

A Study of Techno - Pedagogical skills of Secondary school Hindi teachers working in Kerala

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Abstract

Techno pedagogy is the hybrid method of teaching in which ICT resources are utilized in class room interaction process. It is the art and craft of incorporating technology in tailoring teaching learning experiences in an effective manner. Techno pedagogical skills are very useful in making teaching learning process a joyful experience as it would make notable changes in the interaction pattern of teachers. Even though techno pedagogy is a boon in teaching and learning, it is a fact that the fruits of these skills are not properly utilized by the stakeholders. There are so many reasons present that lead to this condition. Lack of knowledge regarding Techno pedagogical skills on the part of teachers, non- favourable attitude of teachers, lack of ICT facilities in schools and lack of time are some major constrains in this regard. Among these hindrances lack of knowledge of teachers regarding Techno pedagogical knowledge demands high attention as it is one of the basic necessities in practicing the skill. So the investigator realized the high need of studying the Techno pedagogical skills of Secondary school Hindi teachers of Kerala.

Key Terms:-*Techno Pedagogical skills, Secondary school teachers, Hindi, Kerala*

Introduction

Modernization trend, facilitated by rapid technological changes, presents at least two challenges for educators. The first challenge is that, teachers must stay abreast of relevant instructional technologies. That is, they must be able to assess the value of educational technologies, and acquire and continually update their technological skills. Second one is that teachers will have to begin blending new technologies into their instructional settings. To successfully upgrade skills and integrate technology into the educational environment, teachers will have to make a time commitment and education departments will need to provide ample training and support for instructional practitioners.

Techno-pedagogy can be considered as the weaving of the technologies of the craft of teaching into the learning environment itself. It requires conscious recognition of the mediated learning environment in order to maximize the ease and clarity in the transmission of information. Acquiring techno-pedagogical proficiency will make teaching and learning a pleasurable exercise as it would lessen the pressure on the teachers, and enable the students to plunge deeper into knowledge acquisition process.

Techno-pedagogical competency is very much needed for teachers in their learning space, as it facilitates teaching and learning. Techno-pedagogical competency is the ability of teachers to make use of technology effectively in teaching. It is described as the ability and the will to regularly apply the attitude, knowledge, and skills that promote learning.

Beaudin and Hadden (2004) revealed in their study that techno-pedagogical skill foster the students for further development, attainment of learning outcomes and maintain the context of designing classroom based resources through the use of ICT by the teachers. Therefore, techno-pedagogy method was a necessary component of teacher education.

The National Curriculum Framework (2009) stated that “ICT can be imaginatively drawn upon for professional development and academic support of the pre-service and in-service teachers.” Lee and Tsai (2010) found that meaningful use of ICT in the classroom demands the teachers to integrate technological affordances with pedagogical approaches for the specific subject matter to be taught. Yurdakul (2011) suggests that pre-service teachers need to provide opportunities to get practical knowledge and skills to use current technology during their training process. For that courses techno-pedagogical knowledge need to be added in teacher training programs. The technology centres in teaching and learning should be started in higher education institution.

Sathiyaraj and Rajasekar (2013) found in their study that the techno-pedagogical expertise needs to be improved in order to equip teachers to face the students belong to the digital era and also to face the challenges in the modern classroom. Monsivais, McAnally and Lavigne (2014) found in their study that the integration of ICTs in the classroom depends on the teachers’ ability to scaffold the learning environment by using effective ICT based pedagogies.

Objective of the Study

To find out the Techno- Pedagogical skills of Secondary school Hindi teachers working in Kerala

Hypothesis of the Study

The Techno- Pedagogical skills of Secondary school Hindi teachers working in Kerala are not satisfactory.

Methodology adopted

Survey method was used for the present study for collecting necessary data. The Questionnaire consisted of seven items related with different aspects of Techno pedagogical skills. The investigator visited the schools selected randomly from different districts of Kerala and collected data.

Sample selected for the Study

The Sample of the study consists of 488 Secondary school Hindi teachers working in the government and aided schools of Kerala.

Tools used

Questionnaire developed by the investigator was used for collecting data.

Statistical techniques used

The data obtained was analysed by using appropriate statistical techniques like Percentages, Mean and Z test.

Result and Discussion

Techno pedagogical skills and techno sense are inevitable in the modern educational scenario. The education department of Kerala has already taken steps to present different lessons with the help of multimedia. Schools have already supplied with interesting CD’s on various topics related to Hindi language learning. In order to make use of these facilitations teacher’s knowledge regarding computer usage is must. Overhead projectors and slide projectors are also very useful in making teaching learning process interesting. So in order to find out the extent of knowledge of teachers about selected techno pedagogical skills, seven questions were included in the questionnaire. The questions were connected with proficiency of teachers in computer applications, competency in utilizing the web facilities, competency in the effective operation of modern equipment like LCD projector and the like, competency in using the IT devices effectively in the class room, competency to give proper guidance to student in the improvised techno-pedagogical applications, competency in inquiry based online learning and competency to develop the needed C.D’s and other particulars related with Hindi instruction.

Total sample

The study shows that majority of the sample (75.20 per cent) are proficient in computer applications and 56.76 per cent are competent enough in utilizing the web facilities. As far as the competency in the effective operation of modern equipment like LCD projector and the like are concerned, the percentages of teachers who have the competency is 50.82 and the percentage of the sample those are confident in using the IT devices effectively in the classroom is 50.61 which could be treated as average. At the same time 47.75 per cent of teachers are competent enough to give proper guidance to their students in the improvised techno-pedagogical applications, which is satisfactory. It is also evident from the analysis that 34.43 percentage of the sample teachers are competent in inquiry based on line learning and 32.99 percentage of the sample are competent enough to develop the needed C.D's and other particulars, that cannot be considered as up to the mark. The analysis reveals that secondary school Hindi teachers have sound knowledge regarding techno pedagogical skills.

Findings based on gender

Both male (Mean 78.72) and female teachers (74.37) are highly proficient in computer applications. Male teachers (Mean 68.09) are much competent in utilizing the web facilities than female teachers (Mean 54.06). Male and female teachers average competency in the effective operation of modern equipment like LCD projector. Both male and female teachers are poor in using the I devices effectively in the class room. Their level of competency to give proper guidance to students in the improvised techno pedagogical applications is below average. Male teachers are more competent in inquiry based on line learning and competent to develop C.D's and other particulars than female teachers.

Out of the seven components, connected with techno pedagogical skills of teachers, significant difference was found in the opinion of male and female teachers in four aspects i.e., competency in utilizing the web facilities (Sig.0.014), confidence in using the IT devices effectively in the classroom (Sig.0.038), competency in inquiry based on line learning (Sig.0.020) and competency to develop the needed C.D's and other particulars (Sig. 0.005), as the significance level of the Z test less than 0.05 in all these aspects. But no significant difference was found in the percentage of male and female teachers in different aspects like, proficiency in computer applications and competency in the effective operation of modern equipment like LCD projector and the like where the significant level of Z test is greater than 0.05. It is evident from the analysis that female teachers lag behind male teachers in techno pedagogical skills.

Findings based on Educational qualifications of sample

Both graduate and post graduate has good proficiency in computer applications (Mean scores 74.24 and 77.22 respectively) and average skills in other aspects of techno-pedagogy like competency in utilizing the web facilities, competency in the effective operation of modern equipment like LCD projector and the like, competency to develop the needed C.D's and other particulars and competency in inquiry based on line learning. But the competency in utilizing the web facilities and competency to give proper guidance to the students in the improvised techno-pedagogical applications is not up to the mark both in the case of graduate and post graduate Hindi teachers.

The analysis also shows that there exists is no significant difference between graduate teachers and post graduate teachers as far as techno pedagogical skills are concerned as the significance of Z test is greater than 0.05 for all selected seven aspects of techno pedagogical skills i.e., proficiency in computer application, competency in utilizing the web facilities, competency in the effective operation of modern equipment like LCD projector and the like, competency in utilizing the web facilities, competency to give proper guidance to the students in the improvised techno-pedagogical applications, competency in inquiry based on line learning and competency to develop the needed C.D's and other particulars

The similarity in the techno-pedagogical skills of graduate and post-graduate teachers surely acts as facilitation to the modernization of Hindi teaching in the schools of Kerala.

Findings based on Type of School where the study was conducted

Both government as well as aided school teachers have good proficiency in computer applications (Mean scores 79.31 and 72.28 respectively) and average skills in other aspects of techno-pedagogy like competency in utilizing the web facilities, competency in the effective operation of modern equipment like LCD projector and the like, competency to develop the needed C.D's and other particulars and competency in inquiry based on line learning. But the competency in utilizing the web facilities and competency to give proper guidance to the students in the improvised techno-pedagogical applications is not up to the mark both in the case of government and aided school teachers.

The study shows that there exists no significance difference between government and aided secondary school Hindi teachers as far as techno pedagogical skills are concerned as the significance of Z test is greater than 0.05 in all aspects. There is a general complaint in Kerala that government schools suffer from the lack of necessary instructional aids like computers and overhead projectors. In this situation also government secondary school Hindi teachers equally possess techno pedagogical skills as teachers in the aided institutions where modern teaching learning aids are more available.

Conclusion

The study shows that secondary school teachers who are handling Hindi have good knowledge regarding techno pedagogical skills. The study throws light into the fact that male teachers have more techno-pedagogical skills than female teachers. Female teachers lag behind in the competency in utilizing the web facilities, confidence in using the IT devices effectively in the classroom, competency in inquiry based online learning and competency to develop the needed C.D's and other particulars; as the level of significance is less than 0.05 as far as these four aspects are concerned. The study stresses the importance of female teachers to improve their techno-pedagogical skills. The belief that computer literacy is a must for successful teaching is prevalent among Hindi teachers and education department of Kerala is taking possible steps to provide teachers information regarding the implication e-learning and web-based learning.

The study shows that the Techno-pedagogical skills of secondary school Hindi teachers are satisfactory. Hence the hypothesis that the Techno-pedagogical skills of secondary school Hindi teachers working in Kerala are not satisfactory is rejected.

All educational practitioners should know how to weave subject area content, pedagogy and technology effectively in their class room interaction. Lack of knowledge in the part of teachers regarding techno pedagogical skills is found to be a major constraint in blending these three major aspects. This study shows that secondary school Hindi teachers have sound knowledge regarding techno pedagogical skills that ensuring high educational outcomes and also for attaining high educational objectives in a meaningful way.

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