Tactful Management Research Journal
ISSN: 2319-7943
Impact Factor : 2.1632(UIF)

UPGRADING THE TECHNOLOGICAL SKILLS OF TEACHERS: A NECESSITY?

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Abstract : Skill Development enhances productivity at the individual, industry and national levels. (Skill Development for Socio-economic Progress, 2014) With respect to skills of teachers, the UNESCO states that "Teachers must have the knowledge and skills to use the new digital tools and resources to help all students achieve high academic standards"(Information and Communication Technologies in Teacher Education: A Planning Guide, 2002:10). Scholars have likewise reinforced the significance of Continuous Employee Development as a key challenge in a global world. Globalisation, in simple words, means linking the national economy to the international economy. In keeping with its transformative aspects, it is unanimously conceded that globalization cannot be dissociated with computerization both for enhancing productivity and for expanding employment opportunities.

In the light of the above, this paper attempts to examine the technology deficit and/or gap in the current scenario of higher education and proposes that it needs to be addressed on a massive scale. Based on individual responses to a questionnaire designed to explore teacher-perceptions with regards to their expertise in technology, this pilot study delineates the findings and recommends the need for updating the technological skills through need-based trainings.

The paper is constrained by its coverage of four colleges in a specific geographical area. Its scope can be extended into a minor/major research project wherein a genuine reflection is possible on the status of a mobile and permanent employee-workforce in (un)aided sections. Herein, critically thinking of collaborations among colleges, ASC, UGC and IT companies will help to undertake remedial measures to keep teachers updated and motivated so that they can contribute to the (inter)national educational goals of access to all.

Keywords: Faculty, Gap, Skill-Development,Technology

1 INTRODUCTION

Skill Development enhances productivity at the individual, industry and national levels due to the complementary relation between physical and human capital and technology and human capital. (Sudhir and Soudari, Skill Development for Socio-economic Progress, 2014) Skill means a range of attributes and marketable skill refers to the market value of a skill; if educational needs are to be integrated with knowledge economy, "strengthening the educational system and universalizing access to it" is a pre-requisite for skill development. (ibid:1-3)

In the specific context of higher education the lack of the necessary SET/NET qualifications and the upsurge of unaided divisions in colleges prevent the college teachers from participating in the training programmes conducted by the Academic Staff Colleges for relieving such teachers from their teaching duties results in loss of income for colleges. On the contrary, the UNESCO policy document Information

and Communication Technologies in Teacher Education: A Planning Guide declares that "Teachers must have the knowledge and skills to use the new digital tools and resources to help all students achieve high academic standards"(2002:10). The policy document elaborates on the four necessary ICT competencies: pedagogy, collaboration and networking, social issues (equitable access to technological resources, care for individual health and respect of intellectual property), technical issues (life-long learning in which teachers update skills with hardware and software) as new generations of technology emerge"(2002:42). Various strategies are suggested for integrating ICTs into teaching through software tools (web-processing, database, spreadsheet or browser applications) and multipurpose applications for technology rich lessons through WebQuests (web-based lessons), multi-media presentations, tele-computing projects and online discussions. (2002: 59-65)

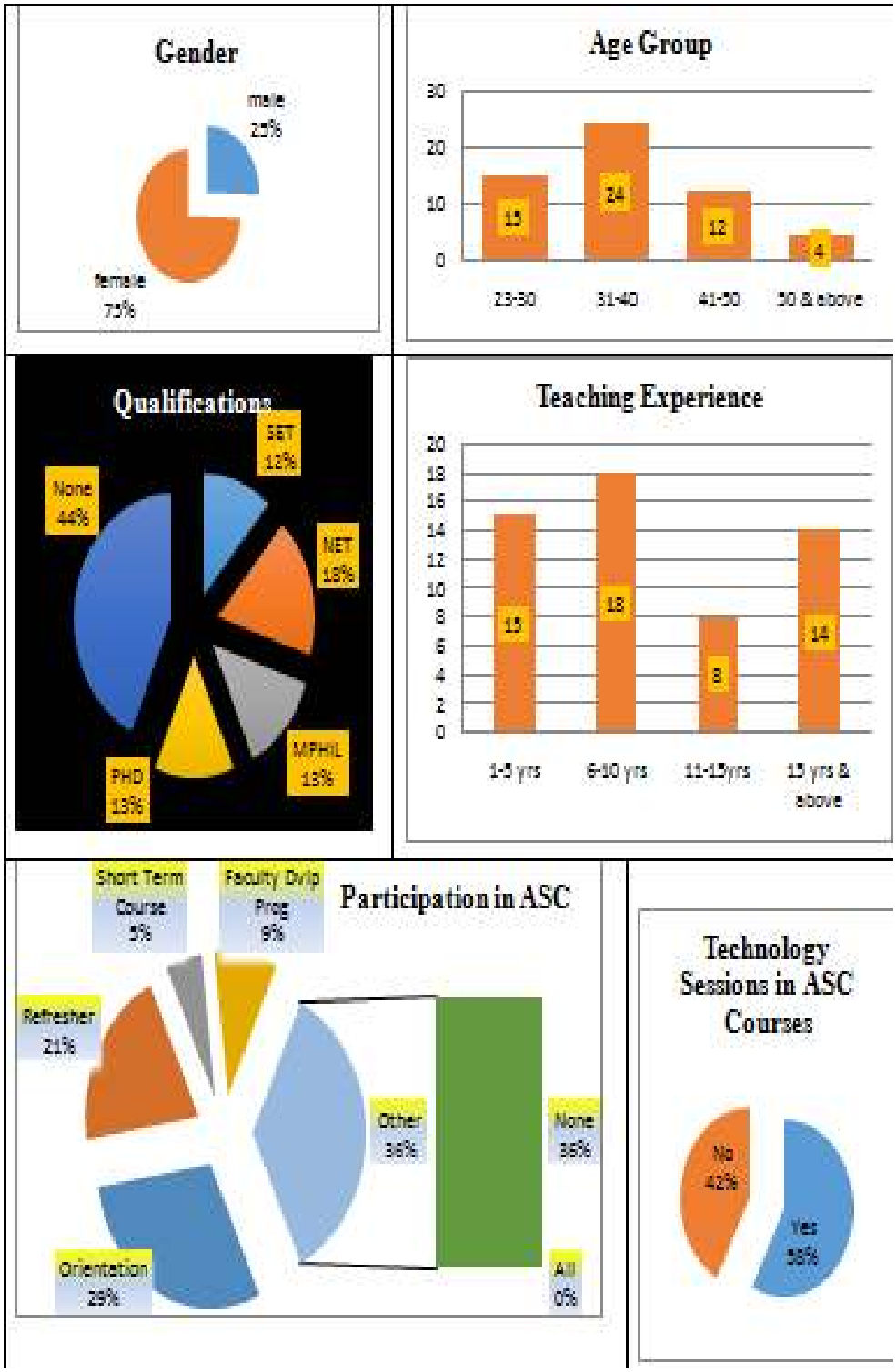
With respect to HR policies, in the article Meeting Organisational Global Challenges through Training (2010), Carsten Schmidtke and Claretha Hughes identify continuous employee development as a key challenge in a global world and reinforce the transformative nature of globalization linking it to computerization and claim that effective training using appropriate technology can increase employee productivity as well as expand employment opportunities.

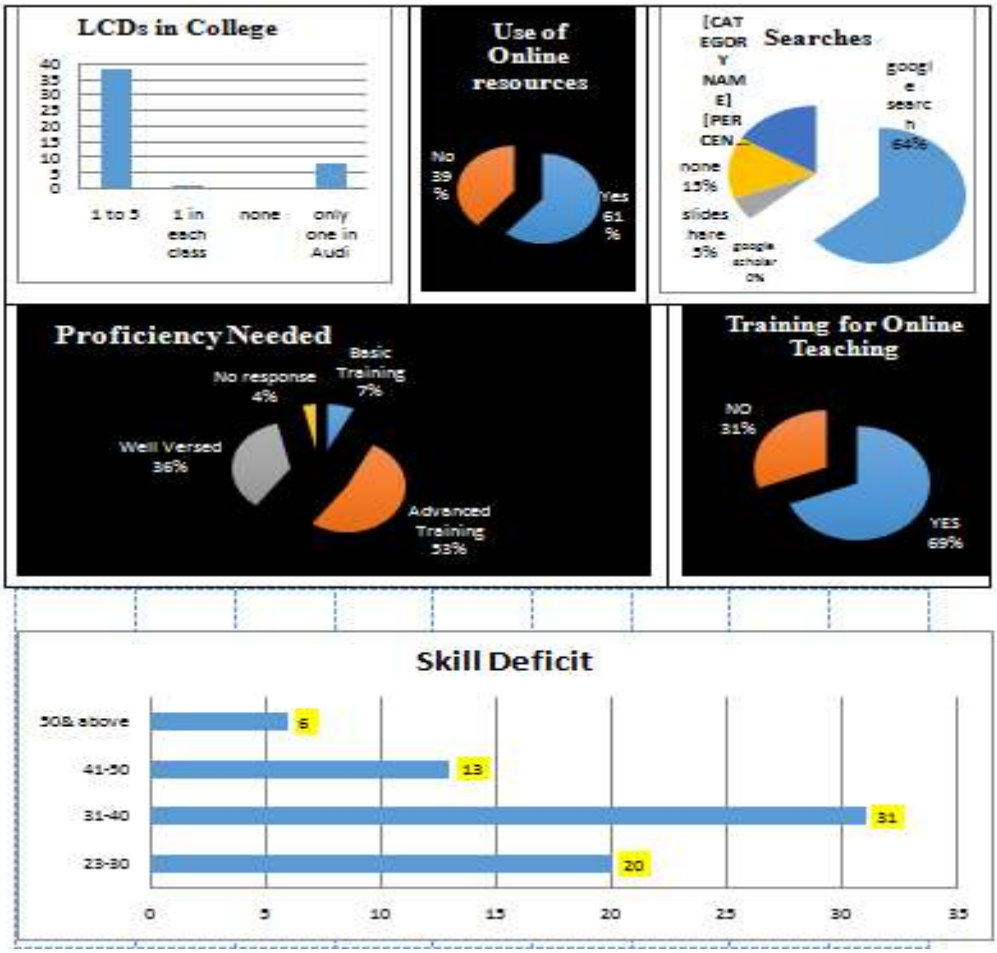
Rationale and Methodology of the study In the light of the above insights which emphasize the need for technological skills of teachers on the one hand and continuous employee development on the other, this paper is a pilot study examines the technology deficit and/or gap in the current scenario of higher education with respect to the technological skills of teachers and calls for redressal on a massive scale. Based on a questionnaire designed to test if teachers themselves feel the need for skill-upgradation with respect to technology, this pilot study examines the individual responses of 55 degree college teachers from four colleges in Dombivli area. The questionnaire was divided into two parts and broadly covered the areas of teaching experience and technology skills.

Findings and Discussion Of the 55 respondents, 14 were male and 41 were female teachers. There were 15 in the age-group of 23-30, 24 in the age-group of 31-40, 12 in the age-group of 41-50 and four were 50 and above. With respect to qualifications, there were 7 with SET, 11 NET, 8 M.Phils and 8 PhDs. 26 did not respond to the question indicating that they did not have the mandatory SET/NET qualifications. The survey indicated that 15 had a teaching experience of 1-5 years, 18 had an experience of 6-10 years, 8 had an experience of 11-15 years and 14 had more than 15 years of teaching experience.

With respect to attending ASC programmes, 28 did not attend even a single ASC programme; 23 attended Orientation, 16 attended Refresher Course, 4 attended Short Term Courses and 7 attended Faculty Development Programmes. When asked if they were given any training in technology, 15 answered in the affirmative but maintained that they had been given only basic training in PowerPoint Presentations, Online resources, cybercrime awareness, use of technology in research; 11 answered that they received no training in technology.

45 respondents replied that they possessed a laptop and 33 teachers used online resources for classroom teaching. With a view to finding if the administration supported the use of ICT resources by providing LCD projectors, it was found that 50 responded positively. 38 said that there were one to five LCDs in their college, 1 said there was one in each class, 8 claimed they had only one in their auditorium; others gave no response. Asked if they needed to upgrade their technological skills with respect to Powerpoint presentation, four said they need basic training, 29 asked for advanced training, while 20 felt they were very well-versed and needed no training. With regards to searches, 35 used google search, 3 used slideshare, 9 used all searches while 8 did not use any. 26 said 'yes' and 29 said 'no' to the use of e-resources (NLIST) in their library. 38 said they required training on online teaching methodology; 17 said they don't need it. What follows is an illustration of the findings in the form of graphs, pie-charts etc. for a quick glance.


Gender
male
25%
female
75%
Age Group
30
20
10
0
15
24
12
4
23-30
31-40
41-50
50 & above
Qualifications
SET
12%
None
44%
NET
13%
MPHIL
13%
PHD
13%
Teaching Experience
20
18
16
14
12
10
8
6
4
2
0
15
18
8
14
1-5 yrs
6-10 yrs
11-15yrs
15 yrs & above
Participation in ASC
Short Term Course
5%
Faculty Dvlp Prog
9%
Refresher
21%
Other
36%
None
36%
Orientation
29%
All
0%
Technology Sessions in ASC Courses
No
42%
Yes
58%



As seen above, the last graph hints at a technology deficit among the teachers of all the age-groups; however, the co-relation between the age, gender and deficit needs more exploration.

Suggestions from College Teachers It was interesting to receive suggestions on a wide range of topics with respect to technological gaps: SAP, Linux Administration, Coding, Advanced Training in Asp net technologies, search clear and specific data, software for research work like SPSS etc., converting figures into graphs, diagrams and connecting them to figures, e-content development, e-learning, Oracle, Tally, Animation, basic PPT, inserting Video-clips/AV effect in PPT, posting creative content, online teaching methodology, searching online articles and books, Web Technology and Data house and knowledge of statistical analysis. There is no doubt that with a refined questionnaire and a wider coverage of the colleges in cluster/district/University/State in the form of a minor/major research project, the technology deficit can be minimized with need-based specific training programmes.

Recommendations and Future Directions In keeping with the UGC initiative of Faculty Development Programmes, this paper envisions that linking CSR activities of IT companies with FDPs will help in bridging the technology deficit through appropriate need-based trainings. Three-pronged initiatives are needed to upgrade the technological skills of teachers: At the level of Colleges, ASC and University/UGC.

As per the findings of the pilot study, young non-SET/NET teachers need to be deputed for ASC orientation courses which will provide pre-service training and equip them with the requisite classroom teaching skills. Many consist of the mobile employee-workforce who keep changing colleges or continue to work in unaided sections without the mandatory service benefits. In the zeal to provide educational access to all, there should be no compromises in terms of quality. Undoubtedly, spending on training is better than hiring new ones. As the UNESCO policy has emphasized, teachers need to be highly skilled and long term visions of initiating the young generation to technology-based teaching methodologies will help in employee retention, expanded opportunities and increased performance and high academic standards.

At the ASC level, there should be collaboration between industry and institution as per the PPP initiatives. Short term courses in basic computer skills can be introduced throughout the year or in April/June. Herein, there can be flexibility regarding the courses which can be part-time, during the weekends or during the vacations too if teachers are ready. With regards to the permanent employee workforce, their technological skills also need to be upgraded. Such teachers can be retained post-retirement and Universities can draw upon their experience and expertise to develop e-content and/or create a memory of online teaching resources for learners and teachers. Finally, at the University level, the PPP initiatives will help in covering many colleges; thereby ensuring the continuous professional development of teachers who will be more productive, gain enriched professional opportunities in the form of consultations and projects which will contribute to individual, college and national income. In the final run, upgrading the technological skills of the teachers will empower them and improve the social and marketable value of their skills turning into greater academic standards required for a knowledge-economy.

Works Cited

Schmidte, Carsten and Claretha Hughes. Meeting Organisational Global Challenges through Training. ATEA Journal. Volume 38.Issue:1. American Technical Education Association. Fall 2010. 18+. www.questia.com

Sudhir M. A and M. Hilaria Soundari. Skill Development for Socio-economic Progress. New Delhi: New Century Publications. 2014

Vijaykumar, Sushila and JayanthiVaikunth. Can we link CSR with FDP?. Paper presented at the One-day National Seminar at KB College, Thane on 29 Jan 2015

---. Teacher-preparedness for M-Learning: A Micro-Study. Paper presented at the One-day National Seminar at Model College, Dombivli on 23 Feb 2015

http://www.pib.nic.in/newsite/erelease.aspx?relideB1358> 21 Feb 2015

http://www.ugc.ac.in/deb/notices/ODLEquivalenceDegress.pdf> 21 Feb 2015

http://www.ugc.ac.in/deb/pdf/recognitionsaccordedunivandinsts.pdf> 21 Feb 2015

http://unesdoc.unesco.org/images/0012/001295/129538e.pdf>21 Feb 2015