

RESEARCH RESULTS FOR QUALITY SCHOOLING: BRIDGING THE GAP BETWEEN RESEARCH AND PRACTICE

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The quest for quality in education has been an avowed goal worldwide. The improvement of quality in school education depends largely on the research conducted in this field. The present study was conducted to know the extent of awareness of school teachers regarding researches conducted in school education and the problems faced by them in using the research results. The findings indicate that the teachers do not use research findings because they are not fully aware about the researches conducted, some of them do not understand the terminology used, while others find it difficult to access as these are printed in scattered form at different places. This study highlights some of the major factors accounting for the gaps that exist between the research and school practices and presents some strategic implementations to bridge this gap. The focus of the study is on getting research-based academic and non-academic practices into the hands of professionals for quality schooling.

KEYWORDS: Quality Schooling, Research and Practice

INTRODUCTION AND BACKGROUND

School education is the foundation stone of the educational system. Although, quantity of schooling is easily measured, and data on years attained, both over time and across individuals, are readily available. Today, however, policy concerns revolve much more around issues of quality than issues of quantity

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(Hanushek, 2004). Quality school education is essential for building an open, democratic society, maintaining social structures and values and for improving the quality of life of people in any country. It is the prime concern of all the systems worldwide and so is of education system.

Systems that embrace change through data generation, use and self-assessment are more likely to offer quality education to students (Glasser, 1990). Quality in school education system is not a destination but a continuous journey. The focus is on what students know as they progress through schools. It is this attribute that matters in discussions of quality schooling. Much of the discussion of quality - in part related to new efforts to provide better accountability - has identified cognitive skills as the important dimension (Hanushek, 2005). However, the precise meaning of quality in educational system and the path to improvement of quality in this system are often left unexplained. Full agreement among parents, teachers, administrators, and students as to the ingredients of quality, how to measure it, and how to initiate and sustain improvement is unlikely (Chapman & Adams, 2002). Indeed, each of us judges the school system in terms of the final goals we set for our children our community, our country and ourselves (Beeby, 1966).

Researchers are investigating ideas and uncovering useful knowledge in this area since many decades. It is conducted to develop generalizations, principles and/or theories, resulting in predictions and possibly ultimate control of events with an understanding of the existing ones. The word research has assumed great generality which goes on increasing with the value attached to it and the rewards that flow from it in the form of promotions, academic reputation status attainment, community membership etc. This encompasses a broad range of activities from efforts to solve an immediate minor problem faced by an administrator solved by crude interview or reference to an old record to a fundamental theoretical sophisticated abstruse work involving a scholar's whole professional life; from a simple action research expected at the B.Ed. level, through M.Ed. or M.Phil. dissertations, Ph.D. or D.Lit. thesis to an institutionally, coordinated team work with large resources and findings of wider applications (Mehrotra, 2009). The major concern of educational research is to understand, explain, to predict to certain extent human behavior and improvise to the extent possible and desirable according to the societal norms at times even leading to generation of new norms. From the above premise it follows that educational research refers to a systematic attempt to gain a better understanding of the educational process i.e. procedural aspects, problems faced by the educational functionaries, generally with a view to improving its quality and thereby its efficiency.

The need of the hour is to take steps to map and implement research to improve quality in education system at school level. Although numerous research studies address the solutions to problems related to quality schooling but the implications are rare and few of those which are made to practice are not immediate. For example the numbers of studies are conducted in the field of environmental education with the combination of different variables. The results of these researches report that teachers should have the necessary level of environmental education awareness, pertinent steps have to be taken to prepare environmentally conscious teachers (Nagra, 2007). Cartoon and comics based learning material was found effective in terms of student's achievement in environment subject (Das, Biswas & Mehta, 2007). Models for using technology in the classroom, technical and administrative support need to be provided to assess teachers in integrating technology into the curriculum and classroom (Jones, 2001). Administrative leaders need to help teachers become less fearful of the challenge of integrating technology by motivating them to have hands on active learning, exploring, reflecting collaboration among peers and participating in active learning (Sandholtz, 2001). Interactive educational technologies including computer generated simulation, video tapes, internet and CD ROM will assess students to learn to organize complex information recognized patterns, draw inferences and communicate findings (Dihllon, 2007). There is a great need of conducting workshops on educational technology in the school with practical involvement of all subject teachers including school principals to create an understanding of Educational Technology and its implication in teaching school subjects effectively and efficiently (Patadia & Goel, 2007). Students were found more favorably disposed towards video teaching learning material (VTLM), retention with VTLM and video aided instruction (VAI) was more effective than conventional teaching (CT) (Neera & Lal, 1998). Students' performance taught by Multimedia (MM) and programmed learning (PLM) were significantly higher than those taught by traditional method (TM) (Agarwal & Mohanty, 1998).

Many such research results have been reported in various areas of school education in different journals or discussed in seminars and conferences. But do these reach to the end users? As encouraging as it is to have policy makers espousing and even requiring the use of scientific and research based practices, there is no guarantee that results in our nation's classrooms will change unless we seriously confront the broad array of issues involved in effectively translating promising research findings into practice. A failure to address these issues may have the net effect of having these "research-based practices" not impacting the performance of students anymore and teachers continuing their practices on tradition and anecdote.

PURPOSE OF THE STUDY

The present study was aimed at determining the extent of awareness of school teachers of researches conducted in the field of school education. The problems faced by the school teachers in using the research results were studied. Finally the strategies were formulated to make research results more meaningful for quality schooling.

METHOD

SAMPLE

Participants in the study were 100 school teachers from twenty schools of Agra, India. Among the teachers 62% were women and 38% were men. The participants teaching experience ranged from 4 years to 30 years, with mean of 11 years for women and mean of 14 years for men.

TOOL USED

Participants completed a questionnaire focused on the purpose of the study. The questionnaire comprised questions pertaining to (i) to determine the extent of awareness of research results among school teachers. (ii) to determine the extent of usage of research results by school teachers for quality schooling. (iii) to find out the problems faced by the school teachers to use the research results for quality schooling. The questionnaire contained multiple-choice questions and open-ended questions.

DATA ANALYSIS

This study adopted both quantitative and qualitative methods, i.e. the use of triangulation. The open answers in the questionnaire were analyzed qualitatively for each participant.

RESULTS OF THE STUDY

The purpose of the study was to determine the extent of awareness of research results of school teachers. The questionnaire commenced with finding out the interest of participants in the related research studies. 41% teachers did not show interest in the research studies conducted in the field of school education. 59% of teachers reported that they are interested in exploring the research studies related to school education. The areas of research studies in school education as indicated by these teachers are as mentioned in Table 1.

Table 1

Areas of Interest of School Teachers in Researches related to School Education

Areas of Interest of School Teachers in Researches related to School Education	Percentage (%)
• Problems of Adolescents	34
• Science Education	23
• Latest Developments in Educational Technology	45
• Child Development and Psychology	22
• Elementary Education	28
• Students Learning Habits	44
• Innovative Teaching Methods	52
• Reforms in Education System	29
• Researches to Improve Education System	33
• Counseling of Students	22
• Enhancement of Brain Efficiency	26
• Personality Development	34

Although school teachers have shown interest in research studies related to school education but very few teachers (only 17%) read research journals to study related research studies. This reflects that reading research takes a low priority for teachers. The research journals named by school teachers which they read are - 'Maths I.Q., Science Today, BhartiyaShikshaShodhPatrika, Growth And Development, Handicapped Children, Child Psychology, Child Development, Indian Journal of Accounting, Down To Earth.' The names of research journals given by teachers, which they read, reflect the lack of awareness of teachers regarding studies related to school education, as some of them are not research journals even.

Other teachers (42%) who have although shown interest in research, but do not read research studies have reported problems faced by them. Out of 42% teachers who have shown interest in reading research, 59% of teachers do not get time to read research articles, 54% of teachers report that they do not read research studies because the school library does not subscribe it, 20% of teachers find the terminology used in researches difficult to understand. 22% of teachers find the research results difficult to interpret. 50% of teachers do not read research material because of lack of encouragement to read it. 24% of teachers are not aware of the source of subscribing the research journal. 63% of teachers are not able to access research studies because these are published in different international journals. 37% of teachers reported that there are no research journals related to school education. The research studies to improve quality of school education are conducted since long and are still being conducted, but how many results are implemented for quality schooling. The results also indicate that the school teachers do not even use research outcomes

such as multimedia packages, educational software, interventions, innovative pedagogical practices because of lack of awareness. Only 11% of teachers have reported to use these. The multimedia packages used by the school teachers according to the results are Multimedia Package for Biology, Environmental Science, Science for class 11, Computer software developed by Microsoft for class 9-12, Educational Software for class 9-12, CAI developed by the teacher himself for various classes.

Many innovative pedagogical practices and interventions are published through various media. But surprisingly the innovations indicated by school teachers which they use to improve the quality of school education are highly limited. The innovations reported by school teachers are mentioned in Table 2. It clearly shows the awareness level of school teachers regarding innovations in school education.

Table 2

Percentage of School Teachers using Innovative Strategies

S.No.	Innovative Strategies as Reported by School Teachers	Percentage (%)
1.	Easy representation of subject matter with the help of diagram and charts and other audio visual aids.	4
2.	New methods of teaching	7
3.	Educational CD's and DVD's	2
4.	Proper discipline measures	2
5.	Moral values with teaching of the subject	2
6.	Seminars and surveys	2
7.	Practical and real life examples	17
8.	Interactive teaching	2
9.	Home assignments and exploratory projects	4
10.	Recreational activities and cultural programmes	2
11.	Self study	4
12.	Use of Internet	2

59% of teachers report that multimedia packages or educational software or interventions developed as a result of research are not easily accessible. They also face the difficulty of lack of training to use multimedia package or educational software or interventions developed as a result of research. 41% of teachers are not even aware of these. The results of the present study indicate that there is need to evolve some strategies to make research results more meaningful for quality schooling.

STRATEGIES FOR OPTIMUM UTILIZATION OF RESEARCH RESULTS

Genuine research is an extensive process. A researcher leaves no stone unturned to carry out the study. Despite of the rigorous steps carried out by

researcher, the research results are not used at par, at least in the field of school education. These results need to be disseminated for strategic implications of existing research and exemplary practices on education quality. This will assist in developing school-level instruments to monitor school quality, and participate in development of national and cross-national efforts to improve education indicators (Hammersley, 2003). The strategies which may help in better utilization of research studies conducted in the field of school education for improving quality schooling are as follows:

The research-practice gap is largely caused by the separateness of the research and practice communities (Greenwood & Abbot, 2001). The practitioners should be involved in the research process as meaningful and valued partners so that the exemplary classroom practices that have the potential for formal validation and widespread applicability can be explored. Teachers should be involved in designing interventions, experimentation of innovative pedagogical practices and to decide research feasibility. Involving teachers in this way creates conditions in which intervention/instruction skills can develop through trial, redesign, and evaluation over time (Fullan, 1992). Innovations should be usable in front-line settings with sufficient specificity for the use of practitioners.

The school teachers should be encouraged to keep themselves abreast of the latest researches in school education. Professional development programmes such as workshops and seminars should be organized for school teachers where in they discuss the research results and plan for its effective implementation. The teacher's forum can be organized annually/ biannually to discuss the research studies conducted in school education. The orientation programmes should be organized for school teachers to introduce the use of latest multi-media packages, educational software or interventions. The school teachers should be made aware of these innovations. Also they should be trained to use them. The multimedia packages, educational software's, computer aided learning material or such research outcomes which can help school teachers to improve quality of school education should be made easily available in schools at nominal prices. The researchers should produce usable interventions with sufficient specificity and concreteness for use by practitioners. The research based interventions can be viewed as experiments in schools which may influence the content and delivery of instructions.

There should be continuous quality checks like SWOT analysis, TQM (Total Quality Management) for Total Quality Schools and such other innovations by organizations which work for quality schooling. They should ensure the optimum utilization of research studies and its implementation in the field of school education. Deliberate efforts should be made to integrate research findings into school curriculum resulting into effective knowledge utilization.

The participants in the study report that it is difficult for them to understand the technical terms used in research. Sydoriak and Fields (1997) urged that "research findings must be reported in language that is familiar to practitioners". Traditionally, researchers have published their findings in professional journals and trusted that others would read the results and use the findings in their classrooms (Kaestle, 1993). As reflected from the results of the study, very few teachers read journals to explore researches. This may be because the majority of teacher educators neither conduct research nor assign reading of research articles as part of pre-service training, teachers learn to disregard research from the moment they enter the field (Arends, 1990). Hence, reading, interpreting and using research results should be part of pre-service and in-service teacher education programme.

The process of research is not less than a herculean task. Hence it should be a matter of prime concern to see that the efforts made by researcher do not go in vain or it is not limited to books or journals only. Rather efforts should be made and appropriate strategies ought to be evolved for best possible utilization of research results and implementation in the field of school education. This is not only helpful but essential in the endeavour of improving quality of school education.

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