

The Current Status of Research Activities Among Addis Ababa Senior High Schools Teachers

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Seyoum Teferra*

Abstract: *This article examined the current status of research activities of Addis Ababa Senior High School Teachers. Among other things, the survey study found out that lack or absence of financial and material resources, as well as lack of incentives, were the major constraints of research activities in schools. At the same time, the study established that quite a significant percentage of teachers had the research skill to engage in research activities. Moreover, the overwhelming majority of them acknowledged that engaging in research activity should be considered as part of their duty. Furthermore, most of them are of the opinion that teachers' involvement in research activity would contribute to the improvement of quality of education. Unfortunately, however, the study indicated that, currently, the status of research activities in schools, was marginal. Therefore, in order to popularize and promote research activities in schools, it was suggested, that the Ministry of Education and the Science and Technology Commission needed to collaborate.*

1. Introduction

Once the above Geez maxim used to appear as a motto on the seal of the former Haile Selassie I University, today's Addis Ababa University. Roughly it means "inquire into everything possible; retain all that is good". Even though, today, it seems to have fallen into disuse, but it still has inspired this writer to address the study under discussion. Besides, not only does it encapsulate the essence of research but it also captures the spirit of the study.

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1. Introduction

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enhance and enrich the teaching-learning process thereby contributing to the improvement of quality of education. However, it may be true that to date research activities in our high schools may not be common and popular. In fact, the major thrust of this study is to probe into the current status of research activities in senior high schools. The study focuses on the following questions:

- a) What are the personal and institutional inputs that affect the current status of research activities among Addis Ababa senior high schools teachers?
- b) What concrete steps can be initiated in the immediate future to popularize and promote research activities among Addis Ababa senior high school teachers?

The study appears to be quite useful and timely particularly considering the emphasis given to orient education to wards problem solving as indicated in article 2.1.1 (TGE, 1994:7) of the new Education and Training Policy. Furthermore, the recent directive issued by the Ministry of Education in April 1996 requiring teachers to stay all day in school during week days claims that such measure will enable teachers to take the initiative to engage in research activities. Therefore, in light of such new developments, there seems to be a sound justification to examine research activities in high schools.

The study is expected to raise the level of awareness for the need to popularize and promote research activities among teachers and students in schools. It is also hoped that it will add, in its own small way, to the corpus of literature on the subject, particularly as it relates to educational research environment in Third World countries.

2. Background

At the very outset, it should be pointed out that the corpus of literature with regard to research activities in the country's high schools is marginal. In fact, research activity is a very new phenomenon in the development of modern education in the country. The traditional educational institutions like the Orthodox Church and the mosque did not encourage scientific inquiry or investigation. Therefore, unquestioning acceptance of natural phenomenon

was the rule rather than the exception. Even after the introduction of modern education, critical thinking and problem-solving approaches were not encouraged in the teaching-learning process. To this day, these two major establishments have been criticised for promoting such a type of education. This has also affected the secular education (TGE, 1994:2).

At the same time, however, it does not necessarily mean that there were no attempts at educational research. As a matter of fact, whenever the education system was faced with major crises, the government responded by launching nation-wide research studies. One of the most widely known study is the 1972 Education Sector Review. It attempted to make an in-depth study of the education sector but, it was discontinued by the 1974 revolution. Similarly, a country-wide study known as the Evaluative Research of the General Education System in Ethiopia (ERGESE) whose main focus was the improvement of quality of education in the country, was carried out in 1983. However, it did not materialize. Recently too, a study was conducted that gave rise to the new Education and Training Policy of 1994. It should also be noted that sporadic and fragmented research studies were made on various aspects educational issues by the different departments of the Ministry of Education such as the former Planning and Research Unit, and more recently, the Institute of Curriculum Development Research (ICDR).

Of course any reference to the genesis of educational research in the country would not be complete without addressing the role played by the Institute of Educational Research (IER) in Addis Ababa University. It was in 1968 that the Faculty of Education established what was then known as the Education Research Center as a research arm of the Faculty. Since then, it has been engaged in conducting research studies on Ethiopian education. In addition, in an effort to encourage educational research, it has been publishing since June, 1967 the *Ethiopian Journal of Education*, the only scholarly and reputable journal of its kind in the country. The Institute also collects educational documents on Ethiopia to help educational researchers. Moreover, in a bid to popularize research in education, in 1989, it published, and distributed to teachers an education* research manual under the sponsorship of the then Ethiopian Teachers' Association. In this connection, mention should also be made of another attempt made to popularize educational research through the publication in Amharic of a simplified educational research manual (Seyoum and Ayalew, 1982 E.C.). It should

also be noted that recently the Ministry of Education has started publishing a semi-annual bilingual journal called Educational Journal (MOE, 1995) that mainly caters for teachers. This indeed is a welcome addition to the effort that is being made to promote educational research.

Apparently, the paucity of literature on research activities in the country at school level is quite glaring. The only study that stands out and is worth mentioning here is that of Yusuf (1972 E.C.: 60-73). The focus of the survey study was the role of Addis Ababa high school mathematics teachers in research activities. Even though the sample size was limited to 45 mathematics teachers, the findings were, however, quite interesting as well as revealing. Among its major findings were:

- a) The overwhelming majority (86 percent) of the teachers did not take research methodology course.
- b) A very high percentage (81 percent) did not conduct any kind of research.
- c) Most of the respondents did not know the existence of the research institutions in Addis Ababa University.

In addition, reasons given by the respondents for not conducting research were:

- a) absence of conducive research environment in schools.
- b) inadequacy of research skill
- c) lack of financial and material resources in schools.
- d) bureaucratic red-tape.
- e) lack of interest in research.
- f) absence of government policy with regard to academic freedom.

Among the suggestions forwarded were:

- a) Teachers should be encouraged to participate in research activities.
- b) Research skills should be taught to teachers.
- c) Seminars or workshops should be conducted occasionally for teachers.

3. The Need for A Teacher to be a Researcher

First of all, before going any further it seems appropriate to clear one misconception about research activity. There seems to be some kind of mystification about research. It is sometimes conceived as an intimidating and sophisticated activity that is the exclusive preserve of university professors. In reality, however, it is not so. As recognized rightly by Boyd (1957:216).

Research is a high-hat word that scares a lot of people. It needn't... It is nothing but a state of mind-friendly, welcoming attitude toward change... It is the problem-solving mind as contrasted with the let-well-enough-alone mind. It is the composer mind instead of the fiddler mind. It is the "to-morrow" mind instead of the "yesterday" mind.

In justifying the need for a teacher to be a researcher, Hawes (1976:17708) observes:

The classroom teacher as a potential research-worker starts his task with very great advantages. He knows his own local conditions better than anyone else is likely to do; he has the support and confidence of those with whom he works: the children, the parents, the community members...

In fact, Hawes goes on to add that two powerful reasons exist in support of teacher-based research. The first has to do with the very serious deficiency of educational information with regard to local problems and local conditions. Such data are necessary as a basis for educational planning. Secondly, once a teacher becomes engaged in research activities in which his/her colleagues are also involved, he/she becomes a participant in the process of planning and improving an education system rather than a mere part of a machine. Besides, if teachers engage themselves in research activity they will have a multiplier effect on their students. Consequently, it will help in the development of research culture in schools.

Furthermore, the possibilities in which teachers can get involved in research activities in school context are varied and vast. They could range from

collection of school statistical data to making inventories on studies of learners. For instance, the following can be possible issues for research in schools: student enrollment figures by sex and age, occupation of parents, patterns of student and teacher attendance, drop-outs, repeaters, school-learners, teaching-loads, teacher turn-over, hidden versus formal curriculum, school-community relations, local community resources, local geography and history, local arts and crafts, local games and sports, local music, local economy, local languages, local flora and fauna, patterns of health and nutrition, youth unemployment.

Various types of research methodologies could be employed to study different kinds of educational problems. Currently, however, one particular research methodology that has been found to be quite amenable and appropriate in order to bring about improvement in the practice of the teaching-learning process and school management is known as action research.

According to Elliot (1991:69), action research is "the study of social situation with a view to improving the quality of action within it". In other words, action research helps in the improvement of educational practices in school situation. Moreover, action research follows three approaches. In the collaborative approach, a voluntary group of teachers or school administrators, students and parents may constitute as part of the research team. In the individual approach, action-research is carried out personally by an individual teacher. In the third approach, the entire school may get involved in the selection of the educational problem to be studied. In order for the research study to be successful, Elliot points out the following as pre-conditions:

- a) Teachers themselves have to be interested in the research activity.
- b) They need to have the research skill.
- c) They need to be encouraged by school officials.
- d) They have to be provided with time and money.
- e) They need to have research materials such as professional journals, reference books etc.
- f) There has to be a means for the dissemination of research results.

In addition, according to Cohen (1984:179), action research involves the following stages:

- a) It requires the identification, and formulation of the problem perceived as critical in everyday teaching or school management.
- b) It calls for initial discussion and agreement among the interested teachers and researchers.
- c) It involves reviewing the relevant related literature to find out what can be learned from the studies - their objectives, procedures and problems encountered.
- d) It may require a modification or redefinition of the initial statement of the problem in light of the review of literature.
- e) It needs the selection of research procedures such as sampling, administration, choice of materials, and allocation of resources.

4. Analytical Framework

More often than not, research activity is conceived as a joint venture between the individual researcher or a group of researchers, and the institutions that sponsors research. In other words, research activity is a result of a collaborative effort. Accordingly, there are inputs that an individual or a group of researchers need to have, and inputs that the sponsoring institutions has to provide so that the research activity can be carried out effectively. The inputs that are often expected from the individual constitute attributes such as personal interest in research, inquisitive mind, perseverance or discipline and research skill, etc. On the other hand, institutional inputs include such things as the provision of research funds and facilities, time, incentives, publishing outlets, etc.

As examination of the review of the literature reveals the importance of interest in research activity is highly emphasized. For instance, Jones (1957:97) regards it as the major driving force behind research. This is indeed true, because interest in research activity is not something that can be imposed from without unless it comes from within the individual. Similarly, having an inquisitive mind could be quite an asset in research. It is often said that research favors the one who is curious about problems as opposed to the one who takes everything for granted or one who is blind to problems (Good, 1963:80). Furthermore, by its very nature, research activity calls for the

disciplined mind, a mind that is tenacious and unwavering. In fact, depending on its scope and depth, research work is quite demanding. That is why success in research is often attributed to the individual researcher's perseverance (Good, 1963:130).

Besides, quite a number of writers (Elliot, 1991:69; Shaeffer and Nkinyangi 1983:15) on research methods have stressed that it would be virtually impossible to think of carrying out research activity without the individual being equipped with basic research skill. Therefore, the need for competency in research methods becomes indispensable to the individual. As Weirsman (1986:1-2) rightly put it:

Although educational research is a demanding task, it is not an impossible one. With organized and concentrated study, the aspiring educational researcher should be able to master necessary research methods. Basically, the only way to acquire competence in research is by doing it, but before research can be put into practice some skills must be acquired.

At the same time, it should be noted that having some or all of the above attributes does not necessarily guarantee the individual to effectively engage in research activity. As rightly recognized by Shaeffer and Nkinyangi (1983:2), "in general, a researcher, to do effective job, should be guaranteed with all sorts of favorable conditions like political, social, economic and cultural security". In fact, Lethnin (1987), as cited in Daniel and Tassew (1993), is much more specific and argues that the general and positive attitude and interest one has in research practice does not by itself take one anywhere unless the essential conditions for research are facilitated. Among the basic essentials that are needed to carry out research activity are obviously financial resources which are in short supply, particularly in most of the Third World countries. As such, since their availability is beyond the reach of most individual researchers, the existence of research sponsoring institutions becomes indispensable. The availability of research facilities ranging from office space to sophisticated pieces of research equipment call for research sponsoring institutions.

It should also be realized that research is a time-consuming activity. Consequently, a researcher needs to be provided with adequate time in order to be able to engage in research activity. The indispensability of time for research activity is aptly expressed below by Cannon (1945:87).

An investigator may be given a palace to live in, a perfect laboratory to work in, he may be surrounded by all the conveniences money can provide; but if his time is taken from him he will remain sterile. On the other hand, as the history of science abundantly shows, an investigator may be poverty stricken, he may be ill-clothed, he may live in a garret and have only meager appliances for his use; but given time he can be productive.

Furthermore, in order to effectively engage in research activity, a researcher needs to be provided with material and/or psychological incentive. Though it may be argued that researchers as scholars should remain above pecuniary benefits, it is not however pragmatic. Therefore, the provision of incentive in one form or another should be seriously considered by research sponsoring institutions.

Moreover, one of the major purposes of research is to disseminate what has been found so that it could be utilized. This calls for the creation of publishing outlets such as journals, magazines, newsletters, etc.

5. Methodology

In order to investigate the current status of research activities in senior high schools, the survey is employed as the appropriate method to canvas opinion on the issue.

Since teachers are expected to engage in research activities, it is assumed that it would be quite appropriate to get the relevant data directly from the horse's mouth. Therefore, teachers are chosen to serve as the main data source. Accordingly, over five hundred (526) teachers are selected randomly from thirteen Addis Ababa Senior High Schools. (See Table 1). The rationale for choosing the senior high schools in Addis Ababa is that Addis Ababa has

a high concentration of academically qualified as well as a highly experienced teacher corps.

Table 1: Questionnaire Distribution Among Sample Schools

School Zone	Name of School	No. of Returned Questionnaires	%
1	Kefetegna 4 Comprehensive High School	46	8.8
2	S.O.S.(Kefetegna 23) Comprehensive High School	38	7.3
	Shimelis Habte Comprehensive High School	26	4.9
3	Dej. Wondirad Comprehensive High School	33	6.4
	Bole Comprehensive High School	24	4.5
4	Kefetegna 12 Comprehensive High School	52	9.9
	Ethiopia Tikedem No.1 Comprehensive High School	39	7.4
	Misrak Comprehensive High School	54	10.2
5	Addis Ketema Comprehensive High School	43	8.2
	Kefetegna 7 Comprehensive High School	34	6.4
	Kolfe Comprehensive High School	40	7.6
	Medhanealem Comprehensive High School	59	11.2
6	Akaki Comprehensive High School	38	7.2
Total		526	100.00

In order to elicit the necessary data, a questionnaire is constructed based on the related literature. Besides, for purposes of validity and reliability, the questionnaire has been tried on some extension students of the Department of Educational Administration, most of whom were high school teachers. The questionnaire was then administered during the second semester of the 1996/97 Academic Year. The rate of return of the questionnaire was about 87 percent, regarded as high for a survey study of its kind. The data collected was then tabulated and analyzed using the Likert-scale and percentages.

6. Results

6.1 Respondents' Profile

A breakdown of the study population in terms of gender indicates that males constitute an overwhelming majority (89 percent); while females make up a small minority. This may not be a surprising finding considering the imbalance prevalent in schooling between males and females. Age-wise, well over 60 percent of the teachers fall within the active age range of 36-46.

Those close to the retirement age of 55 are quite a few (14.6 percent). On the other hand, those who could be categorized as young (below 36 years) comprise about 21 percent. With respect to academic qualification, well over 50 percent of the teachers have their first degree, while about 42 percent have a diploma. Those with a second degree constitute merely a token (1.9 percent). Moreover, their fields of specialization are spread over the physical and biological sciences as well as languages and social studies. The spread reflects more or less the subjects mostly taught in high schools.

Therefore, if one is to draw a profile of what may be characterized as a typical high school teacher, one could come up with a middle-aged male with a bachelor's degree.

6.2 *Teachers' Interest, Commitment and Experience in Research Activities*

As noted already, whether or not individuals have interest in research is quite crucial in order to engage in research activities. In fact, a lot seems to depend on it. Accordingly, respondents were asked to indicate their degree of interest in research. Surprisingly, the finding, indicates that 50 percent of the teachers expressed high level of interest and 34 percent claimed to be moderately interested. This is indeed an encouraging finding. It is only a small minority of about nine percent that reported to have low level of interest. Moreover, in order to probe into their degree of commitment to research, a question was posed as to whether or not conducting research in their respective subjects would contribute to the improvement of quality of education. A vast majority (81.7 percent) confirmed that to engage in research activities in the subject that they taught would lend itself to the enhancement of quality of education. About six percent did not confirm. In general, however, what the response of the overwhelming majority implies is that there is almost unanimity among the teachers that their involvement in research activities would make a difference in improving quality of education. It is indeed encouraging to learn this from the teachers themselves. Besides, in a further confirmation of their commitment to research, two-thirds of the teachers strongly maintain that involvement in research activity should be considered as part of their regular duty. Furthermore, another 25 percent, though not enthusiastically, share a similar view. In general, such an endorsement by teachers promises a better future to research activities in schools.

As emphasized under the theoretical framework, would-be researchers are expected to be well-grounded in research skills. As shown in Table 2, 48

percent of the teachers claimed that they had taken a course in research methods at university or college level. However, a sizeable percentage (27.2) admitted that they had not taken such a course. On the other hand, about 24.3 percent failed to respond to the question item. All in all, it seems that among the high school teacher corps there exist a significant percentage who have at least the basic research knowledge or skill to be engaged in research activities.

In response to frequency of participation in workshops or seminars in the 1996/97 academic year almost two-thirds (63.3 percent) of the teachers reported that they did not at all had a chance to participate; while about 20 percent said that they had the opportunity to participate two times. It was only a small minority of about two percent who claimed to have participated about four times. The rest, about 15 percent, seemed to have opted not to respond to this item at all. In general, it could be said that the overwhelming majority of the teachers did not have much chance to participate in seminars or workshops.

In addition, with regard to research experience, over 55 percent of the teachers reported that they had adequate experience in research activities. However, a significant percentage (34.2 percent) admitted that they had no research experience. In order to counter-check they were asked to indicate their rate of participation in workshops or seminars in the 1996/1997 academic year. Accordingly, a substantial percentage (63.3 percent)

Table 2: Teachers' Response to Research Methods Course

Teachers Who Took Research Methods Course at	No.	%	Teachers Who Did Not Take Research Methods Course		Those Who Not Responded	
			No.	%	No.	%
Diploma level	73	13.9	143	27.2	12.8	
First Degree level	142	26.9				
Second Degree level	9	1.7				
Short-training.	31	5.9				
Total	255	48.4	143	27.2	128	

reported that they had not participated at all. In fact, in a further probe into their research activities, they were asked to list down some research topics

they attempted to do in the recent past. Interestingly enough, their response was invariably characterized by blank space that was left unfilled. Likewise, in order to establish whether or not they were familiar with some of the locally published research journals they were asked to indicate their familiarity. As shown in Table 3, 67 percent of the teachers did not respond to the item. This, to a certain extent, could be a shocking revelation particularly to research institutes like the Institute of Educational Research that consider high school teachers to be among their clientele, for which journals they publish. This finding could also be a shocking revelation particularly to research institutes like the Institute of Educational Research that consider high school teachers to be among their clientele for the journals they publish.

Table 3: Teachers' Familiarity with Locally Published Research Journals

Journals	Teachers Familiarity with	
	No.	%
Ethiopian Journal of Education	51	9.7
MOE's Educational Journal	38	7.2
Journal of the Institute of Language Studies	30	5.7
Journal of Ethiopian Studies	22	4.2
Sinet: Ethiopian Journal of Science	19	3.6
Ethiopian Journal of Development Research	13	2.5
Total	173	32.9

6.3 Teachers' Opinion About constraints of Research Activities in Schools

In an attempt to investigate the current state of research activities in senior high schools in Addis Ababa, the teachers in the study were asked to indicate on a five-point Likert-scale their degree of agreement or disagreement to lack or absence of major individual and institutional research inputs. The finding, as indicated in Table 4, is quite revealing. The teachers reached a high level of consensus in identifying lack of incentives as well as lack of financial resources as major constraints to conduct research activities in schools. At least, on this issue, most of the teachers in the study seem to agree. It also shows that the teachers recognize that, in order to carry out research, these inputs are basic. The finding also confirms that research does not take place in a vacuum.

Besides, the teachers concur that heavy teaching-load is another handicap that hampers research activities in schools. In respect to this, it is reported in

the study that about 27 percent and 40 percent of the teachers carry a weekly teaching-load of 21-25 and 16-20 periods respectively. In fact, about eight percent reported that they carry over 25 periods weekly. However, whether or not these weekly teaching-loads are heavy may be hard to establish. In addition, the teachers also claim that besides teaching they spend weekly, on the average, two to four hours on lesson plan preparation and other school activities. One thing seems to be certain. In order to engage effectively in research activity, the availability of adequate time is not only necessary but essential.

Table 4: **Constraints of Research Activities Among Senior High School Teachers**

Constraints of Research Activities in Schools	Degree of Agreement or Disagreement				
	5 Highly Agree	4 Agree	3 Undecided	2 Disagree	1 Highly Disagree
Lack of incentive		4.48			
Lack of financial and material resources		4.47			
Heavy teaching-load		4.08			
Lack of opportunity to participate in seminars		4.05			
Engagement in other school activities			3.98		
Lack of encouragement by school officials			3.92		
Lack or absence of research experience			3.78		
Lack of publishing outlets			3.71		
Lack of interest in research			3.45		
Lack of competence in research skills			3.21		

It is also interesting to note that a close examination of the responses of the teachers to lack of interest in research, lack of competence in research skills, and to lack of research experience reveals that they are markedly characterized by indecision. At the same time, it is to be recalled that a good percentage of the teachers are reported to have admitted that they neither have the research competence nor the experience. Therefore, it appears that the teachers found it hard to accept that the current absence of research activities in schools is due to their lack of interest in research as well as to lack of competence and experience in research. They seem to prefer ambivalence. On the other hand, as noted earlier, their response to lack of

incentives and to lack of motivation as constraints of research activities in school was characterized by unanimity.

7. Conclusion

At this juncture, it may be in order to recapitulate some of the major findings of the study. The study, among other things, has tried to establish that a significant percentage (84 percent) of the teachers do not only claim to have varying levels of interest in research activities, but they also maintain that involvement in research activities (65 percent) should be considered as part of their duty because they believe that it would contribute to the enhancement of quality of education (81.7 percent). At the same time, however, the findings also report that there are a sizeable number (27.2 percent) of teachers with no research skill. The study also reveals that there is a degree of agreement among the teachers that lack of incentive, heavy teaching load and lack of opportunity to participate in seminars or workshops (see Table 4) are the major constraints to carry out research activities in schools. Besides, it has also been possible to learn from the study that, to date, there is hardly any worthy effort that has been made, at least by Addis Ababa senior high school teachers, to engage in research activities. This has indirectly been evidenced by the fact that a great majority of the teachers admitted that they have not been acquainted with some of the local research journals. This may indeed be a cause for concern.

In conclusion, it could be said that if anything has clearly emerged from this study, it is that research activity is a function of the integration of both personal and institutional inputs. In other words, without inputs from the two, it would be hard to effectively engage in research activities, particularly in the research environment of Third World countries.

Agenda for Action

At all, before considering the agenda for action, it may be proper to note that the teachers expressed. Even though quite a number of the teachers expressed in their written comments that the study was useful and timely, were at the same time quite sceptical about the prospect of the study materialising. Nonetheless, most of them were of the opinion that if

some concrete steps were to be taken to alleviate some of the constraints to research there was hope for research activities to flourish in schools. In fact, they earnestly appealed that this study would not be shelved. Therefore, based on the findings of the study as well as on the expressed concern of the teachers the following action plan is suggested.

In order to effectively carry out research it is imperative that there should be a joint venture between individual researchers and concerned institutions. Therefore, the agenda for action to popularize and promote research activities in schools calls for a cooperative enterprise between the Ministry of Education on one hand and the Science and Technology Commission on the other since the former is responsible for providing education not only quantitatively but also qualitatively, and the later for the development and diffusion of science and technology in the country respectively. As this cannot happen without the development of research culture in schools, it becomes therefore necessary that the Commission becomes an interested partner with the Ministry of Education in popularizing and promoting research activities in schools. In fact, there is no better institution other than the school that is well placed to serve as a seedbed for popularizing and promoting research. Therefore, to create a friendly as well as an enabling research environment in schools the two institutions need to collaborate.

In order to generate sustainable level of awareness and interest on the relevance of developing a research culture in school, the following need to be considered:

- a) Notwithstanding the scarcity of financial resources, it is suggested that the Ministry of Education and the Science and Technology Commission jointly establish modest research funds especially earmarked to popularize and promote research activity among teachers and students in senior high schools.
- b) Since it would be unrealistic to expect teachers without research skills to engage in research activity the provision of some training deserves serious consideration.
- c) In order to popularize and promote research in schools, subject-centered research clubs such as social studies, science and language, and the like could be created.

- d) Over-burdened teachers with unduly heavy teaching-load could not be expected to engage effectively in research activities. Therefore, concerned school officials should do everything possible to lighten the work-loads of teachers. In fact, they should be in the vanguard to provide morale and-material support so as to popularize and promote research culture in schools.
- e) It is believed that classroom teachers have a multiplier effect on their students. Therefore, whatever opportunity is available to participate in seminars or workshop, priority should be given to teachers.
- f) As the main purpose of research activity in schools is to bring about a certain degree of improvement in the quality of education, establishing publishing outlets for the dissemination of research results through journals, magazines, newsletters, etc. is necessary. For instance, a bi-annual research digest that could be named "The Teacher Researcher", or the "Young Researcher" could be launched. The disseminating channel need not be unduly expensive. It could be memographed material that could be cheaply produced and distributed nation-wide.