Current Research in Agricultural Sciences

2014 Vol. 1, No. 2, pp. 35-41 ISSN(e): 2312-6418 ISSN(p): 2313-3716 © 2014 Conscientia Beam. All Rights Reserved.

AWARENESS ABOUT E-LEARNING AMONG AGRICULTURAL RESEARCH SCHOLARS OF BANARAS HINDU UNIVERSITY

Shoji Lal Bairwa¹ --- Kerobim Lakra² --- Pradeep Joliya³ --- Saket Kushwaha⁴ --- Dheeraj Mishra⁵

ABSTRACT

The present study is emphasized on find out the awareness level and perception about e-learning among agricultural research scholars at Banaras Hindu University, Varanasi (Uttar Pradesh) India. This research study is based on the primary source of data which was collected from fifty respondents through structured questionnaire during the year 2013. Statistical tools such as frequency, percentage, and standard deviation were used to analyze the data for making interpretation. In this study, it was found that majority of respondents have a low awareness about e-learning whereby it accounted for 70 per cent of the respondents, 10 have moderate awareness about e-learning and only 20 per cent of the respondents have high awareness about e-learning. Overall awareness of respondents about e-learning tended to be low (M=1.44, SD=0.49, range=9-18). Thus, there is need that government should promote researches on the various aspects of e-learning and maintaining standard of e-learning resources by establishing national level standards of e-resources.

Keywords: E-learning, E- resources, Perception, Awareness level, Agricultural research scholars.

Contribution/Originality

This study is one of very few studies which have investigated awareness level and perception about e- learning among agricultural research scholars and contributes in the existing literature which is necessary for creative learners and agricultural research community during the qualitative research study.

1. INTRODUCTION

The present age is known as age of information and communication technology (ICT). Due to information technology a revolution has been brought in almost every field of life throughout the

^{1,2,3} Department of Agricultural Economics, BHU, Varanasi

⁴Vice Chancellor, L. N. Mithila University, Darbhanga (Bihar) India

⁵Department of Extension Education, Banaras Hindu University, Varanasi

world. As defined by Hall [1] "E-Learning is instruction that is delivered electronically, in part or wholly – via a Web browser, through the Internet or an intranet, or through multimedia platforms such as CD-ROM or DVD". Though E-learning is electronic learning but it seems to be easy learning on the way it is attaining its place in India. E-learning is a very attractive, effective and resourceful tool in enhancing the scope of education across the globe. There are many reasons to opt e-learning as alternative in order to improve quality of education. The major reasons includes saving of time to go for the classroom and highly interactive learning. E-learning is widely reached to masses in India due to its time saving and electronic mode. E-Learning tools, techniques, models and concepts can be applied for business and interactive education. Like in business, industry, engineering and medicine, internet is widely used by teachers and students of the India right from metric to university level, but due to scarcity of resources, infrastructure, this popular and enriched means of learning is not prevalent in education institutions [2]. It can be said that e-learning is riding on the shoulders of the giant (Internet). E-Learning shall enable us to attainment of the objectives and to bring out the overall development of the education.

History timeline of e-learning was divided into four categories viz. Instruction led training (Pre 1983), multimedia era (1984 to 1993), introduction of web - (1994 - 1999) and the text generation web (2000 to now). The framework of e-learning consists of pedagogical dimension, technological dimension, interface design dimension, evaluation dimension, and management dimension, resource support dimension, ethical dimension and institutional dimension [3]. There are various e-learning tools like e-mail, chat, e-mentoring, video-conferencing, e-tutoring, discussion group, internet forum, shared whiteboard, application sharing, instant messaging, virtual classroom, e-lecturing and blog. In this dynamic era, government organizations, corporations and educational institutions have to keep gait with the E-learning phenomenon and make future strategic decisions on how to adopt e-learning techniques in their unique business and educational environments [4].

1.1. Objective and Scope of Study

The present study entitled "A study on E-learning among Agricultural Research Scholars of Banaras Hindu University, Varanasi has been undertaken to find out the awareness and perception by agricultural research scholars towards the e-learning with specific objectives to study the sources of e-learning in agriculture. The finding of the study will have immense practical utility in the field of education. It will helpful to the various agencies which are working for agricultural development through the use of ICT. The study also helpful in different aspect like, strategic planning, implementation of various ICT projects, determining efficiencies and effectiveness of projects related to educational planning and monitoring.

2. RESEARCH METHODOLOGY

Research methodology deals with various methods and procedures used with respect to the selection of the area of the study, sampling designs, selection of the respondents, their empirical measurements, the data collection procedures and statistical methods employed for the analysis of the data.

- 1) Area of the Study: The research was conducted at institute of agricultural sciences, Banaras Hindu University, Varanasi during November, 2013.
- 2) Sampling Designs and Selection of the Respondents: Appropriate research design is the prime need of any research. It is the arrangement for collection and analysis of data in a manner that aims to combine relevance to research objectives with economy in procedure. Simple random samplings were used for collection of data from the all agricultural researchers. Out of 280 scholars, 50 respondents were selected from institute of agricultural sciences, Banaras Hindu University.
- 3) Data Collection Procedure: A structural schedule for data collection was designed and exercised by interviewing with few respondents for pre-testing. Suitable modifications were made according to need of the study. Thereafter, the data were collected from the respondents through questionnaire method.
- **4) Statistical Method:** there are various statistical techniques like frequency, percentage, and standard deviation were used to analyze the data and for making simple interpretation.

3. RESULTS AND DISCUSSION

The findings and inferences drawn with respect to the objectives of the study on the basis of analysis by using relevant statistical techniques have been presented in this chapter. The results are discussed under following subheads:

3.1. Sources of E-Learning in Agriculture

Source is a thing (place or person) from which someone can obtain information. A source of elearning includes the websites from which agricultural student's gets information about the agriculture and allied sector. These e-learning sources documented from agropedia website, in which some websites of state government were included because there was so many sources available which provides the agricultural information such as agmarknet, naip.icar.org.in, nationalfertilizers.com, fertindia.com, icrisat.org, dacnet.nic.in, ikisan.com, gisdevelopment.net, uttamkrishi.com, agricoop.nic.in, icar.org.in, punjabgovt.nic.in, upagriculture.org, indianaglink.com, nafed-india.com, krishi.net, iiss.nic.in, agricultural marketing, delhigovt.nic.in, dare.nic.in, agri.mah.nic.in, indg.in/agriculture, mahyco.com, agrisurf.com, ranadey.com, indianorganic.com, irri.org, agriculture.exportersindia.com, afarm.org, kerenvis.nic.in, indiancommodity.com, kissankerala.net, abtecbiofert.com, agriculture.exportersindia.com, agropedia.iitk.ac.in, and tradejunction.apeda.com.

Table 1 reveals that maximum number of respondents (37) used the ICAR website fallowed by Agropedia website (35), Wikipedia website (27), science direct website (21), website of IARI (15), agriwatch website (12), agrostat website (11), agricoop website (9), indiaagronet website (8), website of MANAGE (7) and other websites were used by minimum number of respondents in the study.

Current Research in Agricultural Sciences, 2014, 1(2): 35-41

Table-1. Name of websites respondents used for getting agricultural information

N = 50

| S.N. | Name of websites | No. of response | Percentages |
|-------|----------------------------------|-----------------|-------------|
| 1. | http://www.icar.org.in/: | 37 | 15.48 |
| 2. | http://www.wikipedia.org/ | 27 | 11.29 |
| 3. | www.indiaagronet.com | 8 | 3.34 |
| 4. | www.agriwatch.com | 12 | 5.02 |
| 5. | http://mofpi.nic.in/ | 5 | 2.09 |
| 6. | http://www.ikisan.com/: | 6 | 2.51 |
| 7. | http://agricoop.nic.in/ | 9 | 3.76 |
| 8. | www.fciweb.nic.in | 5 | 2.09 |
| 9. | http://agropedia.iitk.ac.in/ | 35 | 14.64 |
| 10. | http://www.ndri.res.in | 5 | 2.09 |
| 11. | http://www.manage.gov.in/ | 7 | 2.92 |
| 12. | http://www.agriculturetoday.in/ | 4 | 1.67 |
| 13. | http://www.fao.org/ | 6 | 2.51 |
| 14. | http://www.sciencedirect.com/ | 21 | 8.76 |
| 15. | http://www.iari.res.in/ | 15 | 6.27 |
| 16. | http://www.agrostat2010. | 11 | 4.60 |
| 17. | http://www.indianjournals.com/ | 8 | 3.34 |
| 18. | http://www.ugc.ac.in/ | 3 | 1.25 |
| 19. | http://www.bhu.ac.in/ | 4 | 1.67 |
| 20. | http://www.agriculturetoday.com/ | 7 | 2.92 |
| 21. | http://www.agritechindia.com/ | 3 | 1.258 |
| 22. | http://www.tnau.ac.in/ | 1 | 0.41 |
| Total | | 239 | 100.00 |

Source: Field Study, 2013

Table-2. Descriptive statistics on awareness about e-learning

N = 50

| S.N. | Statements | Total No. of Respondents | frequency | | Percentages | |
|-------|---|--------------------------|-----------|-----|-------------|-------|
| | | _ | Yes | No | Yes | No |
| 1. | Knowledge about Online Learning | 50 | 45 | 5 | 90.00 | 10.00 |
| 2. | Knowledge about E-Learning | 50 | 45 | 5 | 90.00 | 10.00 |
| 3. | Knowledge about Distance and E- Learning | 50 | 41 | 9 | 82.00 | 18.00 |
| 4. | Knowledge about UGC-INFONET | 50 | 16 | 34 | 32.00 | 68.00 |
| 5. | Knowledge about DELNET | 50 | 9 | 41 | 18.00 | 82.00 |
| 6. | Knowledge about EDUSAT | 50 | 11 | 39 | 22.00 | 78.00 |
| 7. | Knowledge about NPTEL | 50 | 6 | 44 | 12.00 | 88.00 |
| 8. | Knowledge about Brihaspati/Vartalaap | 50 | 12 | 38 | 24.00 | 76.00 |
| 9. | Knowledge about University which offer e-learning | 50 | 16 | 34 | 32.00 | 68.00 |
| Total | - | 450 | 201 | 249 | 402 | 498 |
| Avera | ige | 50 | | | 44.67 | 55.34 |

Source: Field Survey, 2013

3.2. Awareness about E-Learning

Awareness is the ability to feel, to perceive or to be conscious of objects, events or sensory patterns. In this, sense data can be verified by a perceiver without necessarily implying understanding. Thus, awareness is the state or quality of being aware of something. In bio psychology, awareness may be defined as a human's perception and cognitive reaction to a particular condition or event. To analyze the awareness level of respondents about the e-learning, a total of 10 questions were prepared and asked to the respondents. The descriptive statistics on awareness about e-learning among agricultural research scholars presented in Table 2.

For measuring overall awareness about e-learning sum the scores of statements about awareness and classified in three groups (low, moderate, and high). Table 3 indicates the distribution of respondent's awareness about e-learning.

Table-3. Distribution of respondent's awareness about e-learning

N = 50

| Awareness | Frequency | Percentages | Mean | S.D. |
|----------------|-----------|-------------|----------|----------|
| Low (9-12) | 35 | 70.00 | 1.446667 | 0.497192 |
| Medium (13-15) | 5 | 10.00 | | |
| High (16-18) | 10 | 20.00 | | |
| Total | 50 | 100.00 | | |

Source: Field Survey, 2013

Overall awareness of respondents about e-learning tended to be low (M=1.44, SD=0.49, range=9-18). Majority of respondents have low awareness about e-learning whereby it accounted for 70 per cent of the respondents, 10 have moderate awareness about e-learning, and only 20 per cent of the respondents have high awareness about e-learning. From the above data it is concluded that majority of respondents had low awareness followed by high awareness. This may be due to the newness of term e-learning for the respondents. This is not good indicator for the future of e-learning in agriculture education. The present finding is not similar to the findings of Ken [5] but similar to the findings of Kinley [6].

3.3. Perception towards E-Learning

According to Intodia, et al. [7] perception is the "Process whereby the individual organizes and make sense of his sensory experience". According to Halbelch [8] perception is the "Organization of sensory information into meaningful experience". According to Schnadelbach, et al. [9] perception is the "Process of encompassing what individual see, hear, feel, taste or smell, how individual construct this information mentally and their interpretations of the information". For analyzing the perception of respondents toward e-learning, statements were written on the basis of reviewing previous research. This statement includes positive and negative statements. Ranking were done by calculating the percentage to each statements by the respondents. The scoring, percentages and ranking to each statement are presented in Table 4.

Table 4 indicates that perception towards different statements about e-learning as perceived by the respondents like "E-learning boosts learners' learning interests." was ranked I followed by "E-learning makes it easier for college and teachers to provide learners a personalized learning environment" ranked II and "E-learning is important in crossing over the restraint of geography" III ranked respectively and further likewise in descending order.

Table-4. Perception of respondents towards e-learning

N = 50

| S.N. | Statement | Scores | Percentage | Rank |
|------|--|--------|------------|------|
| 1. | E-learning is important in crossing over the restraint of geography. | 28 | 56.00 | III |
| 2. | E-learning makes it easier for college and teachers to provide learners a personalized learning environment. | 29 | 58.00 | II |
| 3. | E-learning raises the competitive capacity of the college. | 25 | 50.00 | V |
| 4. | E-learning effectively matches the choices between the college and the learners. | 22 | 44.00 | IX |
| 5. | E-learning produces better learning results than traditional teaching | 25 | 50.00 | VI |
| 6. | E-learning boosts learners' learning interests. | 30 | 60.00 | Ι |
| 7. | E-learning rapidly delivers knowledge and information to learners. | 24 | 48.00 | VII |
| 8. | E-learning develops mutual understanding between teachers and learners. | 23 | 46.00 | VIII |
| 9. | E-learning helps in understanding learners' individual preferences. | 20 | 40.00 | X |
| 10. | E-learning promotes information exchange between colleges. | 26 | 52.00 | IV |
| 11. | E-learning is not good solution for agriculture | 8 | 16.00 | XI |
| 12. | E-learning is the wastage of time for agriculture courses | 6 | 12.00 | XII |

Source: Field Study, 2013

The negative statements like "E-learning is not good solution for agriculture" and "E-learning is the wastage of time for agriculture courses" ranked IX and X respectively. Thus, the perception towards e-learning is positive amongst the respondents, because the negative statements scores lowest rank than positive statements.

4. CONCLUSION

Higher education in view of globalization cannot afford to remain indifferent and unresponsive to the irresistible aura of e-learning. The spectrum of e-learning with its mind-boggling progression has exercised a well discernible shift from formal schooling to de-schooling and to electronic schooling. With collaborative tools e-earning is moving into virtual classes and virtual communities where the old methods of practice and test have melted into new interactive teaching learning methodologies. A judicious blend of both traditional and virtual learning environment with special attention to researchers need and satisfaction can create constructive and creative learners,

teaching community and learned society in India. On the basis of above study following conclusions we can draw:

- 1. Overall awareness of respondents about e-learning tended to be low (M=1.44, SD=0.49, range=9-18). Majority of respondents have low awareness about e-learning whereby it accounted for 70 per cent of the respondents and 10 have moderate awareness about e-learning, only 20 per cent of the respondents have high awareness about e-learning.
- 2. Perception towards different statements about e-learning as perceived by the respondents like "E-learning boosts learners' learning interests." was ranked I followed by "E-learning makes it easier for college and teachers to provide learners a personalized learning environment" ranked II and "E-learning is important in crossing over the restraint of geography" III ranked respectively and further likewise in descending order.
- 3. The negative statements like "E-learning is not good solution for agriculture" and "E-learning is the wastage of time for agriculture courses" ranked IX and X respectively.

REFERENCES

- [1] B. Hall, Web-based training cookbook: Everything you need to know about online training. NY: John Wiley & Sons, 1997.
- [2] H. Singh and R. S. Mishra, "Effectiveness of E-learning: An experimental study," *University News*, vol. 47, pp. 20-21, 2010.
- [3] G. A. Ajuwon, "Use of internet for health information by physicians for patient care in a teaching hospital in Ibadam," *Nigeria. Bioned. Digital Libraries*, vol. 3, pp. 12-21, 2008.
- [4] D. Zhang, L. Zhou, and R. O. Briggs, "Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness," *Information & Management*, vol. 43, pp. 15-27, 2006.
- [5] Y.-N. Ken, "E-learning awareness high but usage low in Japan," *Available:* http://whatjapanthinks.com/2008/04/03/e-learning-awareness-high-usage-low-in-japan/, 2008.
- [6] K. Kinley, "Faculty and students awareness and challenges of e-learning in a college of education," Journal of the International Society for Teacher Education, vol. 14, pp. 27-33, 2010.
- [7] S. L. Intodia, L. L. Somani, and J. P. Lakhera, "Performance of SRI and traditional paddy," Dictionary of Extension Education, vol. 65, pp. 114-146, 1993.
- [8] N. M. Halbelch, "Investigating learner perceptions, preferences and adaptation of E-learning services in Egypt," presented at the 2005, International Conference on Education and Management Technology, 2005.
- [9] H. Schnadelbach, B. Koleva, M. Flintham, M. Fraser, S. Izadi, P. Chandler, M. Foster, S. Benford, C. Greenhalgh, and T. Rodden, *The augerscope: A mixed reality interface for outdoors*. Minneapolis, Minnesota USA: Paper Presented at CHI'2002 Proc., 2002.

Views and opinions expressed in this article are the views and opinions of the author(s), Current Research in Agricultural Sciences shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.