of Open Education Faculty, Faculty of Economics and Faculty of Business Administration can be seen in Appendices L, M, N.

Each faculty has a dean, faculty board and executive commitee, academic and administrative bodies. There is a vice rector coordinating the activities of the faculties in distance education system.

In Anadolu University, text books that are prepared for distance education purposes are sent to the students at the beginning of each academic year. In addition to the books, video programs about the courses are produced and broadcasted via TRT channels. Videocassetes of the programs are also in sale.

Some of the courses are instructed face-to-face by the Open Education Faculty staff or local university staff. There are also computer laboratories used for academic counselling purposes.

Students are accepted according to their scores at the university entrance examination. In order to evaluate the performance of the students, multiple choice tests are used. Mid-term and final exams with the weights of 30% and 70% respectively are used in an academic year. An average score of 50% is required to "pass" a course. The test questions are prepared at the Test Research Center of Anadolu University and are sent to the test centers under strict security measures.

The fees paid by the distance education students are grouped in two categories. First, educational tuition is collected by Anadolu University to cover the expenses of the university for distance education system. Second payment is collected by the state for the subsidization of the current service cost. (Project Team, 1997)

4.2.1.1 Open Education Faculty

Under Open Education Faculty of Anadolu University, there are West European Programs, Education Associate Degree Program, Agriculture and Veterinarian Programs, Degree Completition Programs and the Department of Health Programs.

West European programs, started in 1987, are offered to Turkish citizens living in Western European countries like Germany, Holland, Belgium, France and Switzerland. High School programs were added to these programs in 1990. West European programs are BA degree in Economics, BA degree in

Management and Organization, Assoc. Degree in Foreign Trade and the Open Lycee.

Education Associate Degree program was established in 1985 to provide associate degree study for the primary school teachers.

Agriculture and Veterinarian Programs were established in 1994. Their purposes are to provide associate degree study for the technicians employed at the Ministry of Agriculture.

Degree Completion Programs were established in 1990. They provide bachelor degree study opportunities for high school teachers who are the graduates of Education Institutes in the fields of Turkish Language and Literature, Mathematics, History, Geography, Physics, Chemistry, and Biology. In 1993, English, French, German, Artistic Picture and Phical Education fields were included into the programs.

Established in 1990, Department of Health Programs aims to provide associate degree study to the nurses in the name of "Nursing Associate Degree Program". The first students of the department were admited in 1991. They were selected according to a special exam administered by Student Selection and Anocation Center (OSYM). After 1991, the students are started to be admitted according to the University Entrance Exams. Two new programs (Midwifery and Medical Technician programs) are included later.

4.2.1.2 Faculty of Economics

The Faculty of Economics started education at the 1993-1994 academic year. It conducts four year BA degree programs in Labor Economics and Industrial Realtions, Public Administration, Public Finance, and Economics.

4.2.1.3 Faculty of Business Administration

The Faculty of Business Administration like the Faculty of Economics started education at the 1993-1994 academic year. It has four year BA degree programs in the fields of Accounting and Finance, Management and Organization, Business Administration, and Marketing.

4.2.1.4 Effectiveness of Anadolu University Distance Education System

Anadolu University has played an important role in the national education system of the country by its distance education facilities. Distance education students of Anadolu University are not accepted socially as formal students compared to the other university students. Therefore, It has brought the perception of the graduates of the system as inferior with respect to their counterparts at the conventional schools.

There is no a reliable assesment used to measure the quality of the education given by the universities in Turkey. However, the graduates of the distance education programs of Anadolu University are seen as having low quality than the other university graduates. This perception can be seen as a consequence of the university entrance exam. Because, distance education

students have lower scores in university entrnce exam than the students of the other universities.

Since there is no sufficient number of universities in Turkey to meet the demand, Anadolu University Open Education System is seen as a remedy for removing the bottleneck at this point.

The technologies used to deliver instruction to distance learners are primarily one-way and non-interactive. Face to face lecturing at local centers are limited to certain courses. Also, access of the students to the local is difficult due to geographical dispersion and the time of the classes. Only about 10% of the total student population is estimated to attend the face to face lecturing classes as well as computer assisted academic councelling centers. The main reason for this is that a considerable percentage of the students are either working or housewifes. (Project Team, 1997)

Since the total number of the students are very high, multiple choice examinations are used as a tool to measure the performance of the students. But, cheating is an important problem as a consequence of multiple choice tests.

Anadolu university accomplishes academic and administrative activities as well as student services with an organization distributed to all the provincial centers of Turkey, Northern Cprus and Western Europe. Current management policies are higly centralized and decision making is practiced by the upper management. The span of control is very wide for some of the organizatrional

units of the Open Education Faculty. This decreases the efficiecy. For example, total number of 66 offices are in the control of central office at Eskisehir. Also the academic councelling coordinator has a large number of academic councelling centers to manage (Project Team, 1997).

4.2.2 Informatics Online Master of Science Program in Middle East Technical University

Informatics Institute of Middle East Technical University offers Informatics Online Master of Science Program. It is categorized as a "non-thesis M.S." program.

The purpose of the program is to provide expertise on the rapidly developing subjects of information technology and systems. It is intended for working professionals who need continuous education in anytime, anywhere fashion without the need to come to the METU campus for lectures.[7]

The students are accepted to the program according to their LES scores, undergraduate and graduate grade point averages, two reference letters, professional experience and interview results. Accepted students pay a tuition fee that costs 150 $ per credit hour. So, cost of a course with 3 credits is 450 $ for a student.

The interaction among the students and the teacher is carried out by e-mails, forums, discussion lists and chat tools. Web sides are used in order to present the course materials on internet. Interactive animations, simulations and exercises are the tools used in the web sides of the courses. The students are

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[7] Source : Informatics Online Master of Science Program, http:// ion.ii.metu.edu.tr

required to complete an applied project and present it in a seminar (in campus). It is expected that the students must complete the program in at most 6 terms. Course requirements of the program:[8]

5 core courses (3 credits each)

5 elective courses (3 credits each)

Special Studies (All terms, non-credit)

Research Methods in Informatics (1 term, 1 credits)

Graduate Seminar (1 term, non-credit)

Special Studies (6 term, non-credit)

Online informatics graduate program is a student-centered program which requires self-motivation and responsibility. Each online course has a final exam and self-tests administered on the web. The results of these tests and exams are used in the evaluation process of the students. Homework, projects, contribution to chats, seminars and forums are also used as evaluation criteria in measuring performance of the students.

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[8] Source : Informatics Online Master of Science Program, http:// ion.ii.metu.edu.tr

CHAPTER V

ONLINE DISTANCE EDUCATION

It is known that world population increases each year, consequently the number of people to be educated and the educational needs of the people also increase. As the technology develops, job opportunities change. While the old businesses or jobs die, the new ones appear. Therefore, working people have to adjust to the rapidly changing technology and business world in order to continue to live. The adjustment to the new technogical and business environment needs training and education. In today's era, knowledge is the most important asset to be used. So, the importance given to the education increases day after day. The changes in employment patterns and increased competition in world markets have made governments in all industrialized nations take seriously the need for lifelong training and education.

Supplying education to large number of students becames difficult with the increase in population. Therefore, alternative ways are considered for meeting the educational needs of the people. At this point distance education is seen as the solution. With recent technological improvements, supplying distance education has become more easier. Internet and web applications have been widely used for this purpose in recent years.

Internet is an interlinked network of networks that allows any computer in the world connected to it to exchange data with any other computer in the world. This is possible as all computers linked to the internet have a unique address that enables data to be sent to and from it. (Ryan, Scott, Freeman and Patel, 2000)

Since all the computers in the world can be connected to each other and exchange data by internet, it becomes as the main tool in distance education applications. By internet, it is possible to remove the physical gap between the teachers and the students. So, it can be said that one of the main problems in supplying education to the large number of people is solved with internet. Moreover, usage of internet in distance education has solved the time problem of working people. Since they can reach any knowledge at any time by internet, they can arrange their time accordingly and allocate time on education. The benefits of usage of internet as a medium for distance education can be listed as follows:

- Students may study according to their own time schedule.

- Students may study at an individually chosen and varying pace.

- Students may in most distance education colleges embark on their courses at any time.

- Students may choose between a large number of study opportunities that are present in their local surroundings.

- Students may find even high-end commercial distance education courses less expensive than a free on-campus education.[9]

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[9] Source : FTUE-Net : European Trade Unions Education Network, http://www.fb.no/

Web applications are the main tools used in internet for supplying any information or knowledge. The web, with its ability to include a range of powerful media forms and its interactive capability, enables us to support a sophisticated range of interaction and provide a rich environment for teaching. The web page should contain the things given below for teaching purposes.

Course and Instructor Information:

- Topics
- Office hours,
- Honor code,
- Text book information,
- Course objectives,
- Grading.

Communication:

- Student to professor e-mail,
- Student to professor to class e-mail to discussion or newsgroup,
- Student to class discusser or newsgroup,
- Trouble or problem reports.

Assignments:

- Distribution,
- On-line completion or submission,
- Solutions and hints.

Tests:

- Distribution,

- On-line completion or submission,

- Solutions and sample exams.

Material distributed / covered in the classroom:

- Lecture notes, handouts,

- Demonstrations, animations, video, audio.

Interactive tutorial or review materials,

Reference material:

- Sources - in print and electronic form.

Supplemental material:

- Links to resources on the Web specific to the course.

Links to similar courses on the WWW

Related materials:

- Links to resources on the Web related to the course or discipline of a general

  or comprehensive nature.[10]

5.1 METU Informatics Institution Distance Learning Center

Distance Learning Center is established at the Informatics Institution of Middle East Technical University.

The aims of the center are conducting and coordinating research on distance learning, monitoring and leading current methods used for distance learning in

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[10] Source: Mary Washington College, http://www.mwc.edu

and out of the university. The center promotes an interdisciplinary approach to research and development in distance learning. The aims of the center also include a systematic accumulation of knowledge and experience gained from current applications as well as the dissemination of this "know-how" at the university and to other institutions in a systematic and scientific manner.[11]

Knowledge is the most valuable asset in today's world. So, people need education not only when they are children or young but also when they are working. Consequently, distance education becomes more important in every passing day. With the establishment of this center, distance education programs or any other distance education facilities will be directed and coordinated. The distance education applications in the world will be monitored and the new technologies in this field will be brought to Turkey. Researches will be conducted and national/international conferences will be organized about distance learning. Online course exchanges between METU and other universities are coordinated and regulated by this center.

Distance Learning Center is managed by the administrative units that are Administrative Committee, Project and Technical Support Groups, Board of Center and Director.

Administrative Committee meets at least once in two months. The decisions about center administration, educational responsibilities and the main principles of the studies implemented with international/national institutions are made by the committee. Preparing regulations and study principles of the project groups

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[11] Source: Informatics Institute Distant Learning Center, http://www.ii.metu.edu.tr/DLC/

are among the responsibilities. Moreover, Administrative Committee examines the budget and facility reports prepared by Center Director and presents them to Institution Director.

Center Director carries out his/her responsibilities on the frame of yearly programs and budgets. He/She prepares both activity reports of the previous year and program schedules of the following year, and presents them to the Institution Director.

While Technical Support Group consists of technical personnel and part-time or full-time working assistants, Project Groups are composed of university academic personnel, members of institutions or associations out of university and civilian society organizations. These groups support and take part in the implementation of the objectives of the Distance Learning Center.

CHAPTER VI

COST ANALYSIS OF ONLINE SCIENCE AND TECHNOLOGY POLICY STUDIES (STPS) GRADUATE PROGRAM

Cost determination is one of the most important items in a feasibility analysis. In order to determine the total cost of a distance education system, each component of the system should be considered and should be assigned a specific cost. The cost elements of distance education are grouped under two main categories:

1. Investment costs

2. Operational costs

These cost categories are further subdivided into more detailed items in order to determine the specific cost of each component. Items that constitute the investment costs and operational costs are given below:

1. Investment Costs

    *   Construction

    *   Machinary & Equipment

        -   Operational Equipment (Switch, routes etc.)

        -   Equipment for course material development

    *   Training Infrastructure

        -   Training of technical staff

- Training of trainers

- Copyrights, Patents, license

2. Operational Costs

- Training

  - Training material/license fee

  - Salaries of the trainers

  - Training material costs (Stationary)

- Personnel Expenditure

  - Technical Staff

  - Administrative staff

- Communication Expenditures

  - Postal telephone lines, rental fees etc.

- Other

  - Maintenance

  - Overhead costs

In order to determine the cost of a course given via internet, the system components and the assumptions about the system are defined. A course which is supported by audio, video, animation, or text, is loaded on a server computer. This course is either sent to all receiver computers or reached by any specific receiving site (at any time he/she desires) from the server of the providing site through cable. The receiver at home follows the course through a computer, and the interaction is provided through e-mail, fax, and/or telephone.

Assumptions:

1. No construction cost

2. Line rentals will be paid by home receivers

3. Each student has to buy his own modem and computer

4. Changing number of students will affect the cost

5. One semester is composed of four months

Course Development Costs: (US $)[12]

Material Development Costs:	Min.	Max.
Transfer of course content into computer environment	5000	6000
Copyright per course (a set = 2000 unit)	1500	2000
Questions & Answers editing and update fee	100	250
Total	**6,600**	**8,250**
Machinery & Equipment Costs :		
Computer & Printer	2000	2500
Scanner	500	600
VCR, Digital Camera	2000	3000
Telephone with answering machine	100	150
Fax	350	500
Total	**4,950**	**6,750**
Sub Total	**11,550**	**15,000**
Others:		
Homework and exam preperation & course conduct	4000	4400
Salary of an assistant	4000	5000
Copyright (per student $ 10)	1000	1000
TOTAL	**20,550**	**25,400**
General Expenses (17-20 % of total)	3494	5080
Total Costs for Developing a course	**24,044**	**30,480**
Course Development Costs per Month	6011	7620

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[12] Source : Project Team, (1997) "*Feasibility Analysis of Nation-Wide Distance Education Alternatives Final Report*", 1997

Monthly Costs of Serving 100 Students at Home (US $)

Course Development Costs per Month	6011	7620
Total costs per student / Month	60	76
T.Costs per student / Semester / Course	240	305
T.Costs per student / Semester / 5 Courses	1202	1524
Total Costs per Student / Year (for 5 courses)	2404	3048

Monthly Costs of Serving 25 Students At Home (US $)[13]

Course Development Costs:

Material Development Costs:	Min	Max.
Transfer of course content into computer environment	5000	6000
Copyright per course (a set = 2000 unit)	1500	2000
Questions & Answers editing and update fee	100	250
Total	**6,600**	**8,250**
Machinery & Equipment Costs :		
Computer & Printer	2000	2500
Scanner	500	600
VCR, Digital Camera	2000	3000
Telephone with answering machine	100	150
Fax	350	500
Total	**4,950**	**6,750**
Sub Total	**11,550**	**15,000**
Others:		
Homework and exam preperation & course conduct	4000	4400
Salary of an assistant	4000	5000
Copyright (per student $ 10)	250	250
TOTAL	**19,800**	**24,650**
General Expenses (17-20 % of total)	3366	4930
Total Costs for Developing a course	**23,166**	**29,580**
Course Development Costs per Month	5792	7395

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[13] Source : Project Team, (1997) "*Feasibility Analysis of Nation-Wide Distance Education Alternatives Final Report*", 1997

Monthly Costs of Serving 25 Students at Home (US $)

Course Development Costs per Month	5792	7395
Total costs per student / Month	232	296
T.Costs per student / Semester / Course	927	1183
T.Costs per student / Semester / 5 Courses	4633	5916
Total Costs per Student / Year (for 5 courses)	9266	11832

Operational costs are the variable costs that repeat themselves in each application. Investment costs on the other hand are the fixed costs that do not repeat themselves. They are the costs required in set up process. In this cost analysis, copyright cost is the only variable cost. Because, copyright cost depends on the number of students who will take the course. It is 10 $ per student. Material development costs, machinery & equipment costs, homework and exam preparation costs, course conduct costs and salary of the assisstants are fixed costs. They are not depend on the number of students.

Profit for one course can be calculated as follows[14],

Price of one credit hour = 100 $

CP = Price of one course that is composed of 3 credits

Q = Number of students who are taking the course

VC = Variable Cost

FC = Fixed Cost

P = Profit

VC = Cost of Copyright (per student 10 $) = 10*1.20 =12 $ per student with the general expenses added.

CP = 3*100 = 300 $

FC (Min) = 19,550*1.20 = 23,460 $ with the general expenses added.

FC (Max) = 24,400*1.20 = 29,280 $ with the general expenses added

Profit = Total Revenue – Total Cost

P = CP*Q – (FC + VC*Q)

P (Min) = 300Q – (23,460 + 12Q)

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[14] In the calculations, cost of "General Expenses" is taken as 20 % of the fixed and variable costs.

If P(Min) = 0, then number of students at break-even point becomes Q (Min) = 23,460 / 288 = 80. This is the minimum number of students at which total revenue earned from one course equals its total cost. This means that after 80 number of students, offering an online course becomes profitable.

P (Max) = 300Q – (29,280 + 12Q)

If P(Max) = 0, then number of students at break-even point becomes Q (Max) = 29,280 / 288 = 100. This is the maximum number of students at which total revenue earned from one course equals its total cost. This means that after 100 number of students, offering an online course becomes profitable.

Therefore, for an online course to be profitable, the number students who will take the course should be in the range of $80 < Q < 100$. This solution can be observed in the following graphs :
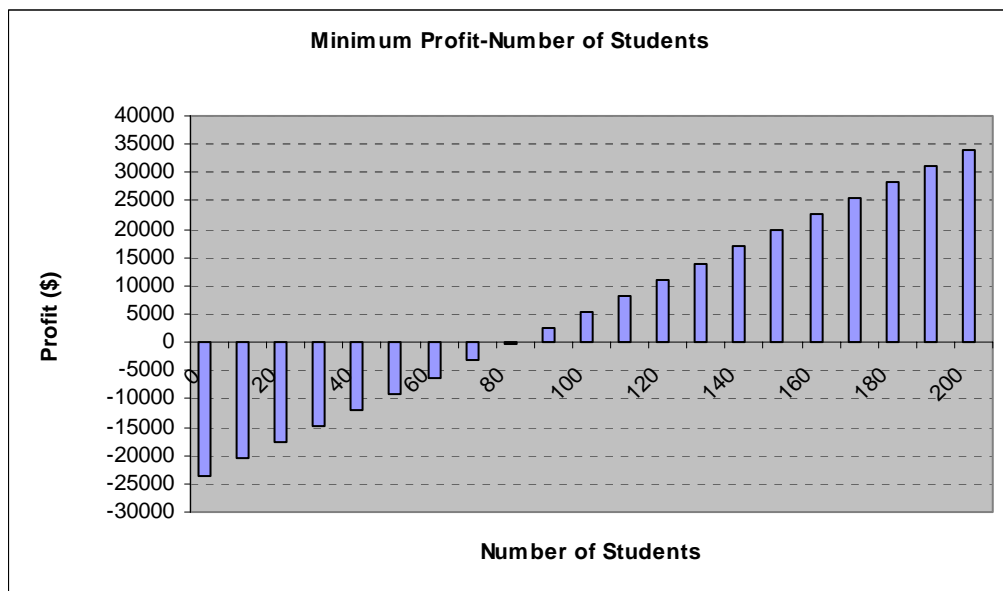
Figure-3 : Minimum Profit-Number of Students[15]

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[15] Figure-3 shows that after 80 students, profit becomes positive.
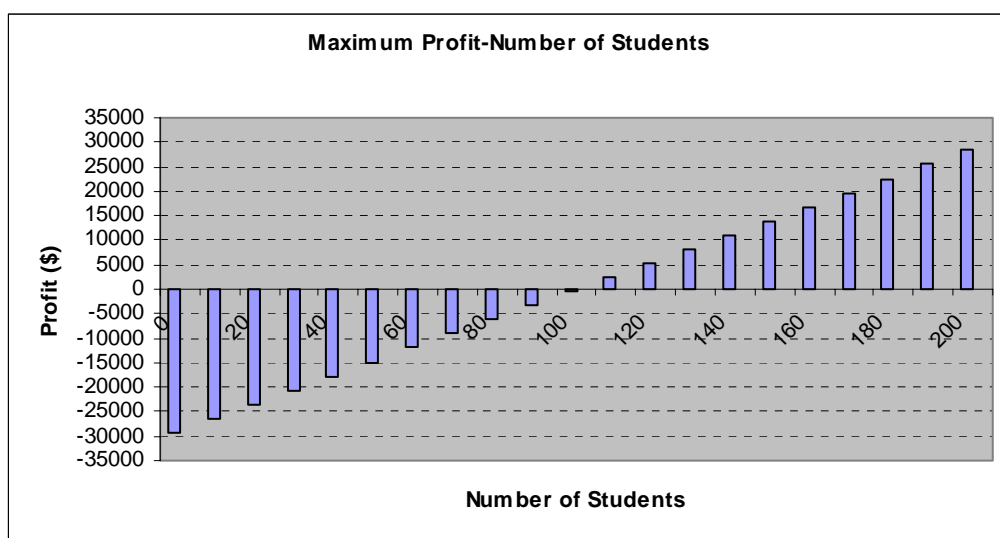
Figure-4 : Maximum Profit-Number of Students[16]

If one credit hour costs 100 $ then a three-credit course costs 300 $. Science and Technology Policy Studies (STPS) graduate program with thesis is composed of seven courses. So, its total cost becomes 7*300 = 2,100 $ for a student.

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[16] Figure-4 shows that after 100 students, profit becomes positive.

CHAPTER VII

QUESTIONNAIRE MADE ON STPS GRADUATE STUDENTS

A questionnaire was made on the students of Science and Technology Policy Studies Department about their garduate program in the first months of 2003. This questionnaire was made by STPS department. The questions on the questionnaire were prepared to figure out the general perspectives of the STPS graduate students and to find out the weak or strong points of STPS garduate program. Thirty-two STPS students answered the questions. The questions and the results of the questionnaire are given in Appendix-A through Appendix-J.

As it can be seen from Appendix-A, 47 % of the students are working. This means that nearly half of the STPS graduate students are working. The percentage of working students has decreased with 2001-Economic Crisis in Turkish Economy. Before the economic crisis, the number of working students in STPS Graduate Program was very high. The percentage of working students in the graduate program was effected negatively from the results of the economic crisis. Because, most of the working people have lost their jobs with the crisis. Since the working students have to get permission from the companies at which they are working to attend the courses, it can be understood that the companies are aware of the graduate program. In fact, 13 % of the working students are supported by their companies (see Appendix-B). In addition, Appendix-C shows that graduation from STPS program

will effect the working status of 62 % of the working students. Therefore, it can be said that attending STPS graduate program will be beneficial both for the students and the companies. The students will improve their careers by getting M.S. degree from STPS department. This means that getting payment for STPS graduate program is feasible. The students can pay 100 $ for one credit hour of a course. That is, they can pay 300 $ for a three-credit course. The benefits of STPS program will meet the cost of it. Because, an improvement in his/her career will increase his/her salary.

A doctorate program in Science and Technology Policy Studies Department is highly demanded by STPS master students. 88 % of the Science and Technology Policy Studies master students want to continue their education at the doctorate program of the same department. (see Appendix-D).

STPS master program is an interdisciplinary program. So, STPS master students have different backgrounds. Their backgrounds range from Social Sciences to Natural and Applied Sciences. Most of the courses given in the program are social science courses. It is observed from Appendix-E that 86 % of the STPS master students want to study in social sciences in their doctorate studies. This means that most of the students with natural and applied science background want to continue their education in social sciences in their doctorate studies. So, it can be said that STPS master program is so successful that it directs its students towards social sciences.

In the questionnaire, the graduate program is questioned in more detail. The ideas of the students about the number of must and elective courses, time schedule of the courses, and the evaluation methods used in the courses are asked. While 65 % of

the students think that number of must courses should stay as the current, 53 % of them think that number of elective courses should be increased (see Appendix-F and Appendix-G). Since most of the STPS students are working, the time schedules of the courses are very important. The permisions taken from the companies at which they work are not easily taken. Scheduling the courses as three-hours at a time is very beneficial especially for working students. Scheduling the courses as three-hours in the morning or three-hours in the afternoon increases the attendance of the working students to the courses. In fact, the answers to the related question in the questionnaire show the situation. Appendix-H shows that while 34 % of the students want the courses scheduled in the morning, 31 % of them want the courses scheduled in the afternoon. If these percentages are sumed (34 % + 31 % = 65 %), 65 % of the students want the courses scheduled as block courses (three-hours at a time). The evaluation methods used in the couses are also asked to the students. Preparing term project or homework is the most prefered evaluation method by the students. Making class presentations and class discussions are coming behind. The least number of students prefer exams. The number of students versus evaluation methods graph is seen in Appendix-I.

As it is seen in Appendix-J, the majority of the students (78 %) think that STPS graduate program is not known. Therefore, the program should be introduced to more people. The more the program is known, the greater will be the number of students who want to attend to the program. As a result, finding students for online-STPS gradute program will become easier.

CHAPTER VIII

EVALUATION AND FUTURE RECOMMENDATIONS

In this thesis, feasibility analysis of offering online STPS Graduate Program is done. Firstly, course development cost of an online course is calculated. Then, total cost of an online course is calculated according to the number of students who will take the course. 100 $ is assigned for one credit hour of an online course. This value is thought as the tuition fee that the students will pay for one credit hour of one course. This means that a students have to pay 300 $ for a course in a semester. This amount can be increased. In the feasibility analysis, total revenue that will be held from an online course is used to calculate the number of students needed to cover the total cost. From the questionnaire presented in the previous section, it is seen that nearly half of the STPS students are working in spite of 2001-Economic Crisis. If there had not been an economic crisis, there would have been greater number of working students in the department. Therefore, it can be said that most of the students can pay the tuition fee and attend to the online courses.

In this study, minimum and maximum number of students required to meet the total cost of offering an online course are calculated as 80 and 100 respectively. STPS Graduate Program accepts nearly 30 students per semester now. So, After three semesters (30 students per semester), cost of offering online STPS Graduate Program will be covered. However, if an online STPS Graduate Program is offered

then the number of students applied to the online program, consequently the number of students accepted will be lower than 30 students per semester. Therefore, it can take more than two semesters for the cost of an online course to be covered. The aim should be increasing the number of students accepted. Because, the greater the number of students accepted, the lower will be the cost of offering online STPS Graduate Program. And the total cost of an online course will be covered more quickly.

In addition, most of the students want to get Ph.D. degree from the department of STPS (see Appendix-D and Appendix-E). So, PhD. program should be offered.

CHAPTER IX

CONCLUSION

In today's world, knowledge consequently education is very important. Rapidly changing technology changes the world we live. The businesses and the jobs are changing with the introduction of new technologies and techniques. The adaptation to the new working and living environment requires following the recent developments. New developed techniques should be learnt rapidly in order to stay in today's world. Therefore, the demand for education increases every day. In order to meet the high education demand, new ways of supplying education are being searced. At this point, distance education is seen as the solution because, it provides new opportunities to the people who have some obstacles to take conventitional education. Distance education is useful especially for working people because they spend most of their time in work place. Time and physical conditions are main problems for them.

There are a lot of distance education alternatives that can be used. But, giving online distance education by using internet has become very common in recent years. Online education removes the physical gaps among the students and the teachers. It also solves the time problem because, the students can reach the learning material at any time by using internet.

In this thesis, firstly, distance education is defined and its brief history is given. Secondly, different distance education alternatives are stated. The properties, advantages and disadvantages of each alternative are explained. Thirdly, distance education applications in the world and in Turkey are stated by giving example distance education institutions in and out of Turkey. Fourtly, some information about online distance education is given. The advantages and the tools used in online education are explained. Fiftly, cost analysis of online Science and Technology Policy Studies (STPS) Graduate Program is given. The items that constitute the program are defined and assigned specific cost values. Consequently total cost of offering an online course to the predefined number of students is calculated. Two types of costs which are maximum cost and minimum cost are calculated for a course. Then, 100 $ is assigned for one credit hour of a course. That is, one course of online STPS graduate program costs 300 $ for a student. By using the cost of preparing an online course and its tuition fee (300$), the number of students at break-even point is calculated. The number of students at break-even points are calculated as 80 and 100 for maximum and minimum costs of a course respectively. This means that after 80 or 100 number of students, it becomes feasible for an online course to be offered. Lastly, a questionnaire made on STPS graduate students are presented. The results of the questionnaire are given in the appendices in the form of graphs. From the results of the questionnaire, it is learnt that nearly half of the STPS students are working. When they graduate from STPS program, their working status will change. So, getting STPS master degree will increase their careers. Therefore, it can be concluded that STPS students can pay 100 $ for one credit hour of an online course.

As a result, it can be said that offering online STPS graduate program with a tiution

fee is feasible.

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FTUE-Net : European Trade Unions Education Network, http://www.fb.no/

Informatics Online Master of Science Program, http:// ion.ii.metu.edu.tr

University of Phoenix, www.phoenix.edu

Kennedy-Western University, www.kw.edu

Mary Washington College, http://www.mwc.edu

APPENDICES

APPENDIX-A

WORKING STATUS OF THE STUDENTS
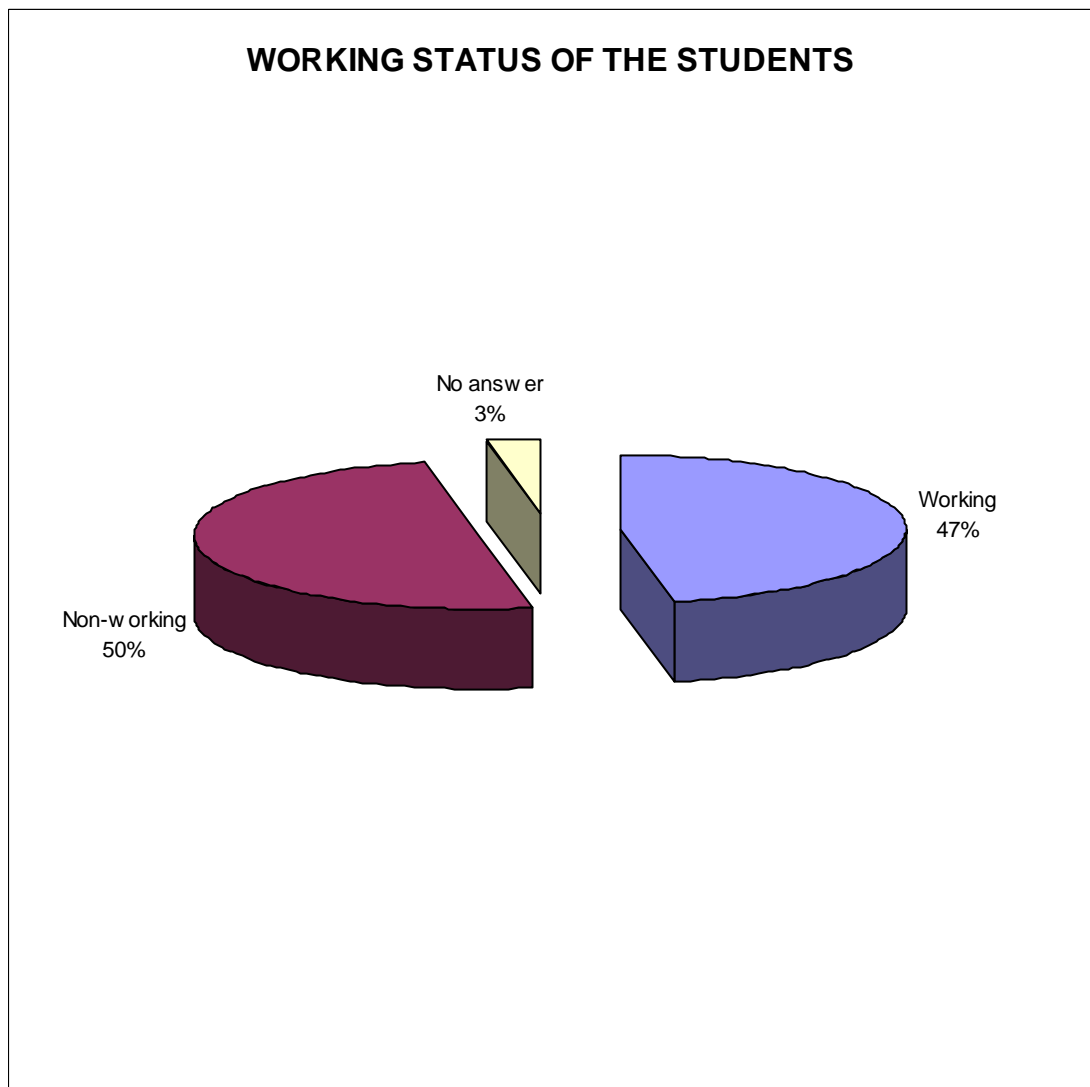
WORKING STATUS OF THE STUDENTS

No answer
3%

Non-w orking
50%

Working
47%

COMPANY ATTIDUTES TOWARDS THE GRADUATE PROGRAM

COMPANY ATTIDUTES TOWARDS THE GRADUATE PROGRAM

Company Supports
13%

No answer
7%

Company do not
support
80%

THE CHANGE IN WORKING STATUS

THE CHANGE IN WORKING STATUS

No
38%

Yes
62%
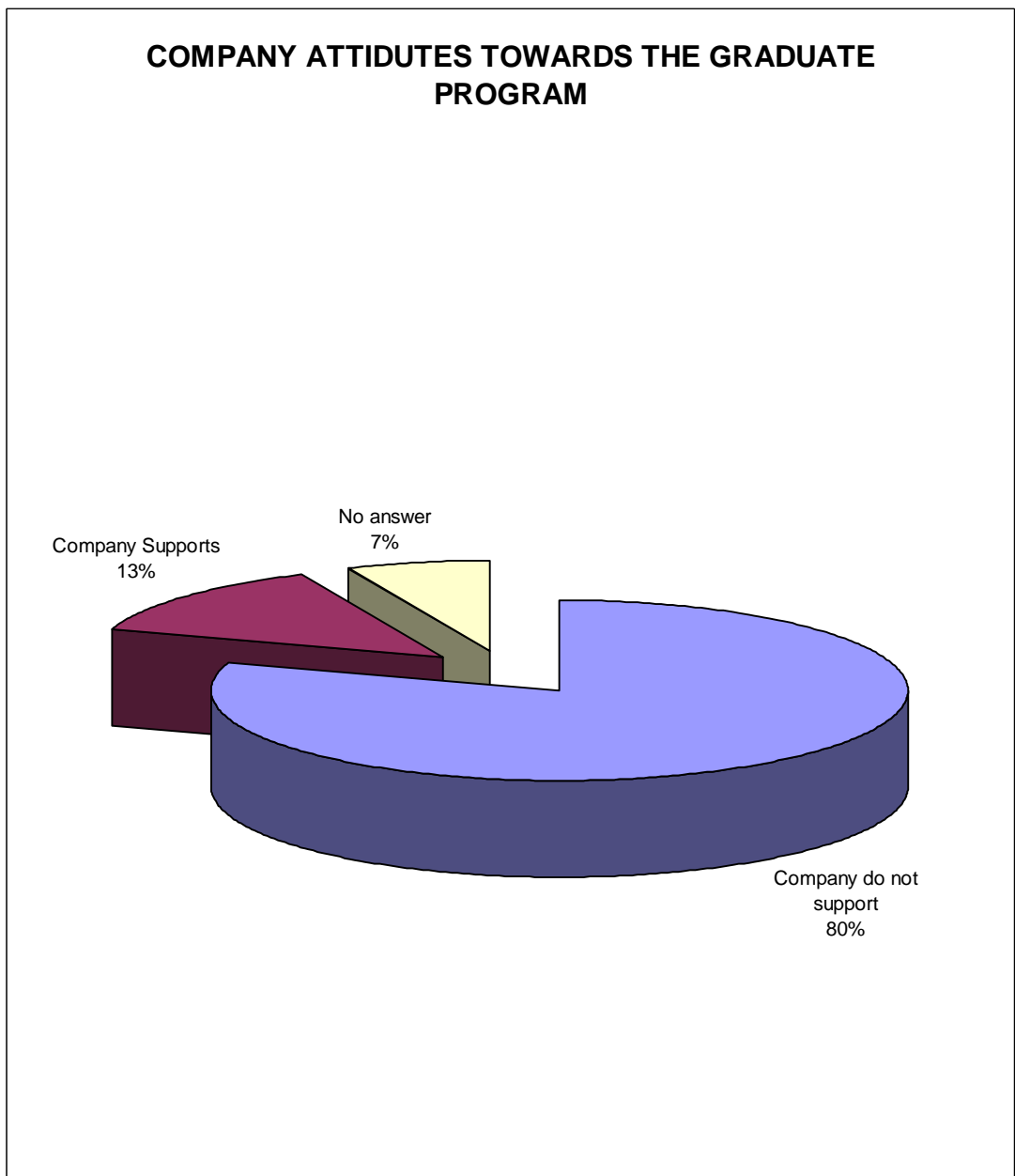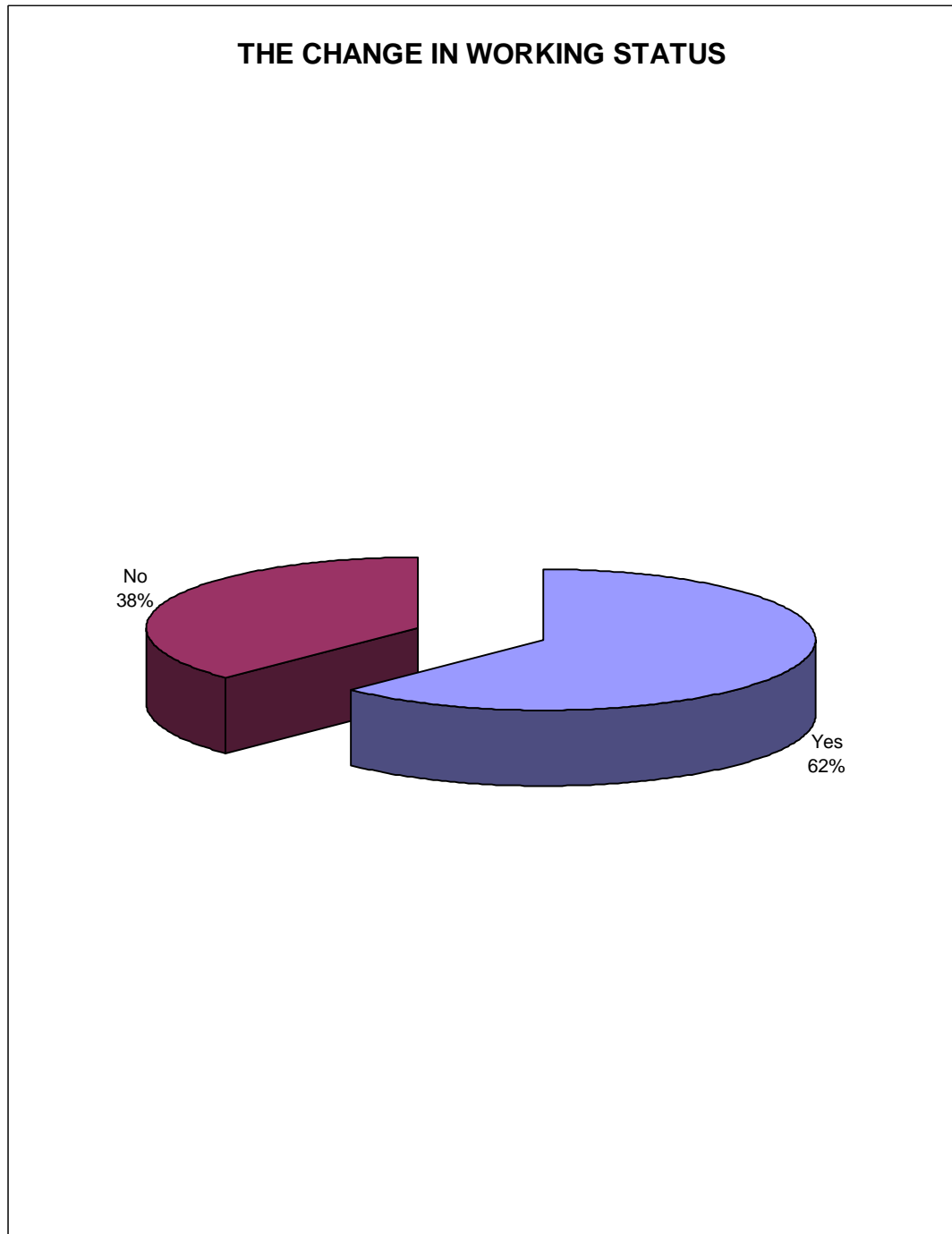
DESIRE TO CONTINUE TO THE Ph.D PROGRAM

DESIRE TO CONTINUE TO THE Ph.D PROGRAM
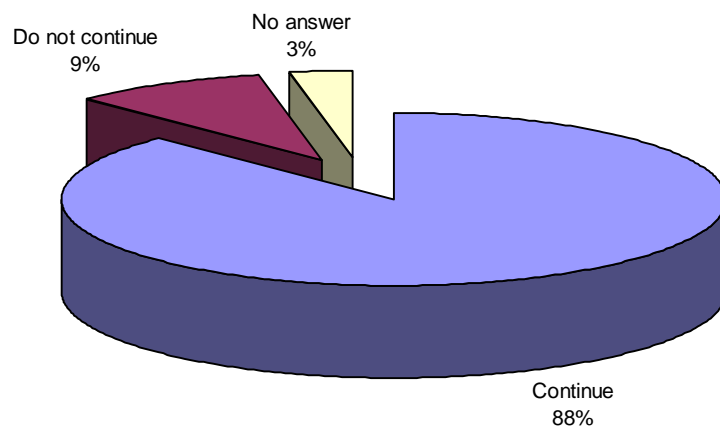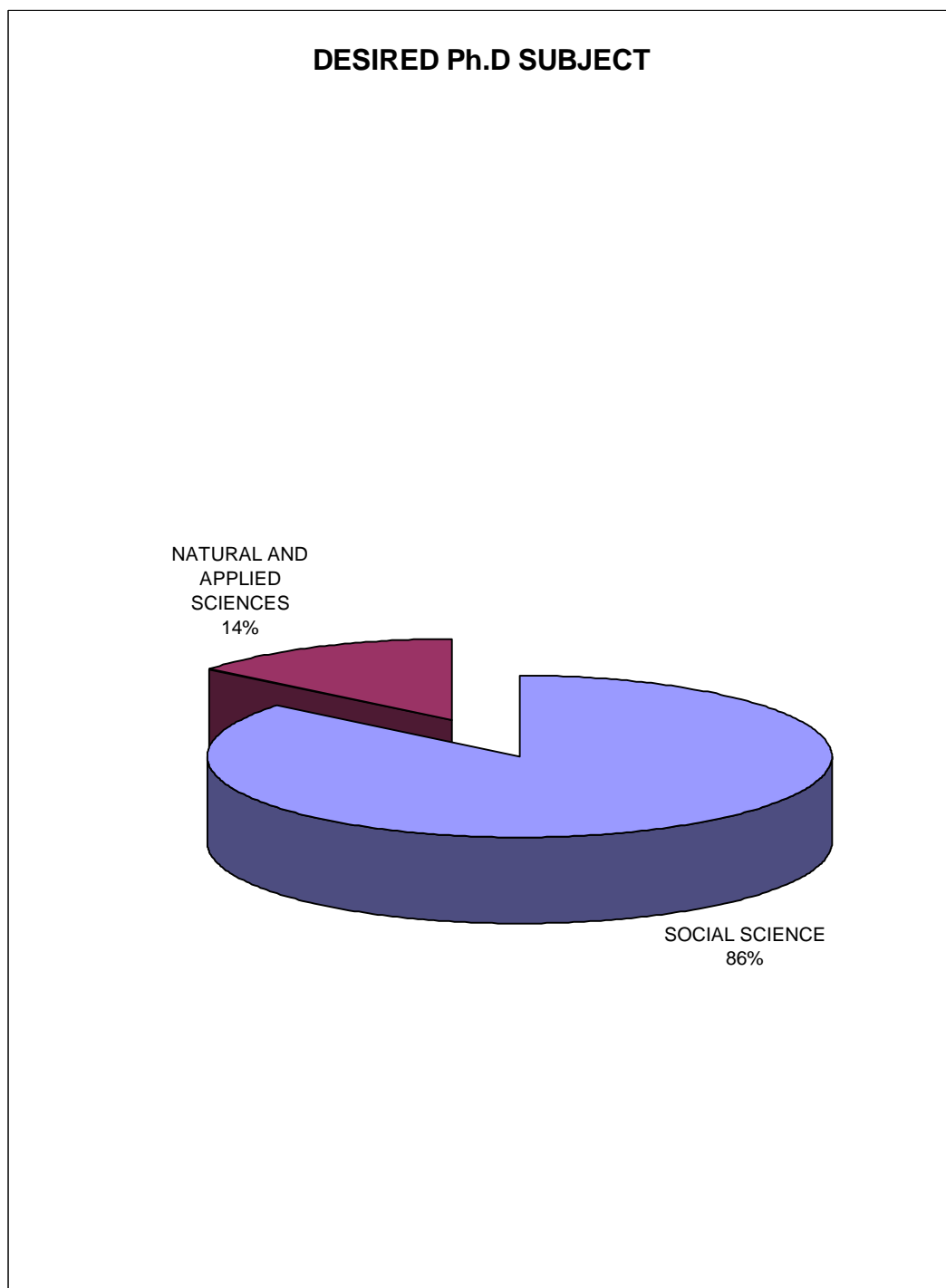
Do not continue
9%

No answer
3%

Continue
88%

DESIRED Ph.D SUBJECT

DESIRED Ph.D SUBJECT

NATURAL AND
APPLIED
SCIENCES
14%

SOCIAL SCIENCE
86%

NUMBER OF MUST COURSES

NUMBER OF MUST COURSES

Should be increased
16%

Should be reduced
19%

Should stay as current
65%

NUMBER OF ELECTIVE COURSES

NUMBER OF ELECTIVE COURSES

No answer
6%

Should stay as current
41%

Should be increased
53%

TIME SCHEDULE OF THE COURSES

TIME SCHEDULE OF THE COURSES

No answer
13%

In the Evening
22%

In the Morning
34%

In the Afternoon
31%
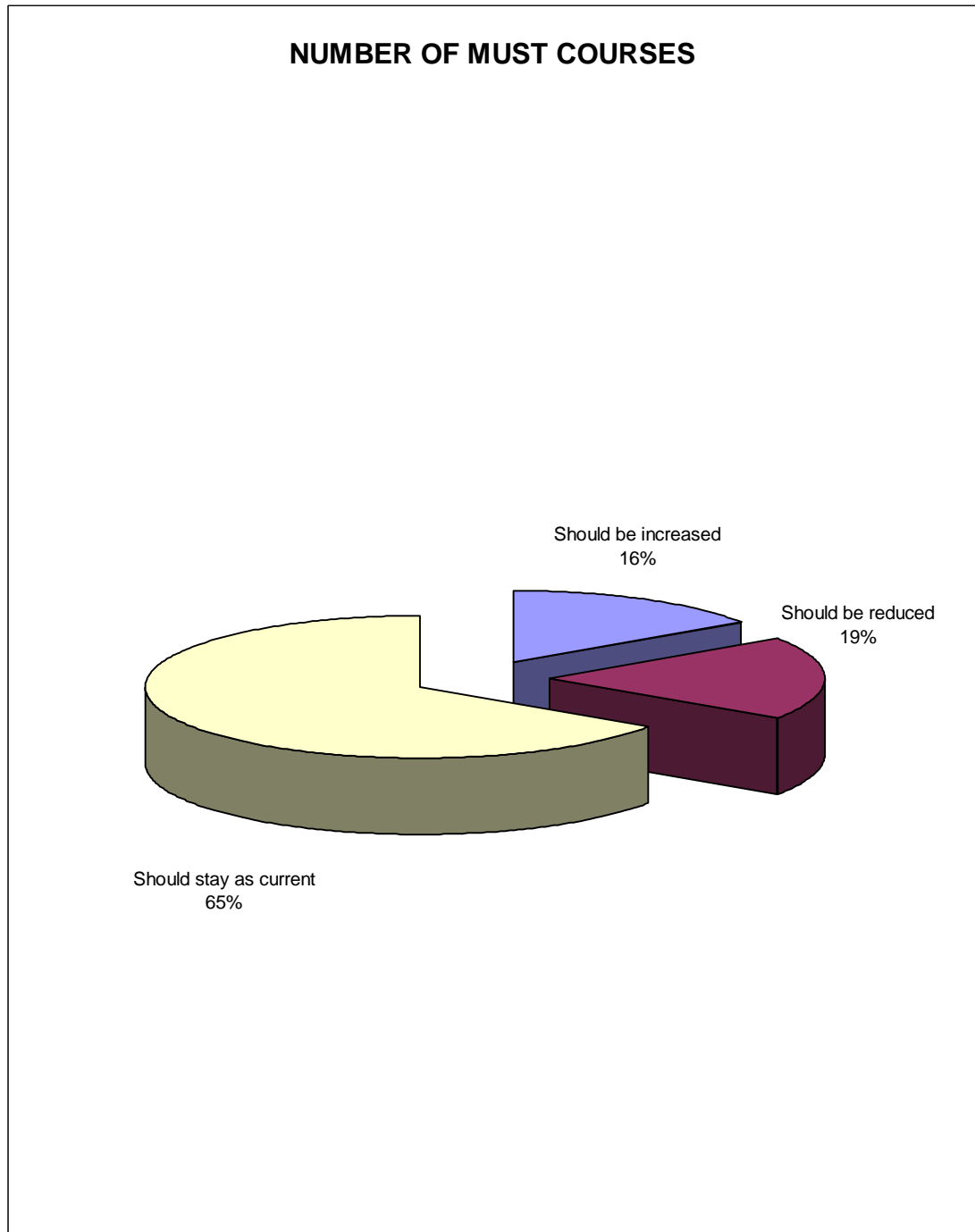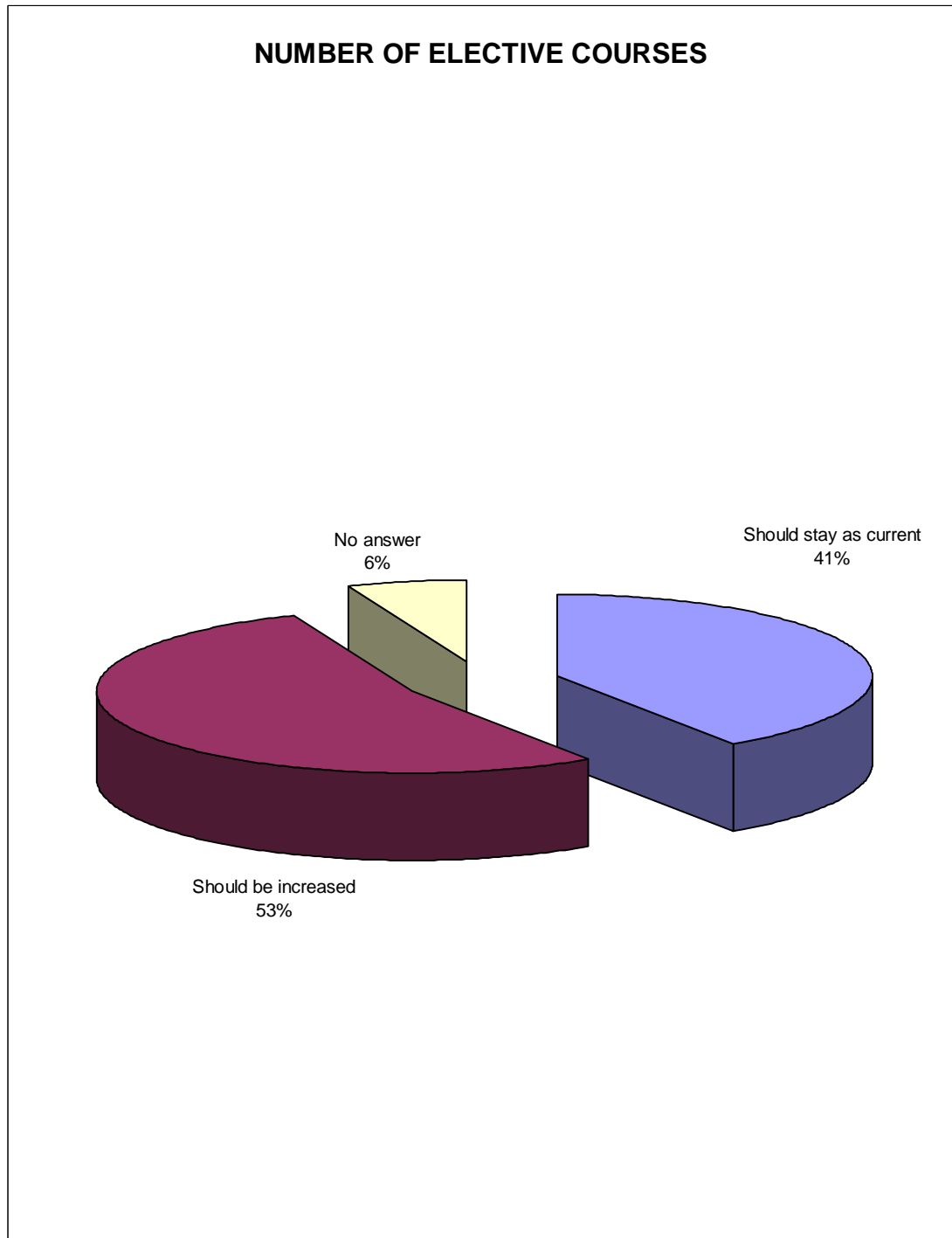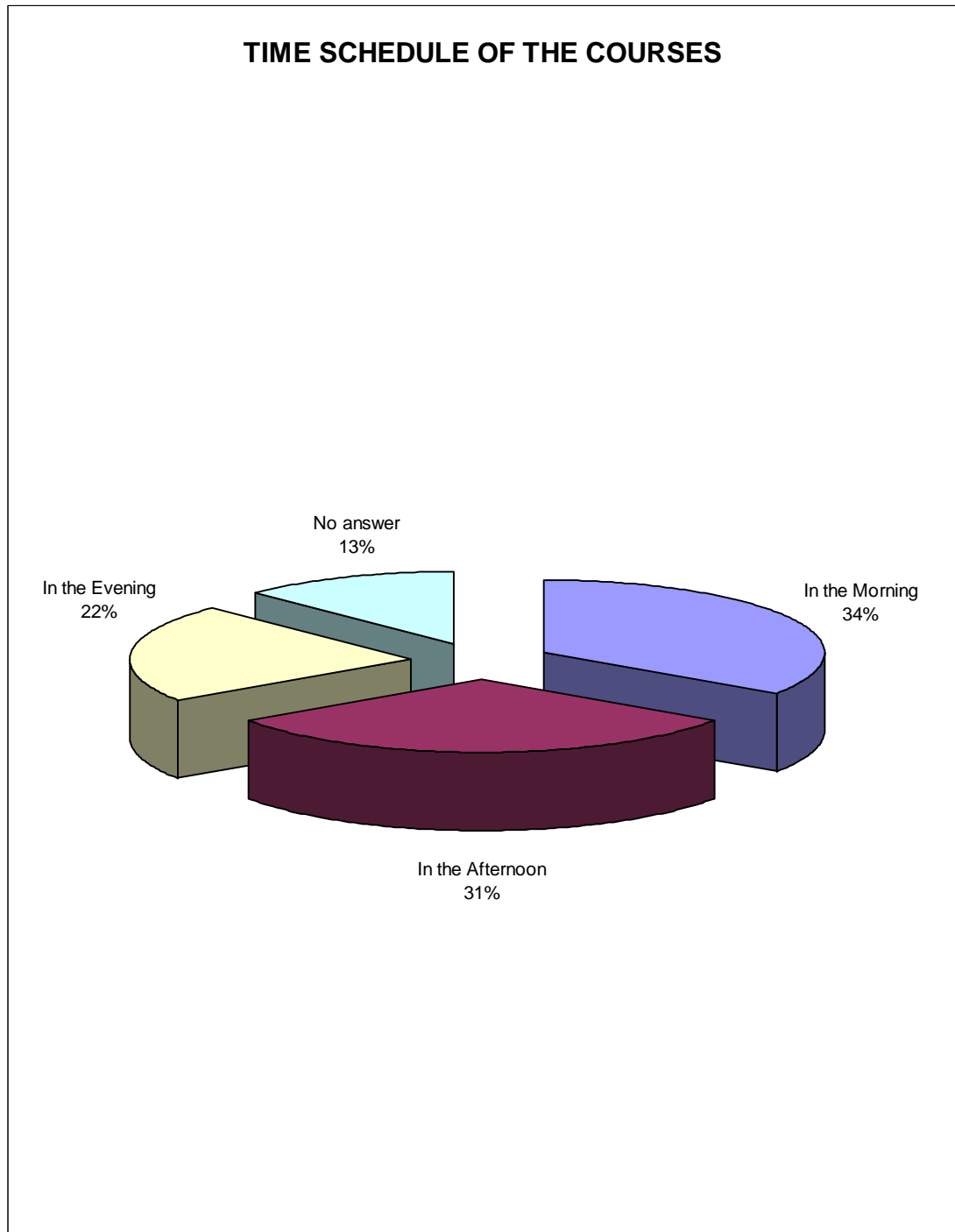
EVALUATION METHODS

EVALUATION METHODS
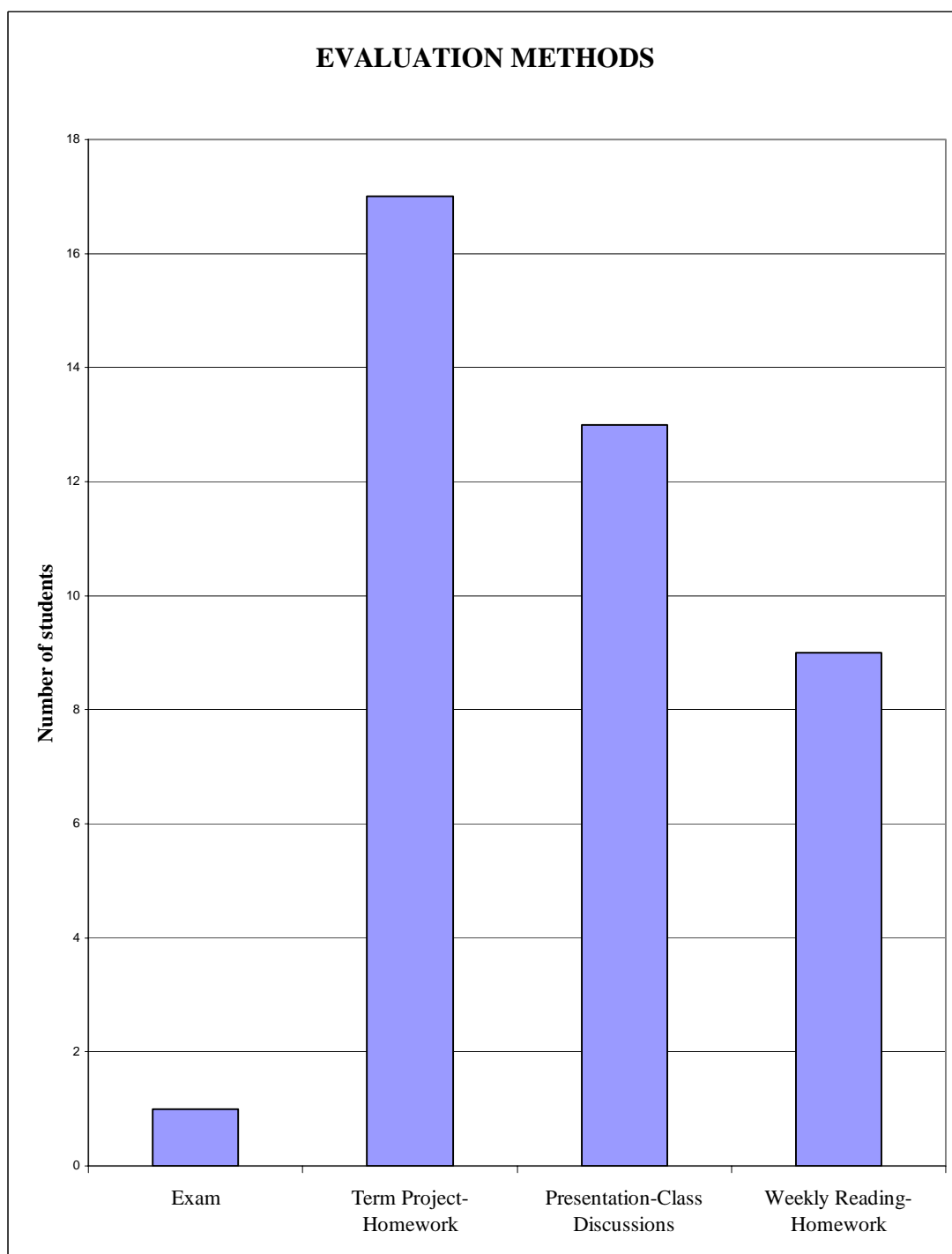
IS STPS GRADUATE PROGRAM KNOWN

IS STPS GRADUATE PROGRAM KNOWN

No answer
13%

Known
9%

Does not known
78%
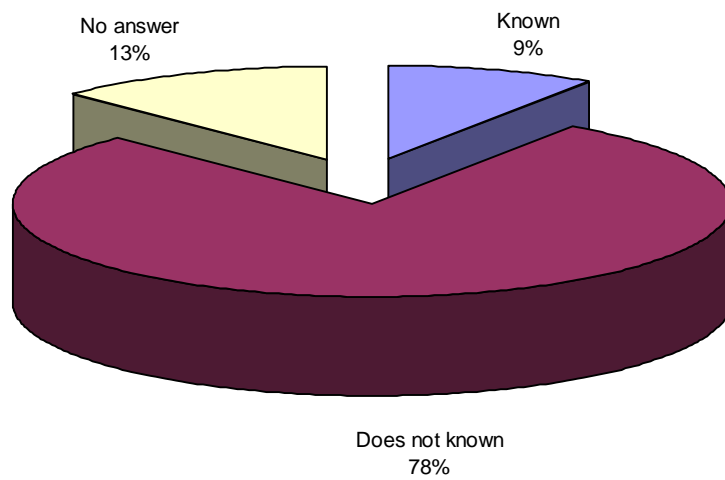
APPENDIX-K

QUESTIONNAIRE ABOUT SCIENCE AND TECHNOLOGY POLICY STUDIES (STPS) GRADUATE PROGRAM

The questions in this form are prepared to learn the expectations and to improve the performance of STPS Gradute Program. The results of the questionnaire will be evaluated with statistical methods.

1. Gender

   ( ) Man   ( ) Woman

2. Military Duty

   ( ) Completed   ( ) Postponed   ( ) Not Applicable

3. STPS Program Type

   ( ) With Thesis   ( ) Without Thesis

4. Undergraduate Background

   ( ) Social Sciences   ( ) Natural and Applied Sciences

5. Graduate Cumulative GPA

   ( ) 3.80+ ( ) 3.50-3.80 ( ) 3.25-3.49 ( ) 3.00-3.24 ( ) 2.50-2.99

   ( ) 2.00-2.49 ( )1.50-1.99

6. At which semester are you registering now (except the semesters that you got permission of not to register) ?

   ( ) 1   ( ) 2   ( ) 3   ( ) 4   ( ) 5 ( ) 6   ( ) 6+

7. Did you ever got permission of not to register ?

( ) Yes   ( ) No

If Yes, its duration _____

8. Are working full-time at a company ?

( ) Yes   ( ) No

If Yes, for how many years ? _____
In which sector ? _____

9. Does the company at which you are working support your graduate education ?

( ) Yes   ( ) No

10. Will your working status (title, salary..etc.) be effected from your graduate degree ?

( ) Yes   ( ) No

11. Are you planning to continue your education by getting a Ph.D degree after graduation?

( ) Yes   ( ) No

12. If you want to get a Ph.D degree, at which area do you want to study?

( ) Social Sciences   ( ) Natural and Applied Sciences

13. Do want to get a Ph.D degree from abroad ?

( ) Yes   ( ) No

14. If you are writting your thesis, at which area does your thesis advisor study?

( ) Social Sciences   ( ) Natural and Applied Sciences

15. Number of must courses in STPS Graduate Program

( ) Should be increased   ( ) Should be decreased   ( ) Should stay as current

16. Is the number of elective courses offered enough ?

( ) Yes   ( ) No

17. Course hours should be in

( ) The Morning   ( ) The Afternoon   ( ) The Evening

18. How should the course hours be scheduled ?

( ) All must courses should be on the same day

( ) They should be on different days

( ) They should be given as a block in the evening

( ) They should be given as a block in the afternoon

19. Do you think that STPS Graduate Program is known by a great number of people?

( ) Yes   ( ) No

If your answer is no, what kinds of things should be done?
_____
_____

20. Any suggestion about STPS Graduate Program
_____
_____

OPEN EDUCATION FACULTY

Dean

Faculty Board — Executive Board

Vice Dean

Vice Dean
- TV Production and Broadcasting

Vice Dean
- Test Research Center
- Academic Counselling General Coordinator
  - Academic Counselling Centers (AOF)
  - Academic Counselling Centers (Other Universities)

Vice Dean
- Books and Printed Material
- Printed Material Distribution
- Tourism and Hotel Administration Program Summer Training

Distance Education Department

Continuous Education Department

Economics and Administrative Sciences Department
- Business Administration
- Accounting
- Public Relation
- Social Sciences
- Office Management
- Home Economics
- Local Adminis. Management
- Banking and Insurance
- Foreign Trade
- Medical Institutions Management
- Sales Management
- Tourism and Hotel Management

Health Programs
- Nursing
  - Midwifery
  - Health Technician

Other Programs Coordinator

Central Office (Eskişehir)
- Student Administration (AOF Faculty of Economics, Faculty of Business Administration)
- AOF Provincial Offices
- AOF Lefkoşa

AOF Cologne Office
- Student Administration
- Academic Counselling

Faculty General Secretary

Revolving Fund

Public Relations

Computer Assisted Academic Counselling

68

APPENDIX-M

FACULTY OF BUSINESS ADMINISTRATION

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                        ┌──────────┐
                        │   Dean   │
                        └──────────┘
      ┌───────────────┐      │      ┌────────────────┐
      │ Faculty Board │──────┼──────│ Executive Board│
      └───────────────┘      │      └────────────────┘

      ┌──────────────┐              ┌────────────────────┐
      │  Vice Dean   │              │ Faculty General    │
      └──────────────┘              │ Secretary          │
                                    └────────────────────┘
      ┌──────────────┐              ┌────────────────────┐
      │  Vice Dean   │              │ Revolving Fund     │
      └──────────────┘              └────────────────────┘

      ┌───────────────────────────┐
      │ Department of Accounting, │
      │ Finance and Quantitative  │
      └───────────────────────────┘
      ┌───────────────────────────┐
      │ Department of Marketing   │
      │ and Production            │
      │ Management                │
      └───────────────────────────┘
      ┌───────────────────────────┐
      │ Department of Business    │
      │ Administration and Human  │
      │ Resources Management      │
      └───────────────────────────┘
      ┌───────────────────────────┐
      │ Department of Business    │
      │ Administration            │
      └───────────────────────────┘
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FACULTY OF ECONOMICS

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                          ┌──────────────┐
                          │     Dean     │
                          └──────┬───────┘
        ┌────────────────┐       │        ┌────────────────┐
        │  Faculty Board │───────┼────────│ Executive Board│
        └────────────────┘       │        └────────────────┘
                                 │
                                 │
        ┌──────────────┐              ┌──────────────────┐
        │  Vice Dean   │              │ Faculty General  │
        └──────────────┘              │    Secretary     │
                                      └──────────────────┘
        ┌──────────────┐              ┌──────────────────┐
        │  Vice Dean   │              │  Revolving Fund  │
        └──────────────┘              └──────────────────┘

        ┌──────────────────────┐
        │ Department of Public │
        │       Finance        │
        └──────────────────────┘

        ┌──────────────────────┐
        │ Department of Public │
        │     Management       │
        └──────────────────────┘

        ┌──────────────────────┐
        │ Department of Labor  │
        │ Economics and        │
        │ Industrial Management│
        └──────────────────────┘

        ┌──────────────────────┐
        │ Department of        │
        │ Economics            │
        └──────────────────────┘

        ┌──────────────────────┐
        │ Department of        │
        │ International        │
        │ Realtions            │
        └──────────────────────┘
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