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Research Article

Perception of Teachers and Students about the Utilization Pattern of Information and Communication Technologies (ICTs)

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ABSTRACT

ICT is defined as a global network in which information and knowledge is shared, by using ICT tools like cell phones, and technology like computers, to connect the people. The progress in Information and Communication Technologies (ICT) has led to changes that are affecting all aspects of our societies and becoming important in our daily lives. Education is the sector that has benefited most from the advancements of ICTs. The present study was conducted in CCS HAU Hisar and the data was collected by the questionnaire method with a sample size of 100 teachers and 150 students. The respondents were asked, what are their perception levels about the utilization of ICT resources for study and research output? The responses offered by the respondents were analyzed on the basis of number and percent of respondents who reported for the respective response. Results showed the perception of teachers as well as students about the utilization of the ICTs resources. Thirty one per cent of the teachers perceived that ICT tools are very helpful for study and research followed by ICT tools are need of the present time (27.00%). Like the teachers most of the students also responded that ICT tools are very helpful for study and research with 28 per cent followed ICT tools are need of the present time with 19 per cent. Hence, the respondents were positively inclined towards ICT and considered it an important part of quality teaching -learning environment and enhancement of effective communication.

Keywords: *ICT, Education, Learning, Teaching, Technology.*

INTRODUCTION

The beginning of the twenty-first century has seen a number of technological developments which affect every aspect of our lives. The ever-growing Information and Communication Technologies (ICTs) can be seen in all realms of life, from the workplace to the sports field, in schools and on a personal or social level. ICT is defined as a global network in which information and knowledge is shared, by using ICT tools like cell phones, and technology like computers, to connect the people.

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The progress in Information and Communication Technologies (ICT) has led to changes that are affecting all aspects of our societies and becoming important in our daily lives. Education is the sector that has benefited most from the advancements of ICTs. The study was carried out with the following objective:

- To know the perception of the teachers and students about the utilization pattern of information and communication technologies (ICTs).

REVIEW OF LITRATURE

Rajput et al. (2010) revealed that majority of the students have positive perception about ICTs and very few showed negative perception. As perception are shaped on the basis of our past experience there for positive perception showed that in spite of limited ICTs facilities students still feel satisfied to a certain extent with present situation may be because of their positive mind set and cognitive style. Positive perception indicated that students we self – motivated to use ICTs even when ICT infrastructure of university was not so well.

Lusk (2010) found that on one hand, the positive aspect of online communities is that youths can utilize them for academic help and support and on the other hand electronic media use is negatively linked with grades. He also observed that about two-thirds of the students recorded using electronic media while in class, studying, or doing homework.

Moussa and Khan (2012) said that majority of the agricultural research scholars had favorable attitude towards internet. There was a non significant agreement between the male and female research scholars with regard to their perception level towards internet. The attitude of the agriculture research scholars was positive towards the statement like "Knowledge of internet is essential for agricultural research scholars", "Internet is important like other research tools" and "Internet is important like other research tools". There was a considerable correlation between male and female agricultural research scholars with regard to their attitude towards different statements about internet.

Hassan & Sajid (2013) observed that students were positively inclined towards ICT and considered it an important part of quality teaching and learning environment.

Raksha et al. (2014) concluded that 40.00 per cent of extension personnel had favourable attitude towards ICTs in agricultural extension, followed by those with highly favourable (28.89%), neutral (20.00%) and unfavourable (11.11%) attitude towards ICTs in agricultural extension.

Kabir (2015) concluded that 58.9 per cent of the respondents had moderately favourable attitude, 41.1 per cent had highly favourable attitude and there were no respondents in the study area those had slightly favourable attitude towards ICTs.

MATERIALS AND METHODS

Selection of the population

The study was conducted in the purposively selected Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana. All the colleges of university including I.C. College of Home Science, College of Basic Sciences, College of Agriculture and College of Agriculture Engineering & Technologies were selected for conducting research on the usage of ICTs by teachers and students.

Selection of students- The proportionate sample of 150 post graduate doing M.Sc, M.Tech, MBA and P.hd students was selected from all the colleges of CCS HAU, Hisar, Haryana. Simple random sampling technique was used for selection of the respondents.

Selection of the Teachers- The sample of 100 teachers was selected from all the colleges of Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana. Simple random sampling technique was used for selection of the respondents. The teachers for the study were operationalized as a teacher engaged in teaching courses.

Selection of ICT tools- In this study a total of seven ICT tools were selected after relevant review of literature, getting suggestions and guidance of the experts. The ICT tools selected were

- Internet/Web services
- MS Word
- MS Excel
- MS Power Point
- Mobile Technology
- Digital transaction
- Interactive Multimedia Compact Disc

Instruments for data collection

Keeping in view the objectives and the variables under study, questionnaire was prepared for both students and teachers separately and pre-tested on a non-sampled respondents to find any ambiguity in the questions. After pre-testing some modifications were made in the questionnaire by consulting experts and finalized questionnaire was used for data collection. The questionnaire contains both close and open ended types of questions.

The respondents were asked what are their perception levels about the utilization of ICT resources for study and research output. The responses offered were summarized on the basis of number and percent of respondents who reported for the respective response.

The level of the improvement in the study and research output by utilization of the available ICT facilities in the university

Level of improvement	Score
Improved greatly	3
Improved slightly	2
Remained the same	1

The level of the support by the university in the integration of information and communication technology into research and teaching

Level of support	Score
Very supportive	4
Adequate support	3
Some support	2
Minimal support	1

Rank of the faculty development initiatives in information and communication technology at the university

Rank of university initiatives	Score
Excellent	4
Good	3
Fair	2
Needs Improvement	1

FINDINGS OF THE STUDY

The data in Table-1 shows perception levels about the utilization of ICT resources by the teachers and students. Maximum number of the teachers (31.00%) perceived that ICT tools are very helpful for study and research out put followed by ICT tools are need of the day (27.00), ICT resources save time (22.00%), ICT resources make work easier (13.00%), now a days ICTs are essential for updated research work (11.00%) and ICT tools are really good for knowledge enhancement (7.00%). Like teachers more number of students (27.33%) also perceived that ICT tools are very helpful for study and research out put. Where as 22.68 per cent students said that ICT tools are really good for knowledge enhancement followed by ICT resources makes work easier (22.00%), ICT tools are need of the day (13.33%), ICT resources saves time (8.00%), and now a days ICTs are essential for updating research work (7.33%)

Table 1: Perception about the utilization of ICT resources by the teachers and students

Sr. No.		Teachers (n=100) F (%)	Students (n=150) F (%)	Total(N=250) F (%)
1.	ICT tools make work easier	13(13.00)	33(22.00)	46(30.66)
2.	ICT tools are very Helpful for study and research	31(31.00)	41(27.33)	72(28.80)
3.	Now a days ICTs are essential for updated research work	11(11.00)	11(7.33)	22(8.80)
4.	ICT tools are really Good for knowledge enhancement	7(7.00)	34(22.68)	41(16.40)
5.	Save time	22(22.00)	12(8.00)	34(13.60)
6.	ICT tools are need of the day	27(27.00)	20(13.33)	47(18.80)

Note: 1.Multiple responses are possible

The results from Table-2 show the level of the improvement in the study and research output by utilization of the available ICT facilities in the university. Majority of the teachers (93.00%) responded that their research output had greatly improved by using the available ICT facilities in the University. Only 7 per cent teachers attested to have a slight improvement in the usage of ICT facilities for research output. Not a single teacher said that the level of improvement remained the same in their research work by utilization of the available ICT facilities in the university. Where as in case of students maximum number of them (66.00%) reported that their study and research output had greatly improved by using the available ICT facilities in the University followed by remained the same (20.00%) and improved slightly (14.00%).

Table 2: The level of improvement in the study and research output by utilization of the available ICT facilities in the university

Sr. No.	Level of improvement	Teachers (n=100) F (%)	Students (n=150) F (%)	Total(N=250) F (%)
1.	Improved greatly	93(93.00)	99(66.00)	192(76.80)
2.	Improved slightly	7(7.00)	21(14.00)	28(11.20)
3.	Remained the same	-	30(20.00)	30(12.00)

Table-3 and Fig. 1 & 2 depicts the level of the support by the university in the integration of information and communication technology into research and teaching. The teachers and students were asked how well they felt the administration of the university supported the integration of ICT into research and teaching. Responses of the teachers were: very supportive 59 per cent, adequate support 38 per cent and some support 3 per cent. Responses of the students were: adequate support 44.67 per cent very supportive 42 per cent and some support 10.67 per cent.

Table-3: The level of support by the university in the integration of information and communication technology into research and teaching

Sr. No.	Level of support	Teachers (n=100) F (%)	Students (n=150) F (%)	Total(N=250) F (%)
1.	Very supportive	59(59.00)	63(42.00)	122(48.80)
2.	Adequate support	38(38.00)	67(44.67)	105(42.00)
3.	Some support	3(3.00)	16(10.67)	19(7.60)
4.	Minimal support	-	4(2.66)	4(1.60)

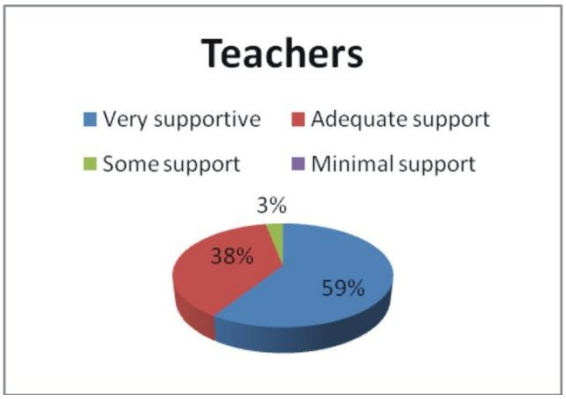

Fig. 1

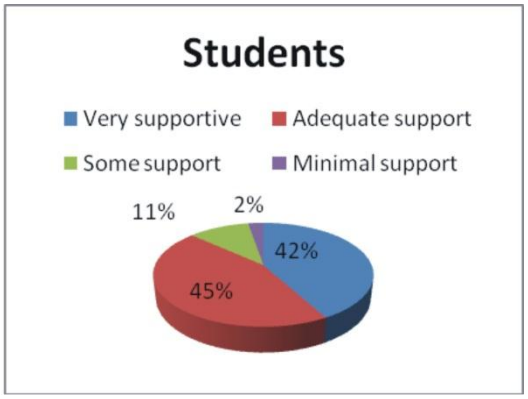

Fig. 2

A curious look at the Table-4 and Fig. 3 & 4 depicts rank of the faculty development initiatives in information and communication technology at the university by the teachers and students. More number of teachers and students (44.00%) and (40.00%) reported that faculty development initiatives are Good in information and communication technology at the university respectively followed by Excellent (38.00%) and (30.00) teachers and students respectively. Whereas 11 per cent teachers and 18.67 per cent students were of the opinion that faculty development initiatives are fair. Only 7 per cent teachers and 11.33 per cent students respectively responded that faculty development initiatives Need improvement.

Table 4: Rank of the faculty development initiatives in information and communication technology at the university

Sr. No.	Rank of university initiatives	Teachers (n=100) F (%)	Students (n=150) F (%)	Total(N=250) F (%)
1.	Excellent	38(38.00)	45(30.00)	83(33.20)
2.	Good	44(44.00)	60(40.00)	104(41.60)
3.	Fair	11(11.00)	28(18.67)	39(15.60)
4.	Needs Improvement	7(7.00)	17(11.33)	24(9.60)

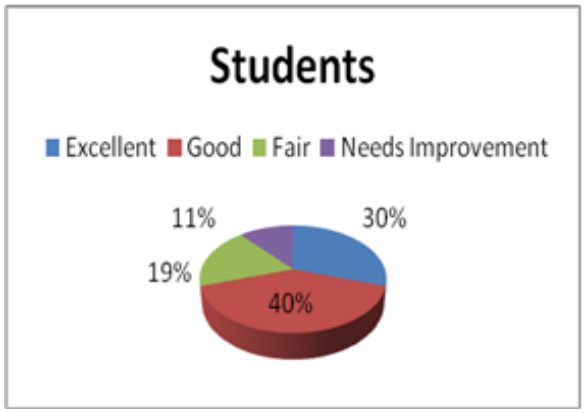

Fig. 3

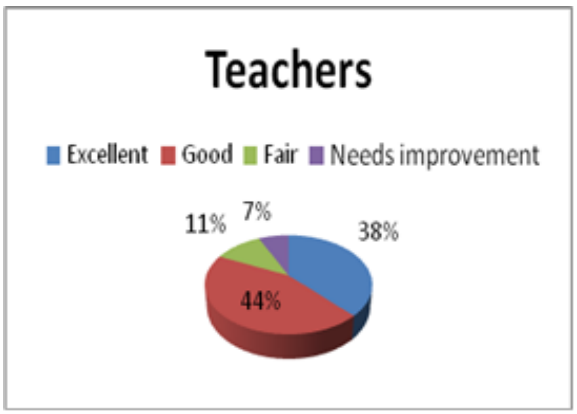

Fig. 4

CONCLUSION

Thus it concluded that majority of the respondents reported that ICT as a tool to enhance the instruction in clarifying the concepts and challenges. Majority of the respondents were aware of the ICT tools and had positive perception and favorable attitude towards utilization of ICT tools for study and research output. Hence, the respondents were

considered ICT as an essential tool for carrying out updated research work.

REFERANCES

Hasan, T., & Sajid, A. R. (2013). ICTs in learning: problems faced by Pakistan. *Journal of Research and Reflection in Education 7*(1), 52-64.

Kabir, K. H. (2015). Attitude and Level of Knowledge of Farmers on ICT Based Farming. *European Academic Research, 2*(10), 13177-13196.

Kalia, G. (2013). A research paper on social media: An innovative educational tool. Issues and Ideas in Education *2*(1), 43-50.

Lusk, B. (2010). Digital natives and social media behaviors: An overview. Prevention Researcher, *17*(5), 3-6.

Moussa, A. K., & Khan, I. M. (2012). Attitude of agriculture research scholars towards internet in SKN college of Agriculture, Jobner, district Jaipur, Rajasthan. *Agriculture Research and Reviews 1*(3), 63- 70.

Rajput, A., Ansari, M. A., & Prabhakar, I. (2010). ICTs in Agriculture Education: Students‟ perception about its role and potential. *Journals ofCommunication Studies 28*(2), 36-43.

Raksha Rao, S. I., Rani, S. V., & Meera & Shaik, N. (2014). Attitude of agriculture students towards informal and communication technology (ICT) based agriculture education. *Journals of Communication Studies 31*(3), 118-122.