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Need Assessment of ICT Skills Training of Principals in Federal Government Secondary Schools

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Abstract

Information and communication technology become an integral part of managerial task of principals. This study assesses the training need of Information and Communication Technology (ICT) skills of principals in FG schools for improved performance. The main objectives of research study were to identify the importance of ICT skills for educational managers and their competence level of ICT skills. These objectives were achieved through Likert scale designed survey conducted in Federal Government Secondary schools of Islamabad and Rawalpindi. Primary data were collected through survey form principals. Questionnaire was used to collect data from principals. Data were collected from the whole population. No sampling was done. The data collection was carried through questionnaire personally, via email and mail. Findings of the study showed that training of ICT skills of the principals is needed for better management of institutions. It may be concluded that research provides significant contribution to the concerned departments to work on the enhancement of ICT skills of their heads of institutions to make them self-reliant.

Keywords: ICT (Assessment, Information and Communication Technology, Skills. Competence level, Management, performance, principals

Introduction

Technological era has changed the role of school administrator from educational manager to transformational leaders/technological leaders. Chang et al. (2021) argue that there has been advancement in the role of the principal from that of being an administrator to that of being a technological manager. ICT skills are now considered one of the key factors for the better performance of educational manager. ICT competence of principals plays an important role in the betterment of educational system which cannot be denied. There is dire need of professional



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development of principals to equip them with necessary ICT skills so that they can perform well with confidence and manage the institution better than previous practices. All over the world trainings are being conducted for principals for better management, capacity planning, timely resolution of the issues and for effective and in time coordination and communication with the concerned.

Training need assessment (TNA) is an investigative tool used to identify the existing need of training and to find the areas where the training is essential to fill the gap. Through TNA problem areas of this age are identified which can be solved by provision of essential trainings to achieve the desired results. To identify the problems or need identification, data collection is done through surveys, observations, interviews etc. Training facilitates the participants to equip them with required skills and knowledge. The process of TNA helps the trainers and the authorities to organize the training sessions for developing the necessary skills. TNA gives the trainees a chance to polish their skills and abilities through these training session.

Three main aspects: knowledge, skills and attitudes, are developed through training program. These aspects have to be taken together. All these are needed to be addressed, if a person has to develop him to contribute effectively in his relevant field. So training enables people to increase knowledge, skills and to shape their attitudes. Therefore Training need assessment has great importance in the process of training.

Need assessment is basically a process for identifying the gaps, shortages and helps decision maker by providing them necessary information. Problems related to skills, knowledge and attitude are linked with the performance of an individual which directly affects the outcome and success of an organization. Training needs assessment is a process which is related to the performance of an individual and organization.

Employees are the spine of an organization. So the capabilities and skills of personnel should be used efficiently for the success of organization and their skills must be polished with the help of improving their knowledge and skills through training programs. It enhances confidence and motivation among them. Sometimes training programs are arranged without proper identification of needs of organizations and individuals which cause wastage of funds and decrease motivation level of employees. So need assessment must be the first step to identify the needs of organization and employees (Mulder, 2023).

Training need analysis is helpful in assessing the needs of workers as it tells what kind of training is needed and to whom. It helps in utilizing the resources allocated for training in cost effective manner as training is provided as per the need of individual and requirements of the organization. Individuals who do not have training or have wrong kind of trainings are counterproductive and wastage of resources (HR Guide, 2019). Training need assessment is an important process from different dimensions for the training institutions. As per Swift (2006) this process is used for following.

1. To determine the required training of the employees for their job,
2. To estimate which kind of training will improve performance,
3. To estimate if training will bring any change,
4. To differentiate the basic needs and problems of the organization.

Employees' skills, knowledge and abilities of organizations are called human



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capital (Armstrong, 2009). Highly skilled employees of an organization are essential for the success of the organization and to elevate its status among all. Education is a sector which provides educated and skilled labour force to all sectors of economy. Irony is that this future labour force is dealt by unskilled principals who are reluctant to adopt modern technology so how can they motivate their employees to adopt it for future generation. Even many principals of public schools often feel helpless while dealing with technology and often they have to depend on their subordinate staff which doesn't leave a positive impression of them on their subordinates. So if we want developed education sector then we must have to focus on developing the skills and education of leaders of the schools so that they can adopt it and motivate other within the institution to use these skills for betterment of the students and achieving the targets of the schools.

TNA is an organized process to recognize the gap between the existing skills and required skills of workers. On the basis of TNA objectives and targets of training programs are set to know about the effectiveness of the program in present and future needs of the organization regarding availability of skilled manpower. It is essential for better analysis to evaluate the present training programs and past practices as it will guide about shortcoming and benefits of these programs to make them more effective (Bulletin, 2013).

Training is basically a process of investment on human capital who is the asset of an organization. So training programs should be organized keeping in view of the needs of the organizations and justify the need of training as well. Constructive output should be the end result of training (*Adjirackor & Dweh, 2016*).

According to Roberts and Sikes (2011) ICT changed education's perspective globally by contributing towards efficient school management. ICT is considered as a combination / convergence of several technologies that includes audio visual, telecommunications, computers, networks, broadcast media etc. It has modernized school management and proved to be an effective tool and brought a fundamental change in educational sector within a short span of time. A variety of ICT tools are used in schools' curricula to create, communicate, store, disseminate, and manage information (Suleiman et al., 2020). Common ICT skills required for the Head Teachers are Microsoft Word, Microsoft PowerPoint, use of Spreadsheet, storage devices, use of scanner and printer, file management, Information Management like storing and retrieving data, social networking skills, basic usage of internet, CCTV monitoring skills, video Conferencing skills etc.

All the above mentioned skills are needed by principals in every school whether public or private. Principal is the administrative head of an institution. So he should be equipped with the basic skills of ICT for using them in his administrative and managerial duties. He should be role model while applying technology in his administration and management. He should work as a facilitator to teacher for successful implementation of ICT in teaching and learning process (Singh & Muniandi, 2012).

Principals of developed countries are trained in these areas but in developing countries like Pakistan, education is at least prior stage and result is that the profession for making professionals of all other profession is far behind even from developing countries. As a result poor personnel are entering in every field.



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So it is essential for the department of education to provide training programs for the workforce of education sector especially for head of the institution to enable them to manage their institution in an excellent manner so that they can achieve the targets with their good organization and enhanced skills.

Principals should be technological smart to tackle all the matter of management easily. It is not an easy task to deal with all things within the institution but a technologically skilled individual would be able to handle with ease as compared to unskilled person. Technology has changed the course of action in every field and in this situation to work with old methodology will not be helpful. Now every principal must have enough information and communication skills to handle all the matters within the institution with ease and best possible manner without relying on others. He should be self dependent in using the basic skills of MS Office, MS Excel, MS power point, social networking skills, security of data, access to data base, video conferencing, usage of internet, email etc.

In the field of education, information and communication technology worked as a facilitator to create access, transmit and manipulate or information sharing in different forms like in the form of words, audio or video. This is done because of the proactive approach of using ICT (Kawade, 2012). Information and communication technology is used in performing various tasks in educational institutions like for improving the process of teaching and learning and on the whole for the purpose of school administration. Being transformational leaders they should motivate creativity, broad mindedness and facilitate in providing such an environment of adopting new technology (Afshari, Ghavifekr, Siraj, & Sukor, 2012).

Koc & HASAN GÜRFİDAN (2016) examined the relationship between school culture, technology leadership and supporting administrations with instructors' technology literacy, the results showed that a constructive school environment could motivate administration to learn and even help other staff adequately for maximum utilization and adoption of modern technology. A study conducted in public secondary schools of Kenya by Mingaine (2013) also focused on the lacking of skills which obstruct principals to adopt and use of ICT. As per its finding it was suggested that positive attitude of principals is important for the usage of ICT to solve the problems which could be faced during the implementation process of ICT in secondary schools.

Research Objectives

Objectives of the research were to:

- i. Identify the problems faced by the principals due to lack of ICT skills and their opinion about importance of ICT skills.
- ii. Identify the areas where trainings of ICT skills are required for educational managers.

Research Process and Methodology

This study investigated the assessment of training need of information and communication technology (ICT) skills for principals of federal government schools. ICT skills help a principal in better management of his institution. It polishes his management skills and makes his work easy for him. Without having these skills dream of educational progress cannot come true. The data were



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collected to assess the training needs of ICT skills, need and importance of ICT skills for principals. This study was descriptive in nature. This study used quantitative type of data. The data was collected from the principals of secondary schools for assessing their existing skills of ICT and to anticipate the areas where training is required.

Population of the study was consisted of Principals from FG Secondary Schools of Islamabad and Rawalpindi. There are two departments, Federal Directorate of Education and FGEI C/G, working under Federal Government in Islamabad and Rawalpindi. Total population of Secondary School Principals under the control of Federal Government in Islamabad and Rawalpindi is as follows:

Table 1: Number of Participants

Department	Principals
Federal Directorate of Education (FDE)	97
Federal Government Educational Institutions(FGEI) (Cantt and Garrison)	38
Total	135

Data were collected from whole population so reliability of the research instrument is checked through SPSS after collecting data from first twenty five respondents and its reliability was found 0.865. Reliability was checked again after collection data from the whole population and value of Cronbach Alpha was calculated 0.867. The data collection was carried through questionnaire personally and via email. Data collected through the above mentioned instrument, values were tabulated and analyzed by using statistical methods i.e. percentages, mean values, & Standard Deviation. Likert scale was used in questionnaire. The findings were drawn from the interpretation of the data. Conclusion was made on the basis of findings and recommendations were made accordingly.

Data Interpretation and Analysis

The present study focused on the assessing training need of ICT skills of the principals in federal government secondary institutions under the administration of FDE and FGEIs. In this study need and importance of information and communication technology is analyzed along with the present ICT skills of principals are assessed with the help of rating scale. The study helped in identifying the areas which need to improve through the training process for the professional development of the principals which directly effects the institutions of their control. The population of the research study was 135 principals.

A questionnaire was developed for principals. The questionnaire was consisted of two parts. 1st part focused on problems, need and importance of ICT skills were analyzed. In the 2nd part all principals rated themselves keeping in view of their present skills related to ICT skills on the given rating scale. Data collected through the above-mentioned instrument, values were tabulated and analyzed by using statistical methods i.e. percentages, mean values, & S.D.



Table 2: Importance and Problems Related to ICT skills

Statement	Frequency					Mean	S.D
	SDA	DA	NS	A	SA		
1. Command in the usage of Microsoft word program helps the principals to do their work in better way.	01	00	01	58	58	4.45	0.608
2. Use of Information and Communication (ICT) skills makes communication easy now days.	01	00	01	58	58	4.45	0.608
3. Principals are dependent on administrative staff for using ICT skill to perform management operations.	03	11	14	69	21	3.79	0.929
4. ICT skills enable principals to manage their institutions effectively.	02	00	01	57	58	4.43	0.685
5. ICT skills are needed to use Educational Management Information System (EMIS) for the better management of the school affairs.	00	01	00	58	59	4.48	0.550
6. Staff can be managed easily by using ICT skills (e.g. biometric system for attendance, Whats App and Emails for communication etc).	00	01	01	55	61	4.49	0.566
7. Training of ICT skills is necessary for principals to meet the requirements of modern age.	00	00	02	37	79	4.65	0.512
8. ICT skills are helpful for the use of Power Point Presentations.	00	00	02	54	57	4.48	0.536

Survey revealed that 114 (97.4%) respondents agreed with the statement “Command in the usage of Microsoft word program helps the principals to do their work in better way.” No one disagreed with the statement and 03 (2.6%) remained not sure. The mean score 4.47, SD = 0.55 indicates that as a whole respondents agreed with the statement that Command in the usage of Microsoft word program helps the principals to do their work in better way. Majority of the respondents (97.4 %) agreed with the statement that Command in the usage of Microsoft word program helps the principals to do their work in better way.

Data analysis showed that 116 (98.4%) respondents agreed with the statement “use of Information and Communication (ICT) skills makes communication easy now days” 1 (.8 %) of the respondents disagreed with the statement and 1 (0.8 %) remained not sure. The mean score 4.45, SD = 0.60 indicates that as a whole they agreed with the statement that use of Information and Communication (ICT) skills makes communication easy. Majority of the respondents (98.4%) agreed with the statement that use of Information and Communication (ICT) skills makes communication easy now days. Survey revealed that 90 (76.3%) respondents agreed with the statement “Principals are dependent on administrative staff for using ICT skill to perform management operations.” 14



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(11.8 %) of the respondents disagreed with the statement and 14 (11.9%) remained unsure. The mean score 3.79, SD = 0.92 indicates that average respondents agree with the statement that principals are dependent on their administrative staff for the usage of ICT skills. Majority of the respondents (76.3%) agreed with the statement that principals are dependent on administrative staff for using ICT skill to perform management operations.

The data indicated that 115 (97.5%) respondents agreed with the statement “ICT skills enable principals to manage their institutions effectively.” 02 (1.7 %) of the respondents disagreed with the statement and 01 (0.8%) remained not sure. The mean score 4.43, SD = 0.68 indicates that as a whole they agreed with the statement that ICT skills enable them in effective management of their institutions. Majority of the respondents (97.5%) agreed with the statement that ICT skills enable principals to manage their institutions effectively.

Data analysis revealed that 117 (99.2%) respondents agreed with the statement “ICT skills are needed to use Educational Management Information System (EMIS) for the better management of the school affairs.” 01 (0.8 %) of the respondents disagreed with the statement and no one remained not sure. The mean score 4.48, SD = 0.55 indicates that as a whole respondents agreed with the statement that ICT skills are needed to use Educational Management Information System (EMIS) for the better management of the school affairs. Majority of the respondents (99.2%) agreed with the statement that ICT skills are needed to use Educational Management Information System (EMIS) for the better management of the school affairs.

Data analysis showed that 116 (97.3%) respondents agreed with the statement “Staff can be managed easily by using ICT skills (e.g. biometric system for attendance, Whats App and Emails for communication etc)” 1 (0.8%) disagreed with the statement and 01 (0.8%) remained not sure. The mean score 4.49, SD = 0.56 indicates that respondents agreed with the statement that Staff can be managed easily by using ICT skills (e.g. biometric system for attendance, Whats App and Emails for communication etc). Majority of the respondents (97.3 %) agreed with the statement that Staff can be managed easily by using ICT skills (e.g. biometric system for attendance, Whatsapp and Emails for communication etc).

Data analysis indicated that 116 (98.3%) respondents agreed with the statement “.” None of the respondents disagreed with the statement and 02 (1.7%) remained not sure. The mean score 4.65, SD = 0.51 indicates that as whole respondents agreed that Training of ICT skills is necessary for Principals to meet the requirements of modern age. Training of ICT skills is necessary for Principals to meet the requirements of modern age Majority of the respondents (98.3%) agreed with the statement that Training of ICT skills is necessary for Principals to meet the requirements of modern age.

Data analysis showed that 111 (98.2 %) respondents agreed with the statement “ICT skills are helpful for the use of Power Point Presentations” None of the respondents disagreed with the statement and 02 (1.8 %) remained not sure. The mean score 4.48, SD = 0.53 indicates that as a whole average respondents agreed with the statement that ICT skills are helpful for the use of Power Point Presentations. Majority of the respondents (98.2 %) agreed with the statement that ICT skills are helpful for the use of Power Point Presentations.



Table 3: Importance and Problems Related to ICT skills

Statement	Competence Level			Mean	SD
	Low	Moderate	High		
9. I know the basic functions of the MS Office.	21	65	31	4.18	2.137
10. I can organize, manage and retrieve computer files and folders.	37	48	30	4.77	2.391
11. I have the knowledge of antivirus, their updates and their operations. i.e. virus, spyware, malware etc.	69	25	22	3.51	2.645
12. I use different search engines, web directories and bookmarks.	51	32	34	4.64	2.523
13. I am competent in the usage of MS Word (e.g. making, editing documents, formatting etc).	37	47	33	4.91	2.486
14. I use ICT skills for the management of EMIS.	31	48	37	5.10	2.293
15. I am expert of MS Power point (e.g making presentation)	56	33	28	4.19	2.529
16. Usage of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc.	40	35	43	5.28	2.425
17. I can use social media etc to disseminate and collect information.	24	40	52	5.67	2.269
18. I use MS Excel, spreadsheets (e.g. scheduling and financial management)	65	29	22	3.59	2.505

Data analysis showed that 21 (18%) principals have low level of knowledge of basic functions of MS office while 65 (55.6) % rated themselves at average level and 31 (26.4) % rated themselves as highly skilled about knowing the basic functions of the MS Office. The mean score 4.18, SD = 2.13 indicates that as a whole average of respondents rated themselves at moderate level of knowledge of basic functions of MS office. It is concluded that mean value 4.18 shows that most of the respondents are at the moderate level of knowledge of basic functions of MS office.

Survey indicated that 37 (32.1%) principals have low level of knowledge of organizing, managing, and retrieving files and folders while 48 (41.7) % rated themselves at average level and 30 (26.1) % rated themselves as highly skilled in organizing, managing and retrieving files and folders. The mean score 4.77, SD = .2.39 indicates that majority of the respondents rated themselves at average and low level of the statement. It is concluded that mean value 4.77 shows that most of the respondents are at the moderate level in organizing, managing, and retrieving files and folders

Data analysis indicated that 69 (59.4 %) principals have low level of knowledge of antivirus, their updates and their operations. i.e. virus, spyware, malware etc,



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while 25 (21.5 %) rated themselves at average level and 22 (18.9 %) rated themselves as highly skilled in using the knowledge of antivirus, their updates and their operations. i.e. virus, spyware, malware etc. The mean score 3.51, SD = 2.64 indicates that as a whole average respondents rate themselves at lowest moderate level of the statement that they have the knowledge of antivirus, their updates and their operations. i.e virus, spyware, malware etc. It is concluded that mean value 3.51 shows that most of the respondents have low level of knowledge of antivirus, their updates and their operations. i.e virus, spyware, malware etc , Data analysis indicated that 51 (43.5 %) principals have low level of expertise of using different search engines, web directories and bookmarks, while 32 (27.3 %) rated themselves at average level and 34 (29.1 %) rated themselves as highly skilled in using different search engines, web directories and bookmarks. The mean score 4.64, SD = 2.52 indicates that average respondents rated themselves at moderate level in expertise of using different search engines, web directories and bookmarks. It is concluded that mean value 4.64 shows that most of the respondents have moderate level of expertise of using different search engines, web directories and bookmarks.

Data analysis showed that 37 (31.7 %) principals have low level of expertise in the usage of MS Word (e.g. making, editing documents, formatting etc), while 47 (40.1 %) rated themselves at average level and 33 (28.3 %) rated themselves as highly skilled in the usage of MS Word (e.g. making, editing documents, formatting etc). The mean score 4.91, SD = 2.48 indicates that average of the respondents rated themselves at moderate level in the the usage of MS Word (e.g. making, editing documents, formatting etc). It is concluded that mean value 4.91 shows that majority of the respondents are at moderate level in the usage of MS Word (e.g. making, editing documents, formatting etc).

Analysis of data indicated that 31 (26.7 %) principals have low level of expertise in the usage of ICT skills for the management of EMIS, while 48 (41.4 %) rated themselves at average level and 37 (31.9 %) rated themselves as highly skilled in the usage of ICT skills for the management of EMIS. The mean score 5.10, SD = 2.29 indicates that average of the respondents rated themselves at moderate level in the usage of ICT skills for the management of EMIS. It is concluded that mean value 5.10 shows that majority of the respondents are at moderate level of expertise in the usage of ICT skills for the management of EMIS.

Data analysis showed that 56 (47.8 %) principals have low level of expertise in the Usage of MS PowerPoint, while 33 (28.1 %) rated themselves at average level and 28 (23.9 %) rated themselves as highly skilled in the Usage of MS PowerPoint. The mean score 4.19, SD = 2.52 indicates that average of the respondents rated themselves at moderate level in the Usage of MS PowerPoint. It is concluded that mean value 4.19 shows that majority of the respondents are at moderate level in the Usage of MS Power Point.

Finding of the survey indicated that 40 (33.9 %) principals have low level of expertise in the Usage of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc, while 35 (29.6 %) rated themselves at average level and 43 (36.4 %) rated themselves as highly skilled in the Usage of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc. The mean score 5.28, SD = 2.42 indicates that average of the respondents rated themselves at moderate level in the usage



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of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc. It is concluded that mean value 5.28 shows that majority of the respondents are at moderate level in the usage of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc.

Data analysis indicated that 24 (20.7 %) principals have low level of expertise in the usage of social media etc to disseminate and collect information, while 40 (34.5%) rated themselves at average level and 52 (44.7 %) rated themselves as highly skilled in the usage of social media etc to disseminate and collect information. The mean score 5.67, SD = 2.26 indicates that average of the respondents rated themselves at moderate level in the usage of social media etc to disseminate and collect information. It is concluded that mean value 5.67 shows that majority of the respondents are at moderate level of the usage of social media etc to disseminate and collect information.

Data analysis showed that 65 (56.1 %) principals have low level of expertise in the usage of MS Excel, spreadsheets (e.g. scheduling and financial management), while 29 (25.0 %) rated themselves at average level and 22 (18.9 %) rated themselves as highly skilled in the usage of MS Excel, spreadsheets (e.g. scheduling and financial management). The mean score 3.59, SD = 2.50 indicates that as a whole average of the respondents rated themselves at moderate level in the usage of MS Excel, spreadsheets (e.g. scheduling and financial management). It is concluded that mean value 3.59 shows that majority of the respondents are at moderate level of expertise in the usage of MS Excel, spreadsheets (e.g. scheduling and financial management).

Discussion

This study was conducted to assess the training needs of information and communication technology skills for the principals of federal government secondary schools in Islamabad and Rawalpindi. Findings of the research showed that all respondents were agreed upon the importance of ICT skills for enhancing their management skills. These are also helpful in effective communication which is an important factor in the success of institutions. 77.8% principals agreed that principals were dependent on their administrative staff. 100 % respondents agreed that training of ICT skills is essential to meet the requirements of present age and better management. These percentages highlighted the training need of ICT skills of principals. Rating scale part of questionnaire also indicated the training need of ICT as majority of principals rated themselves at the moderate level of different ICT skills. This clearly shows that still there is room for improvement. So they should be given training keeping in view of their training needs of required ICT skills to update their knowledge and skills as it would increase their efficiency and would reduce their dependency level on their administrative tasks which directly affects their performance.

As per the findings, training of ICT skills is required for the existing principals of secondary schools to make them confident and self reliant regarding the use of these skills for the better management of the institutions. It would help in increasing their confidence level and would reduce their level of dependence on their supporting staff. The highlighted areas of the study for future training



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programs were Ms Excel, Ms word, Ms power point presentation, knowledge and use of antivirus, usage of different social media for better communication, net surfing and web browsing and getting access to the data on EMIS, retrieving storing and editing information on the software.

Inclusive training programs keeping in view of the needs should be arranged by the departments with proper intervals to keep their principals up-to-date with new and innovative ideas and skills related to modern technological advancements. This would increase their performance as with moderate level of ICT skills best performance cannot be achieved so for this it is the duty of concerned department and government to develop the skills and knowledge of their team for successful achieving the targets of education.

As per the research of Serhen (2007), provision of training in modern technology enables principals to show positive attitude towards introduction of modern technology in classes. For this principals should be confident in using modern technology for the tasks of office management then he can motivate others to use it in teaching learning process. So training programs enhances the skills for using technology. Raelin (1986) also said that training is essential for making them self reliant and confident to their jobs along with professional degrees of specialization in relevant field.

Fredrikson and Gajek (2009) also highlighted the importance of ICT by describing two main areas of educational administration which are communication and administration in general. ICT helps in management of these two areas. Usage of ICT is increasing day by day all over the world in every field including education. So it is the demand of present age that principals' knowledge and skills should be updated after every short period so that they can adopt new technological changes for improving their performance and motivate their staff to use it.

Findings of the study

The following findings were drawn from the results obtained from the analysis of data.

Mean value (97.4 %) showed that Command in the usage of Microsoft word program helps the principals to do their work in better way. Mean score (98.4%) indicated that use of Information and Communication (ICT) skills makes communication easy for the principals now days. Majority of the respondents (76.3%) agreed with that principals are dependent on administrative staff for using ICT skill to perform management operations. Mean score (97.5%) indicated that ICT skills enable principals to manage their institutions effectively. Mean value (99.2%) showed that ICT skills are needed to use Educational Management Information System (EMIS) for the better management of the school affairs. Mean value (97.3 %) revealed that Staff can be managed easily by using ICT skills (e.g. biometric system for attendance, Whats App and Emails for communication etc. Mean score (98.3%) stated that training of ICT skills is necessary for Principals to meet the requirements of modern age.

Mean value (98.2 %) showed that ICT skills are helpful for the use of Power Point Presentations. Mean value (4.18) showed that most of the respondents are at the moderate level of knowledge of basic functions of MS office. Mean value 4.77 shows that most of the respondents are at the moderate level in organizing,



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managing, and retrieving files and folders. Mean value 3.51 indicated that majority respondents have low level of knowledge of antivirus, their updates and their operations. i.e virus, spyware, malware etc. Mean value 4.64 showed that most of the respondents have moderate level of expertise of using different search engines, web directories and bookmarks. Mean value 4.91 showed that majority of the respondents are at moderate level in the usage of MS Word (e.g. making, editing documents, formatting etc). Mean value 5.10 showed that majority of the respondents are at moderate level of expertise in the usage of ICT skills for the management of EMIS. Mean value 4.19 indicated that majority of the respondents are at moderate level in the Usage of MS PowerPoint. Mean value 5.28 showed that majority of the respondents are at moderate level in the usage of Emails to disseminate and collect information i.e. composing emails, attachments, group mailing etc. Mean value 5.67 indicated that majority of the respondents are at moderate level of the usage of social media etc to disseminate and collect information. Mean value 3.59 revealed that majority of the respondents are at moderate level of expertise in the usage of MS Excel, spreadsheets (e.g. scheduling and financial management).

Conclusion

ICT skills play an important role in increasing the efficiency of managerial task of principals. Present study focused on highlighting the importance of different ICT skills in management tasks as majority respondents agreed with it. ICT skills of principals were rated by themselves and the results showed that majority of principals are at moderate level in using these ICT skills.

Training of ICT skills of principals are essential for improving their performance as it will increase their efficiency in management of the institution. ICT skills help in better communication and management of institutions. These help in better management of staff, budget making, planning and decision making and effective and efficient use of available resources.

Training of ICT skill will reduce the dependency level of principals on their administrative staff and will enable them to work more confidently. Findings of the rating scale shows that majority of the principals are at the moderate level of ICT skills which are not enough for the smooth functioning of institutions and a great hindrance in the progress of education system. Most of them are dependent on others. Even though they were given questionnaire to rate themselves on basic skills of ICT but the results were very depressing.

To cope with this situation comprehensive need based training programs are needed with proper planning if we want to progress in the field of education. This study also created awareness among principals as they rated their ICT related skills. This gave them a realization about the importance of these skills in their tasks of management and their present status. Hopefully, most of them thought of improving these skills after filling the questionnaire.

Recommendations

Following recommendations were made.

On the basis of the necessity of ICT skills, there should be comprehensive need based training programs provided to the principals. High ups of FDE, FGEIs, should work in collaboration with Ministry of education for the planning and



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implementation of comprehensive need based training programs for skill enhancement of principals as these are crucial for development of education system of the country. Present study recommended training of ICT skills are MS Office, MS Excel, MS Power Point Presentation, email, web surfing, data management, EMIS, information handling, accessing relevant data, antivirus programs to save information, CCTV monitoring and use of different social media for communication.

The sole responsibility is not on the administrations of department only but principals must do self analysis and try to improve their ICT related skill to make themselves dynamic, efficient and effective managers. Principals must show positive attitude towards technology, they must try to use their existing skills for the better management of the institutions and they should encourage their staff also in this regard.

Training programs should be decentralized with the help of mentor trained at the central level. These mentors can work as in charge of training to the principals of their areas so that with little effort and resources training could be provided to all. Follow up of the training programs will help to assess the success rate and problems of these programs which can be handled in future planning of such kind of training programs.

Present study focused on the very basic skills related to ICT but for future researchers, recommended focus areas are online system of education and management like zoom, Microsoft Team, work from home strategies, teleconferencing, videoconferencing etc.

Administration of FDE, FGEIs, should work in collaboration with Ministry of education for the planning and implementation of these training programs as these are essential for improvement of education system of the country. As the research study focused on the very basic skills related to ICT but for future researchers it is recommended to focus on these areas like online system of education and management like zoom, work from home strategies, teleconferencing, videoconferencing etc.

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