

Perceptions about e-Learning in Saudi Arabia

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Saudi Arabian education system is under stress to provide additional educational opportunities for increasing population and a desire to increase literacy rate. The capacity growth rate of existing Saudi educational institutes doesn't match the current growth rate in enrollment demand. Internet offers a viable and cost effective alternative to formal classroom learning. Internet based distance learning is still in its infancy in the country. As it happens with any change, the public perception is not in favor eLearning over formal classroom based raining. In this paper we report the user perceptions about distance learning. These responses are part of a broader study that covers the use and effect of Internet in Saudi Arabia.

Introduction

The rapid technological advances, shifting market conditions, rapid obsolescence of existing knowledge and increasing population are challenging the education systems to provide additional educational opportunities without increasing budgets. The answer to this challenge is to develop distance education programs. Traditionally these programs are considered useful for adults who missed college education, those who have time and distance constraints, physical disability and workers who want to update their knowledge at their places of work^{0,0}. Now anyone is potentially a distance learner, a concept that has implications for educational institutions and teachers.

In its simplest form, distance learning takes place when a teacher and student(s) are separated by physical distance⁰. The teacher student interaction can take place using voice, video, data and print (by correspondence). The United States Distance Learning Association defined distance learning as "the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance"⁰. These definitions are general because they don't distinguish formal and informal learning, or different types of distances (temporal and physical). A form of distance learning that uses Internet and Internet technologies as a medium to impart training is known as Electronic Learning (e-Learning).

Advances in information and communications infrastructure, capacity, functionality, and reduction in cost have increased the use and access of information technology for educational purposes. Moreover, information and communication technology is suitable for evolving art of teaching that is constructivist, interactive, collaborative, learner centered, and just-in-time. Perhaps more than any other distance media, the Internet and the Web help overcome the barriers of time and space in teaching and learning. The use of Internet for eLearning offers many advantages over traditional distance learning modes. Some of these advantages are: time and place flexibility; potential to reach a global audience; quick deployment and easy updating of content; no concerns of compatibility of hardware and software and archival capabilities^{0,0}.

In Saudi Arabia, public access to Internet was allowed in April 1997. After a slow start for few years, Internet subscription and use is rapidly increasing. In last three years around 700,000 users have become on-line. However, this number is still a small fraction (2.6%) of overall population. Saudi Arabia is one of few countries where Internet content is filtered in order to make it suitable for the society. After four years of public Internet access, a need was felt to find out the effects of Internet use in the country. King Abdul Aziz City of Science and Technology (KACST) decided to fund a study that will explore the use of Internet along three major topics: social uses and effects of Internet in society, implications of the Internet technology for education, and business uses of the Internet. Exploring these three major topics results in the identification of few more topics of study which can also be investigated through this study. These topics are: the availability of Arabic content on the Internet and the prospects of distance learning in Saudi Arabia. For these purposes, we are running a web-based on-line questionnaire and analysing the responses. In this paper we have reported our findings for distance learning (e-learning) of Internet use in Saudi Arabia.

This paper is organized as follows. In Section 2 we will cover the need of eLearning in Saudi Arabia. The subsequent section will cover the current status of eLearning in the country. The paper ends with conclusion in Section 4.

Need of e-Learning in Saudi Arabia

The Internet has the capability to level the learning needs of variety of individuals. Whether it is a high school student looking for assistance with some mathematical problem or a full time employee seeking a university degree through distance education program, distance learning can satisfy their needs. Individuals now have the power to learn on their own time and pace. Being such a promising technology, an effective e-Learning system can ignite a sweeping revolution in education which will empower the society to school the illiterate, bring job training to the unskilled, open a universe of knowledge to students at all levels, and enrich the understanding of the lifelong learner. This will definitely improve the technical skills of the national workforce, and guarantee a continued supply of highly qualified technical personnel capable of improving the country's productivity.

In addition to offering more up to date information through links to reference material on related sites, eLearning ensures the quality and uniformity of content since the educational material is instructor-independent.

With over 50% of the country's population under the age of 20 and one of the highest birth rates in the world, Saudi Arabian higher education institutions have been facing a growing demand for enrollment. The capacity growth rate of existing Saudi universities doesn't match the current growth rate in enrollment demand. This has resulted in overcrowded classrooms with a consequent reduction in the quality of learning. Saudi schools at various levels, elementary, primary and secondary are also facing the same problem but at a much smaller scale.

A viable eLearning system represents an excellent cost-effective solution to these problems. Furthermore, it addresses other problems such as shortage of instructors, sparsely located schools and educational needs of population in remote areas. In addition, compared to closed-circuit-TV lecturing, eLearning can offer a more attractive solution to problems specific to girls' higher education.

eLearning in Saudi Arabia

eLearning is still in its infancy in Saudi Arabia. Currently the emphasis has been to improve the use of information technology in curriculum and resource development and establishing electronic communities. In this regard a project has been launched to connect schools and educational directorates by means of a wide area network covering the entire country⁰. This project is known as WATANI Schools' Net project. The project is also going to establish local area networks within every educational directorate. The Schools' Net Project will provide every student, teacher, parent and educator with a multitude of services and a huge source of reference information. The resources will be mostly developed in Arabic Language and involves the technological training of more than 300,000 male and female teachers and other support staff. This phase of the project involves use of on-line training for teachers and support staff.

During the course of our study project entitled "Use and Effect on Internet in Saudi Arabia" we conducted a web-based survey to solicit responses from users to determine use and effect of Internet in Saudi Arabia. In the following paragraphs we report results and analysis of user views in response to questions related to distance education.

When asked about their preferences for taking a diploma/degree at home or at class, almost 35% of the respondents either definitely or probably prefer taking the course in a class. Around 29% of the respondents prefer otherwise i.e., definitely or probably at home. A large number of respondents were uncertain (36%). This can be attributed to the fact that the idea of distance learning is new in Saudi Arabia and large portion of respondents are not aware of importance or significance of this medium.

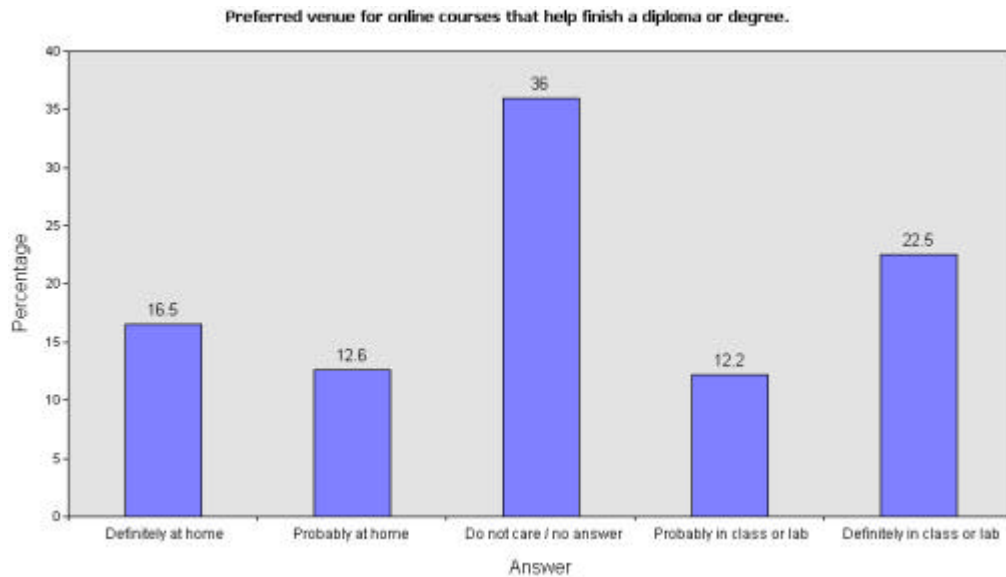


Figure 1: Preferred venue for on-line courses that help finish a diploma or degree

The most compelling reason for taking courses on the Internet is that the users like computers. Almost 41% of the respondents have selected this option. The other major reasons (in order of importance) are: learning from own home/own place, promotion, fun or experience, non-availability of course in school, and to get higher degree.

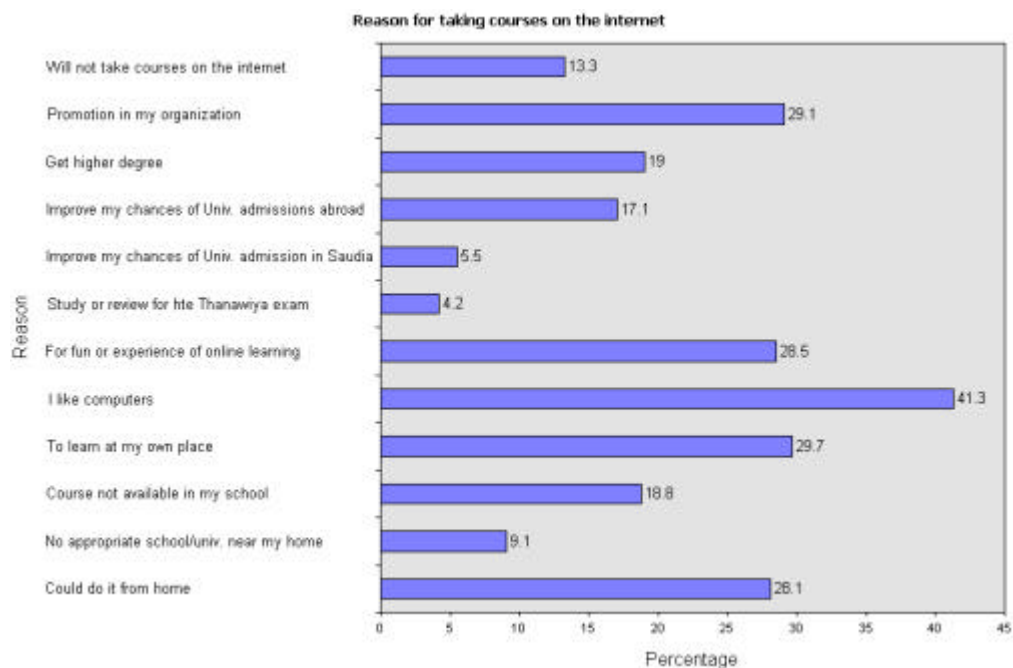


Figure 2: Reasons for taking courses on the Internet.

The non-accredited status of on-line courses over the Internet in the Kingdom is the known major reason for not taking on-line courses. The other reason is the non-interaction with other students and faculty. Figure 3 summarizes these findings. In light of these findings, we can say that in order to promote distance learning, the government should come up with regulation and accreditation plans so that companies/universities willing to offer distance-learning courseware can start planning for offering such courses.

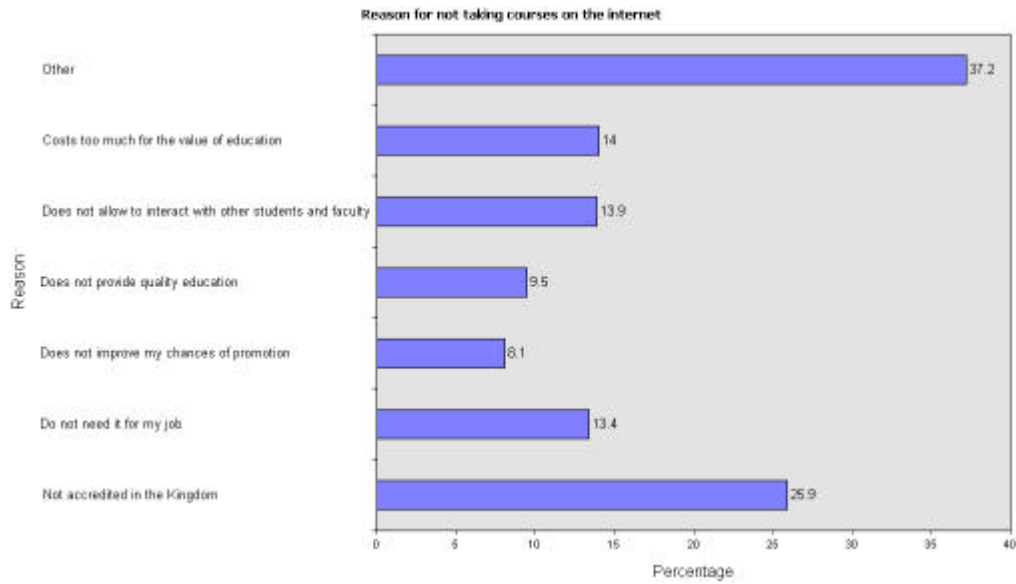


Figure 3: Reasons for not taking courses on the Internet.

We try to identify the types and levels of courses in which users are interested. According to our survey, users are interested in online courses to upgrade their skills (40%), special training courses for jobs (28%) and for University degree (23%). On the other hand they are not at all interested in high school (43%), home schooling whether schools are available (35%) or not (33%). These results are tabulated in Table 1. In accordance with the user responses, we can say that the first segment where distance learning can be used is adult education for on-job training. This education is meant for those who have already gone through the traditional education system. This education will upgrade skills of the participants for advances in their field and will cater for job oriented training courses. Private companies can take advantage of these findings to come up with solutions related to distance learning for professionals.

Generally it is believed that Saudi Arabia being a segregated education system where male and female students take their education in separate institutions, women will prefer to take distance learning classes at home than men. However, according to our findings gender doesn't affect user responses. Only 30% male and 26% female users prefer to take distance-learning courses at home. This can be seen in Figure 4.

Table 1: Types of on-line courses users intend to take on the Internet

Type of Course	Very Interested	Little Interested	Neutral	Not Much Interested	Not at all Interested
Remedial education	12.6	10.2	38.4	7.2	31.3
High school	5.6	4.2	34.9	7.7	47.3
University degrees	18.4	9.3	33.8	5.7	32.3
Home schooling (instead of attending school)	7.4	6.8	37.6	8.2	39.3
Home schooling (where no schools are available)	8.3	4.7	39.3	7.0	40.1
Special training courses for jobs	27.7	11.9	34.5	4.4	20.7
Telemedicine	10.9	10.5	43.8	7.5	26.5
Learn new household skills	14.7	13.2	41.7	6.3	23.2
To upgrade my skills	40.1	15.9	32.7	1.7	8.6
Other reasons	5.6	3.7	57.9	2.6	28.0

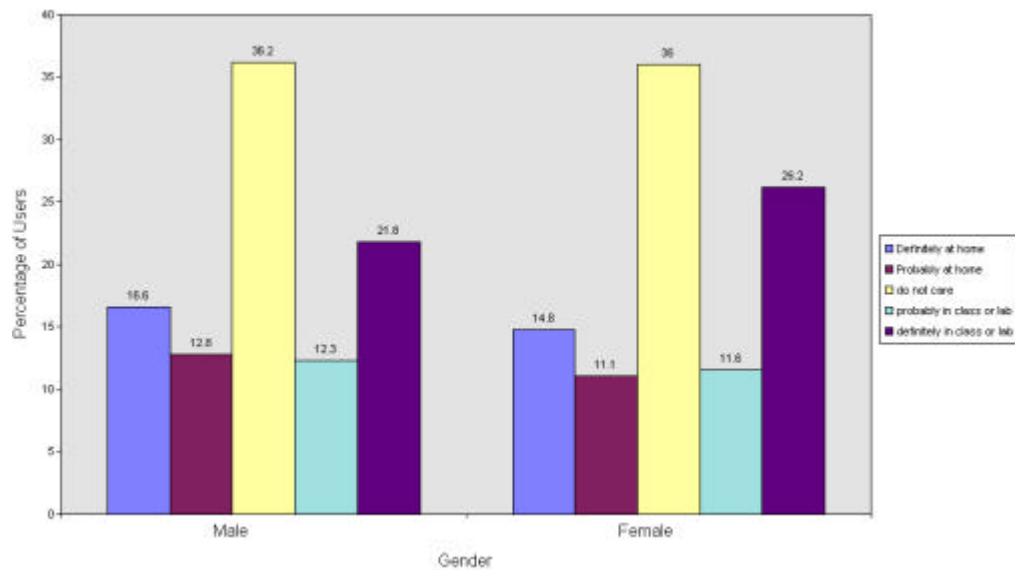


Figure 4: Effect of gender on preference of venue for taking on-line courses

Similar results are observed while analyzing the effect of gender on types of courses to be taken online or otherwise. Responses of male and female are more or else identical on this issue too (Figure 5).

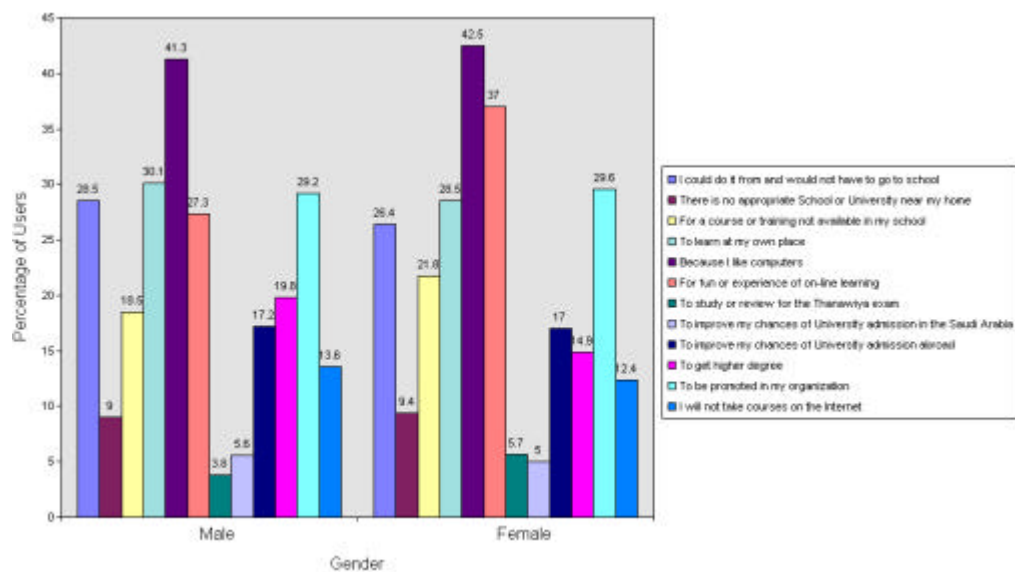


Figure 5: Effect of Gender on Reasons for Taking Courses on the Internet

It is observed that residents of rural areas are more inclined to take remedial and high school education through distance learning means than their counterparts in big cities. Analyzing the respondent's interests in different level of education through distance learning and their place of residence makes this observation. Two sample results are shown in Figure 6 & 7.

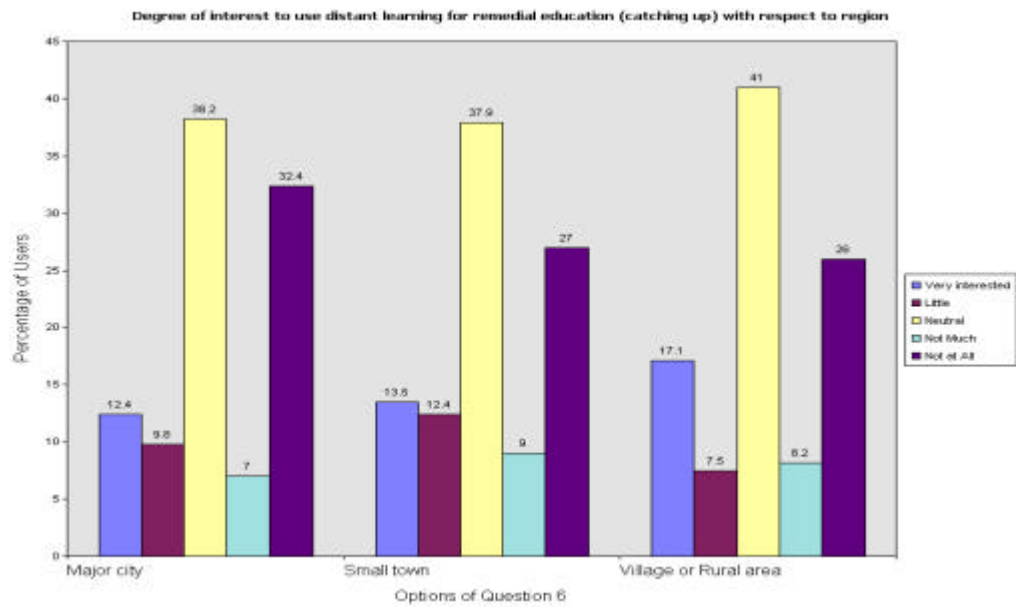


Figure 6: Effect of region on respondent's interest in taking remedial education through distance learning means

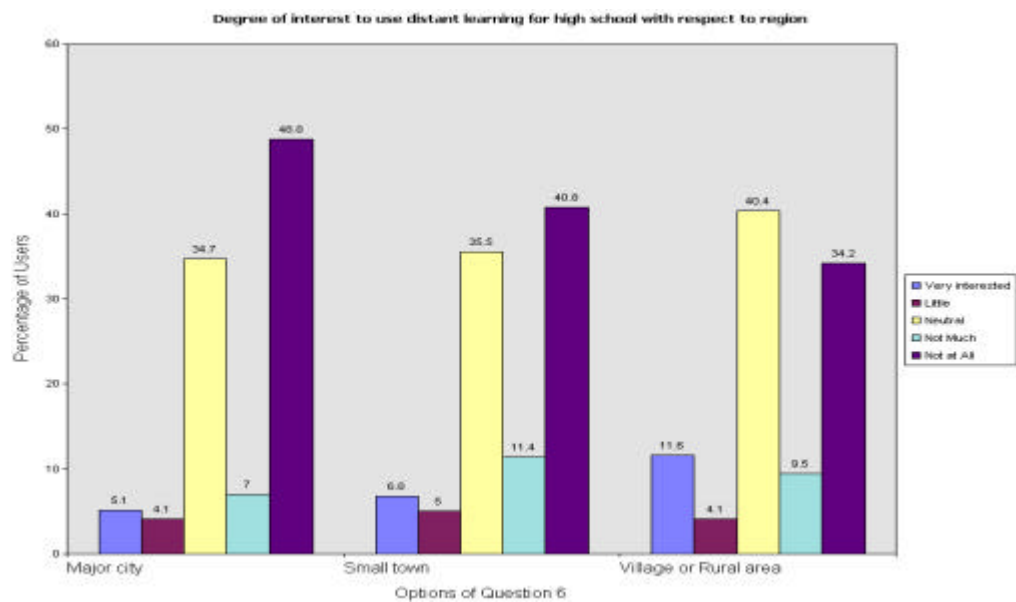


Figure 7: Effect on region on the respondent's interest to attend high school through distance learning means

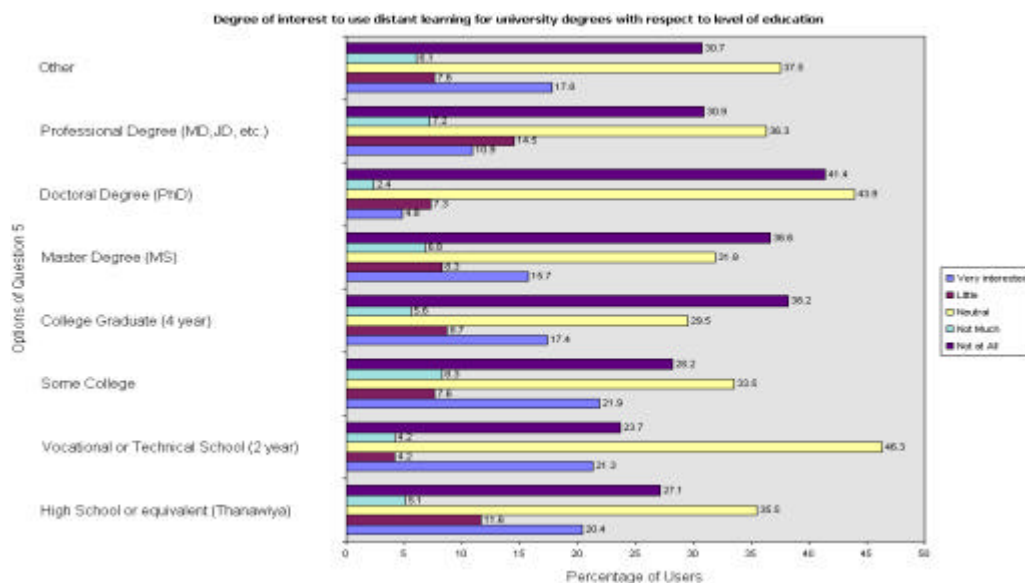


Figure 8: Effect of respondent's education level on their preference to attend university degree through distance learning means

As the education level of respondents increase they are less interested in taking distance learning means to improve their education level like getting university degree or taking remedial education on-line. This is probably due to the reason that distance education degrees are not accredited in the country therefore already educated respondents are not very keen for distance learning. However, those who are less educated or missed formal education are some what interested in advancing their education level through these new avenues. Figure 8 plots these results.

Conclusion

According to our survey, majority of the respondents prefer not to take courses on the Internet. Those who want to take courses on the Internet; they do so because they like computers. The major reason for not taking courses on the Internet is that these courses are not considered equivalent to regular courses in the country and moreover online courses are not accredited in the country. Gender doesn't affect user responses for distance learning. However, respondents living in remote areas and small villages are more interested in receiving distance education then those who live in major cities.

Acknowledgements

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