ABSTRACT

Learning is possible anytime and anywhere because of the rapid growth of information and communication technology. So, far the field of education is concerned, its appropriate application can add to the quality of education. The present research aimed to study the usage and integration of ICT by the faculty members in their teaching, research and administrative work. The study covered their usage and integration of ICT, opinions towards ICT, competency in using it, influence of ICT on their work and problems faced by them while using the ICT. The population of the study comprised of faculty members of The Maharaja Sayajirao University of Baroda, Vadodara. The study sample consisted of 290 faculty members from various faculties of the Maharaja Sayajirao University of Baroda. The samples of the study were selected through purposive convenient sampling method. A structured questionnaire was used to collect the data. The data were analyzed using different statistical measures viz t-test, ANOVA, Posthoc, Intensity Indices.

The findings of the study revealed that the majority (76.2%) of the faculty members were using a computer daily. A higher percentage of the faculty members (47.2%) were spending 2 to 4 hours per day on desktop/laptop for their professional work. Nearly half (49%) of them were using desktop/laptop most of the time for teaching, research, and administrative work. Less than one-fourth (24%) of the faculty members use an LCD projector either sometimes or most of the time for teaching. The majority (60%) of the faculty members were using M. S. Word most of the time in teaching whereas forty percent of them were using PPT for teaching and research work. Almost equal percent (33%) of the faculty members had high, moderate, and low ICT usage. A higher percentage of the faculty members belonging to the young age group, Social Science discipline, Temporary Assistant Professor with unfavorable opinions towards ICT and with good technological infrastructure in the department had high usage of ICT. Significant differences were found in usage of ICT in relation to discipline, age, competency in using ICT, technological infrastructure, integration of ICT, and the influence of ICT.

More than half of the faculty members (54.1%) had favorable opinions towards ICT. Faculty members had favorable opinions towards ICT with regards to ICT improves the quality of teaching and make it more effective, helps in producing varied teaching

materials, raise the working efficiency of a teacher, it makes the lectures more interesting and diverse. A higher percentage of the faculty members (35.86%) were less competent in using ICT. A higher percentage of the faculty members belonging to the middle age, senior teachers, from Humanities discipline, Temporary Assistant Professors, Professors, and with poor technological infrastructure in the department admitted about less competency in using ICT. Faculty members were highly competent in using the USB drive, printer, internet for communication, PowerPoint Presentation, and search material online.

The findings of the study also revealed that a higher percentage of the faculty members integrate ICT into their teaching work at a moderate level and there were significant differences in the integration of ICT in teaching in relation to their opinions towards ICT, competency in using ICT, usage of ICT, and the influence of ICT. On the other hand the findings of the study indicated that the integration of ICT in research work amongst the higher percentage (35.5%) of the faculty members was low and significant differences were found in the same in relation to their opinions towards ICT, technological infrastructure, competency in using ICT, usage of ICT, and the influence of ICT. In relation to integration of ICT in administrative work the faculty members reported high integration of ICT for uploading annual report online, for circulating circulars amongst the colleague, to intimate staff about forthcoming events, for uploading self-appraisal, downloading a blank mark list from the university website for result submission and recruitment and work allotment to staff in the department.

The finding shows that little less than forty percent (38.4%) of the faculty members faced a moderate level of non-human resources related problems whereas a higher percentage of them (36.2%) faced less human resources related problems in using ICT. The data indicate that faculty members faced technological infrastructure-related problems. These problems include lack of smart boards, lack of computers, uneven bandwidth of internet, slow internet connection, restriction on accessing certain websites.

The findings indicate that near to forty percent (38.3%) of the faculty members reported that ICT had a moderate level of influence on their teaching whereas a higher percentage (36.6%) of them reported a moderate level of ICT influence on their research work. The findings of the study reveal that the majority (63.4%) of the faculty

members reported a moderate level of influence of ICT on the administrative work carried out by them. There were significant differences in the influence of ICT on the teaching, research and administrative work of the faculty members in relation to their competency in using ICT, the use of ICT, and the integration of ICT.

Role of ICT in education has facilitated as an agency of change, and content and pedagogy enhancing quality education, enriched educational management, research and development and learning environment along with professional development. The present findings highlighted the training needs related to use and integration of ICT by the faculty members. The training may for use and integration of ICT enable faculty member to make the best use of ICT in their teaching, research and administrative work. The university should put an effective and sustainable ICT policy and programmes that will enhance its usage and integration by faculty members in their work.