''ASPECTS OF SCHOLARS CONCERNING DATA TECHNOLOGY COURSES IN SOCIAL SCIENCE''

KOITH BITHON; JHONESON POUDDY; PAVID GOLIEANA

ABSTRACT

Information Technology (IT) is employed in nearly each space of upper education. However, it can be clearly seen that the number of courses supposed to show the utilization of IT in science is kind of low in Turkey. There is a gap between generations who design curriculum and who take classes at universities. If we have a tendency to take into account digital natives can attend universities before long, it is very important to re-design the curriculums including topics about IT. Besides the number of IT courses in the science curriculum is more than the number of IT courses in the social science curriculum. In this study, the authors aimed to determine the aspects of students about IT courses in social science. In this scope, a questionnaire is conducted to fourth-grade students of the Philosophy Department at Istanbul University who have taken Logic and Computer Practices II class. The form consists of nineteen queries and it's conducted to a hundred and forty students. According to study results, students expressed that IT courses square measure important for his or her future calling and geographic point. They believe that it's necessary to feature varied IT courses like workplace programs, data management, web design, database, and programming languages to the curriculum in social science at higher education institutions.

Keywords:-

Higher education, IT courses, philosophy education, social science.

1. Introduction:-

Human needs sometimes can be considered as critical factors which act in shaping the social processes. Today, information and technology become vital virtually in each field and additionally society is currently brought up as information society. Information Technology (IT) which consists of an integration of computer and communication tech-

nologies, and especially effects on developments in communication technologies infrastructure (Tahirov, 2009), has been one of the important and effective sub-branches of today's world of technology. IT is defined as tools that help to produce, collect, accumulate, process, retrieve, disseminate and protect information (Akkoyunlu, 1998). Rapid developments in IT has led to a shift and remodeling in the social structure (Çalık and Sezgin, 2005). Furthermore, the existence of individuals who can use IT effectively will provide the ability to benefit from these technologies at the highest level. However, goals toward changing into Associate in Nursing info society, deficiencies and inadequacies related to user skills about the usage of IT tools and digital literacy level of users cause ineffective usage of information and communication technologies (ICT) and hinders the utilization of overall effect sufficiently (TBMM, 2012). Therefore, developed countries are intended to be literate, to access information, to gain and to develop their skills of using and assessing to information including all members of society until reaching the 21st century which is the age of information and technology (Önal, 2010).

Only in the last 10 years, changes and developments in the internet and mobile technologies affected business and services in various fields to perform their operations online. Furthermore, our daily and professional life is changed because of these changes within the needs of up to date society (Hamiti et al., 2014). Many tools that we use in our existence is modified with technological development. We can give many examples of this change such as from the box office where we buy tickets to machines which we fill our cards, from queues at banks to internet and mobile banking, from phones which sent images as its biggest function to smartphones which give an opportunity to almost every transaction.

Working life is not much different from daily life. Today, developments in IT, especially increment of internet infrastructure and usage network, considerably result each sector; economic integration that has occurred with the disappearance of borders between countries has changed quality and structure of provided services significantly with these developments (Özbilgin, 2003). In addition, advances in technology entail redefinition of professional requirements at the organizational level the workplace environment, health and safety at workplace reorganizing and restatement of business plans, job descrip-

tions (Göktürk, 2007). Therefore, the new job descriptions which will be organized in line with technological progress or new rules in existing fields can produce new jobs. However, at this point providing competitive edge will depend on the effective use of IT tools. Education is defined as the process of changing the behavior of individuals in the desired way (Genç ve Eryaman, 2008). At the same time, considering the purpose of education which is educating individuals towards needs of the community, it is clear that education has a quite important role in bringing up students for this IT era (Varol, 2002). High schools have an important role to provide IT education for students and to make them ready for the global IT workforce (Csapo, 2002 in Randall and Zirkle, 2005). In schools, large amounts of money are spent on computers/computer technologies but the more important issue is the educational effectiveness of these technologies after integration to classrooms (Wilmore and Betz, 2000). The use of technology in education has increasingly gained importance as technology education. In recent years, notably, the employment of mobile technology in education is widespread. However, social sciences are considered to be less of studies in this field. Shih et al. (2010), specify that the employment of mobile learning technologies for social sciences square measure according to less often than for the opposite sciences has technique-oriented content that develops the structural or systematic knowledge or skills of students.

According to these ideas, new education methods and programs ought to be developed, IT ought to be used effectively as Associate in Nursing education instrument (Gülseçen and Kubat, 2006), because, instructional life while not IT or IT tools is no longer possible for students and even for lecturers especially at higher education. Registration operations, searching book on a library, attending online courses and exams, communicating with the course lecturer, etc. are some simple examples in terms of students. On the other hand, lecturers are trying to adopt IT for their courses and follow the developments for their students.

2. General Rationale and Hypothesis

Specifically, universities, which are the most important institutions contribute a country's development and which provides the needed international qualified manpower by per-

forming high levels of education and training activities at programs organized its internal structure training (Günay, 2004), is now trying to do own share in this new structure. In the process of restructuring, the importance of acquiring the skills needed for higher education for individuals are increasing day by day (Saatçioğlu et. al., 2003) and IT usage is one in each of these skills. These developments and new applications are quite proper because one fact that we should take into account is nature of science that requires collaboration between researchers whether they are working in the same area or not. For example, a man of science WHO works at the business administration department will like a software package that helps to analyze data about customer behaviors and also the researcher need to know how to use this software. Another fact is sometimes students in higher education can be not curious enough to search about their studying area. In such cases, the only key is lecturers who can guide them to meet IT and IT tools. Moreover, it is important to decide which IT courses should be added to curriculums. At this point, when curriculum contents at universities in Turkey are examined, it is seen that the fundamentals of IT courses have already existed. However, once more we've to raise ourselves following questions: area unit these courses enough for students? Area unit students thinking that the IT courses that they need taken necessary for his or her business life? How should IT education be according to students? And related to the previous question what are student expectations from universities? Authors are inspired by these questions and the questions have become the start line.

In this study, it is accepted that IT education is disregarded at social science little more than science in Turkey. For this reason, it's aimed to gift aspects of scientific discipline students regarding IT courses at pedagogy in Turkey. Accordingly, a questionnaire is conducted to İstanbul University Faculty of Letters 4rd grade Philosophy Department students to find out their opinions about IT.

3. Method

Participants

The sample of the study consists of 140 fourth grade students (102 female and 37 male at the average age of 23) from the Department of Philosophy United Nations agency

had taken the course named "Logic and portable computer Practices II".

Data Collection Tool

Questionnaire (see Appendix), which is prepared by authors, is used as a data collection tool. The questionnaire consists of 19 questions. Two of them are demographic questions, 8 multiple choice questions are prepared to determine IT usage and IT education at universities and eventually, it has 9 open-ended questions.

Data Analysis

Percentage and frequency tables are used to analyze data. Data analysis is performed with IBM SPSS Statistics 22.

Internal Validity of the Study

The questionnaire used as a data collection tool has been applied to students one to one. There has not been any redirection. There was not any question that has a clue about the identity of the students. Age and gender were the only demographic questions of the questionnaire. Authors analyzed responses by themselves.

External Validity of the Study

Considering the research group of the study, we can say that the results can be generalized limitedly. Generalizability of the results is possible for students who have the same education and features. Brief information about the questionnaire is given to students before it is conducted.

4. Findings:-

One hundred and forty students have responded to the questionnaire, but participants have left blank some of the questions. seventy-three of them (102 students) is feminine and twenty-sevenths of them (37 students) is male. Ages of students are between 21 and 42, the average is 23. 94% of students (131) has and only 6% of them (8) has not a computer. Table 1 shows IT usage, general success rates and class assessments of students who participated in this study.

Table.1. IT usage, general success rates and class assessments of the students

Questions	N	Minimum	Maximum	Mean	Std. Deviation
How many years have you been using computer?	138	1,0	24,0	9,678	3,7337
How many years have you been using internet?	136	1,0	18,0	8,426	3,3871
How many hours do you spend time on internet?	128	1,0	24,0	3,316	2,7125
What is your Weighted Grade Point Average (AGNO) at the end of the 7th term?	118	1,80	3,53	2,7208	,35644
Please evaluate your "Logic and Computer Practices II" course performance.	138	1,0	10,0	6,772	1,6535

Responses of "How do you describe yourself once it involves technology?" question are given with the frequency and percentage rates in Figure 1.
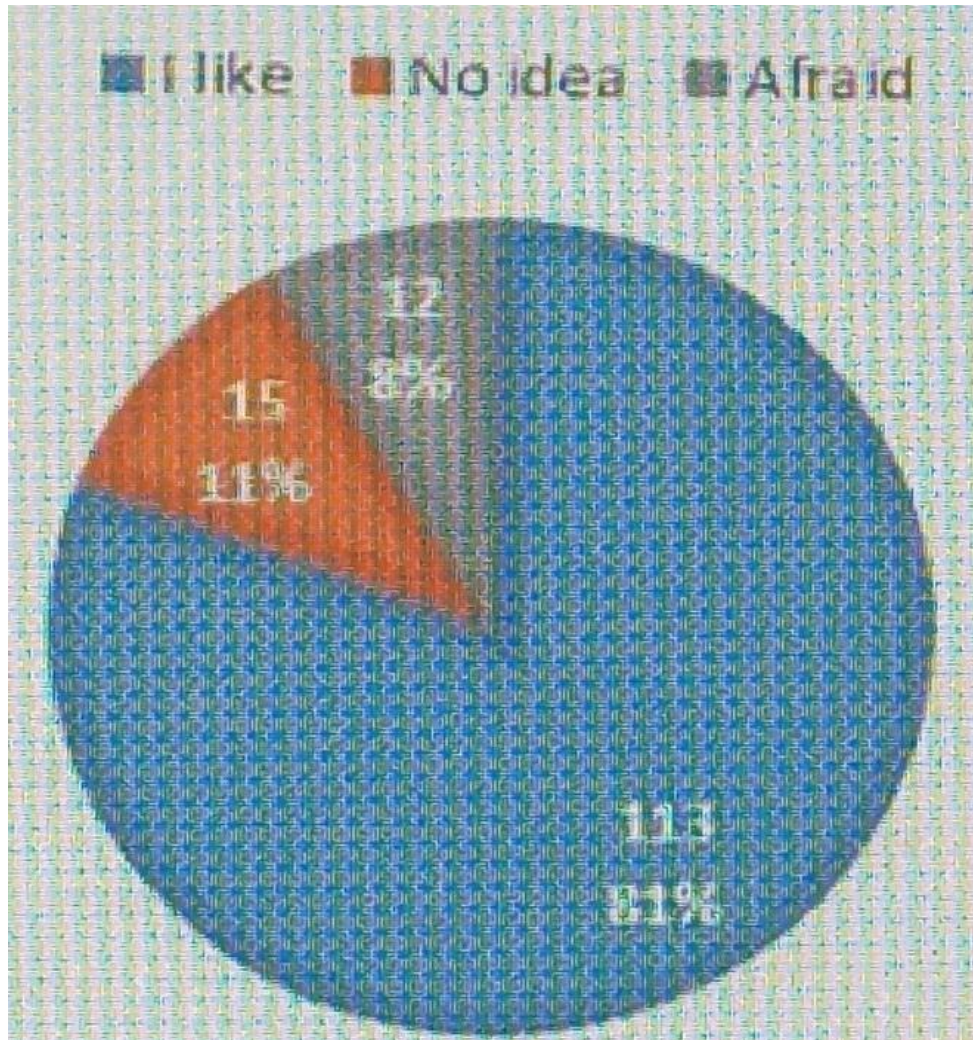
Figure 1. Attitude of the research group on technology.

Responses of "if you are thinking that IT courses that you just have received at university is it sufficient?" and "Do you think that IT courses area unit necessary for your business life?" queries area unit given with frequency and share rates in Figure a pair of – A and Figure a pair of – B severally.
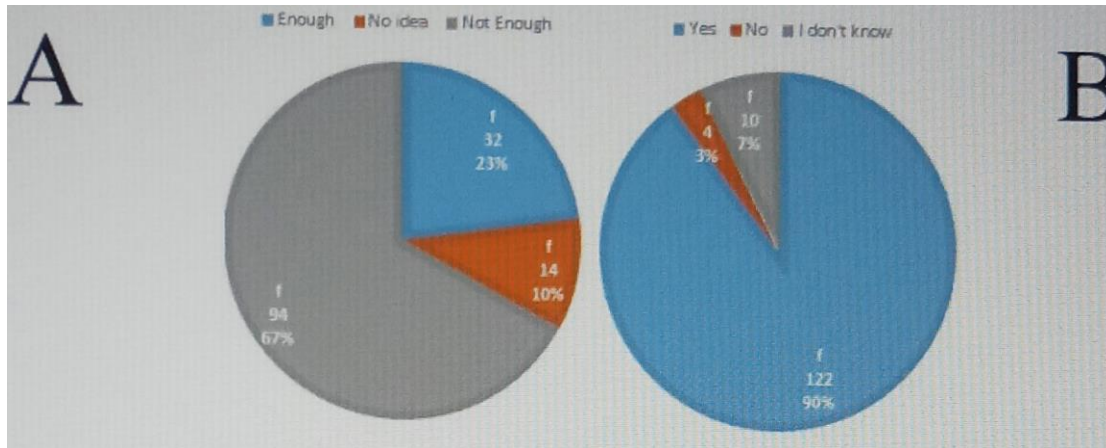
Figure 2 Aspects of students about IT education.

Responses of "What do you do on internet?" question is given with frequency and proportion rates in Table a pair of 2

Table 2. Things that students can do on internet

Option/Choice	F	%
Email	123	87,9
Forum	49	35,0
Group	80	57,1
Social Media	124	88,6
Search Engine	127	90,7
Blog	29	20,7
Learning Management System	20	14,3

As it is seen in Table 2, most of the participants (90.7%) are using the search engine, 87.9% of them are using email and 88.6% of them are using social media. Usage rates of a blog (20.7%) and Learning Management System (14.3%) are lower.

"What does one favor to use in their instructional life !!" question is given with frequency and percentage rates in Table 3.

Table 3. Student expectations from internet during their educational lives.

Option/Choice	F	%
Email	111	79,3
Forum	42	30,0
Group	86	61,4
Social Media	99	70,7
Search Engine	82	58,6
Blog	30	21,4
Learning Management System	33	23,6

"Which course/courses does one choose to take throughout your instructional life at university?" question is given with frequency and share rates in Table four.

Table 4. IT courses which students want to take at university.

Option/Choice	F	%
Office software (Word, Excel, PowerPoint etc.)	126	90,0
Hardware	52	37,1
Programming Language (C, PHP, Java, etc.)	39	27,9
Statistics Software	24	17,1
Information Management	38	27,1
Database	32	22,9
Web Programming	82	58,6
Other		

"Which of the following device/devices do you prefer to connect to the internet ?" question is given with frequency and percentage rates in Table 5.

Table 5. Device preferences of students to connect to internet.

Option/Choice	F	%
Desktop PC	44	31,4
Notebook	102	72,9
Tablet	42	30,0
Smart Phone	92	65,7

It is obtained that once students area unit divided into teams per their own description once it comes to technology, three groups have nearly the same average about evaluation of their "Logic and Computer Practices II" course performance: i prefer technology (6.8), I actually have no plan (6.8), i'm frightened of technology (6.7). Male and female students are each most 5-minute wait to open an online page. Average of the percentage of time that female students spend on the internet for research is 29% and an average of the percentage of time that male students spend on the internet for research is 24%.

As Table 7 shows the results of the Independent-Samples T Test which compares computer ownership (Q9) and internet usage in years (Q13), there is obvious to see that in both Equal variances assumed and Equal variances did not assume cases the Sig. (2-tailed) < 0,05. Therefore, web usage of scholars United Nations agency have computers is totally different from students who do not have computers. In addition, if we glance at Table half-dozen, we will see that students United Nations agency have computers have been using the internet more than students who do not have computers.

Table 6. Group Statistics.

	Q9. Computer ownership	N	Mean	Std. Deviation	Std. Error Mean
Q13. Internet usage (in years)	Yes, I have	129	8,636	3,3135	,2917
	No, I don't have	7	4,571	2,3705	,8959

Table 7. Independent Samples Test.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
Q13. Internet usage (in years)	Equal variances assumed	,882	,349	3,196	134	,002	4,0642	1,2718	1,5488	6,5796
	Equal variances not assumed			4,313	7,336	,003	4,0642	,9422	1,8567	6,2718

5. Discussion and Conclusion:-

Considering the demographic information of students, they have been using a computer for approximately 10 years and the internet for 8 years. They spend time on internet 3,3 hours per day. Students usually access the internet via notebooks or smartphones (Table 5). Although the average of AGNO is 2.7, their self-performance assessment of "Logic and laptop Practices II" course is vi.7 (1: The worst, 10: The best). Most students (81%) like technology (Table 1). For this reason, the sample cluster consists of scholars United Nations agency principally like technology, use pc and internet, can be classified as experienced and are above average in both general and course cases. Most of the students (67%) think that IT courses, which they have taken at university, are not sufficient. Furthermore, 90% of the students do not think that they will need this information for their business lives.

On one hand, most of the participants ar exploitation email, social media and search engines (Table 2). They also want to use these technologies during their educational life and their preference rate is higher when it comes to filing sharing and communication with over one person (Table 3). On the opposite hand, Table 3 shows that usage of blogs, Learning Management System and forums is lower. It is thought that the reason of this low rate has arisen because of their lack of data concerning connected subjects (At Table two, it can be easily seen that students are using them less than others). Courses that students value more highly to take throughout their instructional life at university ar severally (from the foremost wanted): Office software (word, excel, power-point, etc.), web programming, hardware, programming language (c, PHP, Java, ..), information management, database, statistics software (for example SPSS, …) (Table 4). Many organizations ar trying to find workplace software package usage talent nowadays therefore it's traditional to be at the highest of the list for workplace software. However, it's expected that data management and statistics software package (for example SPSS, …) should be at the top of the list. This order is formed with lack of information about these terms more than requirement analysis.

If we have a tendency to take into account students at universities area unit generation Y and generation Z is getting ready to begin university life, it is obvious to see that it is

necessary to shape education contents according to IT needs in social science as well as other sciences urgently. This study can be extended to a student who studies at other departments in social science or to students who study at the same department but from different national and international universities, so expectations of students can be determined clearer.

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AUTHOR AFFILIATION

KOITH BITHON

JHONESON POUDDY

PAVID GOLIEANA