ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

STATUS OF ACTION RESEARCH IN GOVERNMENT SECONDARY SCHOOLS IN NORTH SHOA ZONE ,OROMIA REGIONAL STATE

BY
TADESSE ABERA

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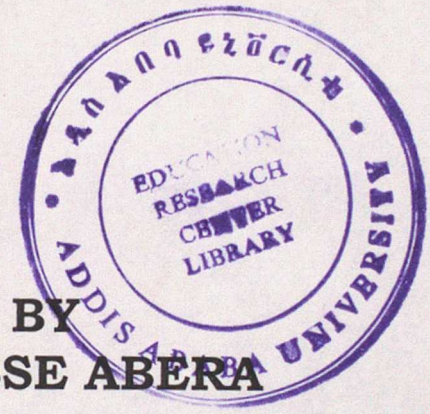

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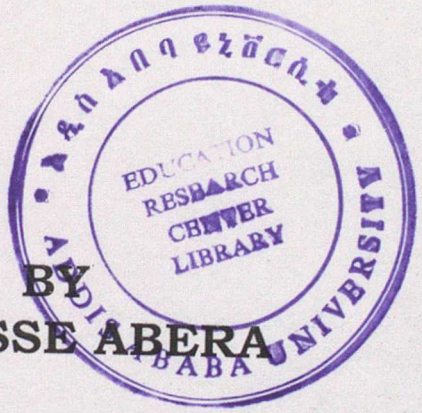

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A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES, ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN EDUCATIONAL PLANNING AND MANAGEMENT

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ABSTRACT

The main purpose of this study was to explore the current status of action research undertaking among secondary schools teachers in North-Shoa Zone in Oromia. The study was conducted in seven government secondary schools selected on the basis of purposeful sampling technique. The subjects of the study were 140 teachers drawn from the sample schools proportionately using stratified random sampling technique, as well as 14 schools principals and 14 woredas education officers selected on purpose. Information was solicited from the sample respondents through questionnaire, which was pilot-tested in one secondary school on 10 teachers and 2 principals. Based on the feedback obtained from pilot test, some modifications were made on about nine questions. Interviews were also held with 14 woredas education officials. Statistical tools such as chi-square test and percentages were used for data analysis. The findings of the study revealed that the knowledge and skills of teachers in conducting action research were not sufficient. Teachers remain uninvolved in the process of conducting action research. Moreover, acute shortage of resources (time, financial and material) was observed. Even though the existence of collaborative school culture is encouraging, it has to be developed more. On top of this, lack of action research skill, lack of time, lack of school management support, lack of cooperation among teachers, lack of incentives were also identified as hindrances of action research, undertaking. Therefore, it was argued that with appropriate support from concerned bodies and fulfilling necessary resources more teachers may become involved in action research activities and thus enable wider dissemination of their insights into children's learning.

CHAPTER ONE

THE PROBLEM AND ITS APPROACH

1.1. Background of the Study

Research is thoughtful inquiry of events. It is responsible for bringing to light new knowledge. It is also responsible for correcting the present mistakes, removing existing misconceptions and adding new learning to the existing body of knowledge (Khan, 1990: 1). Research is also a systematic attempt to obtain meaningful answers to questions about phenomena or events through the application of scientific procedures (Koul, 1984). Therefore, the features of scientific procedures such as an accurate observation, careful exploration, empirical evidence, carefully designed procedures, objective and logical testing (experimentation), and the researchers' patient, expertise and courage are also some of the basic elements of the research activities (Cooley and Bickel, 1986).

According to Mitchell (1985), educational research started to emerge around 1900-1910, when a complex industrialized society developed a greater need for educated individuals to operate its machines and institutions. He further explained that, when educated people were demanded by the society, education became an issue of discussion, and educators started to question and find answers about educational problems. Therefore, that was an initial point for the introduction of educational research. As a result, different organizations, which were responsible for educational research activities, like the National Society for the study of Education, the American Educational Research Association, the Journal of Educational psychology and the like were established in the years 1900-1910 (Koul, 1984).

In Ethiopia, though research undertaking is a new phenomenon in the development of modern education, attempts were made at educational research since its genesis by different concerned bodies like ministry of

Education, Institute of Curriculum Development and Research (ICDR), and most importantly the Institute of Educational Research (IER) in Addis Ababa University (Seyoum, 1998: 3).

Nowadays, the close link between teaching and research is called up on to make schools the right educational center. Because teaching and research is a new genre and it is different from traditional research in terms of how it approaches the process of doing research in the classroom setting by teachers. It is school-based research focusing on the importance of teachers as knowledgeable experts about their own students and classroom. Conducting classroom based research increases or expands the view of the teacher's role as decision makers, consultants, curriculum developers and classroom researchers, and it enables teachers to improve their understanding of the context of educational change. Teacher research thus has the potential power to maximize both teacher effectiveness and student learning.

Teachers to be effective, flexible and confident they should give more emphasis on research-based teaching. In doing so, they will be aware of classroom climates and it could be simple for them to distinguish the "good" and the "difficult" class in terms of both discipline and achievement. In implementing research-based teaching, there is a possibility for teachers to orient themselves with different teaching strategies, assessment, and teaching methodology and have the possibilities of taking into consideration each individual learner rather than the group.

Altricheter (1993: 5) also revealed that:

> *These teachers have not only carried out development work for their schools but have also broadened their knowledge and their professional competency. They have passed on this knowledge to colleagues, students, parents, and in written form, also to the wider public. They have shown that teachers can make an important contribution to the knowledge base of their profession.*

In justifying the need for a teacher to be a researcher, Hawes (in Seyoum, 1998: 5) also observed:

> *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, and community members.*

Currently, the research methodology that is appropriate to bring about improvement in the practice of the teaching-learning process and school management is known as action research (Seyoum, 1998: 6).

The involvement of teachers and others in the action research process- in data gathering, analysis, and critique- creates an immediate sense of responsibility for the improvement of practice. It could also serve as a bridge to professional development for the teacher. Participation in action research is thus a form of professional development, linking the improvement of practitioners with the improvement of practices (Husen and Postlethwnite, 1994: 43).

According to Kemmis and McTaggart (in Husen and Postlethwnite, 1994: 43), action research is:

> *a form of collective self reflective enquiry undertaken by participants in social situations in order to improve the productivity, rationality, and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which the practices are carried out.*

The Education and Training policy of our country has mentioned the importance of research and related competencies such as problem solving, creative thinking, and all rounded personality of the citizen. As indicated in article 2.2.6. (TGE, 1994: 8) of the Policy, emphasis is given to make education, training and research be appropriately integrated with development by focusing on research. The policy also emphasized the need to

integrate and coordinate teaching with research and development. It further states that any improvement and change in evaluation techniques, method of teaching and curriculum shall be assisted with research activities. Moreover, the strategy underlines that education can be promoted and be in a better standard when it is supported by a research (TGE, 1994: 13).

Therefore, in light of the emphasis given to the importance of research by different scholars and concerned bodies, it is quite useful to examine the research undertaking in secondary schools of North Shoa Zone in Oromia.

1.2. Statement of the Problem

Action research represents a scientific approach to problem solving that is considerably better than changes based on the effectiveness of untried procedures and infinitely better than no change at all. It is a means by which teachers can attempt to improve the educational process, at least with in their environment. It is believed to have a potential value to enhance professional development of teachers and to improve students learning.

According to Husen and Postlethwnite (1994: 43), action research aims to help practitioners investigate the connections between their own theories of education and their own day-to-day educational practices; it aims to integrate the research act into the educational setting so that research can play a direct and immediate role in the improvement of practice; and it aims to overcome the distance between researchers and practitioners by assisting practitioners to become researchers.

Therefore, teachers have good opportunity to search solutions for various educational problems in their localities through action research because they are true practitioners who face the real problems in classrooms.

It is natural that anyone evaluates his work. Thus, a teacher has to evaluate his work (teaching-learning process) through action research. In this regard

Kincheloe (1991) stated that if we are pushing teachers towards participation in educational research, we are in a position to evaluate the teaching-learning process and then defeat a bad teaching.

However, as Seyoum (1998: 3) put it quite nicely, "... it may be true that to date research activities in our high schools may not be common and popular".

Since the implementation of the Education and Training policy, teachers as well as schools and woreda educational officials believed on the value of action research. Nevertheless, involvement of teachers in action research activities, perceptions and facilities of schools for action research undertaking are said to be not easy matters. Hence, this study aims to examine the status of action research undertaking in secondary schools of North Shoa Zone in Oromia. In this regard, the following basic questions are entertained in the study.

1. Do teachers in secondary schools have the required knowledge and skills to engage in action research activities?
2. To what extent are teachers involved in action research activities to solve real problems of education in their setting?
3. Are resources (time, financial and material) available for secondary school teachers to conduct action research?
4. Is there collaborative school culture that support engagement in action research?
5. What are the potential barriers preventing teachers from initiating action research?

1.3. Objectives of the Study

1.3.1. General Objectives

The main objective of the study is to explore the current status of action research undertaking among secondary schools teachers in North Shoa Zone in Oromia. It was an attempt to raise the level of awareness for the need to

make known and promote action research activities among teachers and students in schools.

1.3.2. Specific Objectives

1. To assess the knowledge and skills of North Shoa Zone Secondary Schools teachers in doing action research.
2. To find out the extent to which North Shoa Zone secondary schools teachers conduct action research activities to solve real problems of education in their settings.
3. To assess whether the organizational culture of secondary schools in North Shoa Zone is conducive for undertaking action research.
4. To identify the potential barriers preventing teachers from initiating action research.
5. To recommend actions to be taken by concerned authorities to improve the status of action research activities among North Shoa Zone secondary schools teachers.

1.4. Significance of the Study

The study appears to be significant for the following reasons:

i. Secondary schools teachers benefit from this study since the result of the study will enable them strive to improve their skills and knowledge to conduct action research.

ii. The findings of the study may also provide some feedback to concerned education officials at all levels in the zone on major issues related to status of action research undertaking among teachers of secondary schools so that they could optimize successful operation of action research in secondary schools.

iii. The findings of this study may generate interests of those who have an intention for further study in the field.

iv. The study may add insights to the already existing knowledge by providing some important ideas.

1.5. Delimitation of the Study

The study focuses only on the current status of action research undertaking in government secondary schools in North Shoa Zone in Oromia. The rationale behind selecting this zone is that; first, since it is very difficult if not impossible for the researcher to conduct research having a wider scope for he may face shortage of time and money; he is obliged to delimit the study to the mentioned zone. Secondly, because the researcher has been working in the zone over a decade, he knows the seriousness of the problem regarding action research activities among secondary schools teachers in the zone.

The study is also delimited to investigate the knowledge and skills required of teachers to engage in action research, availability of resources and collaborative school culture as a frame of reference.

1.6. The Research Design and Methodology

1.6.1. The Method

Descriptive survey research method was employed for this study because the method enables the student researcher to collect description of the current status of action research in government secondary schools with the aim of producing data that justify current conditions and practices and compare it with established standard.

1.6.2. Sample Population and Sampling Techniques

To make the sample area manageable and representative, seven (50%) out of 14 government secondary schools were selected on the basis of purposeful sampling technique. The rationale for choosing these 7 secondary schools was that these schools have a high concentration of academically qualified and well experienced teachers than the other seven recently opened schools. With regard to the respondent sampling, teachers were chosen to serve as the main data sources because they were expected to engage in action research

activities. Accordingly, out of the total 280 teachers in the sample secondary schools, 140 (50%) were selected using stratified random sampling technique. The table below indicates study sites and the number of respondents from each site.

Table 1: Sample Schools and Respondents of the Study

S.N	Sample Schools	Teachers			Principals		
		Population	Sample		Population	Sample	
			No	%		No	%
1	Sheno Secondary School	37	18	49	2	2	100
2	Sendafa Secondary School	33	17	51	2	2	100
3	Chancho Secondary School	37	18	49	2	2	100
4	Muketuri Secondary School	36	18	50	2	2	100
5	Fitche Secondary School	59	30	51	2	2	100
6	G/Guracha Secondary School	40	20	50	2	2	100
7	Gohatsion Secondary School	38	19	50	2	2	100
	Total	**280**	**140**	**50**	**14**	**14**	**100**

***Source**: 1998 E.C. Educational Statistics Annual Abstract of North Shoa Zone Education Office*

***NB**: The Source applies for population only*

As shown in Table 1, the sample population of the study comprises of a total of 154 respondents: 140 teachers and 14 principals.

Out of the 14 school principals, seven were deputies. Since they were also the most relevant sources of information, purposeful sampling was employed.

In addition to this, 14 woreda education officers were included in the sample. Out of these, seven (7) were education offices heads and the remaining 7 were woreda educational supervision sections heads. These officers were also selected on purpose and were incorporated in the sample with the assumption of getting the required information, because they were among the

major ones who were directly involved in managing and rendering necessary support to the schools.

1.6.3. Instruments for Data Collection

The data for the study were obtained from primary and secondary sources. As secondary source, relevant literature was consulted to acquire adequate knowledge and insights in the area of the study, and to support the findings.

In an attempt to obtain first hand information, data were collected from the subjects through questionnaire. One set of questionnaire was prepared and administered to teachers and principals. This instrument was preferred because it enables to secure information at a time from as many subjects as possible.

1.6.4. Procedures of Data Collection and Administration

The following procedures were followed by the researcher in examining the problem under study. In order to elicit the necessary data, a questionnaire and interview were constructed based on the related literature. For the purpose of testing validity of the questionnaire, the researcher pilot tested the questionnaire on 10 teachers and 2 principals at Fitche Secondary School. The researcher examined the filled-in questionnaire item by item and made some modifications on nine questions. Before the actual collection of data, the researcher also contacted the principals of the sample schools for their permission (See Appendix C). The researcher then arranged convenient time for respondents in each sample school and woreda education office to elicit the necessary information and maximize the rate of return. Finally, data were gathered from sample secondary schools teachers and principals as well as Woreda Education Officers as per the schedule.

1.6.5. Methods of Data Analysis

The data collected through questionnaire was structured, organized and framed to suit analysis and inference. The organization of the data was followed by the tables which give detailed information about sample population. The data obtained through questionnaire was analyzed manually. Hence, the following descriptive statistical techniques were used to analyze the data:

i. Percentage and frequency counts were employed to analyze various characteristics of the sample. This statistical tool helps to determine the relative standing characteristics such as sex, age, teaching experience and educational level.
ii. Statistical tool such as chi-square was also employed to describe opinion differences between groups of respondents.

1.7. Definition of Terms

The following are key terms and phrases, which are used in the context of the study.

Action research: Is the process of studying a real school or classroom situation to understand and improve the quality of actions or instruction (Henson, in Johnson, 2002: 13).

Government school: A school fully runs by the government as per proclamation No. 260/1984. In this case schools run by either woreda education offices or regional education bureau.

Secondary school: A school comprised of either first cycle of secondary education (Grades 9 and 10) or second cycle of secondary education (Grades 11 and 12) or both, article 3.2.3 (TGE, 1994: 14).

School principal: Administrative head and a professional leader for school, who is subject to school system, policy and manages the school's total program. For this study it refers to both principals and assistant principals (Dejnozka, 1984: 127).

Teacher: A person employed in an official capacity for the purpose of guiding and directing the learning experiences of pupils or students in an educational institutions, whether public or private (Good, 1973: 586).

Woreda Education office: The immediate administrative level in which schools directly report to.

Woreda Education officers: Those officers who are working in the woreda education office. For this study it includes: worda education office head and woreda educational supervision section head.

1.8. Organization of the Study

The study has four chapters. Chapter I of the study provides background, statement of the problem, objectives of the study, significance, scope, research design and methodology, definition of terms and organization of the study. Chapter II presents a review of related literature. Chapter III consists the presentation, analysis and interpretation of data and Chapter IV comprises summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Action Research

2.1.1. The Conceptual Framework of Action Research

It's difficult to offer a comprehensive definition of the term action research for usage varies with time, place and setting. However, if we carefully consider many of the definitions there are common basic themes: empowerment of participants; collaboration through participation; acquisition of knowledge; and social change.

McCutcheon and Jung (1990: 148), for example, define action research as a "systematic inquiry that is collective, collaborative, self-reflective, critical and undertaken by participants in the inquiry." For Kemmis and McTaggart (1990: 5), action research is:

> *a form of collective self-reflective inquiry undertaken by participants in a social situation in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out.*

According to Rapoport (1970, cited in McKernan, 1991: 4), "action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework."

Clift et al. (1990: 54-55) define action research as "a way of thinking that implies the use of reflection and inquiry as a way of understanding the conditions that support or inhibit change, the process of change, and the results of change." Changing one's own practices, therefore, is one of the chief features of action research.

According to Zuber-Skerrit (1991: 2), the process that the researcher goes through to achieve aforementioned themes is a spiral of action research cycles consisting of four major phases: the planning, acting, observing and reflecting.

Action research is concerned with diagnosing a problem in a specific context and attempting to solve it in that context: it is usually collaborative- teams of researchers and practitioners work together on a project: it is participatory- team members themselves take part directly or indirectly in implementing the research and it is self-evaluative- modifications are continuously evaluated with in the on going situation the ultimate objective being to improve practice in some way or other (Cohen and Manion, 1994).

It's also important to distinguish action research from applied research for though they are similar in some way there are useful differences between them which need to be made explicit, for confusion between the two sometimes arise. They both utilize the scientific method. Since applied research is mainly concerned with establishing relationships and testing theories, it is quite rigorous in its application of the conditions of this method. To this end, therefore, it insists on:

- studying a large number of cases;
- establishing as much control as possible over variables;
- precise sampling techniques; and
- serious concern to generalize its findings to comparable situations.

Applied research does not claim to contribute directly to the solution of problems (Cohen and Manion, 1994).

In contrast, action research interprets the scientific method much more loosely, because its focus is on a specific problem in a specific setting. Its

emphasis is not so much on getting generalizable scientific knowledge. The conditions imposed on applied research, therefore, are normally relaxed with action research (Cohen and Manion, 1994).

According to Cohen and Manion (1994) the purpose of action research in school and classroom fall broadly into five categories:

1. it is a means of remedying problems diagnosed in specific situation or of improving in some way a given set of circumstances;
2. it is a means of in-service training there by equipping the teacher with new skills and methods, sharpening his analytical powers and heightening his self-awareness;
3. it is a means of injecting additional or innovatory approaches to teaching and learning into an ongoing system which normally inhibits innovation and change;
4. it is a means of improving the normally poor communications between the practitioner (teacher) and the academic researcher and of remedying the failure of traditional research to give clear prescriptions; and
5. although lacking the rigor of true scientific research it is a means of providing a preferable alternative to the more subjective impressionistic approach to problem-solving in the classroom.

There are three possibilities to undertake action research in schools: First, a single teacher is operating on his own with his class. There is a felt need on his/her part for some kind of change or improvement in the teaching learning or organization for example and will be in a position to translate his ideas into action in his/her classroom. He/she is as it were, both orientation within himself or herself. Secondly, action research may be pursued by a group of teachers working co-operatively within one school though of necessity functioning against a bigger backdrop than the teacher working solo. They may or may not be advised by an outside researcher. Thirdly, there is

occasion where a team of teachers work alongside a team of researchers in a sustained relationship, possibly with other interested parties like advisers, university departments and sponsors, on the periphery. This third possibility though potentially the most promising may also be the most problematic at least initially because of rival characterizations of action and research by the teachers and researchers respectively. Advocates of action research believe that little can be achieved if only one person is involved in changing his/her ideas and practices. For this reason, cooperative research tends to be emphasized and encouraged.

Grundy and Kemmis, (1981, cited in Grundy, 1982) state that there are three minimal requirements for action research. These requirements incorporate the goals of improvement and involvement which characterize any action research project. The conditions which are set out there as individually necessary and jointly sufficient for action research to exist are:

1. the project takes as its subject-matter a social practice, regarding it as a strategic action susceptible to improvement;
2. the project proceeds through a spiral of cycles of planning, acting, observing and reflecting, with each of these activities being systematically and self-critically implemented and interrelated;
3. the project involves those responsible for the practice in each of the moments of the activity, widening participation in the project gradually to include others affected by the practice and maintaining collaborative control of the process (Grundy and Kemmis, 1982, cited in Grundy, 1982: 353).

2.1.2. Historical and Philosophical Foundations of Action Research

Through the origins of action research are unclear with in the literature, authors such as Kemmis and Mc Taggart (1990), Zuber-Skerrit (1992), state that action research originated with Kurt Lewin, an American psychologist.

McKernan (1991: 8) on his part says:

> *... action research as a method of inquiry has evaluated over the last century and careful study of the literature shows clearly and convincingly that action research is a root derivative of the scientific method reaching back to the science in education movement of the late nineteenth century.*

According to Freideres (1992, cited in McTaggart, 1992: 2) the concept of participatory research emerged in the 1970s from development work in low income countries and mentions names such as Fals-Borda and Freideres.

Despite the clouded origins of action research, Kurt Lewin, in the mid 1940s constructed a theory of action research, which described action research as proceeding in a spiral of steps, each of which is composed of planning, action and the evaluation of the result of action (Kemmis and McTaggart, 1990: 8). Lewin (in Kemmis and McTaggart, 1990: 8) in his own words argued that "... in order to understand and change certain social practices, social scientists have to include practitioners from the real social world in all phases of inquiry." This construction of action research theory by Lewin made action research a method of acceptable inquiry (McKernan, 1991: 9).

Movements that have had historical and philosophical influences on action research are:

1. ***The science in education movement*** of the nineteenth and early twentieth century in which the scientific method was applied to

education, notably in the work of Bain (1979), Boone (1904) and Buckingham (1926, cited in McKernan, 1991: 8).

2. ***The experimentalist and progressive educational work,*** especially of John Dewey, who applied the inductive scientific method of problem solving as a logic for the solution of problems is such fields as aesthetics, philosophy, psychology and education (McKernan, 1991: 8).
3. ***The group Dynamics movement*** in social psychology and human relations training. This movement was used in the nineteenth century to address the social problems of this era through qualitative social inquiry (McKernan, 1991: 9). It was again utilized in the 1940s to address some of the problems (such as the onslaught of World War II, inter-group relations, racial prejudice, and social reconstruction) being experienced at this time.

One of the noted researchers of this time was Kurt Lewin. He discussed action research as a form of experimental inquiry based upon the groups experiencing problems. Social problems should serve as the locus of social science research. Basic to Lewin's model is a view of research composed of action cycles including analysis, fact-finding, conceptualization, planning, implementation and evaluation of action (McKernan, 1991: 9). In the fifties and early sixties action research was used in the study of industry, it developed a committed following in the USA at the Massachusetts Institute of Technology, and in the UK at the Tavistock Institute (McKernan, 1991: 10).

4. ***Post-war re-constructionist curriculum development activity.*** Action research in education was utilized in this era as a general strategy for designing curricula and attacking complex problems, such as inter-group relations and prejudice through large curriculum development projects (McKernan, 1991: 10). Generally, the research was carried out by outside researchers with the cooperation of teachers and schools (McKernan, 1991: 10. Noted researchers of this era were

Corey (1953), Taba (1949) and Brady and Robinson (1952, cited in Mckernan, 1991: 10). However, by the end of the 1950s action research was in decline and under attack. Sanford (1970, cited in McKernan, 1991: 10) suggested that the decline was directly related to the split between science and practice which was supported by the movement, and to the shift towards the establishment of expert educational research and development laboratories. This shift highlighted the separation of theory and practice. Professional researchers were insulated from the teaching ranks and were prevented from studying problems in the field (McKernan, 1991: 11).

5. ***The teacher-researcher movement***. This movement originated in the UK, with the work of Stenhouse (1975) and the humanities curriculum project. "Stenhouse felt that all teaching should be based upon research, and that research and curriculum development were the preserve of teachers" (McKernan, 1991: 11). He also states that "other significant teacher research developments include the Ford Teaching Project, and the Classroom action Research Network."

2.1.3. Characteristics of Action Research

Action research methodology bridges the divide between research and practice. It directly addresses the knotty problem of the persistent failure of research in the social sciences to make a difference in terms of bringing about actual improvements in practice. It does so by rejecting the concept of a two stage process in which research is carried out first by researchers and then in a separate second stage the knowledge generated from the research is applied by practitioners. Instead, the two processes of research and action are integrated (Somekh, 1995: 340).

So, the first main difference between action research and other forms of research is that it is carried out by people directly concerned with the social situation that is being researched. It is a precondition of action research that

the practitioner researchers have 'a felt need... to initiate change' (Elliott, 1991: 53). Action research starts from their practical questions arising from concerns in their everyday work. The investigation takes place in the workplace and no effort is made to 'control' the research context or design an 'experiment'. Somekh (1995: 341) states:

> *We are all practitioners in some sphere and the only distinction between practitioners and those often called 'outsiders' in action research is that the latter are not full-time participants in the social situation but have a short-term role, peripheral to the main action, as observers or facilitators or 'critical friends'. The problems of change in practice are inherent to all practitioners, because human action is rooted in routines developed through experience and fundamental beliefs of the individual. We have relatively poor control over our own actions, and worse still, little consciousness that this is the case.*

An empathetic outsider is, therefore, an invaluable resource in action research, although almost certainly best by the same difficulties in bringing about change in his or her own practice. This emerged clearly in the Initial teacher Education and New Technology Project (INTENT), in which teacher educators in higher education faced intense problems in integrating the use of information technology into their own teaching, despite their considerable experience as facilitators of their students' professional development in teaching (Somekh, 1995: 341).

A second major difference is that the findings of action research are feedback directly into practice with the aim of bringing about change. This is because, unlike traditional research, the validity of action research does not depend upon measuring the extent and frequency of phenomena over a period of time in order to justify precise (and therefore narrowly defined) statements of cause and effect. Action research is concerned with exploring the multiple determinants of actions, interactions and interpersonal relationships in

unique contexts. Its aim is deepen practitioners' understanding of the complex situations in which they live and work, so that their actions are better informed (Somekh, 1995: 341). Rather than specific 'findings' or 'outcomes', action research generates what Elliott (1991: 52-53) calls 'practical wisdom' and Dreyfus (1981) calls 'situational understanding'. However, an important part of this is usually in the form of specific insights which the action researcher uses as the basis for practical action steps to bring about improvements in the social situation s/he is researching. The validity of action research is tested by evaluating the impact of these action steps in a continuous process of data collection, reflection and analysis, interpretation, action and evaluation (Altrichter and Posch, 1989, cited in Somekh, 1995: 341).

A third major difference as Somekh (1995: 341) states it is that action research has a highly pragmatic orientation. It recognizes that there is a trade-off between the benefits of giving practitioners the central role in research (e.g. they alone have the power and ability to bring about change in the field of action) and the resulting limitations in terms of the time they can devote to research and their lack of certain kinds of specialist knowledge (e.g. skills of data analysis). Miles and Huberman (1984, cited in Somekh, 1995: 341) states that action research uses many of the same methods and techniques as traditional qualitative research but the aim is always to make the best possible use of these tools within the constraints of the workplace. As Somekh (1995: 341) put it "time for research is always limited, since the primary responsibilities of the action researcher are those of a working practitioner".

According to Somekh (1995: 342), a fourth major difference is that action research is grounded in the culture and values of the social group whose members are both participants in the research field and researchers. It may be instigated by an individual, but its momentum is towards collaboration,

because the emphasis on social interactions and interpersonal relationships has the effect of drawing other participants into the research process. The focus of the research is likely to be on an issue which is of concern to the group. Somekh, further states that:

> *... because action research incorporates a high degree of reflection upon both the conscious and unconscious meaning of individuals' intentions and actions, and their impact upon others, it contributes to the further development of the group's values and improvement in working conditions (Somekh, 1995: 342).*

Finally, a fifth major difference is that "action research raises particularly knotty ethical questions" (James and Ebbutt, 1980 cited in Somekh, 1995: 342). The researcher is a practitioner and the research involves an investigation into his or her own practice and that of colleagues. As an example, it is impossible to draw a line between data which have been collected as part of the research and data which are available to the researcher as part of the job. Likewise, it is impossible to carry out analysis and interpretation of the data without doing so in the light of prior knowledge (Somekh, 1995: 342).

The advantages of insider knowledge are great, but it is always important to specify a set of ethical principals to act as ground rules for the research, e.g. making it clear how much control colleagues will have over how their work is reported. These ethical principles not only provide necessary safeguards to all concerned; more importantly, they are essential in order to ensure the quality of the data and the depth of analysis which will be possible in the research (Somekh, 1995: 342). He, further states that when an outsider is working with the practitioner researcher as a co-researcher or facilitator of the research, the roles and responsibilities of both partners also need to be clearly defined. This form of collaboration is usually productive, because of the different kind of experience and/or skills that the outsider brings to the

work; nevertheless the expectations of each partner are grounded in different working cultures and institutional expectations (Somekh, 1995: 342).

Action research need not be solitary activity. In fact, there is an increasing interest in collaborative research where by two or more practitioners pursue questions or problems of shared interest (Carson, 1990). Obviously, collaboration is soul-searching, labor intensive work for any one participating, that shared understanding and significant change takes longer than expected, and that nothing is perfect (Bolin and Falk,. 1987; Hall and Hord, 1987; Jackson, 1988 cited in May, 1993: 119). Although this situation is sobering, collaboration is better than feeling powerless and isolated in one's work setting.

According to May (1993) practitioners in collaborative inquiry may represent only teachers or teachers and university researchers working together. He further states that in the latter arrangement, "the university member might assist a teacher in pursing his or her own questions of interest as these emerge over time". For example, the researcher can help the teacher collect information he or she has expressed an interest in or demonstrate research strategies that are appropriate to the teacher's questions. The university partner might share published research syntheses or examples of other teachers' case studies on similar topics, upon request. She or he could conduct classroom observations with field notes, audio-or videotape lessons, periodically interview students using open-ended questions generated by the teacher, engage in numerous informal conversations with the teacher, and share all written records or transcripts for the teacher's personal reflection and analysis (May, 1993: 118).

According to May (1993: 118) the genre of research methods most often used in action research is qualitative or interpretive in character, not quantitative or positivistic. There are at least two reasons for this. First, action research is

always field-based, in the original place, lending itself to ethnographic methods such as keeping field notes or journals, participant observation, interviewing, engaging in dialogue, audio taping, and collecting and analyzing documents and students' work. These methods provide more detailed, rich databases than do simple tests or surveys (Johnson, 2002: 51).

Second, the primary interest of action researchers is to gain a better understanding of their beliefs/practice and how these came to be, and to enhance their practice if, when, and how they see it. To do this, they try to attend to the nuances they often miss in the blur of routine practice, try to become more conscious of what they are thinking and feeling as they plan for and engage in practice, and pay closer attention to what students say and do in class in an effort to understand what sense students are making of their learning. Thus, journals, diaries, audio taping or videotaping oneself, and much conversation and dialogue with students, colleagues, or other action researchers are important methodological vehicles (May, 1993: 118).

2.1.4. The Importance of Action Research

With regard to the importance of action research, many scholars describe it in different ways. However, they are summarized as follows:

2.1.4.1. It can be used to fill the gap Between Theory and Practice in Education

Among other things, research is used to build theories that in turn help determine the best practices in education (Johnson, 2002: 16). These practices are then used to help teachers create effective learning experiences. However, sometimes the gap exists between researchers conducting and reporting their educational research and teachers practicing in the field (Hensen, 1996). That is, what goes on in schools often does not reflect the wealth of research related to best practice in teaching and learning.

According to Hensen (1996) and Johnson (2002: 17) action research is one solution in bridging the gap between theory and practice.

2.1.4.2. It can Empower Teachers to Become Agents of Change

Book (1996), Erickson (1986), Hensen (1996 cited in Johnson, 2002: 18) make clear that action research also facilitates teacher empowerment. Teachers are empowered when they are able to collect their own data to use in making decisions about their schools and classrooms.

Johnson (2002: 18) in his words states that:

> *Empowered teachers are able to bring their talents, experiences, and creative ideas into the classroom, and implement programs and strategies that best meet the needs of their students. They also are able to use the methodologies that complement their own particular philosophy and teaching style.*

According to Book (1996, cited in Johnson, 2002: 18) the top-down approaches sometimes used to manage schools and solve classroom problems create an external locus of control that inhibits teacher empowerment and thereby lessens the effectiveness of school.

2.1.4.3. It Enhances Professional Growth and Development

In regard to teachers' professional growth and development, Hensen (1996, cited in Johnson, 2002: 18) describes the following benefits of action research:

1. It helps teachers develop new knowledge directly related to their classrooms,
2. Promotes reflective teaching and thinking,
3. Expands teachers' pedagogical repertoire,
4. Puts teachers in charge of their craft,
5. Reinforces the link between practice and student achievement,
6. Fosters an openness toward new ideas and learning new things, and
7. Gives teachers ownership of effective practices.

Thus, providing teachers' time and incentive to engage in action research projects and giving them a platform to present their findings and engage in professional dialogue with peers enhances their professional growth and development, which in turn moves the field of education forward.

2.1.4.4. It is Like an In-service Training

Action research can also be used to replace teacher in-services as a means of professional growth and development (Johnson, 2002: 18). According to Berliner, et al. (1996, cited in Johnson, 2002: 18) traditional teacher in-services are often ineffective. That is, teachers are gathered, usually after a long day of teaching or on a busy workshop day, to listen to an expert describe an approach or methodology that often does not related to their classroom situation or align with their teaching style. Birman, et al., (2000, cited in Johnson, 2002: 18) on their part also state that these traditional in-services generally do not give teachers sufficient time, activities, or content to increase their knowledge or affect their practice.

Therefore, to be effective, in-services need to be longer or extended over multiple sessions, contain active learning to allow teachers to manipulate the ideas and enhance their assimilation of the information, and align the concepts presented with the current curriculum, goals, or teaching concerns (Johnson, 2002: 18).

2.1.4.5. It Prevents Teachers from Being Forgotten

According to Altrichter, H. et al. (1993: 176) by communicating to the public, deep knowledge and experience can be achieved and it is advantageous to the improvement of practice. While reporting, participants have the opportunity to discuss, raise questions, getting feedback and criticism and forwarding supplementary ideas could also be realized. It is helpful to improve the knowledge and practice of the reporter teacher and at the same time is useful

to other teachers and professional communities to gain knowledge from the findings. These activities will enhance the interaction between teachers and the community at large and at the same time highlights the importance and contribution of teachers.

2.1.4.6. It is a Means to Influence Educational Policies

If the report has rational arguments and is convincing, then it has a power to improve the policy when disseminated to a large group of people, hence the possibility of reaching the appropriate and decision-making people is high (Altrichter, H. et al., 1993: 176).

2.1.4.7. Teachers can Develop Confidence

After so many years of service, most of the teaching population assumes that their work is routine and they make themselves isolated due to dissatisfaction. However, reporting on research result tackle and alleviate such type of problem because each activity on professional development is recorded to make it visible to the public (Altrichter, H. et al., 1993: 176).

2.2. The Required Knowledge and Skills in Action Research

2.2.1. Practitioners' Knowledge

In order for the practitioners to change their own practices, they need to have knowledge that leads them to take action which is closely related to knowledge. According to Schon (1983) knowledge in action is inherent in the action and is the essential part of the epistemology of all professional practice, including teaching.

As for Park (2001: 82) we need to broaden the existing epistemological horizons to include forms of knowledge associated with various human concerns. They are discussed here under.

2.2.1.1. Representational Knowledge: Functional Subtype

One subtype of representational knowledge comprises the portrayal of a thing, a person, an event or an experience as being related as a variable to some other variable/s in a functional manner, as in saying that one variable is a function of another in a mathematical sense; correlation and causal relationships are good examples of representational knowledge. The instrumental power of representational knowledge in this functional form lies in its capacity to make predictions by showing antecedent events leading to probable consequences, which makes it possible, in theory, to produce desired events or to prevent undesirable ones (Park, 2001: 82).

Therefore, the action researcher equipped with such knowledge, is then in a position to control events, with varying degrees of success.

2.2.1.2. Representational Knowledge: Interpretive Subtype

In contrast to the functional subtype, interpretive knowledge manifests itself as understanding of meaning and requires that the knower come as close to the to-be-known as possible. This means taking into account the backgrounds, intentions and feelings involved both in understanding human affairs and textual and other kinds of artifacts that are human creations (Park, 2001: 83).

According to Park (2001: 83) the interpretive process requires an attitude of openness and willingness to listen to the message emanating from the object of interpretation. Thus, the knower and the known participate in the process of knowing in which what they bring to the encounter merges together.

As park (2001: 83) nicely put it "interpretive knowledge is synthetic and integrative, rather than analytic and reductive".

2.2.1.3. Relational Knowledge

According to Park (2001: 83) interpretive knowledge, when applied to human situations, has the potential for bringing people together in empathy and making it possible for them to know one another as human beings affectively, as well as cognitively, which constitutes relational knowledge. Park, further states that in every day usage, when we say 'we know some one', we mean this is a very different sense from knowing a fact or theory, or knowing right from wrong; it has a distinctively relational meaning.

Relational knowledge grows from interaction. Forms of interaction may include touching, as in shaking hands or hugging, conversing, telling stories and communicating through other means, sharing things, engaging in activities together, experiencing common events, living together, and partaking in the same cultural and ethnic background (Park, 2001: 86). For him, what makes conversation and other forms of interaction that lead to relational knowledge possible are respect, caring, sincerity, authenticity and trust. The attitude most conducive to promoting these traits in conversations is that of listening, for it is in listening that we come close to someone and we are with that person, as in putting our ear to someone's heart (Fiumara, 1990 cited in Park, 2001: 86).

2.2.1.4. Reflective Knowledge

According to Park (2001: 86) the notion of reflective knowledge derives from the critical theory tradition which argues that meaningful human knowledge must not merely understand the world but also change it.

Concerted engagement in change producing activity requires conscious reflection on the part of the actors involved, this is why this from of knowledge is chosen to be called reflective (Park, 2001: 86).

According to Mezirow (1990, cited in park, 2001: 86) reflective knowledge involves actors themselves critically analyzing and evaluating questions or

morality and values relating to their life conditions and the proper actions to take. But for Habermas (1970, cited in Park, 2001: 86) this form of knowledge is expressed as:

> *... a product of group deliberation in which concerned parties present arguments for or against a moral stance, an understanding of the problematic situation or a course of action to be taken, and ideally, discuss them according to criteria of rational discourse. It is a social and dialogic.*

Reflective knowledge confirms the dignity of human beings as free and autonomous agents who can act effectively and responsibly on their own behalf in the context of their interdependent relationships (Park, 2001: 86).

2.2.2. Inquiry Skills

According to Heron (1996, cited in park, 2001: 184) these skills are summarized here under.

2.2.2.1. Being Present and Open

This skill is about empathy, resonance and attunement, participating in the way of being of other people and the more-than-human world. And it is about being open to the meaning we give to and find in our world by imaging it in sensory and non-sensory ways.

2.2.2.2. Bracketing and Reframing

The skill here is holding in abeyance the classifications and constructs we impose on our perceiving, so that we can be more open to its inherent primary, imaginable meaning. It is also about trying out alternative constructs for their creative capacity to articulate an account of people and a world; we are open to reframing the defining assumptions of any context.

2.2.2.3. Radical Practice and Congruence

This skill means being aware, during action, of its bodily form, its strategic form and guiding norms, its purpose or end and underlying values, its

motives, its external context and defining beliefs, and of its actual outcomes. It also means being aware of any lack of congruence between these different facets of the action and adjusting them accordingly.

2.2.2.4. Non-attachment and Meta-intentionality

This is the knack of not investing one's identity and emotional security in an action, while remaining fully purposive and committed to it. At the same time it involves having in mind one or more alternative behaviors, and considering their possible relevance and applicability to the total situation.

2.2.2.5. Emotional Competence

This is the ability to identify and manage emotional states in various ways. It includes keeping action free from distortion driven by the unprocessed distress and conditioning of earlier years.

2.3. Teachers' Involvement in Action Research Undertaking

There are enough examples with in the educational literature to suggest that action research is popular with teachers. It has been used in pre-service and in-service courses to help participants reflect on aspects of their teaching practice (see for example, Gore, 1991; Johnston, 1994: 40). In some courses students are required to undertake, as assessment for the course, some form of action research project focused on their own teaching and, although the outcomes vary, there are many cases in which students find this a useful and illuminating process (Johnston, 1994: 40).

According to Johnston, (1994: 39) many teachers in a range of situations suggest that they find involvement in action research professionally and personally rewarding, as well as contributing to significant changes to their practice and their understanding of that practice.

Discussions about action research are always greeted with enthusiasm for a process which seems to "ring true" to teachers and student teachers. They seem to identify readily with the process and its terminology, immediately seeing many applications for it in their own teaching situations. Even the definitions of action research found in the literature do not present barriers to teachers. "They have a common-sense ring and teachers can readily see ways of incorporating action research into their own routines" (Johnston, 1994: 41). McCutcheon and Jung (1990, cited in Johnston, 1994: 41) have proposed that the salient characteristics of action research are captured in the following definition:

> *Action research is characterized as systematic inquiry that is collective, collaborative, self-reflective, critical, and undertaken by the participants of the inquiry. The goals of such research are the understanding of practice and the articulation of a rational or philosophy of practice in order to improve that practice.*

For many teachers, this puts into words a process they associate with being a professional, reflective teacher (Johnston, 1994: 41).

Of course there have been important developments over the past two decades that teachers integrating research into their classroom practice. Teachers have contributed as practitioners, researchers and writers to some classic collaborative action research projects like, for instance, the 'Humanities Curriculum Project' (see MacDonald, 1973), the 'Girls into Science and Technology (GIST) project' (Kelly et al, 1984 cited in Hancock, 1997: 85) and the 'pupil Autonomy and Learning with Microcomputers (PALM) project' (Somekh, 1991, cited in Hancock, 1997: 85).

Though these are some of significant and desirable developments, some writers made clear that the great majority of classroom teachers remain uninvolved. According to Hancock (1997: 86) they shy away from seeing themselves as researchers and they are reluctant to write about their

teaching practice. Stenhouse (1975: 142) on his part certainly anticipated the difficulties:

> *I concede that it will require a generation of work... if the majority of teachers- rather than only the enthusiastic few-are to possess this field of research...*

Therefore, as a matter of fact, teachers rarely seem to undertake action research of their own accord unless some kind of external motivation or intervention, such as funding, assessment requirements for coursework studies, a group facilitator or a university researcher always present (Johnston, 1994: 40). Hull et al. (1985: 99) in a collaborative research project between teachers and a small team of university staff also found that the school staff were at first very tentative about getting involved and surprisingly unfamiliar with the 'culture' of research. They write, "the professional teacher community does not embrace a research tradition".

Hancock (1997: 92) questions if action research is a 'natural' process for teachers. He identifies the barriers which prevent teachers from carrying it through on their own. He mentions teachers' strong orientation to practice, their continued belief that research is done by professional researchers, the isolation of individual class teachers which makes collaborative research difficult, and their lack of time and training in the necessary research skills. Hammersley (1993, cited in Hancock, 1997: 92) is concerned that teachers might be seen as lacking because they appear to need outside help in order to engage with action research. Johnston (1994: 43) in her conclusion says that there is a dissonance between action research and teaching:

> *Teachers' reluctance to take on action research may arise because action research, although appearing on the surface to be a natural part of what is considered to be good teaching, actually does not fit with the processes that reflective, inquiring teachers use.*

Perhaps this dissonance is part of a larger difficulty related to the research role itself. Smetherham (1978, cited in Hancock, 1997: 93) suggests that the very act of doing research separates one "from the thoughts and interests of those cohabiting the observed social world". The maintenance of a research identity necessarily results in a degree of detachment from the here and now being studied. Participants who carry out 'insider' research have to grapple with this (Hancock, 1997: 93). He also states that "good professional practice requires that teachers give full attention to children' ongoing needs- the 'ethic of care'."

However, observing the situation and collecting data must, to some extent, take them away from this interpersonal engagement. So, there is a sense in which research may actually conflict with good teaching practice (Hancock, 1997: 93).

2.4. School Culture

2.4.1. What is School Culture?

According to Deal and Peterson (1990: 7) the school culture:

> *... is a complex web of norms, values, beliefs and assumptions, and traditions and rituals that have been built up over time as teachers, students, parents, and administrators work together, deal with crises, and develop unstated expectations for interacting and working together.*

This invisible, taken-for-granted flow of beliefs and assumptions gives meaning to what people say and do. It shapes how they interpret hundreds of daily transactions. Culture consists of the stable, underlying social meanings that shape beliefs and behavior over time (Deal and Peterson, 1990: 7).

According to Halsall (1998: 29) one of the most consistent messages from the school improvement literature is that school culture has a powerful impact on any change effort.

Equally consistent as the general message concerning the influence of culture on change efforts is that to do with the relationship between a collaborative culture and the likelihood of those efforts being successful (Halsall, 1998: 29).

2.4.2. What types of School Cultures Exist in Schools?

2.4.2.1. Collaborative School Cultures

In schools where collaborative culture prevail, teachers regularly engage in professional dialogue with colleagues, share ideas, knowledge, and techniques, and participate in collaborative problem-solving around classroom issues. Teachers work together to develop shared technical knowledge and discover common solution to challenging problems (Little, 1982).

Developing collaborative work cultures helps reduce the professional isolation of teachers, raises morale, enthusiasm, and the teachers' sense of efficacy and makes teachers more receptive to new ideas (Fullan, 1991).

2.4.2.1.1. The Importance of Collaboration in Schools

According to Fullan and Hargreaves (1991) schools with professional collaboration exhibit relationships and behaviors that support school improvement including the following:

- More complex problem-solving and extensive sharing of craft knowledge.
- Strong professional networks to share information.
- A richer technical language shared by educators in the school that can transmit professional knowledge quickly.
- Increased job satisfaction and identification with the school.
- More continuous and comprehensive attempts to improve the school, when combined with school level improvement efforts.

- Greater risk-taking and experimentation (because colleagues offer support and feedback).

Collaborative schools also foster practices that support success, such as the following:

- Failure, mistakes, and uncertainty in work are not "protected and defended" but are openly shared, discussed, and examined in order to provide support and help (Fullan and Hargreaves, 1991: 49).
- "Broad agreement on educational values" exists, but colleagues accept the natural disagreements that foster new dialogue (Fullan and Hargreaves, 1991).
- These schools are "places of hard work, of strong and common commitment, dedication, of collective responsibility, and of a special sense of pride in the institution" (Fullan and Hargreaves, 1991: 48).
- Disagreements are openly voiced more frequently and more strongly as purpose and practice are discussed (Fullan and Hargreaves, 1991: 49).
- The teacher receives respect and consideration as a person (Fullan and Hargreaves, 1991).
- Collaborative schools have more satisfying and more productive work environments (Fullan and Hargreaves, 1991).

2.4.2.1.2. Characteristics of Collaborative Cultures

According to Halsall (1998: 29-30) the major characteristics of collaborative school cultures are listed here under:

1. Teachers working with and for each other on a range of tasks such as action research, curriculum planning and design, resources preparation, etc.
2. Voluntarism: collaboration arises from teachers' views regarding its value to themselves and to the students.

3. A collective commitment to the schools vision, values, purposes and development priorities.
4. Leadership roles for and involvement in planning by, more rather than fewer teachers.
5. A belief that everyone can and should make a difference to student progress, development and achievement and that it's the responsibility of us all'.
6. A belief in the notion that improvement is always possible, that it is a process and an always shifting end.
7. A belief that teachers are learners and that maximization of student learning is dependent on this.
8. Openness: a willingness and ability to speak one's mind and to listen to others, with a view to being constructively critical and a readiness to handle disagreements.
9. A willingness to take risks, to try something different, in the knowledge that if it does not quite work out there will be an acknowledgement of the intent and of the effort made, and an absence of unconstructive criticism.
10. A readiness to celebrate peoples' efforts and successes, both those of teachers and students, manifested as verbal and written praise and the celebration of achievement evenings.

2.4.2.1.3. Collegial Relationships

Collegial relationships are important in collaborative schools. Collegial relationships exist when teachers discuss problems and difficulties, share ideas and knowledge, exchange techniques and approaches, observe one another's work, and collaborate on instructional projects (Little, 1982; Rosenholtz, 1989). In schools where collegiality is the norm, these professional, interactive, supportive relationships are accepted, enhanced, and socially encouraged (Little, 1982). Such relationships have a key impact

on schools and provide the opportunity for teachers to work together on improvement activities.

According to Rosenholtz (1989) strong collegial relationships enhance productivity, staff development, and school improvement efforts. Collegiality increases the capacity for change and improvement, because collegial relationships provide powerful sources of stimulation, motivation, and new ideas.

Rosenholtz (1989) also found key behaviors in schools with strong collegial orientations. In these schools, teachers' value professional relationships, share ideas, and readily exchange new techniques. Teachers and administrators spend time observing each other, and they instruct each other in the craft of teaching through formal and informal demonstrations. These interactions can build a powerful and shared technical language about teaching and learning that is precise and concrete. Collegial environments favor in-depth problem solving and planning. Interactions among staff and administrators foster more successful staff development, ongoing refinement of instruction, and improved teaching (Rosenholtz, 1989).

Little (1982) identifies four types of collegial relationships found in schools: (1) story telling and scanning for ideas, (2) aid and assistance, (3) sharing, and (4) joint work. According to Little (1982) the first three are relatively weak in shaping deeper, more productive professional relationships, although they involve some interaction, while the fourth type, joint work, provides ample support and complex connections to improve staff relationships and collaboration.

Generally, collaboration and collegiality are in any case likely to be particularly appropriate or conducive to action research or teacher research for school improvement. It is a manifestation of, or a contribution to, a

collaborative culture and a shared purpose and commitment. They are also likely to help maintain the research effort through the mutual support it provides, and to lead to the more active participation of a broader group of staff in debates following the conclusion of the research (Halsall, 1998: 90).

2.4.2.2. Non-Collaborative Culture

According to Fullan and Hargreaves (1991) there are three non-collaborative cultures:

2.4.2.2.1. Balkanization

This is where separate and competing groups seek power and influence for their own ends. Competition, poor communication, and poor integration of curriculum and instructional ends characterize these schools. This isolation of competing groups discourages the rich interplay of ideas, solutions, and networking of practical knowledge.

2.4.2.2.2. Comfortable Collaboration

In this case, the culture carefully restricts collaboration; teachers stay out of deeper, more extended relationships that could foster problem-solving, exchange of craft knowledge, and professional support. This form of collaboration can be thin and superficial, with teachers sharing some materials, some instructional techniques, or bits of wisdom but avoiding deeper discussion of teaching, curriculum, long-range planning, and the shared purpose of schooling. Collegial interchanges, when they occur, focus on comfortable, immediate, short-term issues that are not likely to solve thornier problems facing teachers.

2.4.2.2.3. Contrived Collegiality

These cultures are characterized by "a set of formal, specific, bureaucratic procedures to increase the attention being given to joint teacher planning, consultation, and other forms of working together" (Fullan and Hargreaves,

1991). But formal structures are not necessarily collaborative cultures. Examples of these structures include site-based management councils, school improvement teams, or peer coaching arrangements. While these structures may bring teachers together and foster the implementation of new programmes, structures alone will not necessarily foster the deeper, more substantial, and more productive informal linkages, norms, and shared commitment found in collaborative settings (Fullan and Hargreaves, 1991).

2.5. Potential Barriers Preventing Teachers from Initiating Action Research

The potential barriers preventing teachers from initiating action research have been well documented. The major ones are listed here under.

2.5.1. The Dichotomy of Theory and Practice

One of the misunderstandings which restrain teachers from participating in practical inquiry and classroom-based research is the separation of theory and practice in education. There is a common belief among practitioners that it is the theorists who do the theorizing and the teachers who teach (do the practice). This misunderstanding defines teaching and research as two separate activities (Carr, 1990 cited in Kwan, 1993: 41). It defines research as a scholarly activity, which is too academic for practitioners. Kwan (1993: 41) says "even if they are able to research, teachers are reluctant to claim themselves as researchers".

2.5.2. Lack of Time

Shortage of time is always raised as a barrier by teachers who find great difficulty incorporating in to their busy daily routines, time to gather formally as groups to discuss professional issues (Johnston, 1994: 42).

Obviously research activity is time taking. The researcher has to raise and deal with so many issues, for example, teaching-learning methods, materials, different relationships, students' achievements, and so on. All these issues can't be attained over night but need careful investigation on the part of the researcher.

Therefore, to attain the intended objectives the researcher should be provided with ample time. Otherwise, the quality of the research will be in question.

The crucialty of time for research undertaking is clearly shown by Cannon (1945: in Seyoum, 1998: 9).

> *An investigator may be given a place 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.*

For teachers who are expected to conduct action research, in addition to their teaching-learning and many other roles the crucialty of time is unquestionable. However, it is the only option they have in order to examine their own practice and to support and test their teaching, training, curriculum and methodology (Rossister, 1993).

2.5.3. Lack of Research Skills

Although advocates of action research attempt to distinguish it from empirical research approaches and suggest naturalistic forms of data collection, many teachers feel that they lack the research skills which they perceive are needed for action research (Johnston, 1994: 42).

The knowledge and skill acquired could differ from individual to individual as far as action research is concerned. This shows the necessity of expertise and

appropriate experience in conducting research, since it deals with a number of variables. Weirsman (Cited in Seyoum, 1998: 8) elaborates on the need of research skills, by saying as this:

> *Although is intrigued educational research is demanding task, it is not an impossible one. With organized and concentrated study the aspiring educational research 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.*

Lack of in-service trainings like workshops, seminars, conference, etc on action research makes the problem severe. The limitation in learning research skills in pre-service teacher education program makes teachers handicapped to conduct action research unless in-service trainings are frequently arranged. In general training updates individuals' understanding and makes one familiar with the new technology and the new world when designed accordingly. Besides it is an educational process, which is beyond information telling, and transmitting knowledge and skill, but as Wentling (1983: 1) says it requires the trainers to have a thorough understanding of the training process, the role and value of proper and systematic planning in it.

2.5.4. Lack of Interest

Any process of inquiry should not be imposed from the external body. This idea is supported by Jones (in Seyoum, 1998: 7) success will be achieved when the initiation comes from the individual researcher himself or herself. She/he herself/himself must suggest doing it depending on the area of interest, to explore intrinsically with some passion. It's only at this time that people will have more concern for their society and attempt to pursue significant goals rather than being selfish.

In addition carrying out research also needs people who are visionary, have the potential to analyze things in different perspectives and ready to respond and challenge without any hesitation. Otherwise, hurdles like over stretched social commitment could be manifested in the absence of interest and determination.

Generally commitment to action research depends on the teacher himself/herself. Kwan (1993: 16) nicely put by qualifying it as:

> *Action research should not be imposed on to schools and teachers as a top-down policy.... Most teachers are still at the thought level and do not really commit to action. But commitment to action research depends very much on the teacher's attitude and ability to change and on self-initiation...*

2.5.5. Standardizing Teaching

According to House (1974: 172-173) school principals who are not competent in performing duties associated with strong instructional leadership are likely to follow a 'production ideology'; a practice similar to 'functional foremanship'. It is characterized by centralized control and a narrow job definition or specification of the teaching duties of the staff of a school. These leaders believe there is one best way of performing effective teaching. By standardizing teaching, teacher supervision and monitoring are readily easily implemented. In a similar vein, it is believed that teacher incompetence can be identified with ease (Kincheloe, 1991). The production ideology is also rightly recognized by Kwan (1993: 23) as:

> *The revivals of 'Taylorism' in the professional work place frustrates teaches to teach creativity. 'Taylorism' ignores the idiosyncrasies of reflective practice and critical understanding in the site-based dynamics of individual classrooms.*

2.5.6. The Isolated Culture of Teaching

According to Kwan (1993: 40) "the world of teaching is a lonely one". He observed that there is little open communication and discussion among colleagues. Teachers are used to teaching alone in the classroom and seldom share with their own experiences.

Subject-based ideology and departmentalism further alienate teachers and pull them away from peer collaboration (Hargreaves, 1991 cited in Kwan, 1993: 40). According to Schon (1987, cited in Kwan, 1993: 40) without mutual support and collaboration, any form of change causes fear and the admission of fear is often considered as a sign of deviation. Even if they want to talk about their practice, teachers find that they do not have the language to communicate their thoughts. They find their knowledge is tacit and their knowing is in the action (Kwan, 1993: 40).

2.5.7. Motivational Factors

In the absence of psychological and material benefits the opportunity of undertaking research is a rare case (Seyoum, 1998: 8). Psychological achievements like recognition, public support, satisfaction due to the results achieved are needed. People also have motives of financial and material incentives for their engagement in research activities.

2.5.8. Deskilling of Teachers

> *Reformers often try to specify the characteristics of good teachers in terms of universal observable competencies. However, these behavioristic and outcome-oriented measurements are based on reductionist view (Wideen and Holborn, 1986 cited in Kwan, 1993: 40).*

Measurement by standardizing teacher's behavior is harmful to the profession. It is a deskilling process which restrains teachers from active inquiry into their own practice (Apple and Teitelbaum, 1986, cited in Kwan,

1993: 40). According to stringer (1997, cited in Kwan, 1993: 40) in response to such deskilling, some teachers, already exhausted with heavy workload and administrative duties, may tend to rely on a mechanistic, repetitive, teach-to-the-test approach to learning. Hence, the deskilling view of teaching removes the possibility of action research and school-based reform from the teacher.

CHAPTER THREE

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This part of the thesis deals with the presentation of the results and their discussion. Questionnaires were distributed to 14 secondary school principals (including deputies) and 140 teachers. And they were duly filled and returned by both groups.

Based on the collected data, the results and discussion are presented following each table.

Table 2: Questionnaires Distributed to and Collected from Respondents

Name of School	Teachers Questionnaire			Principals Questionnaire		
	Distributed	Collected	Difference	Distributed	Collected	Difference
Sheno Secondary School	18	18	-	2	2	-
Sendafa Secondary School	17	17	-	2	2	-
Chancho Secondary School	18	18	-	2	2	-
Muketuri Secondary School	18	18	-	2	2	-
Fitche Secondary School	30	30	-	2	2	-
G/Guracha Secondary School	20	20	-	2	2	-
Gohatsion Secondary School	19	19	-	2	2	-
Total	**140**	**140**	-	**14**	**14**	-

Table 2 displays questionnaires distributed to and collected from respondents. As seen from the table no questionnaire was unreturned. All the questionnaires (100%) were distributed, filled and returned to the researcher by teachers and principals. Hence, rate of return of the questionnaire was 100%.

In this regard, Babbie (1973, Cited in Best, J.W. and Kahan, J.V., 2003: 242) proposes that a response rate of 50% is adequate, 60% good, and 70% very good.

Table 3: Sex and Age Profile of Respondents

Respondents	Sex	No	%	Age								Total
				≤ 25		26-35		36-45		Above 45		
				No	%	No	%	No	%	No	%	%
Teachers	Male	128	91.4	44	31.4	34	24.3	33	23.6	17	12.1	91.4
	Female	12	8.6	5	3.6	4	2.9	2	1.4	1	0.7	8.6
	Total	**140**	**100**	**49**	**35**	**38**	**27.2**	**35**	**25**	**18**	**12.8**	**100**
Principals	Male	14	100	-	-	8	57.1	6	42.9	-	-	100
	Female	-	-	-	-	-	-	-	-	-	-	-
	Total	**14**	**100**	**-**	**-**	**8**	**57.1**	**6**	**42.9**	**-**	**-**	**100**

As indicated in Table 3, considerable proportion of teachers 128 (91.4%) were males while the remaining, 12 (8.6%) were females. Consistent with this, North Shoa Zone, Educational statistics Annual abstract of 1998 E.C. showed that the total number of female teachers in government secondary schools was only 6%. This shows that there is gender imbalance in the number of teachers.

Unfortunately, there were no female principals. All the principals (100%) were males.

Regarding their age, whereas the majority, 87 (62%) of teachers who could be categorized as young lie below 36 years, the remaining about 25% and 13% lie in 36-45 and above 45 years respectively.

Table 4: Teaching Experience and Educational Level of Respondents

Respondents	Teaching Experience	No	%	Educational level				Total %
				Diploma		BA/BSc		
				No	%	No	%	
Teachers	≤ 5 years	63	45	6	4.3	57	40.7	45
	6-10 years	13	9.3	2	1.4	11	7.9	9.3
	11-15 years	12	8.6	5	3.6	7	5	8.6
	16-20 years	22	15.7	5	3.6	17	12.1	15.7
	≥ 21 years	30	21.4	8	5.7	22	15.7	21.4
	Total	**140**	**100**	**26**	**18.6**	**114**	**81.4**	**100**
Principals	≤ 5 years	1	7.1	-	-	1	7.1	7.1
	6-10 years	3	21.4	-	-	3	21.4	21.4
	11-15 years	4	28.6	-	-	4	28.6	28.6
	16-20 years	3	21.4	-	-	3	21.4	21.4
	≥ 21 years	3	21.4	-	-	3	21.4	21.4
	Total	**14**	**100**	**-**	**-**	**14**	**100**	**100**

Any effective research activity requires attributes such as interest, inquisitive mind, discipline, research skill, experience, educational level and so on. Accordingly, respondents were asked to indicate their experience and educational level. Table 4 above presents the summary of responses as reported by the sample respondents. As regards the educational level of teachers, as shown in the table, while the great majority (81.4%) had BA/BSc, the remaining 18.6% were diploma holders. This shows that there is minor inconsistency with the standard which requires BA/BSc at secondary school level. Concerning the educational level of principals, all of them (100%) were BA/BSc holders. This shows compatibility of educational qualification between the school principals and the required standard.

With respect to teaching experience, as shown in Table 4, 54.3% of teachers and 28.6% of principals had below 11 years teaching experience; while 45.7% and 71.4% of teachers and principals respectively had above 10 years experience.

Table 5: Respondents' Opinion on Research Knowledge and Skill

No	Item	Respondents				Total (N=154)	
		Teachers (N=140)		Principals (N=14)			
		No	%	No	%	No	%
1	Have you taken research course at university or college?						
	• Yes	121	86.4	10	71.4	131	85.1
	• No	19	13.6	4	28.6	23	14.9
2	If your answer is 'yes' for the above item which research course have you taken?						
	• Action research	51	36.4	4	28.6	55	35.7
	• Educational research	70	50	6	42.8	76	49.4
3	Do you have participated in training programs (workshops, seminars, etc) on action research?						
	• Yes	30	21.4	4	28.6	34	22.1
	• No	110	78.6	10	71.4	120	77.9
4	If your answer for the above item is 'yes', to what extent the training assisted you in conducing action research?						
	• to high extent	17	12.1	4	28.6	21	13.6
	• To medium extent	8	5.7	-	-	8	5.2
	• To low extent	5	3.6	-	-	5	3.2

Respondents were asked to indicate whether or not they had taken research course at university or college. As seen from Table 5, the great majority, 86.4% and 71.4% of teachers and principals respectively had taken research course at university or college level. Nevertheless, a small portion about 13.6% and 28.6% of teachers and principals respectively had not taken this type of course. In addition, respondents were asked to specify the type of research course they had taken. Accordingly, the minority (36.4% and 28.6%) of teachers and principals respectively had taken action research as a course at university or college level. However, 50% and 42.8% of teachers and principals respectively had taken educational research as a course. This indicates that there exists substantial teaching group who have not the required knowledge of action research.

Respondents were also asked to indicate whether or not they have participated in training programs like workshops, conferences, etc concerning action research. As clearly seen from Table 5, the majority 78.6% and 71.4% of teachers and principals respectively responded that they have not participated in such types of trainings while 21% of teachers' and28.6% of principals said that they have participated. Moreover, while 12.1% of teachers and 28.6% of principals suggested that the training assisted them highly in conducting action research, about 5.7% and 3.6% of teachers respectively confirmed that the training assisted them to a medium and low extent in conducting action research. This signifies that there is more than half way to go to develop the knowledge and skill of teachers in action research through short term trainings like workshops and seminars.

These trainings could benefit teachers if they are given the opportunity to participate. Teachers can develop action research plans collectively, rather than doing it individually. Trainings will also give teachers the chance to engage in shared dialogue and critical inquiry.

Table 6: Teachers' Involvement in Action Research Activities

S.N.	Item	Respondents				χ^2 value
		Teachers (N=140)		Principals (N=14)		
		No	%	No	%	
1	Have you conducted action research in your school?					
	• Yes	28	20	4	28.6	**0.579**
	• No	112	80	10	71.4	
	Total	**140**	**100**	**14**	**100**	
2	If your answer is 'yes' for the above item, to what extent were you involved in conducting action research?					
	• Highly involved	6	4.3	2	14.3	**1.524**
	• Moderately involved	22	15.7	2	14.3	
	Total	**28**	**20**	**4**	**28.6**	

$\alpha = 0.05$

Table 6 displays the data on teachers' involvement in action research activities. As seen from the table, while the great majority of respondents, 80% and 71.4% of teachers and principals respectively admitted that they have not conducted action research in their schools, about 20% of teachers and 28.6% of principals responded positively that they have conducted action research at their settings. In addition, those respondents who have conducted action research were also asked to indicate the extent of their involvement in conducting action research. Consequently, about 15.7% and 14.3% of teachers and principals respectively confirmed that they were highly involved; while about 4.3% of teachers and 14.3% of principals said that they were moderately involved in action research activities.

Chi-square tests for teachers' involvement in action research activities were also calculated. As shown in the table the result of the tests revealed that (with degree of freedom (df)= 1; critical value of $\chi^2 = 3.841$, and the tests values of $\chi^2 = 0.579$ and 1.524) in both cases there are no statistically significant difference between the opinions of the two study groups (See Appendix D).

From this it can be deduced that the great majority of classroom teachers remain uninvolved in action research activities.

Hancock (1997), underlined that teachers shy away from seeing themselves as researchers and they are reluctant to write about their teaching practice. Stenhouse (1975: 142) on his part certainly anticipated the difficulties by stating the following: "I concede that it will require a generation of work... if the majority of teachers-rather than only enthusiastic few are to possess this field of research".

In order for teachers to conduct action research, it is, therefore, paramount to understand that they need to overcome their reluctance in doing their own research.

Table 7: Respondents' Opinion on Sufficiency of Time as Resource to Conduct Action Research

Item	Respondents				Total	
	Teachers		Principals			
	No	%	No	%	No	%
Do you have ample time to conduct action research in your school?						
• Yes	31	22.1	3	21.4	34	22.1
• No	109	77.9	11	78.6	120	77.9
Total	**140**	**100**	**14**	**100**	**154**	**100**

As shown in Table 7, respondents were asked whether they had ample time or not to conduct action research in their schools. Accordingly the majority (77.9%) and (78.6%) of teachers and principals respectively suggested that they haven't had ample time to conduct action research. On the other hand, about 22.1% of teachers and 21.4% of secondary school principals responded positively to the question. Consequently, what can be inferred from this is that teachers are lacking in time for conducting action research.

Johnston (1994: 42) commented on this as "lack of time is always raised by teachers who find great difficulty incorporating into their busy daily routines time to gather formally as groups to discuss professional issues."

Table 8: Respondents' Opinion on Availability of Resources (Financial and Material) to Conduct Action Research

Item	Respondents	Statistic	Excellent	V. Good	Good	Fair	Poor	χ^2 Value
Financial	Teachers (N=140)	No	1	3	18	23	95	4.944
		%	0.7	2.1	12.9	16.4	67.9	
	Principals (N=14)	No	1	1	1	2	9	
		%	7.1	7.1	7.1	14.3	64.3	
Reference Books	Teachers (N=140)	No	4	10	22	29	75	0.619
		%	2.9	7.1	15.7	20.7	53.6	
	Principals (N=14)	No	1	1	2	3	7	
		%	7.1	7.1	14.3	21.4	50	
Journals	Teachers (N=140)	No	2	2	13	14	109	3.895
		%	1.4	1.4	9.3	10	77.9	
	Principals (N=14)	No	1	1	1	1	10	
		%	7.1	7.1	7.1	7.1	71.4	
Periodicals	Teachers (N=140)	No	0	7	18	17	98	1.164
		%	0	5	12.9	12.1	70	
	Principals (N=14)	No	0	0	1	2	11	
		%	0	0	7.1	14.3	78.6	
Newspapers	Teachers (N=140)	No	3	6	11	16	104	1.674
		%	2.1	4.3	7.9	11.4	74.3	
	Principals (N=14)	No	0	0	2	1	11	
		%	0	0	14.3	7.1	78.6	
Unpublished materials	Teachers (N=140)	No	0	5	11	19	105	2.59
		%	0	3.6	7.9	13.6	75	
	Principals (N=14)	No	0	0	0	1	13	
		%	0	0	0	7.1	92.9	
Stationery	Teachers (N=140)	No	3	10	17	24	86	1.599
		%	2.1	7.1	12.1	17.1	61.4	
	Principals (N=14)	No	0	1	1	4	8	
		%	0	7.1	7.1	28.6	57.1	
Research Rooms	Teachers (N=140)	No	1	4	5	9	121	2.291
		%	0.7	2.9	3.6	6.4	86.4	
	Principals (N=14)	No	0	0	1	2	11	
		%	0	0	7.1	14.3	78.6	

$\alpha = 0.05$

Table 8 displays the data on the condition of resource (financial and material availability) to conduct action research. As seen from the table, substantial percentages (67.9%) of teachers and 64.3 percent of principals rated the financial availability as poor; while 16.4 percent and 14.3% of teachers and principals respectively rated the condition as fair. The rest, 15.7% of teachers and 21.4% of principals said that the financial availability had met the acceptable standard, (i.e. good, very good and excellent).

The result of the chi-square test for the availability of financial resource is also presented in the Table. As can be seen from the Table, with 4 degree of freedom; alpha level 0.05; critical value of $\chi^2 = 9.488$. The result disclosed that there is no statistically significant difference between the response patterns of the two study groups (See Appendix E).

With regard to reference books, the majority of respondents, over 53% and 50% of teachers and principals respectively reported that the availability of reference books was in poor state. While 20.7 percent of teachers and 21.4% of principals responded that reference books were fairly available. On the other hand, about 15.7%, 7.1%, 2.9% and 14.3%, 7.1%, 7.1% of teachers and principals respectively said that reference books were available in good, very good and excellent condition.

The result of the chi-square test ($\chi^2 = 0.619$; df=4; alpha level= 0.05; critical value of $\chi^2 = 9.488$) revealed that there is no statistically significant difference between the response patterns of the two groups-that is, teachers and principals. This suggests that both groups declared almost in the same way that there is considerable lack of reference books in secondary schools of North Shoa zone (See Appendix E).

Respondents were also asked to evaluate the availability of journals. Accordingly, a sizable portion (77.9%) and 71.4% of teachers and principals respectively indicated that the availability of journals were in poor condition. Moreover, 10% of teachers and 7.1% of principals reported that journals were available in fair state. Here again the result of the chi-square test for the availability of journals ($\chi^2 = 3.895$; df= 4; alpha level= 0.05; critical value of $\chi^2 = 9.488$) also shows that there is no statistically significant difference between the response patterns of teachers and principals. As mentioned earlier the overwhelming majority of both groups suggested in relatively the same way that journals were available in secondary schools in poor state. This clearly reveals that journals are in accurate shortage in secondary schools of the zone.

In response to availability of periodicals, the vast majority (78.6 percent) of principals and 70% of teachers repotted that periodicals were available in poor condition, while very small portion of respondents (12.1%) and 14.3% of teachers and principals respectively said that periodicals were fairly available. The result of chi-square test for availability of periodicals (χ^2= 1.164; df= 4; alpha level= 0.05) disclosed that there is no statistically significant difference between the opinions of the two study groups about availability of periodicals (See Appendix E). This denotes that there is acute shortage of periodicals in secondary schools of North Shoa.

The result of the chi-square test for the state of availability of newspapers is also presented in the same table. As can be seen from the Table, the result revealed the absence of statistically significant difference between the opinions of the two study groups about the availability state of newspapers (χ^2 = 1.674; df= 4; alpha level= 0.05). That is, considerable percentages (74.3%) and 78.6% of teachers and principals respectively admitted in relatively the same way that newspapers were poorly available in secondary schools. Likewise, about 11.4% of teachers and 7.1% of principals on their part indicated that newspapers were fairly available.

In addition, the proportions of those respondents who have reported the availability of newspapers as being good are insignificant in both groups. This suggests that North Shoa zone secondary schools are lacking in Newspapers to conduct action research activities.

With regard to unpublished materials, as can be seen from the Table, the result of the chi-square test (χ^2 = 2.59; df=4; alpha level= 0.05; critical value of χ^2 = 9.488) disclosed that there is no statistically significant difference between the opinions of the two groups concerning the availability of unpublished materials. That is, enormous percentages, 92.9% and 75% of principals and teachers respectively responded in relatively the same way that the availability of unpublished materials was poor. Very small portion, 13.6% of teachers and 7.1%

of principals reported that unpublished materials were fairly available. This indicates clearly like previously mentioned resources, unpublished materials are not accessible to many teachers and principals in secondary schools of the zone.

Respondents were also asked to evaluate the availability of stationery materials in secondary schools of North Shoa Zone. Accordingly, 61% of the total respondents suggested that the availability state of stationery materials was poor; while about 18.2% and 11.7% said that the availability of stationery materials was fair and good respectively.

Besides chi-square test was also computed to this item, as can be seen in the table, the result (χ^2 = 1.599; df= 4; alpha level= 0.05) indicated that there is no statistically significant difference between the views of the two study groups about the availability of stationery materials in secondary schools. That is, a sizable proportion, 61.4% and 57.1% of teachers and principals respectively suggested that stationery materials were poorly available; while 17.1% of teachers and 28.6% of principals said that stationery materials were fairly available. This is also a clear revelation of lack of stationery materials to conduct action research activities in secondary schools of North Shoa Zone.

Respondents were also asked to evaluate the availability of research rooms. Accordingly, the overwhelming majority of the total respondents (85%) confirmed that research rooms were poorly available in secondary schools. However, small portion (7.1%) respondents said that research rooms were fairly available. The rest, quite insignificant percentages (3.9%, 2.6% and 0.6%) of the total respondents indicated that the availability of research rooms were good, very good and excellent respectively.

As seen from the Table, the chi-square result (χ^2 = 2.291; df= 4; alpha level= 0.05; critical value of χ^2 = 9.488) also revealed the absence of statistically significant difference between the opinions of the two study groups. That is, the vast majority of respondents 86.4% and 78.6% of teachers and principals

respectively confirmed that research rooms were poorly available in secondary schools in North Shoa Zone. The slighter difference in response pattern is due to chance.

Table 9A: Respondents' Views on Collaborative School Culture

Item	Respondents	Statistic	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	χ^2 Value
Teachers are working with and for each other on a range of tasks such as action research and so on	Teachers (N=140)	No	11	31	30	37	31	2.3766
		%	7.9	22.1	21.4	26.4	22.1	
	Principals (N=14)	No	2	1	3	5	3	
		%	14.3	7.1	21.4	35.7	21.4	
	Total (N=154)	No	**13**	**32**	**33**	**42**	**34**	
		%	**8.4**	**20.8**	**21.4**	**27.3**	**22.1**	
Teachers believe that they can make a difference to students progress, development and achievements	Teachers (N=140)	No	49	54	27	6	4	3.5187
		%	35	38.9	19.3	4.3	2.8	
	Principals (N=14)	No	2	8	3	1	0	
		%	14.3	57.1	21.4	7.1	0	
	Total (N=154)	No	**51**	**62**	**30**	**7**	**4**	
		%	**33.1**	**40.3**	**19.5**	**4.5**	**2.6**	
Teachers believe that action research is a meaningful activity	Teachers (N=140)	No	59	45	18	5	13	17.5464
		%	42.1	32.1	12.9	3.6	9.3	
	Principals (N=14)	No	5	2	3	4	0	
		%	35.7	14.3	21.4	28.6	0	
	Total (N=154)	No	**64**	**47**	**21**	**9**	**13**	
		%	**41.6**	**30.5**	**13.6**	**5.8**	**8.4**	
Teachers have willingness and ability to express their views directly and honestly in front of their colleagues	Teachers (N=140)	No	49	53	19	14	5	10.6616
		%	35	37.9	13.6	10	3.5	
	Principals (N=14)	No	1	6	2	5	0	
		%	7.1	42.9	14.3	35.7	0	
	Total (N=154)	No	**50**	**59**	**21**	**19**	**5**	
		%	**32.5**	**38.3**	**13.6**	**12.3**	**3.2**	
Teachers believe that they are learners and learning is evidenced by the research activity itself	Teachers (N=140)	No	50	55	19	15	1	10.2556
		%	35.7	39.3	13.6	10.7	0.7	
	Principals (N=14)	No	2	3	5	4	0	
		%	14.3	21.4	35.7	28.6	0	
	Total (N=154)	No	**52**	**58**	**24**	**19**	**1**	
		%	**33.8**	**37.7**	**15.6**	**12.3**	**0.6**	
Teachers are willing and able to express their mind in front of their superiors	Teachers (N=140)	No	37	48	33	16	6	12.1719
		%	26.4	34.3	23.6	11.4	4.3	
	Principals (N=14)	No	1	4	2	4	3	
		%	7.1	28.6	14.3	28.6	21.4	
	Total (N=154)	No	**38**	**52**	**35**	**20**	**9**	
		%	**24.7**	**33.8**	**22.7**	**13**	**5.8**	

$\alpha = 0.05$

Table 9A displays the data on collaborative school culture. It is important to remember that one of the major characteristics of collaborative school culture used in this study (as seen from the literature part) involves teachers working with and for each other on a range of tasks such as action research, and so on. Accordingly, respondents were asked whether they agree or not in the presence of this characteristic of collaborative school culture in secondary schools. The finding indicates that 48.5% and 57.1% of teachers and principals respectively expressed their disagreement while 30% of teachers and 21.4%of principals claimed to agree. Moreover, 21.4% of teachers and 21.4% of principals said that they were undecided. This reveals that teachers in secondary schools of North Shoa Zone are not working with and for each other on a range of tasks such as action research and so on.

Chi-Square test was also computed for this item. The result ($\chi^2 = 2.3766$; df= 4; alpha level= 0.05; critical value of $\chi^2 = 9.488$) disclosed that there is no statistically significant difference between the opinions of the two study groups about teachers working with and for each other on tasks such as action research (See Appendix F).

Respondents were asked whether or not they agree on the opinion that teachers believe that they can make a difference to students' progress, development and achievements. Quite interestingly, considerable percentages (73.9%) and (71.4%) of teachers and principals respectively agreed with the opinion. Moreover, 19.3% of teachers and 21.4% of principals said that they were undecided. It is only a small minority (7.1%) of both teachers and principals who disagreed. This of course is an encouraging finding because there exists enthusiasm among the vast majority of the teaching professionals to bring about change in the students' progress, development and achievements and hence use action research as a means to this end.

As shown in the same table, the result of Chi-Square test ($\chi^2 = 3.5187$; df= 4; alpha level= 0.05; critical value of $\chi^2 = 9.488$) revealed the absence of statistically significant difference between the opinions of the two study groups.

Respondents were also asked whether they agree or not on the opinion that teachers believe that action research is a meaningful activity. Accordingly, the majority of total respondents (72.1%) admitted that they agreed with the opinion, while only 14.2% reported that they disagreed with the opinion. On the other hand, about 1.6% of the total respondents were unable to decide about the opinion.

The Chi-Square test result for the opinion that teachers believe that action research is a meaningful activity revealed that ($\chi^2 = 17.5464$; df= 4; alpha level= 0.05) there is statistically significant difference between the response patterns of the two study groups. That is, while sizeable portion (28.6%) of principals claimed that they disagree with the opinion the small minority (3.6%) of teachers confirmed likewise. In addition, while 21.4% of principals were unable to decide about the opinion, 12.9% of teachers were also undecided about the opinion that teachers believe that action research is a meaningful activity.

In general, this finding crystallizes that teachers believe in the value of action research. This may not be a surprising finding. Johnston (1994) suggests, discussions about action research are always greeted with enthusiasm by teachers.

As shown in the same table, respondents were asked whether or not they agree on the opinion that teachers have willingness and ability to express their views directly and honestly in front of their colleagues. Accordingly,

substantial percentages (72.9%) and 50% of teachers and principals respectively indicated their agreement on the opinion that teachers have willingness and ability to express their views directly and honestly in front of their colleagues; while about 13.5% of teachers and 35.7% of principals disagreed. In addition, the rest, about 13.6% and 14.3% of teachers and principals respectively were unable to decide on the opinion. From this, it could be inferred that secondary school teachers have willingness and ability to express their views directly and honestly in front of their colleagues.

As can be seen in the same table, sizable percentages (75%) and 35.7% of teachers and principals respectively agreed with the opinion that teachers believe that they are learners and learning is evidenced by the research activity itself. However, about 11.4% of teachers and 28.6% of principals disagreed with the opinion; while 13.6% and 35.7% of teachers and principals respectively were undecided about the opinion. Interestingly, the vast majority (71.5%) of the total respondents seem to agree that teachers believe that they are learners and learning is evidenced by the research activity itself. This shows that teachers have no doubt regarding action research's value to themselves and to the students.

Respondents were also requested to indicate whether or not they agree on the opinion that teachers are willing and able to express their mind in front of their superiors. Accordingly, considerable percentage (60.7%) of teachers and 35.7% of principals reported that they agree with the opinion; while, the minority 15.7% of teachers and a sizable portion (50%) of principals disagreed with the opinion that teachers are willing and able to express their mind in front of their superiors. The rest, 23.6% and 14.3% of teachers and principals respectively were unable to decide on the opinion.

From 50% of principals' point of view, secondary schools teachers are lacking willingness and ability to express their mind in front of their superiors. As

shown in the table, the results of the Chi-square tests for the last three items revealed the presence of statistically significant difference between the response patterns of the two study groups (i.e., with df= 4, the critical value= 9.488, in all cases the tests values are greater than the critical value).

Table 9B: Respondents' Views on Collaborative School Culture

Item	Respondents	Statistic	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	χ^2 value
The school principals support action research undertaking	Teachers (N=140)	No	19	32	44	24	21	9.4387
		%	13.6	22.9	31.4	17.1	15	
	Principals (N=14)	No	4	4	0	5	1	
		%	28.6	28.6	0	35.7	7.1	
	Total (N=154)	No	**23**	**36**	**44**	**29**	**22**	
		%	**14.9**	**23.4**	**28.6**	**18.8**	**14.3**	
Teachers are willing to take risks involved in action research undertaking	Teachers (N=140)	No	20	37	35	33	15	6.4753
		%	14.3	26.4	25	23.6	10.7	
	Principals (N=14)	No	0	2	4	7	1	
		%	0	14.3	28.6	50	7.1	
	Total (N=154)	No	**20**	**39**	**39**	**40**	**16**	
		%	**13**	**25.3**	**25.3**	**26**	**10.4**	
There is cooperative relationship between teachers and school officials	Teachers (N=140)	No	35	42	25	26	12	2.3528
		%	25	30	17.8	18.6	8.6	
	Principals (N=14)	No	3	5	4	2	0	
		%	21.4	35.7	28.6	14.3	0	
	Total (N=154)	No	**38**	**47**	**29**	**28**	**12**	
		%	**24.7**	**30.5**	**18.8**	**18.2**	**7.8**	
School officials are ready to celebrate peoples' efforts and successes, both those of teachers and students	Teachers (N=140)	No	20	45	35	25	15	5.3367
		%	14.3	23.1	25	17.9	10.7	
	Principals (N=14)	No	1	8	4	1	0	
		%	7.1	57.1	28.6	7.1	0	
	Total (N=154)	No	**21**	**53**	**39**	**26**	**15**	
		%	**13.6**	**34.4**	**25.3**	**16.9**	**9.7**	
Teachers participate in decision making and planning of staff development activities	Teachers (N=140)	No	37	47	24	19	13	1.9932
		%	26.4	33.6	17.1	13.6	9.3	
	Principals (N=14)	No	4	5	2	3	0	
		%	28.6	35.7	14.3	21.4	0	
	Total (N=154)	No	41	52	26	22	13	
		%	26.6	33.8	16.9	14.3	8.4	

$\alpha = 0.05$

Table 9B also shows the data on the elements of collaborative school culture. As seen from the table, while 57.2% of principals and 36.5% of teachers confirmed that they agree with the opinion that the school principals support action research undertaking, 42.8% and 32.1% of principals and teachers

respectively disagreed with this opinion. Moreover, 31.4% of teachers only were undecided about the opinion.

Though the majority of principals (57.2%) claimed that they support action research undertaking, the result if we closely look in to it, seems to suggest that the school principals' support for action research undertaking was not up to the expectations of the teachers in general. Obviously this situation is not conducive to teachers' involvement in action research activities.

Fullan (1991) suggests that successful implementation of school reform and curricular innovation is dependent on the administrator's (principal's) ability to help practitioners to change and develop new understandings and skills. Much effort and leadership are required to generate a 'culture' of quality schooling.

Respondents were asked whether they agree or not on the opinion that teachers are willing to take risks involved in action research undertaking. Consequently, considerable portion (57.1%) of principals and 34.3% of teachers disagreed with the opinion. However, about 40.7% and 14.3% of teachers and principals respectively affirmed their agreement with this opinion. In addition, 28.6% of principals and 25% of teachers were unable to decide about the opinion. This suggests that teachers to some extent are not in a position to take risks associated with research undertaking.

As shown in the same table, the majority, 55% and 57.1% of teachers and principals respectively confirmed their agreement on the opinion that there is co-operative relationship between teachers and school officials. On the other hand, while 27.2% of teachers and 14.3% of principals disagreed with the opinion, 17.8% and 28.6% teachers and principals respectively were undecided about the opinion that there is co-operative relationship between teachers and secondary school officials. What can be inferred from this

finding is that there is co-operative relationship between teachers and school officials.

According to this table, 64.2% and 46.4% of principals and teachers respectively agreed that school officials are ready to celebrate peoples' efforts and successes, both those of teachers and students. On the other hand, while 28.6% of teachers and 7.1% of principals disagreed with this opinion, about 28% and 25% principals and teachers respectively were unable to decide about the opinion. This suggests that teachers have their reservations about school officials' readiness to celebrate peoples' efforts and successes, both those of teachers and students.

Respondents were asked whether they agree or not on the opinion that teachers participate in decision making and planning of staff development activities. Consequently, the majority (60%) and 64.3% of teachers and principals respectively admitted that they agree with the opinion. Moreover, while 22.9% of teachers and 21.4% of principals said that they disagree, about 17.1% and 14.3% of teachers and principals respectively confirmed that they were undecided about the opinion that teachers participate in decision making and planning of staff development activities. This finding confirms that teachers have the opportunity at least to discuss on certain issues with their superiors.

Chi-square tests were computed for all items as shown in the table. The result of the tests values (for df= 4; alpha level= 0.05; critical value of χ^2 = 9.488) for all the five items verify that there is no statistically significant difference between the opinions of the two study groups (See Appendix G).

Table 10A: Respondents' Opinion on Barriers Preventing Teachers from Initiating Action Research

Barriers	Respondents	Statistic	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree
Lack of action research skills	Teachers (N=140)	No	29	**43**	**12**	**32**	**24**
		%	20.7	30.7	8.6	22.9	17.1
	Principals (N=14)	No	2	8	2	1	1
		%	14.3	57.1	14.3	7.1	7.1
	Total (N=154)	No	**31**	**51**	**14**	**33**	**25**
		%	**20.1**	**33.1**	**9.1**	**21.4**	**16.2**
Exhaustion with heavy teaching load	Teachers (N=140)	No	40	67	11	18	4
		%	28.6	47.9	7.8	12.9	2.8
	Principals (N=14)	No	5	6	2	1	0
		%	35.7	42.9	14.3	7.1	0
	Total (N=154)	No	**45**	**73**	**13**	**19**	**4**
		%	**29.2**	**47.4**	**8.4**	**12.3**	**2.6**
Exhaustion with managerial duties	Teachers (N=140)	No	14	39	33	40	14
		%	10	27.9	23.5	28.6	10
	Principals (N=14)	No	1	6	5	1	1
		%	7.1	42.9	35.7	7.1	7.1
	Total (N=154)	No	**15**	**45**	**38**	**41**	**15**
		%	**9.7**	**29.2**	**24.7**	**26.6**	**9.7**
Lack of school management support for teacher research	Teachers (N=140)	No	36	62	22	11	9
		%	25.7	44.3	15.7	7.9	6.4
	Principals (N=14)	No	2	4	4	3	1
		%	14.3	28.6	28.6	21.4	7.1
	Total (N=154)	No	**38**	**66**	**26**	**14**	**10**
		%	**24.7**	**42.8**	**16.9**	**9.1**	**6.5**
Lack of teachers working with and for each other on a range of tasks such as action research	Teachers (N=140)	No	18	68	28	20	6
		%	12.8	48.6	20	14.3	4.3
	Principals (N=14)	No	2	6	3	2	1
		%	14.3	42.9	21.4	14.3	7.1
	Total (N=154)	No	**20**	**74**	**31**	**22**	**7**
		%	**13**	**48.1**	**20.1**	**14.3**	**4.5**
Lack of willingness to take risks involved in action research activities	Teachers (N=140)	No	21	55	21	34	9
		%	15	39.3	15	24.3	6.4
	Principals (N=14)	No	1	8	1	2	2
		%	7.1	57.1	7.1	14.3	14.3
	Total (N=154)	No	**22**	**63**	**22**	**36**	**11**
		%	**14.3**	**40.9**	**14.3**	**23.4**	**7.1**
Absence of a belief that teachers can make a difference	Teachers (N=140)	No	15	40	30	38	17
		%	10.7	28.6	21.4	27.1	12.1
	Principals (N=14)	No	0	5	1	6	2
		%	0	35.7	7.1	42.9	14.3
	Total (N=154)	No	**15**	**45**	**31**	**44**	**19**
		%	**9.7**	**29.2**	**20.1**	**28.6**	**12.3**
Lack of incentive	Teachers (N=140)	No	57	54	9	12	8
		%	40.7	38.6	6.4	8.6	5.7
	Principals (N=14)	No	4	9	1	0	0
		%	28.6	64.3	7.1	0	0
	Total (N=154)	No	**61**	**63**	**10**	**12**	**8**
		%	**39.6**	**40.9**	**6.5**	**7.8**	**5.2**

As can be seen from Table 10A, respondents were asked to indicate their degree of agreement or disagreement to potential barriers preventing teachers from initiating action research. Accordingly, considerable percentages 51.4% and 71.4% of teachers and principals respectively showed their agreement about lack of research skills as one of the barriers; whereas 40% teachers and 14.2% of principals refused to accept lack of research skills as barrier. In addition, 8.6% and 14.3% of teachers and principals respectively were unable to decide about the issue.

Whereas the overwhelming majority of teachers were familiar with either action research or educational research (See Table 5), this finding shows that secondary school teachers are lacking research skills. In support to this, Johnston (1994) states that although advocates of action research attempt to distinguish it from empirical research approaches and suggest naturalistic forms of data collection, many teachers feel that they lack research skills which they perceive are needed for action research.

With regard to exhaustion with heavy teaching loads, the overwhelming majority, 76.5% and 78.6% of teachers and principals respectively admitted that they were agreed to it; while 15.7% of teachers and 7.1% of principals were disagreed. Moreover, 7.8% and 14.3% of teachers and principals were undecided about exhaustion with heavy teaching loads as a barrier.

Concerning exhaustion with heavy managerial duties, most principals (50%) and 37.9% of teachers were confirmed their agreement; while 38.6% and 14.2% of teachers and principals respectively were disagreed. Sizable percentages, 23.5% of teachers and 35.7% of principals were demonstrated in decision to exhaustion with heavy managerial duties. The result suggests that exhaustion with heavy managerial duties as a barrier is more of a concern to principals than do for teachers.

As shown in the same table, the majority of respondents (70%) and 42.9% of teachers and principals respectively were declared their agreement to lack of school management support as impediment for teacher research or action research. In contrast 14.3% of teachers and 28.5% of principals were claimed their disagreement. Moreover, about 15.7% and 28.6% of teachers and principals were unable to decide. This suggests that secondary school management do not play much in what is expected of them in promoting action research activities in secondary schools of North Shoa Zone.

Here it is advisable that the school managers should be the prime movers behind the action research and they themselves should also engage in action research activities.

Respondents were also asked whether or not they agree to lack of teachers working with and for each other on a range of tasks such as action research. Consequently, considerable size (61.4%) and 57.2% of teachers and principals respectively confirmed that they had accepted the issue as a barrier to action research activities. On the other hand, about 18.6% of teachers and 21.4% of principals said that they were disagreed. In addition, 20% and 21% of teachers and principals respectively were unable to decide on the issue. This finding suggests that teachers are not working with and for each other on different activities including action research. Hence collegial relationships are not exhibited between secondary schools teachers in North Shoa Zone. Collegial relationships exist when teachers discuss problems and difficulties, share ideas and knowledge, exchange techniques and approaches, observe one another's work, and collaborate on instructional projects (Little, 1982; Rosenholtz, 1989).

Respondents were also requested to provide information on whether or not they agree to lack of willingness to take risks involved in action research activities is one of the barriers in undertaking action research in secondary schools. Accordingly, substantial percentages (64.3%) and 54.3% of principals and teachers respectively have reached consensus on the issue; while 30.7% of

teachers and 28.6% of principals were disagreed. The rest, 15% and 7.1% of teachers and principals respectively were failed to decide about it. This finding shows that there is a marked reluctance among secondary schools teachers in North Shoa Zone in taking risks associated with action research activities.

Elliott (1991), a leading protagonist of action research method, points out ways of approaching risks in schools while undertaking action research as follows:

> *When one is faced with a practical problem, it is better to take the calculated risk of getting it wrong, and adjusting one's action strategy retrospectively, than that of not doing any thing about the problem until one has fully understood it. (p. 24).*

Furthermore, question was also posed to respondents whether or not they agree to the absence of a belief that teachers can make a difference is a barrier against action research activities. Therefore, most principals(57.2%) and 39.2% of teachers were disagreed to the opinion; while 39.3% and 35.7% of teachers and principals respectively confirmed that absence of a belief that teachers can make a difference was a barrier to action research activities among secondary schools teachers in North Shoa Zone. In addition, about 21.4% of teachers and 7.1% of principals were undecided about the opinion. In general, the finding shows that teachers have hesitation in viewing themselves that they can make a difference to their school in general and to their students in particular through action research activities.

Ross (1987), states that most teachers do not see themselves as problem solvers or as researchers.

As shown in the same table, great majority (92.9%) of principals and 79.3% of teachers were approved that lack of incentive as one of the major hindrances to action research activities. On the other hand, while 14.3% of teachers were disagreed to the opinion, about 6.4% and 7.1% of teachers and principals respectively were showed their indecision to the opinion. The finding indicates

that absence of incentive has the potential hindering role in action research undertaking in secondary schools of North Shoa Zone.

Table 10B: Respondents' opinion on Barriers preventing teachers from initiating action research

Barriers	Respondents	Statistic	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree
Lack of interest in action research	Teachers (N=140)	No	14	33	33	37	23
		%	10	23.6	23.6	26.4	16.4
	Principals (N=14)	No	2	6	2	2	2
		%	14.3	42.8	14.3	14.3	14.3
	Total (N=154)	No	16	39	35	39	25
		%	10.4	25.3	22.7	25.3	16.2
Lack of communication and discussion among teachers	Teachers (N=140)	No	27	48	15	38	12
		%	19.3	34.3	10.7	27.1	8.6
	Principals (N=14)	No	1	7	1	3	2
		%	7.1	50	7.1	21.4	14.3
	Total (N=154)	No	28	55	16	41	14
		%	18.2	35.7	10.4	26.6	9.1
Absence of a belief in the importance of action research for continuing learning of teachers	Teachers (N=140)	No	19	44	16	42	19
		%	13.6	31.4	11.4	30	13.6
	Principals (N=14)	No	4	2	1	5	2
		%	28.6	14.3	7.1	35.7	14.3
	Total (N=154)	No	23	46	17	47	21
		%	14.9	29.9	11	30.5	13.6
Lack of professional confidence in improvement of practice by action research	Teachers (N=140)	No	17	39	15	50	19
		%	12.1	27.8	10.7	35.7	13.6
	Principals (N=14)	No	3	5	4	1	1
		%	21.4	35.7	28.6	7.1	7.1
	Total (N=154)	No	20	44	19	51	20
		%	13	28.6	12.3	33.1	13
Lack of financial and material resources	Teachers (N=140)	No	67	49	8	13	3
		%	47.9	35	5.7	9.3	2.1
	Principals (N=14)	No	5	7	0	2	0
		%	35.7	50	0	14.3	0
	Total (N=154)	No	72	56	8	15	3
		%	46.7	36.4	5.2	9.7	1.9
Lack of opportunity to seek ideas about action research from seminars, conferences and workshops	Teachers (N=140)	No	69	45	12	10	4
		%	49.3	32.1	8.6	7.1	2.9
	Principals (N=14)	No	7	6	0	1	0
		%	50	42.9	0	7.1	0
	Total (N=154)	No	76	51	12	11	4
		%	49.4	33.1	7.8	7.1	2.6
Lack of recognition for exemplars in the school	Teachers (N=140)	No	40	53	26	17	4
		%	28.6	37.9	18.6	12.1	2.8
	Principals (N=14)	No	2	5	1	4	2
		%	14.3	35.7	7.1	28.6	14.3
	Total (N=154)	No	42	58	27	21	6
		%	27.3	37.7	17.5	13.6	3.9

As seen in Table 10B, while 41.5% of the total respondents disagreed to lack of interest in action research as the potential barrier, about 35.7% of

respondents agreed to the point. Moreover, 22.7% of the total respondents were unable to decide. From the result, it seems that North Shoa Zone secondary schools teachers do not exhibit lack of interest to action research.

As regards lack of communication and discussion between teachers, considerable percentages (53.6%) and 57.1% of teachers and principals respectively admitted that lack of communication and discussion between teachers is a barrier preventing teachers from initiating action research. Conversely, while 35.7% of teachers and 35.7% of principals disagreed to the idea, about 10.7% and 7.1% of teachers and principals respectively refused to decide. This indicates that North Shoa Zone Secondary Schools teachers lack the opportunity to talk about practice and share ideas between them.

As shown in the same table, respondents were also asked to indicate their agreement or disagreement to absence of a belief in the importance of action research for continuing learning of teachers. Consequently, while 45% and 42.9% of teachers and principals respectively agreed, about 43.6% of teachers and 50% of principals indicated their disagreement. The rest, quite small percentages, 11.4% and 7.1% of teachers and principals respectively were unable to decide. As the majority of the total respondents (44.8%) revealed, the result shows that teachers lose confidence to the use of action research for continuing learning of teachers and they recognized this as the major obstacle to action research activities in secondary schools.

Concerning lack of financial and material resources, 82.9% of teachers and 85.7% principals reached consensus in accepting as the potential barrier to carry out action research in secondary schools. On the other hand, a small minority, about 11.4% and 5.7% of teachers respectively disagreed and were unable to decide. The finding confirms that financial and material resources are serious impediments that hinder the work of action research in schools.

Lack of opportunity to seek ideas about action research seminars, conferences and workshops was also identified as the major barrier to conduct action research in schools by the majority of respondents (that is, 81.4% of teachers and 92.9% of principals).

Likewise, considerable proportion 66.5% and 50% of teachers and principals respectively indicated that lack of recognition for exemplars in schools is potential barrier to carry out action research activities in secondary schools. While 14.9%, of teachers and 42.9%, of principals disagreed, about 18.6% and 7.1%, of teachers and principals respectively were unable to decide about the issue. The finding clearly shows that secondary schools teachers of North Shoa Zone are lacking recognition from concerned body for the best jobs they have done.

CHAPTER FOUR

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This final chapter of the thesis presents the summary of the major findings of the study, the conclusions drawn and recommendations made.

4.1. Summary of the Findings

The purpose of the study was to explore the current status of action research undertaking among secondary schools teachers in North Shoa zone in Oromia.

In order to conduct this study, the following basic questions were developed:

1. Do teachers in secondary schools have the required knowledge and skill to engage in action research activities?
2. To what extent are teachers involved in action research activities to solve real problems of education in their settings?
3. Are resources (time financial and material) available for secondary school teachers to conduct action research?
4. Is there collaborative school culture that support engagement in action research?
5. What are the potential barriers preventing teachers from initiating action research?

In order to examine the issue under study, descriptive survey method was employed. The sample schools were seven secondary schools selected on the basis of purposeful sampling technique. The subjects of the study were 140 teachers, 14 principals and 14 woredas education Officers. One set of questionnaire containing close and open-ended questions was prepared in English and distributed to sample teachers and principals. Interview was conducted with woredas education officers. The data obtained were analyzed using statistical tools such as frequency, percentage and chi-square test.

The findings of the study are the following:

1. - Regarding educational qualification, the vast majority, 81.4% and 100% of teachers and principals had their first degree.
   - With respect to teaching experience, the minority (45.7%) of teachers and the majority (71.4%) of secondary schools principals had above 10 years teaching experience.
   - The knowledge and skills of teachers in conducting action research were not sufficient.

The study revealed that the minority of teachers (36.4%) and principals (28.6%) had taken action research as a course at university or college level. Moreover, the overwhelming majority, 78.6% and 71.4% of teachers and principals didn't get the opportunity to participate in any short term training like workshop, seminar, etc. concerning action research. This signifies that the knowledge and skills of teachers in action research were not adequate. Therefore, there is a long way to go to develop the knowledge and skills of teachers in action research activities through training.

2. Secondary schools teachers remain uninvolved in action research activities.

The great majority, 80 percent and 71.4 percent of teachers and principals respectively admitted that they have not conducted any action research in their schools.

3. Acute shortage of resources (time, financial and material) was observed in the study. Considerable percentages, 77.9% and 78.6% of teachers and principals respectively haven't had ample time to involve in action research activities. This finding also confirmed the findings of previous researches indicating that lack of time as a potential barrier to teacher

researchers' successful involvement in the action research process (Elliott, 1991; Johnston, 1993; Hancock, 1997).

In addition, the majority of respondents, 67.9% and 64.3% teachers and principals respectively confirmed that the financial availability of secondary schools to conduct action research was poor. Moreover, sizable percentages, over 53 percent of teachers and 50% of principals reported that reference books were poorly available.

According to the overwhelming majority (77.9% and 71.4%) of teachers and principals respectively, journals were also in acute shortage. While poor availability of periodicals was confirmed by 70% of teachers and 78.6% of principals, about 74.3% and 78.6% of teachers and principals respectively admitted that newspapers were poorly available in secondary schools.

With regard to unpublished materials, stationary and research rooms, the great majority of total respondents (76.6%, 94% and 85.7%) respectively declared that they were poorly available in secondary schools.

4. Even though the existence of collaborative school culture is encouraging, it has to be developed more.

The study featured that most elements of collaborative culture exist in secondary schools of North Shoa. For example, the majority (55% and 57.1%) of teachers and principals respectively expressed their agreement on the presence of co-operative relationship between teachers and school officials.

In the same vein, about 60% of teachers and 64.3% of principals agreed to the opinion that teachers participate in decision making and planning of staff development activities.

In addition, substantial percentages (72.9% and 50%) of teachers and principals respectively indicated their agreement on the opinion that teachers have willingness and ability to express their views directly and honestly in front of their colleagues.

On the other hand, sizable percentages (48.5% and 57.1%) of teachers and principals confirmed that secondary schools teachers were not working with and for each other on a range of tasks such as action research. Here lies a weakness and hence, much effort has to be exerted to improve this element of collaborative culture.

5. The potential barriers preventing teachers from initiating action research were also disclosed in the study.

The following barriers were confirmed by the majority of total respondents:

- Lack of action research skills (53.2%).
- Exhaustion with heavy teaching load (76.6%).
- Lack of school management support for action research or teacher research (67.5%).
- Lack of teachers working with and for each other on action research (61.1%).
- Lack of willingness to take risks involved in action research activities (55.2%).
- Lack of incentive (80.5%).
- Lack of communication and discussion among teachers (53.9%).
- Lack of financial and material resources (83.1%).

4.2. Conclusions

Based on the major findings of this study the following conclusions are made:

1. Even though the study indicated that some teachers had taken action research as pre-service course at university or college, the majority of teachers were not familiar with action research. On top of this, teachers were not given the chance to take part in any short term training like workshops, seminar, etc. Therefore, it seems to appear from the findings that teachers need to have training and hands- on practices about action research activities so as to possess the required knowledge and skill.
2. Facilitating teachers to learn from their own experience and improve their practice by action research is an important means to teacher empowerment, school improvement and educational change. However, the findings of the study revealed that action research has never been well practiced in secondary schools of North Shoa Zone. In other words, the overwhelming majority of class teachers remain uninvolved in action research activities. Given that research is an extra layer of work for teachers, it is important to provide some kind of practical support that will enable them initiate conducting action research. Teachers need (and should expect) support if they are to take on action research in addition to teaching.
3. The findings of the study also reveled that secondary schools teachers lack time for action research undertaking. Obviously any research activity requires time. Teachers should be given sufficient time in order to take part in action research activity. Without time and support it seems that action research will be difficult to accomplish. Above all, given the difficulties of finding time for research, it makes a considerable difference if teachers feel that time spent on action research is also directly benefiting their classroom work.
4. The other important drawback identified through the findings of the study was that resources like finance, reference books, journals, periodicals, news papers, unpublished materials, stationery and research rooms were meager in secondary schools of North Shoa Zone. In order to engage effectively in

However, this can not be realized unless teachers have adequate knowledge and skill to conduct action research. Deficiency was exhibited through the study in this regard. Therefore, educational opportunities like workshops, seminars, courses should be rendered to teachers. These can be organized at different level in the hierarchy. Lack of budget could be covered by seeking assistance from Embassies or NGOs. The following procedures could help in this regard.

- Seek for individuals, perhaps teachers or experts who have skill in educational project preparation.
- Seek postal addresses of different NGOs and Embassies that have small scale projects grant schemes and write a letter of request for assistance
- Submit project proposals as required by the Embassies or NGOs
- Attempt should also be made to access university researchers to assist in the training.

2. *Facilitators could help to initiate action research among teachers.*

Facilitators are needed to overcome teachers' reluctance to undertake action research. Therefore, school officials together with woreda and zonal education officials should seek for facilitators who could establish teams among teachers and manage the process at least at the early stages. To this effect, trainers should be trained from teachers who have the knowledge and skill in action research from each school.

3. *Technical support should be provided to teachers.*

The school officials together with woreda and zonal education officials should find ways to give the following forms of technical support to enable teachers to access the resources they require for action research undertaking.

action research activity, the availability of adequate resources is not only important but essential.

5. The existence of most elements of collaborative culture in secondary schools was confirmed by most teachers and principals. However, one key element was missing. This was the absence of teachers working with and for each other on a range of tasks such as action research. Therefore, ways must be found to bring this important element into existence so as to develop more collaborative culture which in turn supports action research activities.
6. The potential barriers preventing teachers from initiating action research include lack of action research skill, exhaustion with heavy teaching load, lack of school management support for action research activities, lack of teachers working with and for each other on action research, lack of willingness to take risks involved in action research activities, lack of incentive, lack of communication and discussion among teachers, and lack of financial and material resources.

In conclusion, the researcher's purpose in revealing these difficulties is not to be discouraging of action research. However, there is a need to develop clearer insights into secondary schools teachers' reluctance and forward some recommendations which could help in reducing the difficulties.

4.3. Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:

1. *Provision of educational opportunities to those teachers who are lacking action research knowledge and skill.*

Teachers who engage in action research can make contributions to educational improvement by doing inquiry concerning the teaching and learning process. Doing research, in turn, can enhance the professional status of teaching, generate knowledge and promote teacher development.

- Help to use on-line resources such as research reports, collection of research in practice reports, reports from journals for the teacher researcher, etc.
- Help to access university library resources such as Journal of Education, Research Journal, etc.
- Help to access university research courses

4. *School officials should provide adequate time for teachers who involve in action research activities.*

Teachers should be relieved from heavy workload and administrative duties to undertake action research.

The issue of time may also be addressed in the following ways:

- Using internal teams: the use of team can mean that, while the total amount of time needed for research remains unaltered (or even increased slightly), the sharing of research planning, instrument construction, data gathering and analysis, and report writing means that the time commitment for any individual member of the team can be reduced.
- The issue of time may also be a symptomatic of larger underlying issues, such as the propensity of part-time work, the uncertainty of employment, etc. Hence, education officials at different levels and school managers being aware of this should provide necessary support like recognition, moral, money, material support and so on.

5. *School managers should facilitate collaborative culture that supports the work of action research.*

Although ultimately this depends on the proclivities of staff themselves, they should be facilitated by school managers. Therefore, school managers should

identify tasks that teachers can collaborate on and take leadership roles in. They should also give attention to potential benefits of action research.

6. *Concerned education officials at different level (regional to school level) should consider the necessity of financial and material resources to action research activities and allocate appropriate budget or seek funding.*

While some schools or education offices look to external sources for financial support regarding a host of purposes, none of them do so to support research activity; yet such sources do exist. For example, some charitable trusts (NGOs) are responsive to teacher research proposals and possibilities can exist by way of proposals from schools or education offices.

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APPENDIX A

Addis Ababa University

School of Graduate Studies

Department of Educational Planning and Management

Questionnaire to be filled in by Teachers, Vice-Principals and Principals in Secondary Schools (Grades 9-12)

Dear Sir/Madam

This questionnaire is designed by graduate student of the Department of Educational Planning and Management attempting to study "status of action research in government secondary schools in North Shoa Zone: Oromia".

This study is aimed to explore the current status of action research undertaking and to raise the level of awareness of teachers, to popularize and promote action research.

Therefore, to achieve the purpose your responses are found out to be important and decisive.

NB:

1. Please answer freely; your responses will be kept confidential
2. there is no need to write your name or sign on the questionnaire
3. please complete the questionnaire as per the instruction and return it to the designated person;

THANK YOU FOR YOUR CO-OPERATION

PART ONE: Background Information

Please provide some basic background information on yourself. For items 1.1 to 1.4, **Mark** (X) or **write in** where necessary.

1.1. Sex:

- ☐ Male
- ☐ Female

1.2. Age:

- ☐ 25 years and below
- ☐ 26-35 years
- ☐ 36-45 years
- ☐ Above 45 years

1.3. Your current post:

- ☐ Teacher
- ☐ Assistant principal
- ☐ Principal

1.4. How long have you been teaching?

- ☐ Less than or equal to 5 years
- ☐ Between 6-10 years
- ☐ 11 to 15 years
- ☐ 16 to 20 years
- ☐ 21 years and above

1.5. Educational levels you have completed:

- ☐ Diploma
- ☐ BA/BS
- ☐ MA/MS
- ☐ Other, please specify _____

1.6. Your weekly teaching load (in periods)_____

PART TWO: Research Knowledge and Skill

Please **circle** your response for each item

2.1. Have you taken research course at university or college?

a. Yes b. No

2.2. If your answer is 'yes' for the above item, which research course have you taken?

a. action research b. educational research

2.3. Do you have participated in any in-service training (workshops, seminars, etc) program on action research?

a. Yes b. No

2.4. If your answer for the above item is 'yes', to what extent the training assisted you in conducting action research?

a. to high extent

b. to medium extent

c. to low extent

PART THREE: Teachers' Involvement in Action Research Activities

Please **circle** or **write in** your response as appropriate for each item.

3.1. Have you conducted action research in your school?

a. Yes b. No

3.2. If your answer is 'yes' for the above item, to what extent were you (as a teacher) involved in conducting action research?

a. Highly involved b. moderately involved

c. Not involved at all

3.3. Please list down the research topics that you have done in the recent past.

a. _____

_____

b. _____

_____

c. _____

_____

d. _____

_____

PART FOUR: Availability of Resources to Conduct Action Research

Please **circle** or **write in** or **tick** (✓) your responses for each item as appropriate.

4.1. Do you have ample time to conduct action research in your school?

a. Yes b. No

4.2. If your answer is 'No' for the above item, what do you think the reason would be?

a. I am stretched at school with heavy teaching load

b. I have to cope with extraordinary large classes.

c. I spend my spare time on lesson plans and notes preparation.

d. I also perform routine managerial duties in addition to teaching.

e. all could be reasons

f. Others, please specify _____

_____

_____

_____

4.3. How would you evaluate the financial and materials availability to conduct action research in your school?	**Excellent**	**V. good**	**Good**	**Fair**	**Poor**
a. Financial					
b. Reference books					
c. Journals					
d. Periodicals					
e. Newspapers					
f. Other unpublished materials					
g. Stationery					
h. Research rooms					

PART FIVE: Collaborative School Culture

Please read each item and **mark (X)** the response that best reflects your level of agreement or disagreement based on a scale of 5-1: **5** (Strongly Agree), **4** (Agree), **3** (Undecided), **2** (Disagree), **1**(Strongly disagree).

No	In my school	5	4	3	2	1
5.1	teachers are working with and for each other on such tasks such as action research and so on					
5.2	teachers believe that they can make a difference to students progress, development and achievements					
5.3	teachers believe that action research is a meaningful activity					
5.4	teachers have willingness and ability to express their views directly and honestly in front of their colleagues.					
5.5	teachers believe that they are learners and learning is evidenced by the research activity itself.					
5.6	teachers are willing and able to express their mind in front of their superiors.					
5.7	the school principals support action research undertaking					
5.8	teachers are willing to take risks involved in action research					
5.9	there is cooperative relationship between teachers and school officials					
5.10	school officials are ready to celebrate peoples' efforts and successes, both those of teachers and students					
5.11	teachers participate in decision making and planning of staff development activities.					

PART SIX: Potential Barriers Preventing Teachers from Initiating Action Research

Please read each item and **mark (X)** the response that best reflects your level of agreement or disagreement based on a scale of 5-1: **5** (Strongly Agree), **4** (Agree), **3** (Undecided), **2** (Disagree), **1**(Strongly disagree).

No	Barriers	Strongly Agree	Agree	Undecided	Disagree	Strongl Disagre
6.1	Lack of action research skills					
6.2	Exhaustion with heavy teaching loads					
6 3	Exhaustion with managerial duties					
6.4	Lack of school management support for teacher research					
6.5	Lack of teachers working with and for each other on a range of tasks such as action research					
6.6	Lack of willingness to take risks involved in action research activities					
6.7	Absence of a belief that teachers can make a difference					
6 8	Lack of incentive					
6.9	Lack of interest in action research					
6.10	Lack of communication and discussion among teachers					
6.11	Absence of a belief in the importance of action research for continuing learning of teachers					
6.12	Lack of professional confidence in improvement of practice by action research					
6.13	Lack of financial and material resources					
6.14	Lack of opportunity to seek ideas about action research from seminars, conferences and workshops					
6.15	Lack of recognition for exemplars in the school					

PART SEVEN: Suggestions about the Solution to the Problem

Please list down any suggestion, which you think alleviate the problem encountered to undertake action research.

a. _____

b. _____

c. _____

d. _____

e. _____

I am deeply grateful to you once again for your co-operation

APPENDIX B

Interview Questions

1. How do you evaluate the current status of action research activities among secondary schools teachers in your woreda?
2. How do you evaluate the availability of resources (time, financial and material) for secondary schools teachers to conduct action research?
3. Are there trainings (workshop, seminar, etc) given by your office to secondary school teachers concerning action research?
4. If you answer is 'yes', how often your office conduct this kind of training for secondary schools teachers?
5. In your opinion what major factors are affecting action research undertaking in secondary schools?
6. What do you think the solution for the problem could be?

Thank you for your cooperation!

APPENDIX C

North Shoa Zone Secondary School Principal's Consent for data Gathering Form	
Researcher: **Tadesse Abera**	**Topic**: Status of Action Research in Government Secondary Schools in North Shoa Zone in Oromia

I have met with the above named student researcher and we have discussed the issue as approved by Addis Ababa University. I hereby give my permission to gather data as proposed in my school.

Name of School	**Principal's signature**	**Date**
1. Sheno Secondary School		
2. Sendafa Secondary School		
3. Chancho Secondary School		
4. Muketuri Secondary School		
5. Fitche Secondary School		
6. G/Gurache Secondary School		
7. Gohatsion Secondary School		

Signature of the Researcher	**Date**
_____	_____

APPENDIX D

Cross tabulations for the involvement of teachers in action research activities

Item	Respondents	Frequency	Responses		χ^2 Value
			Yes	No	
Have you been conducted activation research in your school?	Teachers (N = 140)	fo	28	112	0.576
		fe	29.1	110.9	
	Principals (N = 14)	fo	4	10	
		fe	2.9	11.1	
	Total (N = 154)	fo	32	122	
		fe	32	122	

Item	Respondents	Frequency	Responses			χ^2 Value
			Highly Involved	Moderately Involved	Not Involved at all	
If your answer is 'yes' for the above item, to what extent were you involved in conducting action research?	Teachers (N = 28)	fo	6	22	0	1.524
		fe	7	21	0	
	Principals (N = 4)	fo	2	2	0	
		fe	1	3	0	
	Total (N = 32)	fo	8	24	0	
		fe	8	24	0	

APPENDIX E

Cross Tabulations for the Availability of Resources to Conduct Action Research

Features	Respondents	Excellent Frequency		V. Good Frequency		Good Frequency		Fair Frequency		Poor Frequency		χ^2 value
		fo	fe	fo	fe	fo	fe	fo	fe	fo	fe	
News papers	Teachers (N = 140)	3	2.7	6	5.5	11	11.8	16	15.5	104	104.5	1.674
	Principals (N = 14)	0	0.3	0	0.5	2	1.2	1	1.5	11	10.5	
	Total (N = 154)	3	3	6	6	13	13	17	17	115	115	
Unpublished materials	Teachers (N = 140)	0	0	5	4.5	11	10	19	18.2	105	107.3	2.59
	Principals (N = 14)	0	0	0	0.5	0	1	1	1.8	13	10.7	
	Total (N = 154)	0	0	5	5	11	11	20	20	118	118	
Stationery	Teachers (N = 140)	3	2.7	10	10	17	16.4	24	25.5	86	85.5	1.599
	Principals (N = 14)	0	0.3	1	1	1	1.6	4	2.5	8	8.5	
	Total (N = 154)	3	3	11	11	18	18	28	28	94	94	
Research Rooms	Teachers (N = 140)	1	0.9	4	3.6	5	5.5	9	10	121	120	2.291
	Principals (N = 14)	0	0.1	0	0.4	1	0.5	2	1	11	12	
	Total (N = 154)	1	1	4	4	6	6	11	11	132	132	
Financial	Teachers (N = 140)	1	1.8	3	3.6	18	17.3	23	22.7	95	94.5	4.944
	Principals (N = 14)	1	0.2	1	0.4	1	1.7	2	2.3	9	9.5	
	Total (N = 154)	2	2	4	4	19	19	25	25	104	104	
Reference books	Teachers (N = 140)	4	4.5	10	10	22	21.8	29	29.1	75	74.5	0.619
	Principals (N = 14)	1	0.5	1	1	2	2.2	3	2.9	7	7.5	
	Total (N = 154)	5	5	11	11	24	24	32	32	82	82	
Journals	Teachers (N = 140)	2	2.7	2	2.7	13	12.7	14	13.6	109	108.2	3.895
	Principals (N = 14)	1	0.3	1	0.3	1	1.3	1	1.4	10	10.8	
	Total (N = 154)	3	3	3	3	14	14	15	15	119	119	
Periodicals	Teachers (N = 140)	0	0	7	6.4	18	17.3	17	17.3	98	99.1	1.164
	Principals (N = 14)	0	0	0	0.6	1	1.7	2	1.7	11	9.9	
	Total (N = 154)	0	0	7	7	19	1.9	19	19	109	109	

APPENDIX F

Cross Tabulations for the features of Collaborative School Culture

Features	Respondents	Freq.	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	χ^2 value
Teachers are working with and for each other on such tasks as action research	Teachers (N = 140)	fo	11	31	30	37	31	2.3766
		fe	11.8	29.1	30	38.2	30.9	
	Principals (N = 14)	fo	2	1	3	5	3	
		fe	1.2	2.9	3	3.8	3.1	
	Total (N = 154)	fo	13	32	33	42	34	
		fe	13	32	33	42	34	
Teachers believe that they can make a difference to students progress, development and achievements	Teachers (N = 140)	fo	49	54	27	6	4	3.5187
		fe	46.4	56.4	27.3	6.4	3.6	
	Principals (N = 14)	fo	2	8	3	1	0	
		fe	4.6	5.6	2.7	0.6	0.4	
	Total (N = 154)	fo	51	62	30	7	4	
		fe	51	62	30	7	4	
Teachers believe that action research is a meaningful activity	Teachers (N = 140)	fo	59	45	18	5	13	17.5464
		fe	58.2	42.7	19.1	8.2	11.8	
	Principals (N = 14)	fo	5	2	3	4	0	
		fe	5.8	4.3	1.9	0.8	1.2	
	Total (N = 154)	fo	64	47	21	9	13	
		fe	64	47	21	9	13	
Teachers have willingness and ability to express their views directly and honestly in front of their colleagues	Teachers (N = 140)	fo	49	53	19	14	5	10.6616
		fe	45.5	53.6	19.1	17.3	4.5	
	Principals (N = 14)	fo	1	6	2	5	0	
		fe	4.5	5.4	1.9	1.7	0.5	
	Total (N = 154)	fo	50	59	21	19	5	
		fe	50	59	21	19	5	
Teachers believe that they are learners and learning is evidence by the research activity itself	Teachers (N = 140)	fo	50	55	19	15	1	10.2556
		fe	47.3	52.7	21.8	17.3	0.9	
	Principals (N = 14)	fo	2	3	5	4	0	
		fe	4.7	5.3	2.2	1.7	0.1	
	Total (N = 154)	fo	52	58	24	19	1	
		fe	52	58	24	19	1	
Teachers are willing and able to express their mind in front of their superiors	Teachers (N = 140)	fo	37	48	33	16	6	12.1719
		fe	34.5	47.3	31.8	18.2	8.2	
	Principals (N = 14)	fo	1	4	2	4	3	
		fe	3.5	4.7	3.2	1.8	0.8	
	Total (N = 154)	fo	38	52	35	20	9	
		fe	38	52	35	20	9	

APPENDIX G

Cross Tabulations for the Features of Collaborative Schools Culture

Features	Respondents	f	Strongly agree 5	Agree 4	Undecided 3	Disagree 2	Strongly disagree 1	χ^2 value
The school principals support action research undertaking	Teachers (N = 140)	fo	19	32	44	24	21	9.4387
		fe	20.9	32.7	40	26.4	20	
	Principals (N = 14)	fo	4	4	0	5	1	
		fe	2.1	3.3	4	2.6	2	
	Total (N = 154)	fo	23	36	44	29	22	
		fe	23	36	44	29	22	
Teachers are willing to take risks	Teachers (N = 140)	fo	20	37	35	33	15	6.4753
		fe	18.2	35.5	35.5	36.4	14.5	
	Principals (N = 14)	fo	0	2	4	7	1	
		fe	1.8	3.5	3.5	3.6	1.5	
	Total (N = 154)	fo	20	39	39	40	16	
		fe	20	39	39	40	16	
There is cooperative relationship between teachers and school officials	Teachers (N = 140)	fo	35	42	25	26	12	2.3528
		fe	34.5	42.7	26.4	25.5	10.9	
	Principals (N = 14)	fo	3	5	4	2	0	
		fe	3.5	4.3	2.6	2.5	1.1	
	Total (N = 154)	fo	38	47	29	28	12	
		fe	38	47	29	28	12	
School officials are ready to celebrate peoples' efforts and successes, both those of teachers and students	Teachers (N = 140)	fo	20	45	35	25	15	5.3367
		fe	19.1	48.2	35.5	23.6	13.6	
	Principals (N = 14)	fo	1	8	4	1	0	
		fe	1.9	4.8	3.5	2.4	1.4	
	Total (N = 154)	fo	21	53	39	26	15	
		fe	21	53	39	26	15	
Teachers participate in decision making and planning of staff development activities	Teachers (N = 140)	fo	37	47	24	19	13	1.9932
		fe	37.3	47.3	23.6	20	11.8	
	Principals (N = 14)	fo	4	5	2	3	0	
		fe	3.7	4.7	2.4	2	1.2	
	Total (N = 154)	fo	41	52	26	22	13	
		fe	41	52	26	22	13	

DECLARATION

I, the undersigned, declare that this thesis is my work and that all sources of material used for the thesis have been duly acknowledged.

Name: Tadesse Abera

Signature _____

This Thesis has been submitted for examination with my approval as a university advisor.

Name: **Dr. Wossenu Yimam**

Signature: _____

Date: 20/07/07

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June, 2007