

**THE ATTITUDE OF TEACHER TRAINERS
TOWARD THE IMPLEMENTATION OF
MULTICULTURAL EDUCATION
IN TWO TEACHER TRAINING
INSTITUTES**

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ABSTRACT

The purpose of this study was to investigate the attitude of teacher trainers toward the implementation of multicultural education in two teacher training institutes.

The subjects involved in the study were 33 randomly selected teacher trainers from Awassa College of Teacher Education and Arba Minch Teacher Training Institute.

The statistics used were mean, standard deviation, percentage, t-test, F-test, chi-square, correlation and regression. Based on these, the data collected through awareness questionnaire, attitude scale and performance rating scale were analyzed and interpreted.

The results indicated that the majority of the teacher trainers (72.73%) were moderately aware of multicultural education. The largest proportion of the teacher trainers (57.6%) had favorable attitude toward the implementation of multicultural education in the training centres. The majority of the respondents (60.6%) were poorly competent in implementing multicultural education in the classrooms. There were very strong significant relationships among teacher trainers' awareness, attitude on multicultural education and the general patterns of their classroom performance from multicultural perspectives. The attitude of teacher trainers accounted very small proportion of the variation in their classroom performance from multicultural perspectives, their awareness being controlled compared to the variation accounted for by their awareness, their attitude held constant. Therefore, from these it could be concluded that the current attitude of teacher trainers toward the implementation of multicultural education in the two training centres may require substantial amount of functional awareness on multicultural education to sufficiently explain their classroom performance from multicultural perspectives.

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ABBREVIATIONS

AACTE - American Association for College of Teacher Education

CSA - Central Statistical Authority

DTRC - Demographic Training and Research Centre

MCE - Multicultural Education

MCP - Multicultural Perspectives

MIC - Ministry of Information and Culture

MOE - Ministry of Education

NCATE - National Council for Accreditation of Teacher Education

SNNPR - Southern Nations, Nationalities and Peoples' Region

SRAB - Southern Region Agriculture Bureau

SREB - Southern Region Education Bureau

TTI - Teacher Training Institute

Note: All dates are in Gregorian Calendar Except the Amharic version in the Bibliography section (i.e. Ethiopian Calendar).

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Problem

Some people say that Ethiopia is known to be a museum of people for its cultural diversity. According to some writers (Alem, 1982:11; Hamdessa, 1982:271; Van, et al, 1995:66) there are over 80 ethnic groups in the country all having distinct cultures of their own. This shows that Ethiopia is really a country of cultural diversity.

In such circumstance, it is recommended that the educational programs be designed from multicultural perspectives. Concerning this, Bennett (1995:261) states that in a society where there is cultural diversity, the nature of education should be multicultural in character. This means, the educational subjects should be taught from the stand point of all cultures. Similarly, Sims and de Martinez (1981:173) and Gagliardi (1995:10) confirm that in a multicultural form of education, time will not be set aside to study special subjects about cultural diversity, but all subjects will be designed and taught from different cultural backgrounds.

This form of education is supported by different educators for various reasons. In the first place, it directs schools toward the cultural enrichment of all students. By doing so, it makes education relevant to all learners. Secondly, it ensures cultural diversity as a fact of life in pluralistic society. Hence, it develops in learners a sense of pride in their ethnic and cultural identity. Third, it reveals cultural diversity as a valuable resource that should be preserved and extended. This in turn gives opportunity to the learners to comprehend and appreciate cultural diversity (AACTE, 1973:264; Verma, 1983:109 - 110; Tesconi, 1984:94).

Accordingly, in order for schools to promote multicultural education, the training of teachers in this line is indispensable. In preparing teachers for multicultural society, teacher training institutions should take into account cultural diversity as a central issue, not as a minor concern. This is because teachers may not foster meaningful learning if they ignore or fail to respect cultural differences in values, beliefs and

behaviors that prevail among students in their classrooms. (Darke, 1973:97; Rodriguez and Sjostrom, 1995:304; Bennett, 1995:260). Hence, in order to realize this argument, it seems necessary for teacher training institutions to increase their efforts to prepare prospective teachers in multicultural line. Substantiating this, Mahan and Bayle (1981:103) suggest the following: "In a society where there is cultural diversity, the preparation of teachers in knowledge and techniques should be multicultural."

To this end, several studies made since 1970s have recommended the importance of implementing multicultural education in teacher training programs to make trainees effective in their later career (i.e. as teachers in multicultural schools). To cite some, AACTE (1973:264), Erango (1986:57) and Gagliardi (1995:1) have suggested the significance of incorporating multicultural education in teacher education program so as to enable trainees work effectively with ethnically and culturally diversified students in the classroom. This appears to be recommended because most teacher education programs do not satisfactorily prepare their trainees to accept and affirm human diversity in ethnicity and culture. Usually, prospective teachers are not actively encouraged to develop a comprehensive understanding of how to use cultural diversity as resource in the classroom. Thus, in such condition they may not acquire sufficient knowledge and understanding so as to avoid the perpetuation of ethnic and cultural inequalities through schools (Grant, 1981:95). In other words, if teacher training institutions fail to address multicultural education in a substantive manner, they will actively perpetuate bias toward cultural diversity (Ibid: 101).

Therefore, teacher trainers need to evaluate their own knowledge, understanding and acceptance of multicultural education in order to effectively implement multicultural education in teacher training program. In this regard, Dufour (1990:121), Gollnick (1992:219) and Solomon (1995:253) claim that the successful implementation of multicultural education in teacher education program depends on the trainers' awareness and attitudes toward the innovation (MCE). Similarly,

Gay (1977: 34) notes that trainer's awareness of multicultural education lays the foundation for changing their attitudes and classroom behaviors toward members of different ethnic groups.

The implementation of multicultural education in teacher training program also requires certain reform on variables such as formal curriculum and curricular materials derived from it. However, according to Banks (1986:22) this is not sufficient. For instance, multicultural sensitive curricular materials may become ineffective in the hands of trainers who have negative attitude toward different ethnic and cultural groups. Such teachers may use multicultural materials rarely or in a detrimental way. Thus, the attitudes, values and commitments of the trainers play a great role for the effective implementation of multicultural education in teacher training programs (Banks, 1986:22; Gay, 1986: 154). Supporting this, Guruvadoo, *et al* (1995: 163) also pin point that: "Teacher training for multicultural education is more effective when the teacher trainers themselves have internalized the positive attitude toward cultural difference and themselves provide a role model for the trainees."

In general, according to the foregoing argument, the attitude of teacher trainers toward multicultural education seem very crucial for successful implementation of the innovation (MCE) in teacher training program.

1.2. Statement of the Problem

The idea of implementing multicultural education in teacher training programs of most western countries is a phenomenon of the 1970s (Baker, 1979:43; McCormick, 1984:93). However, in Ethiopia, it is only very recently that the idea got recognition and acceptance. This has occurred when the current Education and Training Policy gave the right for all ethnic groups of the country to receive education in their own language in the elementary grades (MOE, 1994:10). This in turn has given the opportunity for cultures of different ethnic groups to be largely reflected in teacher training institutes where instruction is offered in different languages. For instance, in Arba Minch and Awassa teacher training centres, the languages of different ethnic groups

are catered. Besides, academic and non-academic subjects are taught in Amharic and in the languages of some ethnic groups of Southern Nations, Nationalities and Peoples' Region. In this respect, Valette (1986:179), in showing the relationship between language and culture, states that culture is largely manifested through language since language is crucial aspect of culture. She further clarifies that an ethnic group's culture cannot be totally understood and appreciated without the awareness of its language. Thus, the study of aspect of the implementation of multicultural education in teacher training program appears to be timely.

Accordingly, the major purpose of this study is to investigate the attitude of teacher trainers toward the implementation of multicultural education in Arba Minch Teacher Training Institute and Awassa College of Teacher Education.

In line with this purpose, the study tries to answer the following basic questions:

1. To what extent are teacher trainers, in the two training centres, aware of multicultural education?
2. What is the attitude of teacher trainers toward the implementation of multicultural education in the two training centres?
3. To what extent are teacher trainers, in the two training centres, competent in performing classroom instruction from multicultural perspectives?
4. Are the teacher trainers' awareness, attitude on multicultural education and classroom performance from multicultural perspectives have relationships?
5. Does the awareness of teacher trainers on multicultural education have an impact on their attitude toward multicultural education?
6. Do teacher trainers' awareness and attitude on multicultural education have impact on their classroom performance from multicultural perspectives jointly and independently?

1.3. Significance of the Study

To date, as far as the knowledge of the researcher goes, there are no base line data available on the attitude of teacher trainers toward multicultural education in Ethiopia. Besides, studies made on the area of multicultural education in the country are very scant. Among the very few studies, Erango's (1986) investigation on the perceived need for cultural pluralism in teacher education program of Ethiopia is the worth mentioning one. However, his study did not treat, in particular, the attitude of teacher trainers toward the implementation of multicultural education in teacher training Institute.

This shows that limited attention was given to multicultural education in studies about teacher education in Ethiopia. As a result of this, the study may shade light on:

1. the awareness of teacher trainers on multicultural education in the two teacher training institutes;
2. the attitude of teacher trainers toward the implementation of multicultural education in the two training institutes;
3. the competence of teacher trainers in performing classroom instruction from multicultural stand point in the two training institutes;
4. the direction and strength of the relationships among awareness, attitude and classroom performance, and
5. the effect of awareness on attitude, and attitude and awareness on classroom performance jointly and independently.

1.4. Delimitation of the Study

The study is confined to teacher training program conducted in Arba Minch Teacher Training Institute and Awassa College of Teacher Education. In Awassa College of Teacher Education two programs are simultaneously conducted (first cycle - 1 to 4

grades, and second cycle - 5 to 8 grades teacher training program). In this study, the first cycle teacher training program was considered.

These two teacher training centres were selected since they train trainees who come from different cultural and linguistic settings of Southern Nations, Nationalities and Peoples' Region. This region, according to the report of CSA (1994:17), comprises the largest proportion of ethnic and cultural diversity in Ethiopia.

In Addition to this, the study focuses on only one variable of multicultural education (i.e. culture) to make the study manageable. It does not consider factors like social class, sex, disability and age which are often included in multicultural education.

1.5. Limitation of the Study

The study is limited in its comprehensiveness on some points. In the first place, the analysis of the study was based on the data obtained from 33 teacher trainers. Secondly, the classroom observation was conducted by only two observers. Thirdly, the awareness questionnaire and the performance rating scale were developed by the investigator. Hence, their validity and reliability depended only on the view of six judges and the pilot result.

1.6. Operational Definition of Terms

1. Multicultural education - the provision of classroom instruction from the perspectives of different cultures (Sims and de Martinez, 1981: 173).
2. Attitude - a predisposition to act in a positive or negative way toward the implementation of multicultural education in teacher training program (Cooper, 1986: 5).
3. Implementation - the actual use of multicultural education in the classroom or what it consists of in practice (Fullan and Pomfret, 1977: 336).
4. Teacher Training Institute - an institution in which the training of elementary school teachers takes place (Good, 1973: 304).

5. Teacher Trainer - a qualified professional person responsible for the preparation and training of elementary school teachers (Good, 1973: 206).
6. Awareness - the act of having or showing perception or knowledge on multicultural education (Good, 1973: 54).
7. Classroom performance - the actual accomplishment of classroom instruction from multicultural perspectives (Good, 1973: 414).

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This section of the paper presents a review of related literature on the concept and approaches of multicultural education, its implementation in teacher training program, and finally, on its present practices in SNNPR.

2.1. The Meaning and Importance of Multicultural Education

2.1.1. Meaning of Multicultural Education

The term multicultural education refers to the concept of education for a multicultural society. It bears culture as its central ingredient for its meaning (Lynch, 1983:1). In what follows, a brief discussion on culture will be presented before discussing multicultural education.

Culture is the most ubiquitous element of society. It includes everything, tangible and intangible that people of a society create, acquire from societies and transmit to subsequent generation (Ferrant, 1992:83). Several scholars in the field of sociology agree that culture encompasses both material and nonmaterial culture. For example, Newman (1995: 31), Macionies (1991: 60) and Volette (1986:179) write that material culture refers to the physical artifacts of society which include building, innovation, food, technological products, artworks, writings and music - and often represent that society's adaptation to changing environmental condition. According to them, nonmaterial culture on the other hand refers to the intangible creation of society that cannot be identified directly through the senses. It includes the knowledge, beliefs, customs, values, morals, and symbols that are gathered over time and shared. It deals with how ethnic or cultural groups work, how we lead our every day lives, and what to do if something breaks. In general, both material and nonmaterial cultures form the fundamental aspect of multicultural education.

Multicultural education is defined differently by different scholars. Of these, the ones which have much relevance to this work are outlined below.

AACTE (1973: 264) defines multicultural education as education which values "cultural pluralism" - a situation in which different cultural groups live in a mutual respect but retain their ethnic or cultural identity (Eitzen and Zinn, 1993: 547). In this context, multicultural education rejects the view that educational institution should melt away cultural differences or the view that an institution should merely tolerate the statistical existence of cultural diversity. Rather it affirms that educational institutions should be oriented toward the cultural enrichment of all trainees through the programs rooted in the preservation and extension of cultural alternatives. In this view, multicultural education seems to recognize cultural diversity as a fact of life in a multicultural society.

Grants (1982: 485), on the other hand, defines multicultural education as a fundamental belief that all trainees must be accorded recognition and acceptance in an educational institutions, regardless of their ethnic or cultural background. It is manifested in an educational process that neither advocates nor tolerates the "assimilation approach" - teaching from the perspective of the dominant culture nor creating "multi-monocultural" educational programs. To put it in different words, it is reflected in an educational process which promotes acceptance of cultural differences as a resource for the teaching learning process, without segregation of any kind. According to White (1973: 226) it is above all a means of teaching all trainees know and respect all members of society rather than only some.

For James (1978: 14), multicultural education refers to "the process of making the educational experience more responsive to the cultural diversity that characterizes a multicultural society". He further notes that multicultural education is neither a topic /unit to be easily packaged in separate course nor a subject added to the existing teacher education program. It is centred on the premise that all training courses can and should be taught from multicultural perspectives. Thus, James' definition makes multicultural education pervade all aspects of the training program, and is considered by most scholars as a comprehensive one.

To sum up, the above definitions clarify the meaning of multicultural education differently though they seem similar. The first definition views multicultural education as an educational program which values the mutual existence of different cultural groups respecting one another but retaining their cultural identity. Whereas, the second definition considers multicultural education as an educational process where all trainees gain recognition and acceptance in an educational setting. On the other hand, the third definition views multicultural education as a process of providing subjects or courses from multicultural perspectives. According to several scholars, the third definition is very comprehensive and therefore used as a working definition in this study.

2.1.2. Importance of Multicultural Education

Multicultural education is introduced to the educational system of several countries in the early years of 1970s. Since its inception it has shown remarkable significance by facilitating the instructional process in culturally diversified educational settings. In this section, some of the most common significance of multicultural education are summarized.

Multicultural education educates culturally diversified trainees in a way that will not alienate them from their home culture. This stimulates trainees' motivation for learning and help them to increase their academic performance in all aspects of their training. It makes education more relevant and meaningful to the experience of culturally diversified trainees, through the use of teaching approaches and materials that are sensitive to the trainees' sociocultural backgrounds (Biehler and Snowman, 1990: 253; Gollnick and Chin, 1990 in Gollnick, 1992: 220).

Multicultural education ameliorates some of the more obvious forms of discrimination and prejudice, although subtle forms will persist on, during classroom instruction. When it is thoroughly understood and appropriately implemented, it promotes better relation and mutual respect among trainees of diverse cultures. It enhances the rational acceptance of cultural diversity and active affirmation of individual and group differences within society (Lynch, 1983:14, Mayers and Walter, 1983: 184).

In the same way, Verma (1983: 110) and Sowell (1993: 72) hold that multicultural education encourages trainees to maintain and be proud of their own cultural identities. It also helps trainees to develop a sufficient degree of awareness about those around them. Moreover, they believe that it acquaints each trainee with unique cultural features of different ethnic or cultural groups to foster better understanding among one another and thereby reduce inter groups conflict.

2.2. Educational Approaches in Multicultural Society

The provision of education in multicultural society may be structured in one of three different ways. It could either be designed from one dominant culture, multi-monocultures or from multicultural perspectives. Hence, the question of cultural diversity in education could be responded by a country through either of the three approaches depending on its political ideology. Namely, assimilation, cultural pluralism and multicultural education.

2.2.1. Assimilation Approach

Assimilation is an approach which envisages one dominant culture within a society (i.e. monism) that all ethnic or cultural groups gradually adopt patterns of the dominant culture in a society. It involves changing modes of dressing, values, religion and language. In this approach, the subordinate cultural groups finally give up their heritage cultures and take on the way of life of the dominant culture (Baker, 1993: 258; Macionis, 1991: 317; Banks and Lynch, 1986: 197).

The assimilation approach is rooted in the belief that common, national civic culture is a prerequisite to the survival of a nation. It assumes that a shared set of values which transcend ethnicity is strong enough to bind people together for mutual survival and happiness. Ethnicity, in this sense, takes a back seat to the preservation of a national civic culture. Thus, the central role of educational institution in this approach is to teach students the skills, knowledge, and values which will allow them to participate in the assumed shared culture (Banks, 1994 in Steven and Wood, 1995: 66).

According to Banks (1975:170), the curriculum is designed with the assumption of helping trainees to develop a commitment to the assumed common culture. The use of materials and teaching styles are related to the common culture. The learning styles are universal for all trainees. Furthermore, the recruitment of teacher trainers is made with no regard to their ethnic or cultural background.

However, the assimilation approach actually provides classroom instruction from the perspective of the dominant culture (i.e. assumed common culture). It deprives the wealth of experiences outside the mainstream culture. Trainees in assimilationist educational institutions are trained to view the dominant culture and ethnic group as superior to all others in the society (Bennett, 1981:589).

2.2.2. Cultural pluralism Approach

Cultural pluralism is an approach which holds the view that each individual, regardless of self or group identification, is entitled to respect, dignity, freedom and citizen right. It rejects assimilation, and recognizes the right of all ethnic groups to exist on an equal footing---socially, culturally and educationally. All individuals within ethnic groups have some basic civil rights. Society itself is viewed as a composition of different ethnic or cultural groups. Each has its own voice and has the right to socialize its children according to its own values, languages and mode of behaving. The identity of the individual is the extension of the identity of the group. School, then, ought to express and reinforce ethnic identity depending upon the local population dominant in the school (Hass, 1983: 48; Banks 1994 in Steven and Wood, 1995: 66).

Accordingly, the curriculum in this approach reflects the cognitive style, culture and aspiration of the ethnic group dominant in the school. Its major goal is to help the child function more successfully within his /her ethnic culture. It stresses events from particular ethnic group perspective, and promotes ethnic attachment and allegiance. The classroom instruction and learning material are culture specific. The recruitment of teacher trainers is on the basis of ethnicity. Each cultural group needs skilled

teacher trainer of its ethnic identity, for role models, to learn more effectively, and develop more positive self concept and identity (Banks, 1975: 170).

This approach does not advocate for any sense of common traditions, values, purposes and obligations. Without such commonly supported positions, however, educational institutions lack unity and direction. Besides, it is impossible for them to teach a common body of knowledge (Thomas, 1981: 589-592). Cultural pluralism approach may also contribute support to no fault morality which claims that all values are of equal worth. Unfortunately, this may lead to moral anarchy in educational institutions, since there are several cultural issues of different ethnic groups which contradict with one another. Thus, as Thomas put it, what is wrong with this approach is that it acknowledges no commonly accepted moral standard.

2.2.3. Multicultural Education Approach

Multicultural education is the third most recent educational response to cultural diversity in a multicultural society. It is an approach which contends the celebration of both diversity and unity, and social differentiation and cohesion. This approach is clearly a compromise position between assimilation and cultural pluralism. It reforms educational program to reflect the cultural diversity of trainees in an educational institution (Lynch, 1983: 15; Banks, 1994 in Steven and wood, 1995: 66; Seleeter and Grant, 1987: 422).

In this approach, curriculum and teaching materials are prepared to reflect and respect the cultural diversity constituted in the educational institution. They are free from biases, omissions and stereotypes. They are inclusive rather than supplementary and that portray individuals from different ethnic or cultural groups. They incorporate the contributions and perspectives of different cultures (Grant, 1982: 486). Their goal is to prepare trainees to teach successfully in a multicultural classroom. Teacher trainers are recruited to reflect the cultural diversity that characterize the society being served by the educational institution. All teacher

trainers are required to be cognizant and sensitive to the cultural diversity that prevail in the institution (Banks,1975: 170).

In summary the similarities and differences of the aforementioned three approaches could be presented as follow:

Assimilation	Cultural Pluralism	Multicultural Education
<ul style="list-style-type: none"> • Envisages one dominant culture within society. 	<ul style="list-style-type: none"> • Envisages the existence of different ethnic cultures equally in a society. 	<ul style="list-style-type: none"> • Envisages the existence of different ethnic cultures equally being tied to one another by a shared common culture.
<ul style="list-style-type: none"> • Educational institutions teach knowledge, values and skills to trainees participate in the mainstream culture. 	<ul style="list-style-type: none"> • Educational institutions teach knowledge, values and skills to trainees to participate in their own ethnic cultures. 	<ul style="list-style-type: none"> • Educational institutions teach knowledge, values and skills to trainees to participate in their own ethnic cultures as well as in the shared common culture.
<ul style="list-style-type: none"> • Curriculum develops trainees' commitment to the dominant culture. 	<ul style="list-style-type: none"> • Curriculum develops trainees' commitment to their own ethnic culture. 	<ul style="list-style-type: none"> • Curriculum develops trainees' commitment to their own ethnic cultures and shared common culture.
<ul style="list-style-type: none"> • All trainees have the same learning style regardless of their ethnic group (i.e. it is universal). 	<ul style="list-style-type: none"> • Each ethnic group has unique learning style. 	<ul style="list-style-type: none"> • Ethnic groups have some unique learning styles but share many learning styles with one another.
<ul style="list-style-type: none"> • Teacher trainers are recruited regardless of their ethnic group. 	<ul style="list-style-type: none"> • Teacher trainers are recruited on the basis of their ethnic group. 	<ul style="list-style-type: none"> • Teacher trainers are recruited to reflect the cultural diversity that characterize the society.
<ul style="list-style-type: none"> • Classroom instruction is provided from the dominant cultural perspective. 	<ul style="list-style-type: none"> • Classroom instruction is provided from multi-monocultures perspective (i.e. culture specific). 	<ul style="list-style-type: none"> • Classroom instruction is provided from multicultural perspectives.

2.3. Multicultural Education in Teacher Training Program

In the Ethiopian context, the preference of multicultural education over the other two approaches is made on the basis of the following two justifications. In the first place, the current Education and Training Policy seems to favor multicultural education since it states that education should promote democratic culture, tolerance and peaceful resolution of differences in a situation where there is problem due to cultural differences (MOE, 1994: 10). Similarly, the new Culture Policy also states that education should develop the cultures of all ethnic groups in the country by integrating them in the school curriculum. The policy further suggests the development of shared common culture for mutual understanding on the basis of equal development of all ethnic groups' cultures of the country (MIC, 1997: 15).

Secondly, the assimilation and cultural pluralism approaches have drawback that makes them inappropriate for the culturally diversified society. To mention, the assimilation approach emphasises the dominant culture at the expense of the subordinate cultures in a society. Similarly, the cultural pluralism approach also lacks common culture that binds different ethnic groups to exist together.

2.3.1. The Needs for Multicultural Education in Teacher Training Program

Multicultural education is crucial for teachers. It is necessary for them to make teaching responsive to multicultural student population. As research findings in teacher education program show, however, prospective teachers are not usually provided with training that helps them to develop an understanding of the cultural experiences of ethnically different students. Rather most teacher education institutions prepare prospective teachers to deal with the traditions, attitudes and customs of the dominant culture (Grant, 1981: 95). Nonetheless, Sims (1981: 10) research report suggests that teachers who are educated in monocultural teacher education program are uncomfortable, unhappy, and less productive in teaching a multicultural classroom. Hence, educating prospective teachers in a multicultural line to make them sensitive to the needs of all students should be a priority in teacher education program throughout culturally diverse societies (Baker, 1977:31).

In a similar vein, recommending the need for multicultural education in teacher training program, James (1978: 18) has noted: "Teacher education programs do not provide opportunities for prospective teachers to gain the skills and competence needed for establishing an environment where the success of all students is possible and expected." This means that training prospective teachers in a multicultural perspective is mandatory. Such training enables them to develop the skills and competence that help them teach a multicultural student population. In support of this, Gay (1986: 154) writes "To larger degree teachers' effectiveness, or the lack of there of, with ethnically different students is a direct reflection of the quality of their professional preparation." This implies that teachers who have not had the benefit of multicultural teacher training are usually unable to teach a culturally diversified classrooms. Gagliardi (1995: 2) has also indirectly portrayed the need for multicultural education in teacher training program by noting the ineffectiveness of a monocultural educational program. He suggests that a monocultural education program may reinforce feelings of discrimination among those students whose cultures are unconsidered. This in turn may cause the students to loss their cultural identities and self-esteem resulting in low academic achievement. Concerning this, White (1973: 226) also has similar argument. She states that if a teacher retains a strong belief in the superiority of one culture in a pluralistic society, this attitude is subtly transmitted to the students. Consequently, the learners often develop a poor self-concept, and may exhibit poor academic performance.

In response to these demands, the 1977 NCATE standard has recommended for all teacher training institutes in multicultural society to provide evidence of planning for multicultural education in their curricula including both the general and professional studies components. Besides, the standard has suggested emphatically for provision to be made to implement multicultural education in all aspects of teacher education program (i.e. in courses, seminars, directed reading, laboratory, and in the field experiences) to alleviate the aforementioned problems. Similarly, a study conducted by Erango (1986: 57) suggests the need for implementing multicultural education in Ethiopia's teacher training program where culturally diverse trainees are on training in an institution. The failure to include multicultural education in teacher

preparation program is believed to result in the incompetence of teachers in multicultural classroom (Giles and Sherman, 1982: 204; Gay, 1986: 155).

2.3.2. The Prerequisites for the Implementation of Multicultural Education in Teacher Training Program

Multicultural education requires certain prerequisites to implement the basic elements of multicultural classroom instruction:

- Attitude of openness toward cultural diversity,
- The utilization of different techniques of instruction,
- The use of unbiased instructional aids,
- The promotion of cross-cultural dialogue among trainees on an issue,
- The utilization of cultural experiences of trainees,

The above issues can be safely categorized under two major requirements (i.e., institutional and teacher trainers).

2.3.2.1. Institutional Requirement

The implementation of effective multicultural education in teacher training program requires certain reorganization in the program. It cannot be simply grafted on to the existing program. It requires changes in the institutional environment, and curricular materials (Bernier and Davis, 1973: 269). Unless such activities are carried out, educational institutions may resound the superiority of one cultural group in a pluralistic society. This may make the multicultural education program superficial.

As research findings indicate, the incorporation of multicultural education in teacher training program requires an environment which permits institutional commitment and support to the innovation. Regarding this, James (1978: 18) indicates that the success of an institution in implementing multicultural education in teacher education program depends on their commitment and support to multicultural education. He added that without the support and commitment of the entire institution, there is little likelihood for the effectiveness of the innovation (MCE). Similarly, AACTE (1973:

264) also points out that if multicultural education is to become an integral part of teacher preparation program, teacher trainers and personnel must possess the commitment to multicultural education. Evidence of this commitment includes a multicultural staff composition (in proportion with the cultural diversity that characterize the trainees ethnic composition), selection and admission of culturally diverse trainees, promotion of cross-cultural dialogue and the preparation of a multicultural curricular materials (Gagliardi, 1995: 3; Grant, 1978: 47). In support of this, Dolce (1973:283) writes that a monoculturally dominated staff composition and curricular materials do not possess the ingredient required for the multicultural teacher education. Thus, it seems that staff composition and preparation of curricular materials are important factors in multiculturalizing teacher training program.

In the preparation of curricular materials proper attention should be given to reflect the cultural components of different ethnic groups through them with no omission, bias and stereotype (Banks, 1986: 23). It must, however, be accomplished in a way unnoticeable to the trainees to ensure that trainees do not feel any sense of cultural imposition. Besides, as writers point out (for instance, Guruvadoo, et al, 1995: 162), such integration of cultural components should cover all aspects of the training program. This might have been recommended with the assumption that they are more readily accepted when they are incidental to the learning tasks. Moreover, it is a common knowledge that the impact of the hidden curriculum is more lasting than that of the formal curriculum. Attitudes and values are caught rather than taught (Brown, 1990: 40). Hence, trainees seem to accept multicultural components perhaps because they are presented in an informal and natural manner.

2.3.2.2. Teacher Trainers' Requirement

Multicultural teacher training program involves the preparation of teachers on three dimensions of learning (i.e. knowledge, attitude and practice). It introduces prospective teachers with the concept of multicultural education, sensitivity to cultural diversity and skills in providing classroom instruction from multicultural perspectives. To do this, teacher trainers themselves are required to possess the knowledge,

attitude and know-how on multicultural education. Furthermore, they need to provide prospective teachers with information about students' cultures, and train them on how to use this information in teaching (Gagliardi, 1995: 9). Thus, for teachers to be reasonably accountable for implementing multicultural education in any form, they must have some basic knowledge about cultural diversity and positive attitude toward it. Besides, they need to have pedagogical competence in translating cultural knowledge into instructional plan for use with students. In this regard, Villegas (1992) in Rodriguiz and Sjostrom (1995: 304) argues that for teachers to provide classroom instruction from multicultural perspectives, they need the followings:

- Knowledge of cultural resources their students possess,
- An attitude of respect for cultural differences,
- Teaching skills and strategies in taping the cultural resources in the teaching learning process.

Therefore, to put multicultural education into effect in multicultural schools, prospective teachers need to be trained by teacher trainers who demonstrate multicultural education successfully in their classroom. Teacher trainers must model in their classrooms the approach to diversity they teach. According to Gollnick (1992: 221) and Gay (1981: 187) mere talk about cultural diversity in teacher education courses is insufficient and they must instruct classroom lessons from multicultural perspectives. However, this could not be realized unless the teacher trainers have appropriate knowledge, attitude and teaching skills and strategies (approaches) in implementing multicultural education in teacher training program.

2.3.2.2.1. Knowledge of Multicultural Education

According to Roberts, et al (1994: 34) teacher trainers need to have a working knowledge and understanding of the culturally or ethnically diverse trainees. They need to understand what culture is and how it affects the interaction of culturally diversified trainees, and the interaction of the trainees with them. Supporting this, Banks, (1986:16) states that to implement educational program that help all trainees attain educational equality, teacher trainers must understand how culture affects the learning of culturally diverse trainees. Being aware of the cultural backgrounds of

trainees help the teacher trainers to motivate the trainees. Besides, it provides insight and guidelines for their preparation of teaching strategies and materials designed for classroom use (Johnson, *et al*, 1974: 198). In line with this, Gollnick and Chinn (1986) in Biehler and Snowman (1990: 251) suggest that when the cultural values and experiences of trainees are understood and incorporated into instructional lessons, the trainees involved will perform better academically than they would otherwise.

On the other hand, if teacher trainers are not aware of the cultures of the trainees they teach, they may affect the self-concept of the trainees significantly (James, 1978: 16). In addition to this, Gay (1986: 165) argues that instructional activities cannot be facilitated in the absence of a clear understanding of how to provide classroom instruction from culturally diverse points of view. Hence, a classroom with instructional process unaware of and insensitive to the existing cultural differences or with essentially monocultural teaching and learning activity may negatively affect trainees whose cultural backgrounds and experiences are different from the one being stressed. In real sense, these trainees become outsiders. They reveal this by positively refusing to participate in a classroom discussion or by actively disrupting the teaching learning process (Darder, 1991: 113). Thus, even if the teacher trainers are well prepared, if they cater instruction from monocultural perspective in a multicultural classroom, they will likely encounter indifference, antagonism or outright hostility.

Despite these, cultural diversity in the classroom is frequently considered by most teachers as something which has negative impact in educational process. In relation to this, Cabello and Burstein (1995: 286) indicate that teacher trainers usually try to achieve a culture fit, they try to fit trainees into the dominant culture of the educational institution. Supporting this, Darder (1991: 113) also states that most teacher trainers still retain the notion of culture that reflect the colour blind or melting pot assumption. To put it in different words, these trainers believe that all trainees are the same in spite of their ethnicity or culture and that anyone who wants to succeed can succeed irrespective of the cultural circumstances. Thus, they may

ignore to utilize the cultures of ethnically diverse trainees in the classroom instruction.

However, Gagliardi (1995:2) and Tesconi (1984: 94) argue that the cultural diversity can be a resource in the classroom activities if teacher trainers thoroughly understand it. In view of this, Gollnick (1992: 220) also has similar argument. He notes that the effectiveness of teacher trainers in multicultural classroom is greatly enhanced if they understand the cultural diversity that prevail in the classroom than stay encapsulated in their own cultural milieu.

In general in multicultural settings, teacher trainers need to understand the cultural background of their trainees. They must be aware of the cultural experiences that trainees bring into the classroom. Besides, they need to have knowledge in transforming their understanding of the cultural experiences of trainees as a resource for the teaching learning process.

2.3.2.2.2. Attitude Toward Multicultural Education

Multicultural teacher education program plays a major role in shaping the attitudes and beliefs of prospective teachers toward cultural diversity. It helps trainees to explore and clarify their own ethnic and cultural identities and develop positive attitude toward other cultural groups (Banks, 1986: 17; AACTE, 1973: 264). However, these could not be materialized unless teacher trainers themselves hold positive attitude toward cultural diversity. In this regard, Burger (1994) in Guruvadoo, *et al* (1995: 163) describes that no teacher trainer can teach positive attitude toward cultural diversity to his /her trainees unless he /she possess it himself /herself. It is only when the teacher trainers have positive attitude toward cultural diversity that they realize the goal of accepting and appreciating oneself and others a reality among trainees of diverse cultures. Similarly, Johanson, *et al* (1974: 194) suggest that teacher trainers must develop more positive attitude toward ethnically different trainees and other cultures, since they are the most important variable in the trainees' learning environment. They further added that teacher trainers' attitude and expectation have profound impact on trainees' perception, academic behavior, self

concept and beliefs. Thus, the attitude of teacher trainers seems an important factor in the implementation of multicultural education in teacher training program. Substantiating this, Fullan (1992: 34) describes that the prospects for successful implementation of an innovation in educational program is greater when teacher trainers agree on the need and appropriateness of the innovation in the training program.

Accordingly, teacher trainers need to have attitudinal openness toward cultural diversity to become better practitioners in multicultural classrooms (Roberts, et al, 1994: 34; Giles and Sherman, 1982: 204). To ensure this, teacher trainers should assess carefully their personal assumptions, biases and prejudices related to cultural diversity. They must question what impact their cultural backgrounds have on their ability to teach successfully culturally diversified trainees.

In fact, it is far more common for teacher trainers to perceive themselves as neutral and unbiased toward all trainees. However, many negative attitudes (i.e. prejudice, bias, stereotype) are most often transmitted through the classroom lessons (Darder, 1991: 114). In support of this, Banks (1986: 17) describes that teacher trainers bring their prejudices, stereotypes and misconceptions about cultural diversity into the classroom. He added that these however mediate and interact with what they teach, and influence the way the messages are communicated and perceived by their trainees. In this respect, Ramsey (1987:40) states that it is of course very difficult or painful to admit that they have prejudiced feelings toward cultural diversity in the classroom. This is particularly true for teacher trainers who often are motivated by their idealistic desires to create a more fair and responsive environment for their trainees. Nonetheless, Ramsey in his study has found out that teacher trainers have prejudices and biases toward culturally diversified trainees. These prejudices and biases are usually present when they disparage some trainees' cultures in dress, food or music. Moreover, when they dismiss these trainees as "unlikable" because they have different cultural style of interaction or a background of neglect that makes it hard for trainers to relate to them.

Therefore, it is necessary for them to get over from the negative attitude they hold toward cultural diversity, since such attitude is obstacle to understand trainees' cultures and accept their particularities (Gagliardi, 1995: 3). In connection with this, Bomley's and Miller's (1991: 418) suggestions of attitude change could be used as means for changing such attitude. They have summarized what theoreticians recommended to help trainers to surmount negative attitude toward certain issues (for example, cultural diversity) in a classroom. They pointed out that in addition to the direct exposure to the object of the attitude, it is important to utilize the following processes to change trainers attitude:

- Cognitive process for receiving new information that contradict the trainers' belief;
- Behavioral process for helping trainers to act in a way that is inconsistent with their attitude;
- *Fait accompli* (something done and not reversible) to change trainers' attitude to make it consistent with the new event, and
- Psychotherapeutic approach for increasing insights into why the trainer holds certain view.

2.3.2.2.3. Teaching Skills and Strategy Needed in Multicultural Education

The delivery of classroom instruction from multicultural perspectives requires teacher trainers to possess skills in multicultural education. In view of this, Darder (1991: 116) describes that no matter how much a teacher trainer might feel committed to the notion of cultural diversity, it is impossible to provide classroom instruction from culturally diverse points of view if that teacher trainer is ill-equipped with skills of multicultural education. Substantiating this, Banks (1986:16) states that whether a teacher education program designed to foster educational equality succeeds or fails ultimately depends on the skills of the teacher trainer.

Scholars in the field of education suggest that teacher trainers are required to have some specific skills to teach a culturally diverse classroom. To begin with, they need to motivate all trainees to enhance their classroom participation. They should be ready and be able to take on different roles for different trainees and to vary their instructional techniques to insure that they address all trainees (Roberts, et al, 1994: 34). Similarly, Gay (1986: 170) pin points that skill training for teaching multicultural classroom should involve trainers in practicing different instructional techniques and teaching styles to motivate the learning of culturally diverse trainees.

Secondly, they have to create safe and supportive learning environment (psychologically and socially) for all trainees in the classroom. This is because such environment enables trainee to feel that his /her status is equal to that of every other trainee (James, 1978:16). Besides, Roberts, et al (1994: 34) in this regard describe that teacher trainers need to have the skill in creating an environment in which every trainee feels comfortable with his /her perspectives and biases and knows how to express them without offending others. To accomplish this, they added that trainers must be able to intervene appropriately when trainees consciously or unconsciously denigrate others in the classroom. Moreover, direct and precise action must be taken to address this kind of situation. This is because such kind of incident may provide opportunities for trainers to delineate appropriate and inappropriate behavior to the entire trainees in the classroom. If such occurrence are not dealt, the credibility of the teacher trainer for teaching multicultural classroom may be jeopardized (Ibid.: 13).

Thirdly, trainers should promote co-operation and interdependence among trainees. These could be accomplished, as Lynch (1983: 15) pointed out, through:

- encouraging collaborative small group work;
- creating purposeful tasks, the solution to which can only be achieved by working together.

Besides, trainers should have a skill of developing a positive rapport with trainees of diverse cultures. This skill is essential, since pedagogical confidence and good

interpersonal relations with the trainees are prerequisites for success in teaching multicultural classroom (Gay, 1986: 171).

Fourthly, teacher trainers need to have a skill in assessing teaching materials with respect to their use in multicultural classroom setting. The teaching materials should be analyzed thoroughly to check whether they are free from stereotype, bias and distorted depiction of the culture of an ethnic group (Darder, 1991: 115).

On top of these, the teacher trainer should also be competent enough to employ informal approach, in which the cultural components seem incidental to the teaching learning process, to teach a multicultural classroom. Regarding this, Guruvadoo, et al (1995: 163) suggest that the informal approach whereby the cultural components are skilfully woven into the process of explanation of a concept seems more adapted to the transmission of desirable attitude. The cultural components are seen as relevant to the explanation of the concept. However, the development of desirable multicultural attitude on prospective teachers does not guarantee their classroom performance from multicultural perspectives. In view of this, Klein (1982: 393) states that investigations of the relationship between attitude and behavior have yielded quite disparate results. Some studies indicate that correlation between how teachers feel about an innovation and how they act in a classroom is often quite low (Borich, 1988: 3). On the other hand, other studies show that teachers do act according to their attitude toward the innovation (Okafor, 1988: 75, Sparks, 1988: 116).

To conclude, according to the foregoing discussion, it seems that the degree to which multicultural education is implemented in teacher training program depends largely on the knowledge, attitude, skill and strategy of the teacher trainers in multicultural education.

2.4. The Status of Multicultural Education in Southern Nations, Nationalities and Peoples' Region (SNNPR)

The Southern Nations, Nationalities and Peoples' Region is a combination of five former regions that have for a longer time had a close ties. Currently, it constitutes nine zones plus five special 'Woredas' with semi-zonal status. The zones are divided into 70 'Woredas' highlighting the linguistic and cultural complexity and diversity of the peoples of the region (SRAB, 1996:1).

This region comprises people of the four commonly known broad linguistic origins of Ethiopia. The Semetic, Kushitic, Omotic and Nilo-Saharan. The Semetic includes Amhara and Guraghe, Kushitic - Sidama, Hadiya, Kembata, Oromo, Konso . . . , Omotic - Wolayita, Gamo-Gofa, Dawro-Konta, Kefa-Shaka, Yem. . . and the Nilo-Sharan - embraces Mursi, Dizi, Surma, Geleb, Bumi, and others (Ibid.). In general, DTRC (1998: 1) reports that the region comprises more than 45 ethnic groups with distinct languages and cultures of their own. These ethnic groups exhibit a fascinating range of cultural practices (i.e. pastoralism of the lowlanders - Dizi, Mursi. . . to crop cultivation of the highlanders - Wolayita, Konso, Sidama...).

Until recently, however, such cultural diversity had not received attention from the educational system of the country. In this regard, Hamdessa (1982: 271) stated that the educational activities of the country was carried out from one dominant cultural perspective. Similarly, Erango (1986: 27) after reviewing the country's teacher training program document, has revealed that the prospective teachers from various cultural backgrounds are trained from monocultural perspective. He further noted that there was no teacher training program conducted from culturally diverse points of view in the country.

To date in SNNPR, however, the educational process is trying to provide elementary education (1-4 grades) in the languages of some ethnic groups. Accordingly, the educational activities of elementary schools are now being conducted in the languages of nine ethnic groups. This change has also been made in teacher training program of the first cycle (1-4 grades). In Awassa College of Teacher

Education five languages are used as mediums of instruction, namely Sidamigna, Kembatigna, Amharic, Gediogna, and Hadiygna. Similarly, in Arba Mich Teacher Training Institute Wolayita---Gamo-Gofa---Dawro-Konta and Amharic languages are used as mediums of instruction (SREB, 1996: 25-26). Totally six languages are currently employed as mediums of instruction for the first cycle teacher training program conducted in the region. However, trainees are recruited from the nine zones and five special 'Woredas' of the region. Thus, it appears that very few languages of the region are used as mediums of instruction in the training centres vis-a-vis the number of ethnic groups in the region.

As the training centres documents reveal, the recruitment of teacher trainers for academic and non-academic subjects is made on the basis of their speaking and writing capacity of the languages used as mediums of instruction regardless of their ethnic background. For instance, in Sidama section non-professional courses teacher trainers were recruited in accordance with their speaking and writing capacity of Sidamigna language with no regard to their ethnic background.

However, for professional courses (Pedagogy and Psychology) no criteria was indicated to instruct the courses. Despite this, the teacher trainers instructing the subjects are of different ethnic backgrounds as the documents depict. Moreover, the documents also indicate that the administrative staff are of different ethnic backgrounds.

CHAPTER THREE
3. DESIGN OF THE STUDY

3.1. Subjects

The target population of the study were all teacher trainers at Arba Minch Teacher Training Institute and Awassa College of Teacher Education. They all together amount to sixty six, where 38 of them were in Awassa College of Teacher Education and the rest 28 were in Arba Minch Teacher Training Institute. Each teacher trainer teaches one of the nine courses (professional, academic and non-academic) offered in each training centre. Specifically, it could be observed from the table below:

Table I
The courses offered in the first cycle teacher training program
of the two training centres

Course area	Subjects
Professional	Pedagogy
	Psychology
Academic	Natural science
	Social science
	Maths
	Language
Non-academic	Art
	Music
	Health and physical Education

Sample and Sampling Technique

To get a representative sample of the population, fifty per cent of the population (which numbered 33) was taken as a sample of the study. This proportion was used as a sample of the investigation since it was unmanageable to conduct classroom observation on the total population.

In order to procure such proportion of the population, stratified sampling technique was used so as to give equal chance for instructors of all subjects. After stratifying the trainers on the basis of the course they instruct, structured random sampling technique was employed to select proportional number of instructors from each course. Thus, with the help of these sampling techniques, 33 teacher trainers (17 and 16 from Awassa and Arba Minch respectively) were selected as a sample of the study. The respondents who were involved in the pilot study were purposely excluded from the main study to avoid the development of practice effect on the pilot group when similar scales are administered twice.

3.2. Instrument

The data gathering instruments employed in the study were prepared in line with Baker's (1974) Conceptual Model of Multicultural Teacher Education. This model was adapted in this investigation, since the argument of this model matches with the assumption of this paper. The assumption is that multicultural classroom teacher trainers needs to have : first, an awareness of how to teach culturally diversified trainees; secondly, an attitude of openness to provide classroom instruction from multicultural perspectives; third, the competence in employing skills and strategies of MCE in the classroom. In the same manner, the argument of Baker's model states that a multicultural classroom teacher requires professional training in the following three stages of multicultural education:

1. Acquisition stage (used in the study as a base for constructing the awareness questionnaire)
 - focuses on the development of an understanding on a core of cultural information about ethnically diversified trainees.
2. Development stage (used in the study as a base for adapting the attitude scale).
 - emphasizes on creating a personal philosophy of and commitment to multicultural education.
3. Involvement stage (used in the study as a base for developing performance rating scale).

- concentrates on implementing multicultural education in the classroom (i.e. providing classroom instruction from multicultural perspectives).

Accordingly, three types of instruments (i.e. awareness questionnaire, attitude scale and performance rating scale) were prepared to carry out the study.

3.2.1. Multicultural Education Awareness Questionnaire

A questionnaire consisting of 18 items in the form of self rating scale was prepared to collect data concerning awareness of teacher trainers on the concept and importance of multicultural education.

3.2.2. Multicultural Education Attitude Scale

To measure the attitude of teacher trainers toward the implementation of multicultural education in the two teacher training institutes a Likert type scale of culture attitude scale developed by Erango (1986) was adapted. The culture attitude scale constitutes 52 items among which 28 items, which are more relevant to the study were selected and modified to suit the investigation.

3.2.3. Multicultural Education Performance Rating Scale

The performance rating scale was prepared so as to rate the competence of the teacher trainers in performing classroom instruction from MCP. The rating scale consists of 23 items which stress on the techniques of teaching used, style of presentation followed, the nature of trainers-trainees relations prevailing, and the nature of instructional materials used.

3.3. Instrument Validation

A. Multicultural Education Awareness Questionnaire

The questionnaire which consists of 23 items was developed by the researcher to measure the awareness of teacher trainers on the concept and significance of multicultural education. Five point scales (ranging from definitely correct through probably correct, probably incorrect, definitely incorrect to don't know) were used in

the questionnaire. The item included in the questionnaire express what multicultural education mean and its importance for teaching multicultural classroom.

B. Multicultural Education Performance Rating Scale

The performance rating scale which comprises 28 items was developed by the investigator to rate the competence of the teacher trainers in performing classroom instruction from MCP. The items in the rating scale stress on the techniques of teaching used, style of presentation followed, the prevailing trainers-trainees relations and instructional materials used.

The procedure for the development of the awareness questionnaire and performance rating scale, and their statistical characteristics are described as follow:

3.3.1. Construction and Development of Multicultural Education Awareness Questionnaire and Performance Rating Scale

3.3.1.1. Item Collection and Writing

Pool of items related to concept and significance of multicultural education, and behavior of teacher trainer in multicultural classroom were collected from different related literature on multicultural education.

Before writing items for the awareness questionnaire and performance rating scale a test blue print was prepared (see Appendix A). The behavior being measured were described in statement form showing either concept, significance of multicultural education or classroom performance from multicultural perspectives. Based on such description of behavior and using table of specification prepared, 23 items on awareness of multicultural education and 28 items on classroom performance from multicultural perspectives were collected by the investigator.

The collected items were modified and rewritten for both components (awareness questionnaire and performance rating scale). The determination of the weight given for each component - which determines the number of items belonging to sub-

components was arbitrary. Each component helps to measure either awareness of multicultural education or classroom performance from multicultural perspectives.

3.3.1.2. Item Selection

In order to select the items which best suit the purpose of the study, 51 items were given to 6 judges. The judges were all second year graduate students who have taught language (i.e. two of them) and professional courses (i.e. four of them) in teacher training institute for more than four years. More specifically, 2 of them were from the Department of Curriculum and Instruction, 2 from Educational Psychology and the rest 2 from Foreign Language. The judges were given preliminary ideas on multicultural education and classroom performance from multicultural perspectives. Besides, some technical terms were also defined (see Appendix A).

After wards, the judges were asked to give their reaction on each item in relation to two questions (i.e. does the item measure awareness of teacher trainers on multicultural education?, does the item measure the competence of teacher trainers in performing classroom instruction from multicultural perspectives?, and how strong is the item in measuring the behavior under consideration?). Both questions have response categories. For the first question, each item was rated on a scale which ranged from yes (2), somewhat (1) to No. (0). Whereas for the second question, each item was judged on a scale which ranged from very strong (3), average (2), weak (1) to not at all (0) (see Appendix A).

After the ratings have been given by the judges, the median evaluation and ambiguity index of each item was calculated for the first as well as the second question to ascertain the validity of the items for both instruments. Items with scale value ranging from 1.75 to 2.00 were taken as items measuring the behavior under consideration and those items having scale value below 1.75 were taken as items unable to measure the behaviour and thus dropped. Similarly, items with scale value ranging from 2.5 to 3.00 were considered as strong items, those ranging from 1.51 to 2.4 were regarded as items measuring the behavior moderately and those items having scale values below 1.51 were taken as weak items and therefore dropped.

Besides, those items with high index of ambiguity (disagreement between judges) that is greater than or equal to 1.00 were not selected. The higher the quartile deviation, the higher the variability of the ratings. This may be due to the ambiguity of the item in terms of its meaning (Koul, 1988: 164; Edwards, 1957: 89 - 90).

On top of these, judges reliabilities were also calculated by using rating reliability coefficient (Ebel, 1979: 282). The judges reliability coefficient were found to be 0.775, 0.830 for the awareness questionnaire and 0.756, 0.813 for the performance rating scale (see Appendix B). Therefore on the basis of these, items number 2,6,8,12 and 19 from the awareness questionnaire and 4,17,20, 24 and 27 from the performance rating scale were dropped.

Therefore, the ratings which were made by the judges reduced the total number of items to 41 of which 18 items were awareness and 23 were performance.

3.4. Test Tryout

A. Multicultural Education Attitude Scale

A Likert type five point scales, ranging from strongly agree to strongly disagree, were used to examine the attitude of teacher trainers toward the implementation of multicultural education in two teacher training institutes. The attitude scale was originally prepared by Erango (1986) to collect data on perceived need for cultural pluralism studies in Ethiopia's teacher education program. The 28 selected items from Erango were administered to pilot group (8 teacher trainers who teach different courses in the first cycle teacher training program of Awassa College of Teacher Education) to check the reliability of the scale. Positively stated items were scored 5,4,3,2 and 1 as strongly agree, agree, undecided, disagree and strongly disagree respectively. The scoring was reversed for negatively stated items. Thus, a respondents' total score on the attitude scale was computed as the sum of the scores for the individual items. As a result, the internal consistency of the scale was

calculated by using coefficient alpha (Thorndike and Hagen, 1977: 82) and found out to be 0.8294 (see Appendix C).

B. Multicultural Education Awareness Questionnaire and Performance Rating Scale

In order to develop the final version of the tests, the selected 18 items of awareness questionnaire and 23 items performance rating scale were tried out on the pilot group.

The members of the pilot group were subjected to both self report inventory (i.e. awareness questionnaire) and independent classroom observation. There was no time limit in the self report inventory. Whereas, the classroom observation was conducted by one teacher trainer along with the researcher. The selected observer was trained for five hours and was also given time to familiarize himself with the items in the rating scale. Each teacher trainer was observed twice. Hence, a total of 16 classroom observations were carried out.

The responses of the subjects (on the self report inventory) as well as the observers (on independent rating scale) were computed. The subjects, total score on awareness questionnaire was calculated by summing scores on each item of the questionnaire. Similarly, that of the observers was also done by summing the scores on each item of the performance rating scale and finally averaging the total scores of the two raters.

On the basis of the result obtained, the internal consistency of the self report inventory (awareness questionnaire) was calculated by using coefficient alpha and found out to be 0.833 (see Appendix C). Besides, the inter observer agreement was calculated by using Pearson Product Moment Correlation (Coolican, 1995: 73) and found out 0.8103 for the first session and 0.8313 for the second session (see Appendix D).

3.5. Data Gathering Procedure

The multicultural education attitude scale and awareness questionnaire were administered in face to face contact with the trainers by the researcher. Whereas, the classroom observation was carried out by the investigator along with one teacher trainer from the training centres. The selected observer had a BA Degree qualification in the field of education. The trainer was made aware about how to rate the behavior related to multicultural education during classroom instruction by the researcher for five hours. Following this, the observer was made to practice the rating of the desired behavior for two periods before the actual classroom observation was conducted.

The classroom observation was conducted for every teacher trainer twice. Hence, a total of 66 observations, 34 on Awassa College of Teacher Education and 32 on Arba Minch TTI, were carried out. The Whole classroom observations were conducted in culturally diversified classrooms.

3.6. Method of Data Analysis

In analyzing the extent of teacher trainers awareness on multicultural education, the awareness scores were classified into high, moderate and low by using the mean and standard deviation scores. Besides, the total scores were classified into two by experience to see the effect of experience on the extent of awareness of teacher trainers on multicultural education. Then, the proportion of the responses were discussed by using percentage and chi-square.

To examine the attitude of teacher trainers toward the implementation of multicultural education in the two teacher training institutes each individual's score was summed on the attitude scale. The total scores of the respondents were dichotomized into two (i.e. high (favorable) and low (unfavorable)) by using mean score. The mean score was used instead of median score for the latter put respondents with positive attitude to the negative attitude category. Afterward, the proportion of respondents was discussed by using percentage. Moreover, chi-square was employed to check whether there was attitude difference between the more experienced and the less

experienced teacher trainers toward the implementation of multicultural education in the two training institutes.

Following these, performance score was computed. In computing the performance score from the performance rating scale, the average scores of the two independent raters for the two sessions were calculated and averaged again. Then, the scores were classified into three (i.e. efficient, satisfactory and poor) by using the expected mean and standard deviation scores to examine the extent of competence of teacher trainers in performing classroom instruction from multicultural perspectives. Furthermore, t-test was also involved to examine the effect of experience and qualification on classroom performance.

The relationships among teacher trainers' awareness, attitude on multicultural education and classroom performance from multicultural perspectives were calculated and discussed by using Pearson product moment correlation. Besides, multiple and partial correlations were also run to see joint and independent associations among the aforementioned variables. To check the significance of the relationships among the variables, t-test and F-test were used.

In order to see the effect of awareness of teacher trainers on multicultural education on their attitude toward multicultural education, and the impact of their awareness and attitude jointly and independently on their classroom performance from MCP simple, multiple and partial regression, and t-test for mean difference were employed. To check the significance of the coefficient of determination F - test was computed. Finally, all differences were tested for statistical significance at 0.05 level of significance.

CHAPTER FOUR

4. ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of data collected in the main study. The analyses were made in terms of the basic questions raised in the first chapter of the study. To this effect, the results were presented and discussed in two main parts.

The first part describes the data collected through the awareness questionnaire, attitude scale and performance rating scale. In order to analyze these data mean, standard deviation, percentage, chi-square and t-test were used. The second part deals with the analyses of the relationships among awareness, attitude and classroom performance from multicultural perspectives (MCP). Besides, this part treats the impact of the independent variable (awareness) on the dependent variables (classroom performance and attitude). Attitude also acts as an independent variable in occasions in which it is related to classroom performance. To accomplish these, correlation, regression and t-test for mean difference were run. Following this, t-test and F-test were also calculated to test the significance of the correlation coefficient and coefficient of determination.

4.1. Background of the Respondents

A short review on the background of the respondents are portrayed to give a clear picture on the characteristics of the teacher trainers involved in the study.

TABLE IIBackground of the teacher trainers.

Characteristics	Categories	Proportions	
		No.	%
Sex	Male	32	96.97
	Female	1	3.03
	Total	33	100
Experience in years	4 - 9	9	27.25
	10 - 15	15	45.5
	16- 27	9	27.25
	Total	33	100
Qualification	MA/MSc	4	12.12
	BA/BSc	18	54.55
	Diploma	8	24.24
	Certificate	3	9.09
	Total	33	100
Ethnic-background	Sidama	1	3.03
	Amhara	6	18.18
	Wolayita	5	15.15
	Gamo-Gofa	5	15.15
	Dawro-konta	2	6.06
	Guraghe	4	12.12
	Hadiya	3	9.09
	Oromo	4	12.12
	Konso	1	3.03
	Kembata	2	6.06
	Total	33	100

As can be seen from Table II, almost all proportions (96.97%) of the respondents are male. Only very small proportion (3.03%) of the teacher trainers is female. This shows us that the proportion of female teacher trainers are negligible compared to

their male counterparts. This might be due to the teacher trainers recruitment criteria (which is indicated on page 28 of this paper) or the lack of qualified female teacher trainers in the region. The recruitment criteria might have inhibited the available female teachers from joining the training centres. It might also be due to the scarcity of well qualified female teachers for the first cycle teacher training program.

Regarding work experience, the majority of the respondents (72.75%) are with years of experience ranging from 10 to 27 years. Only 27.25% of the respondents have 4 to 9 years of experience. Hence, it seems that the largest proportion of the teacher trainers are well experienced according to the guidelines of the current education policy career structure.

The table also depicts that the majority of the respondents (66.67%) have BA/BSc and MA/MSc qualification. However, some proportion of the teacher trainers (33.33%) have certificate and diploma qualification. In this regard, MOE (1995: 7) indicates that to be a teacher trainer in the first cycle (1 - 4 grades) teacher training program, he /she needs to possess a minimum of BA/BSc Degree qualification in the subject he /she is supposed to instruct.

In addition to these, the table portrays that there are trainers of different ethnic composition in the training centres reflecting the nature of the region.

In general, the responses in Table II suggest that the experience, qualification and ethnic background of the subjects involved in this study fulfil what is required as a base for the analysis of the study.

4.2. Descriptive Analyses of Awareness, Attitude and Classroom Performance of Teacher Trainers.

4.2.1. The Extent of Awareness of Teacher Trainers on Multicultural Education (MCE).

This part examines the attitude of teacher trainers toward the implementation of multicultural education in the two training institutes (Awassa and Arba Minch). The extent of awareness of teacher trainers on MCE is assessed by classifying it into three categories. That is trainers with scores of one standard deviation (1s) above the mean are considered highly aware of MCE, 1s below the mean are taken low aware of MCE and in between 1s below and above the mean are considered moderately aware of MCE.

Table III

Extent of awareness of teacher trainers on MCE.

Characteristics	Extent of awareness						Mean	SD	Max. Value	Item No.
	High		Moderate		Low					
	No.	%	No.	%	No.	%				
Concept of MCE	3	9.1	23	69.7	7	21.21	34.33	4.01	40	1-10
Significance of MCE	8	24.24	19	57.6	6	18.18	29.03	2.71	32	11-18
MCE	3	9.1	24	72.73	6	18.18	63.36	6.18	72	1-18
MCE by experience	Scores above the grand mean			Scores below the grand mean			Total	\bar{X}	S	χ^2
	No.	%	No.	%	No.	%				
Less experienced (1-10 years)	10	30.3	6	18.18	16	62.19	7.83			0.243
More experienced (11-27 years)	12	36.4	5	15.15	17	64.4	4.02			
Total	22	66.7	11	33.33	33	-	-			

$\chi^2_{\alpha} = 3.84, p > 0.05, *$ Grand mean = 63.36

Table III reveals that the majority of the respondents (69.7%, 57.6%) are moderately aware of the concept and significance of MCE respectively. It is only small proportion (9.1% and 24.24%) of both categories respectively are highly aware of the concept and significance of MCE. These small proportions of high awareness on the concept and significance of MCE might be the consequence of the absence of exposure to MCE in their stay in the college and university until they complete their teacher education program.

On the other hand, when we examine the proportion of awareness of teacher trainers on the concept and significance of MCE, the mean proportion of awareness on the

significance of MCE (91%) is greater than the mean proportion of their awareness on the concept of MCE (85.8%). Moreover, there is relatively larger variability in the awareness of teacher trainers on the concept of MCE (4.01) than their awareness on the significance of MCE (2.71) as the standard deviations depict. This implies that teacher trainers may have better awareness on the significance of MCE than the concept of it.

This might be accounted probably for the recent introduction of MCE into the educational system of Ethiopia. This in turn has made the innovation (MCE) to be very recently introduced into the two teacher training institutes (Awassa and Arba Minch). Thus, the capability of the teacher trainers in developing higher awareness on the concept of MCE (more of theoretical) may lag behind their awareness on the significance of MCE (more of practical). Besides, the recent introduction of MCE in the training centres may create relatively higher variability of awareness among teacher trainers on the concept of MCE than their awareness on the significance of MCE. This might be due to the fact that understanding of concept of new innovation (MCE) may be more abstract than the understanding of the significance of the innovation for the latter may more often depend on practice than on theory. In short, when the innovation is very recent, the understanding of the concept of the innovation (MCE) may become more difficult than the understanding of the significance of the innovation (Grass, et al, 1971 in Bishop, 1986: 26).

In general, when we look at the trend of teacher trainers awareness on MCE, the majority of the teacher trainers (72.73%) are moderately aware of MCE. Only very small proportion (9.1%) who are highly aware of MCE. However, relative to the highly aware category, larger proportions of the respondents (18.18%) have low awareness on MCE. This tells us that still there are some proportions of the teacher trainers in the two training centres who have low awareness (i.e. one standard deviation below the mean score) on MCE. This awareness level probably be insufficient in developing attitude of teacher trainers toward MCE. Despite this, it may be possible to say that the majority of the respondents (72.73%) in the two training institutes have satisfactory level of awareness on MCE in developing

multicultural attitude vis-a-vis the recent introduction of MCE into the training centres. Irrespective of this, it is stated earlier on page 21 that the classroom instructional activities of the teacher trainers in multicultural classroom cannot be facilitated in the absence of a clear understanding of the concept and significance of MCE. It is also pointed out on the preceding section on page 22 that the effectiveness of the classroom instruction of the teacher trainers is assumed to be greatly enhanced if he /she has a clear understanding of the cultural diversity in the classroom and the know-how of providing classroom instruction from different cultural backgrounds.

In addition to these, the table also shows that there is no statistically significant difference between the less experienced and the more experienced teacher trainers on their awareness of MCE as the chi-square value indicates ($\chi^2_{cal}=0.243$, $p>0.05$, see Appendix I). Thus, it could be said that teaching experience may not have a role in creating difference in awareness level among teacher trainers of the two training centres on MCE. However, Hussen, *et al* (1984:26) states that more experienced teachers may have better knowledge on what goes on in the educational institute and classroom teaching learning process than the less experienced ones. The probable reason why the result of this study did not conform with the view of Hussen, *et al* might be due to the recent introduction of MCE to the training centres. Hence, the less experienced and more experienced teacher trainers may have similar degree of exposure to MCE resulting in no significant difference in awareness level between them.

4.2.2. The Attitude of Teacher Trainers Toward MCE

To clarify the nature of the attitude of teacher trainers toward the implementation of MCE, the items in the scale were categorized into two (i.e. attitude toward cultural diversity and attitude towards providing classroom instruction from different cultural backgrounds) (see Appendix G). The comparison is given after the next table.

Table IV

The attitude of teacher trainers toward the implementation of MCE in the two training centres.

Characteristics	Attitude		Mean	SD	Max. score	Item No.	
	Positive	Negative					
Cultural diversity	18	15	58.79	7.114	75	2,4,8,9,13,	
%	54.6	45.4	--	--	--	16,18,20,21,23,24,26,28	
Classroom instruction from multicultural perspectives	16	17	53.24	5.613	65	1,3,5,6,7,10,11,12,14,15,	
%	48.5	51.5	--	--	--	17,22,25,27	
MCE in TTI	19	14	112	11.54	140	1-28	
%	57.6	42.4	--	--	--		
MCE by experience			Total	Mean	SD	χ^2	
	No.	%	No.	%			
Less experienced (1-10 years)	9	27.3	7	21.21	16	111.375	14.165
More experienced (/11-27 years)	10	30.3	7	21.21	17	112.588	8.896
Total	19	57.6	14	42.42	33	--	--

$\chi^2_{\alpha}=3.84, p>0.05$

As indicated in Table IV above, 54.6% of the teacher trainers have positive attitude toward cultural diversity. However, 48.5% of the respondents have positive attitude toward the implementation of multicultural education in the classroom. Similarly,

about 45.4% of the teacher trainers (which is less than the proportion of the positive attitude) have negative attitude toward cultural diversity. Nevertheless, 51.5% of the respondents (greater than the proportion of the positive attitude) have negative attitude toward the provision of classroom instruction from different cultural backgrounds. This implies that the largest proportion of the teacher trainers, in the two training centres, have favorable attitude toward the statistical existence of cultural diversity in the classroom than providing classroom instruction from the stand points of different cultures. Contrary to this, it is pointed out earlier on page 3 and 9 that teacher trainers positive attitude toward the statistical existence of cultural diversity is not sufficient, they need to develop positive attitude toward the provision of classroom instruction from different cultural points of view.

The most probable explanations that might be accounted for this result could be the following. To begin with, they may think that multicultural classroom instruction complicates the lesson to be taught. Hence, they may insist on culture specific classroom instruction. Secondly, they may be assimilationist in their orientation. They may hold the view that all trainees are the same in spite of their ethnicity or culture and that anyone who wants to succeed can succeed irrespective of the cultural circumstances (Darder, 1991: 113). Thirdly, they might not have sufficient awareness on the know-how of providing classroom instruction from different cultural backgrounds. Besides, they might not have books and materials prepared in a multicultural line to develop their know-how of providing classroom instruction from multicultural perspectives (MCP). These in turn may cause the view of lack of confidence in their ability to teach culturally diversified classrooms. As a result of these, the largest proportion of the teacher trainers might fail to develop positive attitude (compared to their attitude toward cultural diversity) toward utilizing the cultures of ethnically diversified trainees in multicultural classroom instruction.

Nonetheless, when we examine the general patterns of the attitude of teacher trainers toward the implementation of MCE in the two training centres, the proportions vary from what has been discussed. The greatest proportion of the respondents (57.6%) have positive attitude, whereas 42.4% of the teacher trainers

have negative attitude toward the implementation of MCE in the two training centres. This implies that some proportion of the respondents are involved in implementing MCE in the training centres despite the negative attitude they have toward it. On the contrary, it is indicated in this paper on page 3 that no matter how well the curricular materials are prepared in a multicultural line they may be ineffective in the hands of teacher trainers who have negative attitude toward multicultural education. This is because, such teacher trainers may use multicultural materials rarely or in a detrimental ways.

The most likely explanation why some proportion of the respondents hold negative attitude toward the implementation of MCE in the training centres include the following reasons. In the first place, the awareness level they have on the significance of implementing MCE in the two training institutes might be insufficient to trigger positive attitude toward MCE. In relation to this, Gay (1986: 169) also found out that negative attitude toward MCE arise from lack of understanding about cultural diversity and its use as a resource in the classroom activities. Secondly, they might have a perception that implementing an educational innovation (MCE) in the training centres may create additional burden on their task from the point of view of their time and energy (Bishop, 1986: 28). Moreover, they may think that the implementation of MCE in the training centres may hamper the completion of the curriculum in specified time. According to Bennett (1981: 590), however, a mere completion of the curriculum should not be their worry but preparation of an environment where the highest achievement of each trainee is possible. Thirdly, they might have developed a misconception that the incorporation of cultural components of different ethnic groups in the training program may indirectly make the training centres a scene of cultural competition leading to conflict among trainees. Spring (1994: 165) endorses this view. Fourthly, they might be change resistant, for the new educational innovation (MCE) may change their usual and accustomed way of classroom instruction. Regarding this, Berman and Mcloughlin (1976: 349) point out that teachers develop unfavorable attitude toward the implementation of an educational innovation for they resist change.

Furthermore, table IV also portrays that there is no significant difference between the less experienced and the more experienced teacher trainers on their attitude toward the implementation of MCE in the two training institutes ($\chi^2_{cal} = 0.02, p > 0.05$ see Appendix I). This implies that teaching experience seems to have no role in creating difference in the attitude of teacher trainers toward the implementation of MCE in the training centres. In relation to this, Washington (1981: 190) however, has found out that the more experienced teachers (9 or more years) had more positive attitude toward the implementation of MCE in educational institutes than the less experienced (less than 9 years) teachers. The inconsistency of this result with that of Washington might be associated with the recent introduction of MCE in the training centres. As a result, the environment in which the teacher trainers are working might have similar influence in changing the attitude of both less experienced and more experienced teacher trainers toward the implementation of MCE in the two training centres.

4.2.3 Extent of Competence of Teacher Trainers in Performing Classroom Instruction from Multicultural Perspectives (MCP).

In order to see how the attitude of teacher trainers is reflected in the process of the implementation of MCE in the training centres, it is important to analyze the competence of teacher trainers in performing classroom instruction from MCP. The competence of teacher trainers in performing classroom instruction from MCP is discussed by dividing the performance scores of the respondents into three by using the expected mean and standard deviation scores. The expected mean score was calculated by multiplying the total number of item in the performance rating scale (23) with the expected mean for a single item (minimum score plus maximum score divided by two $\frac{1+5}{2} = 3$). Thus sixty nine is the expected mean (23×3) for the whole items. Teacher trainers who have scored 1 standard deviation (1s) above the expected mean are considered efficiently competent and those that have 1s below the expected mean are taken poorly competent and those that are in between 1s above and below the expected mean are considered satisfactorily competent (see Appendix G).

Table V

Extent of competence of teacher trainers in performing classroom instruction from multicultural perspectives (MCP).

Characteristics	Extent of competence						Expected mean	S D	Max. Value	Item No.
	Efficient		Satisfactory		Poor					
	No.	%	No.	%	No.	%				
Skills and strategies of presenting the lesson from MCP.	--	--	16	48.5	17	51.5	33	2.77	55	1,2,3,5,11,12,14,15,21,22,23
Skills and strategies of making the classroom discussion and activities multicultural in nature.	1	3.03	14	42.4	18	54.6	36	3.1	60	4,6,7,8,9,10,13,17,18,19,20
Competence from MCP	1	3.03	12	36.4	20	60.6	69	5.64	115	1-23

As the table depicts, some proportions of the respondents (i.e. 48.5% and 42.4%) are satisfactorily competent in employing skills and strategies of presenting a lesson from multicultural perspectives, and making classroom discussion and activities multicultural in nature respectively. The largest proportions of the teacher trainers i.e. 51.5% and 54.6%) are poorly competent in employing the aforementioned skills and strategies. Only very small proportion of the respondents (3.03%) is efficiently competent in making the classroom discussion and activities multicultural in nature. This implies that the greatest proportions of the teacher trainers in the two training institutes seem to be ill-equipped with the skills and strategies of presenting a lesson from MCP and making the classroom discussion and activities multicultural in nature.

Similarly, the general pattern of classroom performance from MCP also reveals that the majority proportion of the teacher trainers (60.6%) are poorly competent, and very small proportion of the respondents (3.03%) is efficiently competent in performing classroom instruction from MCP. This implies that classroom instruction from different cultural backgrounds appears to be improperly implemented in the two

training institutes. However, on page 17 of this paper it is suggested that the failure to properly implement MCE in teacher training program may result in incompetence in the prospective teachers in performing classroom instruction from MCP.

The most probable reasons why the majority of the teacher trainers seem almost incompetent in performing classroom instruction from MCP might be the following. Firstly, the teacher trainers might not been educated in a way that develop their know-how of providing classroom instruction from different cultural backgrounds. Secondly, the teacher education program in which the trainers are educated might not been designed in a multicultural line. In support of this, it is indicated earlier on page 16 that most teacher education programs prepare teachers to deal with the traditions, attitudes and customs of the dominant culture in spite of the cultural diversity that the training institutes constitutes. Thirdly, they might not have participated in workshops or in-service programs that develop their know-how of providing classroom instruction from different cultural backgrounds.

Having discussed the aforementioned descriptive analysis on the extent of competence of the teacher trainers in performing classroom instruction from multicultural perspectives, the statistical assessment of the same issue in line with work experience and qualification will be presented in the next table.

Table VI

Extent of competence of teacher trainers in performing classroom instruction from MCP with respect to their teaching experience and qualification .

Characteristics	Extent of Competence				Total	\bar{X}	SD	t-test
	Scores above the expected mean		Scores below the expected mean					
	No.	%	No.	%				
Experience								
• Less experienced (1-10 years)	2	6.1	14	42.42	16	62.33	6.92	0.145
• More experienced (11-27 years)	2	6.1	15	45.45	17	62.62	4.38	
Total	4	12.2	29	87.87	33	--	--	
Qualification								
• Less qualified (certificate and diploma)	--	--	11	33.33	11	60.48	4.66	1.64
• Better qualified (BA/BSc - MA/MSc)	4	12.2	18	54.55	22	63.84	5.95	
Total	4	12.2	29	87.88	33	--	--	

$t_{\alpha} = 2.04, p > 0.05, \text{Expected mean} = 69$

Table VI portrays that there is no significant difference between the less experienced and the more experienced teacher trainers in extent of competently performing classroom instruction from MCP ($t_{cal} = 0.145, p > 0.05$, see Appendix I). This implies that teaching experience might not have a role in creating difference in competently performing classroom instruction from multicultural perspectives among teacher trainers of the two training centres. This might have been due to the same degree of exposure they might have in developing the know-how of implementing MCE in the two training institutes. Supporting this, Washington (1981:190) stated that there is no significant variation in classroom performance from MCP between the less experienced (less than 9 years) and the more experienced (9 years and above) teachers if they have similar minimum amount of training on MCE.

In a similar vein, there is no significant difference between the less qualified and the better qualified teacher trainers in extent of competently performing classroom instruction from different cultural backgrounds ($t_{cal} = 1.64$, $p > 0.05$, see Appendix I). This implies that qualification might not have a role in creating difference in competently performing classroom instruction from multicultural perspectives among teacher trainers of the two training centres. This might be accounted for some reasons. In the first place, the weight or intensity of multicultural education introduced in the teacher education program of the different levels (TTI, Diploma, BA/BSc and MA/MSc) might be similar. Secondly, there may not be any ingredient of MCE in teacher education programs of the different levels.

4.3. The Relationships, and Impacts among Awareness, Attitude and Classroom Performance.

Under this section two issues are analyzed and discussed. Firstly, the relationships and impacts among teacher trainers' awareness, attitude on MCE and classroom performance from MCP independently are treated. Secondly, the impact of awareness on attitude, and awareness and attitude on classroom performance jointly and independently are analyzed.

4.3.1. The Relationships and Impacts among Awareness, Attitude and Classroom Performance Independently.

Table VII

The relationships and predictions among awareness, attitude and classroom performance.

Variables	r value between	t-test	SS reg	SS tot	r ²	F-test
Awareness and attitude	0.854	*9.13	3133.36	4288	0.731	*84.24
Awareness and classroom performance	0.923	*13.39	841.02	1018.96	0.825	*146.14
Attitude and classroom performance	0.863	*9.55	759.17	1018.96	0.745	*90.57

F(1,31) = 4.17, *p<0.05, see Appendix H.

Table VII indicates that there is very strong significant association between the respondents awareness on MCE and their attitude toward the implementation of MCE in the two training institutes ($r=0.854$, $t_{cal}=9.13$, $p<0.05$). This means, subjects with high awareness scores have scored high on the attitude scale and those that have scored low on awareness have also scored low on attitude scale. Besides, a statistically significant proportion (73.1%) of the variance in attitude scores is accounted for by the awareness scores. This implies that awareness of teacher trainers on MCE may have a significant impact on the formation of an attitude toward the implementation of MCE in the two training centres.

The most probable explanations that could be accounted for this might be the following. Firstly, their day to day interaction with culturally diversified trainees and administrative staff as well as with themselves might have helped the transformation of their awareness on MCE into favorable attitude toward the implementation of MCE in the two training centres. Secondly, they might have involved in zonal or regional workshops whereby awareness seminars and activities are simultaneously conducted. In such an occasion, awareness on MCE might form a base for the development of favorable attitude toward MCE (Baker, 1977: 33).

Similarly, the table depicts that there is very strong significant association between awareness of teacher trainers on MCE and the general patterns of their classroom performance from MCP ($r=0.923$, $t_{cal}=13.39$, $p<0.05$). This is to say, respondents with high awareness scores portray relatively better classroom performance from MCP than those with low awareness scores. Moreover, a statistically significant proportion (82.5%) of the variation in the general patterns of their classroom performance from MCP is explained by their awareness on MCE. This implies that awareness of teacher trainers on MCE may have a significant impact on the general patterns of their classroom performance from MCP in the two training centres.

Therefore, the awareness of teacher trainers on MCE seems to have an effect on both their attitude toward MCE and the general patterns of their classroom performance from MCP in the two training institutes. Supporting this, it is indicated earlier on page 3 that teacher trainers awareness on MCE lays the foundation for changing their attitude and classroom behavior toward culturally diversified classrooms.

Added to these, the table also indicates that there is very strong significant relationship between the attitude of teacher trainers toward MCE and the general patterns of their classroom performance from MCP ($r=0.863$, $t_{cal}=9.55$, $p<0.05$). This means, teacher trainers with high attitude scores show relatively better classroom performance from MCP than those with low attitude scores. Furthermore, a statistically significant proportion (74.5%) of the variation in the general patterns of their classroom performance is accounted for by their attitude toward MCE. This implies that the attitude of teacher trainers toward MCE may have a significant contribution for the general patterns of their classroom performance from MCP. In this regard, Baker (1973: 306) and Gagliardi (1995: 168) suggest that the implementation of MCE in the classroom is effective only if the teacher trainers themselves have internalized positive attitude toward MCE.

On the other hand, when we examine the scores of teacher trainers on performance rating scale from the point of view of their awareness and attitude scores, they are low. To put it in different words, the highest awareness and attitude scores did not

correspond to their respective highest classroom performance scores. The most probable reasons for this might be the following. To begin with, the curricula on operation might not been prepared in a way that facilitate the teacher trainers classroom performance from MCP. Secondly, the philosophical belief that they contend (for example, teacher-centred approach) may contradicts the student-centred approach that multicultural education demands (Gagliardi, 1995: 3) for multicultural classroom instruction. In relation to this, Darder (1991: 113) recommends that in a culturally diversified classrooms teacher trainers must become more critical not only of the actual curriculum they bring into the classroom but also the philosophical belief that inform their classroom practice.

In a similar vein, the following table depicts the impact that awareness has on attitude and classroom performance, and attitude has on classroom performance. In sub-dividing the respondents scores median split was employed.

Table VIII

The impact of awareness on attitude, and awareness, and attitude on classroom performance.

Characteristics	Attitude				Median score	n	Mean	SD	t-test
	Positive		Negative						
	No	%	No	%					
Low awareness scores	6	18.18	10	30.3	65	16	105.44	8.56	*3.75
High awareness scores	13	39.4	4	12.12		17	118.18	10.76	
Attitude scores	Classroom performance				Median score	n	\bar{X}	S	t-test
	Above the expected mean		Below the expected mean						
	No.	%	No.	%					
Low attitude scores	--	--	16	48.5	114	16	58.61	4.154	*4.954
High attitude scores	4	12.12	13	39.4		17	66	4.41	
• Awareness scores									
Low awareness scores	--	--	16	48.5	65	16	58.0	3.38	*6.743
High awareness scores	4	12.12	13	39.4		17	66.574	3.89	

$t_{\alpha} = 2.04, *p < 0.05$, Expected mean score = 69, see Appendix I.

As table VIII indicates, the mean attitude score of teacher trainers with high awareness scores (118.18) is significantly greater than those with low awareness scores (105.44). This implies that teacher trainers with high awareness scores have better favorable attitude toward the implementation of MCE in the two training centres than those with low awareness scores. In a similar vein, the mean performance score of teacher trainers with high awareness score (66.574) is significantly greater than those with low awareness scores (58.0). This implies that teacher trainers with high awareness scores have better classroom performance from MCP than those with low awareness scores. Thus, it appears that awareness of teacher trainers on MCE have a significant influence on their attitude toward MCE and classroom performance from MCP.

Moreover, the mean performance scores of teacher trainers with high attitude scores (66) is significantly greater than those with low attitude scores (58.61). This implies

that teacher trainers with high attitude scores have better classroom performance from MCP than those with low attitude scores. Hence, the attitude of teacher trainers toward MCE may have a significant influence on their classroom performance from MCP. In general, it could be concluded from these that the change in the awareness of teacher trainers on MCE may result change in their attitude toward MCE and the patterns of their classroom performance from MCP. The change in their attitude toward MCE in turn may also change the patterns of their classroom performance from MCP.

4.3.2. The Impact of Awareness and Attitude on Classroom Performance Jointly and Independently.

The preceding section has examined the impact of awareness and attitude on classroom performance independently, in this section the influence of awareness and attitude on classroom performance both jointly and partially will be assessed.

Table IX

The impact of awareness and attitude on classroom performance jointly and independently.

Variables	Multiple R	F-test	SS reg	SS tat	Multiple R ²	F-test
Awareness and attitude jointly with classroom performance	0.935	*103.38	930.44	1018.96	0.9131	*157.67
Variables	Partial r between	t-test	partial r ²	F-test	Partial regression coefficient	
					B ₁	B ₂
Awareness and classroom performance, attitude held constant	0.71	*5.6	0.504	*31.39	0.6877	--
Attitude and classroom performance, awareness held constant	0.375	*2.83	0.141	*5.089	--	0.2761

F(1,31) = 4.17 *p<0.05,

see Appendix J.

F(2,30) = 3.32

As can be seen from table IX, there is a very strong significant relationship between awareness and attitude of teacher trainers on MCE taken together and their classroom performance from MCP ($R = 0.935$, $F_{cal} = 103.381$, $p < 0.05$). This means that respondents with high awareness and attitude scores will have relatively better classroom performance from MCP than those with low awareness and attitude scores. Furthermore, a statistically significant proportion (91.31%) of the variation in classroom performance of the teacher trainers from MCP is explained by the combined effect of their awareness and attitude on MCE. This implies that awareness and attitude of the teacher trainers on MCE taken together determine the greatest proportion of the variation in the general patterns of their classroom performance from MCP.

Nonetheless, when one of the independent variables (awareness or attitude) is held constant somewhat different patterns of relationships (i.e. r become smaller) are observed between the dependent variable (classroom performance) and the independent variables. Hence, when the effect of attitude of teacher trainers toward MCE is controlled then the relationship between awareness of teacher trainers on MCE and their classroom performance from MCP becomes significantly somewhat high ($r = 0.71$, $t_{cal} = 5.6$, $p < 0.05$). Whereas, when the effect of awareness is held constant then the relationship between attitude of teacher trainers toward MCE and their classroom performance from MCP becomes significantly low ($r = 0.375$, $t_{cal} = 2.83$, $p < 0.05$).

Added to this, the proportion of variation in the dependent variable (classroom performance) accounted for the independent variables (awareness or attitude) also decreases when the effect of one of the independent variables is controlled. Thus, the percentage of variation in classroom performance of the teacher trainers from MCP accounted for by their awareness on MCE significantly decreases to 50.4% when the effect of attitude is held constant. Likewise, the proportion of variation in the classroom performance of the teacher trainers from MCP explained by their attitude toward MCE significantly decreases to 14.1% when the impact of awareness

is held constant. Thus, this shows that the relative impact that awareness of teacher trainers on MCE has on their classroom performance from MCP is greater than that of their attitude toward MCE has on their classroom performance from MCP.

This is also confirmed by the results of the partial regression analysis coefficient. As the beta coefficient indicates, for every increase of one standard deviation in awareness of teacher trainers on MCE, their classroom performance from MCP increases by 0.6877 standard deviation, their attitude being controlled. Whereas, with an increase of one standard deviation in attitude of teacher trainers toward MCE, their classroom performance from MCP increases by 0.2761 standard deviation, their awareness being controlled. Therefore, these may imply that for the awareness of teacher trainers on MCE to exercise its full impact on their classroom performance from MCP requires their attitude toward MCE as a support. Similarly, for attitude of teacher trainers toward MCE to exercise its full influence on their classroom performance from MCP demands their awareness as a back-up. In this regard, Davidson *et al* (1985: 1190) has found out that the attitude which was supported by substantial amount of information was more predictive of subsequent behavior than attitude lacking such information support. Hence, it seems that the attitude of teacher trainers toward MCE may require substantial amount of awareness on MCE to implement MCE successfully in the two training institutes.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RCOMMENDATIONS

5.1. Summary

The main purpose of this study was to investigate the attitude of teacher trainers toward the implementation of multicultural education in two teacher training institutes. To this effect, the following basic questions were formulated to carry out the study.

1. To what extent are teacher trainers, in the two training centres, aware of multicultural education?
2. What is the attitude of teacher trainers toward the implementation of multicultural education in the training centres?
3. To what extent are teacher trainers, in the two training centres, competent in performing classroom instruction from multicultural perspectives?
4. Are the teacher trainers' awareness, attitude on multicultural education and classroom performance from multicultural perspectives have relationships?
5. Does the awareness of teacher trainers on multicultural education have an impact on their attitude toward multicultural education?
6. Do teacher trainers' awareness and attitude on multicultural education have impact on their classroom performance from multicultural perspectives jointly and independently?

In order to deal with these basic questions related literature was properly reviewed, and three types of data gathering instruments (awareness scaled questionnaire, attitude scale and performance rating scale) were prepared in line with the model adapted in the study.

The subjects of the study were 33 randomly selected teacher trainers from Awassa College of Teacher Education and Arba Minch T.T.I.

The Statistics used to analyze the data were mean, standard deviation, percentage, chi-square, t-test, F-test, correlation and regression.

Based on the instruments and the statistical methods employed the following results are obtained:

1. The majority of the teacher trainers (72.73%) are moderately aware of multicultural education. However, there is an indication that the teacher trainers have better awareness on the significance of multicultural education than the concept of it (i.e. concept refers to the meaning and theoretical background of MCE).
2. There is no significant difference between the less experienced and the more experienced teacher trainers in the extent of their awareness of multicultural education.
3. The largest proportion of the teacher trainers (57.6%) have positive attitude toward the implementation of multicultural education in the two training centres. Nevertheless, there is a trend that the greatest proportion of the teacher trainers (54.6%) have positive attitude toward the statistical existence of cultural diversity in the classroom than the provision of classroom instruction from multicultural perspectives (48.5%).
4. There is no significant difference between the less experienced and the more experienced teacher trainers in their attitude toward multicultural education.
5. The majority of the teacher trainers (60.6%) are poorly competent in performing classroom instruction from different cultural backgrounds.

6. There is no significant difference between the less experienced and the more experienced teacher trainers in performing classroom instruction competently from multicultural perspectives. A similar pattern is also observed between the less qualified and better qualified teacher trainers in performing classroom instruction competently from multicultural perspectives.
7. There is very strong significant relationships among teacher trainers' awareness, attitude on multicultural education and the general patterns of their classroom performance from multicultural perspectives.
8. The greatest proportion (73.1%) of the variation in the attitude of teacher trainers toward the implementation of multicultural education in the training centres is a result of their awareness on MCE.
9. The majority (91.31%) of the variance in teacher trainers' general patterns of classroom performance from multicultural perspectives is explained through the combined effect of their awareness and attitude toward multicultural education.
 - Independently: the attitude of teacher trainers explained very small proportion (14.1%) of the variation in the general patterns of their classroom performance from multicultural perspectives, their awareness on MCE is held constant compared to the proportion of variation in classroom performance from MCP accounted for by their awareness on MCE (50.4%), their attitude being controlled.

5.2. Conclusions

On the basis of these findings, it is possible to conclude that:

1. The awareness level of the majority of the teacher trainers on MCE might have helped the formation of positive attitude toward the implementation of MCE in the two training centres.
2. The current attitude of teacher trainers toward the implementation of MCE into the two training centres appears to contribute least to a better level of their competence in classroom performance from MCP.
3. The current attitude of teacher trainers toward the implementation of multicultural education in the training centres seems to demand substantial amount of awareness on MCE to sufficiently explain their competence in performing classroom instruction from MCP.
4. The teaching experience of the teacher trainers appears to have no role in creating difference in teacher trainers' awareness level and attitude on MCE, and their level of competence in performing classroom instruction from MCP.

5.3. Recommendations

In light of the above findings and conclusions made, the following recommendations are forwarded:

1. Attention should be given to prepare MCE related seminars and workshops to raise the awareness level of the teacher trainers on MCE. In doing so, more emphasis should be placed on the conceptual understanding of the know-how of providing classroom instruction from multicultural perspectives to strengthen their ability of implementing MCE into the classroom. This could be done through preparing the seminars and workshops at the different levels of the region.

- 1.1. Consideration should be given in preparing the seminars and workshops to make them activity oriented by creating group work and distributing reading materials for the participants. These facilitates the active involvement of the teacher trainers in the discussion.
 - 1.2. Emphasis should also be given to creating a situation (e.g. making it student-centred) on how multicultural attitude trigger better classroom performance from multicultural perspectives.
2. Teacher education colleges and universities which prepare teacher trainers for the first cycle teacher training program of the Southern Nations, Nationalities and Peoples' Region have to give much emphasis to equipping them with the skills and strategies of implementing MCE in a culturally diversified classrooms.
3. Finally, the researcher would like to recommend that investigation be made on the extent of the multicultural nature of the curriculum of the first cycle teacher training institutes of the SNNPR for this area is not yet researched.

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Appendix A

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF
CURRICULUM AND INSTRUCTION

Pool of Items to be Rated by Judges

Direction: Here are pool of items designed to measure the awareness of teacher trainers on multicultural education, and the competence of teacher trainers in performing classroom instruction from multicultural perspectives.

These pool of items are prepared to design valid and reliable multicultural education self report inventory and independent classroom performance rating scale. Thus, you are kindly requested to rate items on the basis of the questions mentioned on the categories.

There are 51 items (23 awareness questionnaire and 28 performance rating scale) which will be evaluated in relation to the two questions provided. The first question has three alternatives and the second question has four alternatives. You are requested to select only one choice for a question in an item. Before you attempt the items for each question:

- I. read the definition of technical terms
- II. read the description of basic elements in multicultural education.

N.B. Each item has to be evaluated in relation to the two questions:

- A. Does it measure the awareness of teacher trainers on multicultural education? Does it measure the competence of teacher trainers in performing classroom instruction from multicultural perspectives?
- B. How strong is the item in measuring the behavior?

- For question 'A', give 2 if your response is yes, 1 if your response is somewhat, and 0 if your response is no.
- For question 'B', give 3 if your response is very strong, 2 if your response is average, 1 if your response is weak and 0 if your response is not at all.

I. Definition Technical Terms

1. Culture - learned, shared and symbolic pattern of thinking, believing and behaving.
2. Multicultural education - the provision of classroom instruction from the perspectives of different cultural backgrounds.
3. Multicultural classroom - a classroom which comprises trainees of diverse cultural backgrounds.
4. Multicultural instruction - a classroom instruction from a culturally diversified points of view.
5. Multicultural teacher trainers - an instructor who train trainees to perform classroom instruction from diverse cultural points of view.
6. Multicultural society - a society of several cultures.
7. Multicultural teacher training - the training of teachers to help them teach a multicultural classroom.
8. cultural diversity - the existence of two or more cultures among people who live in a single region or country.
9. Values - aspects of cultural practices, objectives or action that are needed by a society.

10. Value clarification - an explanation of a standard of judgement by which people decide on desirable goals and outcomes.

11. Stereotypic expression - is an expression of traits or behavior which is overgeneralized to all members of a certain group.

II. Basic Elements in Multicultural Classroom Instruction

- the presence of attitude of openness on the part of the teacher trainers to accept and respect all trainees regardless of their cultural background.
- the teacher trainers' understanding of his /her own assumption, bias and prejudice in influencing students learning.
- the utilization of different techniques of teaching to respond to different modes of learning in a multicultural setting.
- the motivation of trainees to exchange their cultural experience with one another.
- Utilization of trainees cultural experience to enrich the teaching learning process.
- Sensitivity to the utilization of instructional aids so as to avoid the biased ones.

III. Item Specification

- Subject to be tested: Instructors of the first cycle (1-4 grades) teacher training program
- Attribute to be measured:
 - Awareness of teacher trainers on
 - concept and significance of multicultural education (MCE).

- concept of MCE refers the meaning and theoretical background of MCE.
- significance of MCE refers to the benefit it render for teacher trainers in teaching multicultural classroom.
- classroom performance of teacher trainers from multicultural perspectives refers to the competence of the teacher trainers in making instruction meaningful and relevant to all trainees.

Groups	No. of Item	Item No.
Group I: Awareness of MCE	23	1,2,3,4,5,6,7,8,9,10,11,12,13,14,19
• Concept of MCE		15,16,17,18,20,21,22,23
• Significance of MCE		
Group II: Performance from multicultural perspectives	28	7,10,11,15,21,22
• Trainers - trainees relationship		3,5,16,17,19
• Techniques of teaching		1,2,4,6,8,9,13,14,18,23,25,27,28
• Presentation of the lesson		12,20,24,26
• Instructional aids		

- concept of MCE refers the meaning and theoretical background of MCE.
- significance of MCE refers to the benefit it render for teacher trainers in teaching multicultural classroom.
- classroom performance of teacher trainers from multicultural perspectives refers to the competence of the teacher trainers in making instruction meaningful and relevant to all trainees.

Groups	No. of Item	Item No.
Group I: Awareness of MCE	23	1,2,3,4,5,6,7,8,9,10,11,12,13,14,19
• Concept of MCE		15,16,17,18,20,21,22,23
• Significance of MCE		
Group II: Performance from multicultural perspectives	28	7,10,11,15,21,22
• Trainers - trainees relationship		3,5,16,17,19
• Techniques of teaching		1,2,4,6,8,9,13,14,18,23,25,27,28
• Presentation of the lesson		12,20,24,26
• Instructional aids		

Pool of Items

Part I

Direction: Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure awareness of trainers on multicultural education? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
1	A comprehensive understanding of the values of trainees who are different from ones own is necessary to teach effectively in a multicultural classroom.							
2	The preparation of individuals to live in ethnically diverse world requires a properly planned education.							
3	Cultural diversity which exists among trainees in the classroom facilitates learning if properly utilized.							
4	Cultural values and experiences influence trainees to think and behave in a particular way.							
5	There are many different but somewhat related cultures in Southern Ethiopia Peoples' Region.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure awareness of trainers on multicultural education? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
6	Becoming knowledgeable in ones field of specialization makes the teacher effective in multicultural classroom.							
7	Value clarification, in multicultural education, involves a series of strategies which do not establish one set of right value for all trainees.							
8	The portrayal of cultural aspects in the textbook requires the involvement of teachers in the process.							
9	In a multicultural society, the languages of various cultural groups are seen as different rather than deficient.							
10	Multicultural education requires an education system which values differences and individuality rather than similarity and imitation.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure awareness of trainers on multicultural education? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
11	The elimination of biases, prejudices and discriminatory practice from the classroom are important tasks of a multicultural instructor.							
12	Effective teaching stimulates trainees self-esteem by promoting cultural discussion in the classroom.							
13	The provision of knowledge about how to teach culturally diversified trainee and conducting practice teaching in a multicultural classroom are the two important aspects of multicultural teacher training.							
14	Multicultural education is a process of making the educational experience more relevant to the culturally diversified trainees.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure awareness of trainers on multicultural education? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
15	Multicultural teacher training facilitates the recognition and acceptance of the right of cultural differences to exist in a society through teaching a lesson from multicultural perspectives.							
16	Multicultural education enhances understanding and mutual respect among individuals of diverse cultures.							
17	Multicultural education promotes an appreciation of similarities and differences among several cultures.							
18	Multicultural instruction facilitates the cultural enrichment of all trainees in the classroom.							
19	The teaching act, in a multicultural classroom , is a cross-cultural encounter.							
20	Multicultural education brings together cultural and psychological differences of learners to enhance individual learning environments.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure awareness of trainers on multicultural education? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
21	Multicultural education develops trainees' rational acceptance of cultural diversity as a resource to society.							
22	Multicultural education helps teacher trainers to incorporate cultural values and experiences of trainees in his /her classroom discussion.							
23	A well designed multicultural education promotes commitment to and respect for justice, equality and human dignity among trainees of diverse cultures.							

Part II

Direction: Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure Classroom performance of trainers from MCP? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
1	The exemplification of ideas and concepts from different cultural points of view.							
2	The use of students' cultural knowledge and life experiences as a starting point for teaching-learning.							
3	The teacher trainer's effort in utilizing a variety of instructional techniques (explanation, questioning, dialogue, illustration. . .) within the period.							
4	The teacher trainers effort in assessing the trainees readiness to the lesson to be taught.							
5	The efficiency of classroom activities provided in motivating culturally diversified trainees to work together.							
6	The teacher trainer's effort in utilizing the cultural experience of trainees to enrich the teaching-learning process.							

Please put an 'X' for both question A and B, for each item.

No.		Does the item measure Classroom performance of trainers from MCP? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
7	The extent to which the teacher trainer encourage trainees of different cultures to respect one another during classroom interaction.							
8	The teacher trainer's willingness to entertain different views from culturally diversified trainees.							
9	The clarification of questions that arise from trainees from diverse cultural points of view.							
10	The conduciveness of the classroom atmosphere for trainees to discuss cultural issues.							
11	The teacher trainer's ability to initiate and maintain positive interaction among culturally diversified trainees during discussion.							
12	The extent to which teaching aids are used free of bias towards a certain ethnic /cultural group.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure Classroom performance of trainers from MCP? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
13	The non-verbal communication patterns of the teacher trainer in encouraging the involvement of culturally diversified trainees in the teaching-learning process.							
14	The teacher trainer's effort in encouraging trainees to appreciate their own cultural identities by giving examples from the points of view of their cultures.							
15	The fairness of the teacher trainers in expressing appreciation for the classroom participations of the culturally diversified trainees.							
16	The ability of the teacher trainer to take on different roles (i.e. as a guide, a facilitator or a task master ...) during classroom instruction.							
17	The fairness of the time given for different trainees to respond to a question.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure Classroom performance of trainers from MCP? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
18	The efforts of the teacher trainer in avoiding stereotypic expression from his /her discussion.							
19	The teacher trainers ability in stimulating and promoting the feeling of cooperation and interdependence among trainees of diverse culture through group works.							
20	The teaching aids used in portraying different cultural and historical perspectives.							
21	The condition of classroom environment in ensuring each trainee to feel that his /her status is equal to that of every other trainee.							
22	The fairness of the teacher trainer in interacting with different trainees of diverse cultures.							
23	The relation of the lesson taught to the lives of culturally diversified trainees.							

Please put an 'X' for both question A and B, for each item.

No.	Items	Does the item measure Classroom performance of trainers from MCP? A			How strong is the item in measuring the behaviour? B			
		Yes 2	Some- what 1	No 0	Very strong 3	Average 2	Weak 1	Not at all 0
24	Suitability of pictures portrayed on chalkboard in illustrating issues from diverse cultures.							
25	The teacher trainer's ability in identifying and clarifying common features from the culturally diversified trainees description of ideas from their cultural point of view.							
26	The extent to which teaching aids are used free of the bias against a certain ethnic cultural group.							
27	The capability of the teacher trainer in equipping trainees with communication skills.							
28	The teacher trainer's mastery of the content he /she teach in making it clear to culturally diverse trainees.							

Appendix B

Summary of the Judges' Ratings for Question 'A'

(i.e. Does the item measure awareness of teacher trainers on multicultural education?)

Item No.	Raw Scores Given by Judges						Scale Value S	Quartile Deviation Q	Total Score X
	01	02	03	04	05	06			
1	2	2	1	2	2	2	1.90	0.60	11
*2	1	0	1	1	0	1	0.75	0.87	4
3	2	2	2	2	2	2	2.00	0.50	12
4	2	2	0	2	2	2	1.90	0.60	10
5	2	0	2	2	2	2	1.90	0.60	10
6	2	2	1	2	2	2	1.90	0.60	11
7	2	2	2	2	2	2	2.00	0.50	12
*8	0	1	0	1	1	1	0.75	0.87	4
9	2	2	2	2	2	1	1.90	0.60	11
10	2	2	2	2	2	2	2.00	0.50	12
11	2	2	2	0	2	2	1.90	0.60	10
*12	1	1	0	1	1	0	0.75	0.87	4
13	2	2	2	1	2	2	1.90	0.60	11
14	2	2	2	2	2	2	2.00	0.50	12
15	2	2	2	0	2	2	1.90	0.60	10
16	2	2	2	2	2	1	1.90	0.60	11
17	2	2	2	2	0	2	1.90	0.60	10
18	2	2	2	2	2	2	2.00	0.50	12
19	2	2	2	2	2	2	2.00	0.50	12
20	1	2	2	2	2	2	1.90	0.60	11
21	2	2	2	2	2	1	1.90	0.60	11
22	2	1	2	2	2	2	1.90	0.60	11
23	2	2	2	2	2	2	2.00	0.50	12
$\sum x_i$	41	39	37	38	40	39		$\sum x$	234
$\sum x_i^2$	79	75	71	72	78	73		$\sum x^2$	2524
$\sigma^2_{x_i}$	0.257	0386	0.499	0.401	0.367	0.299		σ_x^2	6.231

* Item dropped (i.e. S value ≤ 1.75 , Q value ≥ 1.00)

$$S = L + \frac{(0.5 - \sum P_b)}{P_w}$$

$$Q = C_{75} - C_{25}$$

$$\text{Rating reliability } (\alpha_{ck}) = \frac{k}{k-1} \left[\frac{1 - \frac{\sum \sigma_{x_i}^2}{\sigma_x^2}}{6-1} \right] = \frac{6}{6-1} \left[\frac{1 - \frac{2.209}{6.231}}{6-1} \right] = 0.775$$

For Question 'B' (i.e. How strong is the item in measuring the behavior?)

Item No.	Raw Scores Given by Judges						Scale Value S	Quartile Deviation Q	Total Score X
	01	02	03	04	05	06			
1	3	2	2	2	3	2	2.25	0.87	15
*2	1	0	2	1	0	1	0.834	1.083	5
3	2	2	3	3	3	3	2.75	0.87	16
4	3	3	0	3	3	3	2.90	0.60	15
5	3	0	3	3	3	3	2.90	0.60	15
*6	1	2	1	1	1	1	1.10	0.60	7
7	1	3	3	3	3	3	2.90	0.60	16
*8	0	1	0	1	1	1	0.75	0.87	4
9	3	2	3	3	3	3	2.90	0.60	17
10	2	2	2	2	2	3	2.10	0.60	13
11	3	1	3	0	3	3	2.90	0.60	15
*12	1	3	0	1	1	0	0.75	0.87	4
13	3	3	3	1	3	3	2.90	0.60	16
14	3	3	3	3	3	3	3.00	0.50	18
15	3	3	3	0	3	3	2.90	0.60	15
16	2	3	3	3	3	2	2.75	0.87	16
17	3	3	3	3	0	3	2.90	0.60	15
18	3	2	3	3	3	2	2.75	0.87	16
*19	2	1	1	2	1	1	1.25	0.87	8
20	2	3	3	3	3	2	2.75	0.87	16
21	3	3	2	3	3	2	2.75	0.87	16
22	2	2	2	2	3	3	2.25	0.87	14
23	3	3	3	3	3	3	3.00	0.50	18
$\sum x_i$	55	50	51	49	54	53		$\sum x$	310
$\sum x_i^2$	136	130	139	129	152	141		$\sum x^2$	4614
$\sigma_{x_i}^2$	0.801	0.926	1.127	1.07	1.096	0.82		σ_x^2	18.945

* Item dropped (S value ≤ 1.75 or Q ≥ 1.00)

$$= \frac{6}{6-1} \left[1 - \frac{5.84}{18.945} \right]$$

$$\alpha_k = 0.83$$

Summary of Judges' Ratings for Question 'A'

(Does it measure classroom performance of teacher trainers from a multicultural perspectives?)

Item No.	Raw Scores Given by Judges						Scale Value S	Quartile Deviation Q	Total Score X
	01	02	03	04	05	06			
1	2	0	2	2	2	2	1.90	0.60	10
2	1	2	2	2	2	2	1.90	0.60	11
3	2	2	2	2	2	2	2.00	0.50	12
*4	1	0	0	1	1	0	0.50	1.00	3
5	0	2	2	2	2	2	1.90	0.60	10
6	2	2	2	0	2	2	1.90	0.60	10
7	1	2	2	2	2	2	1.90	0.60	11
8	2	2	2	2	2	2	2.00	0.50	12
9	2	2	2	2	2	2	2.00	0.50	12
10	2	2	2	1	2	2	1.90	0.60	11
11	2	2	2	2	2	2	2.00	0.50	12
12	0	2	2	2	2	2	1.90	0.60	10
13	2	2	2	2	2	2	2.00	0.50	12
14	2	0	2	2	2	2	1.90	0.60	10
15	2	2	2	2	2	0	1.90	0.60	10
16	2	2	2	2	2	1	1.90	0.60	11
*17	0	1	0	1	0	0	0.25	0.87	2
18	2	2	2	2	0	2	1.90	0.60	10
19	2	2	2	2	2	2	2.00	0.50	12
20	2	2	2	2	2	2	2.00	0.50	12
21	0	2	2	2	2	2	1.90	0.60	10
22	2	2	2	2	2	2	2.00	0.50	12
23	2	2	2	2	2	1	1.90	0.60	11
24	2	2	2	0	2	2	1.90	0.60	10
25	2	2	2	2	2	2	2.00	0.50	12
26	2	0	2	2	2	2	1.90	0.60	10
*27	0	1	1	0	0	1	0.50	1.00	3
28	2	2	2	2	2	1	1.90	0.60	11
$\sum xi$	43	46	51	47	47	48		$\sum x$	282
$\sum xi^2$	83	90	101	91	93	92		$\sum x^2$	3044
σ^2_{xi}	0.606	0.515	0.29	0.432	0.504	0.437		σ^2_x	7.2806

* Item dropped $\alpha_k = \frac{6}{6-1}$

$$\left[1 - \frac{2.604}{7.2806} \right]$$

$\alpha_k = 0.756$

For Question 'B' (How strong is the item in measuring the behavior?)

Item No.	Raw Score Given by Judges						Scale Value S	Quartile Deviation Q	Total Score X
	01	02	03	04	05	06			
1	3	0	3	3	3	3	2.90	0.60	15
2	1	3	3	3	3	3	2.90	0.60	16
3	2	3	3	3	3	3	2.90	0.60	17
*4	1	0	0	1	1	0	0.50	1.00	3
5	0	3	3	3	3	3	2.90	0.60	15
6	3	3	3	0	3	3	2.90	0.60	15
7	1	3	3	3	3	3	2.90	0.60	16
8	3	3	3	3	3	3	3.00	0.50	18
9	2	3	3	3	3	2	2.75	0.87	16
10	2	2	2	2	3	2	2.10	0.60	13
11	3	2	3	3	3	3	2.90	0.60	17
12	0	3	3	3	3	3	2.90	0.60	17
13	3	3	3	3	3	1	2.90	0.60	15
14	3	0	3	3	3	3	2.90	0.60	16
15	3	3	3	3	0	3	2.90	0.60	15
16	2	2	3	2	2	2	2.10	0.60	13
*17	0	1	0	1	0	0	0.25	0.87	2
18	3	3	3	3	0	3	2.90	0.60	15
19	2	3	2	3	3	3	2.75	0.87	16
*20	1	1	1	1	2	2	1.25	0.87	8
21	0	3	3	3	3	3	2.90	0.60	15
22	2	3	3	3	3	3	2.90	0.60	17
23	3	3	3	3	3	1	2.90	0.60	16
*24	1	2	1	0	1	1	1.60	0.75	
25	3	3	3	3	3	3	3.00	0.50	18
26	3	2	3	3	3	2	2.75	0.87	16
*27	0	1	1	0	0	1	0.50	1.00	3
28	3	0	3	3	3	3	2.90	0.60	15
$\sum x_i$	53	61	70	67	66	65		$\sum x$	382
$\sum x_i^2$	137	167	200	191	190	177		$\sum x^2$	5792
$\sigma^2_{x_i}$	1.31	1.22	0.893	1.096	1.23	0.932		σ^2_x	20.73

* Item dropped $\alpha_k = \frac{6}{6-1}$
 $\alpha_k = 0.813$

$$\left[1 - \frac{6.681}{20.73} \right]$$

Appendix C

Summary of Pilot Result on Internal Consistency of the Awareness Questionnaire

Item No.	Raw Scores of Respondents								Σxi	Σxi^2	S_{xi}^2
	01	02	02	04	05	06	07	08			
1	3	3	3	4	4	3	4	4	28	100	0.25
2	2	2	2	2	3	1	3	2	17	39	0.36
3	2	3	3	4	4	4	3	4	27	95	0.484
4	2	3	3	3	3	4	3	2	23	69	0.36
5	2	2	3	3	3	3	3	4	23	69	0.36
6	3	3	3	3	3	4	4	4	27	93	0.234
7	4	3	3	4	4	3	4	4	29	107	0.234
8	4	3	3	4	2	4	2	4	26	90	0.688
9	2	2	3	3	2	4	4	4	24	78	0.75
10	3	3	2	3	4	4	4	4	27	95	0.484
11	3	3	3	3	3	3	3	4	25	79	0.109
12	3	3	3	3	3	4	4	3	26	86	0.19
13	2	3	3	4	4	4	4	4	28	102	0.50
14	2	3	3	3	3	2	3	2	21	57	0.234
15	3	3	3	3	4	4	3	3	26	86	0.19
16	3	3	3	3	4	4	4	4	28	100	0.25
17	3	2	2	3	4	3	3	4	24	76	0.50
18	3	3	3	3	3	3	4	3	25	79	0.109
Total X	49	50	51	58	60	61	62	63		ΣS_{xi}^2	6.286

$$\Sigma X = 434 \quad \Sigma X^2 = 26000 \quad S_X^2 = 29.44$$

$$\text{Coefficient of alpha } (\alpha_r) = \frac{n}{n-1} \left[1 - \frac{\Sigma S_{xi}^2}{S_X^2} \right] = \frac{18}{17} \left[1 - \frac{6.286}{29.44} \right]$$

$$\alpha_r = 0.833$$

Summary of Pilot Result on Internal Consistency of the Attitude Scale

Item No.	Raw Scores of Respondents								Σx_i	Σx_i^2	Σx_i^2
	01	02	02	04	05	06	07	08			
1	5	4	4	5	4	5	5	5	37	173	0.268
2	1	4	2	1	4	5	5	3	25	97	2.696
3	5	4	4	5	4	4	5	5	36	164	0.286
4	3	4	4	4	4	3	4	5	31	123	0.411
5	5	4	4	5	5	4	5	5	37	173	0.268
6	3	3	4	5	5	5	4	4	33	141	0.696
7	3	4	2	3	3	3	3	3	24	74	0.286
8	1	3	5	4	4	5	5	5	32	142	2.00
9	4	4	4	4	3	5	4	5	33	139	0.411
10	4	4	4	3	4	3	4	5	31	123	0.411
11	5	2	4	4	4	4	5	5	33	143	0.982
12	3	4	4	4	3	5	5	5	33	141	0.696
13	4	4	4	4	4	5	4	4	33	137	0.125
14	3	3	4	4	4	5	2	5	30	120	1.071
15	2	2	2	2	2	5	4	2	21	65	1.411
16	4	4	4	5	4	5	5	5	36	164	0.286
17	3	3	3	3	4	4	4	3	27	93	0.268
18	4	5	4	4	4	5	5	4	35	155	0.268
19	4	4	4	4	4	4	4	5	33	137	0.125
20	3	4	4	2	3	3	3	5	27	97	0.839
21	3	3	4	4	4	5	4	5	32	132	0.571
22	2	5	4	4	5	2	5	5	32	140	1.714
23	4	3	4	4	5	4	5	4	33	139	0.411
24	3	4	4	4	4	3	4	5	31	123	0.411
25	1	1	1	1	1	1	3	1	10	16	0.50
26	4	4	4	4	4	5	4	5	34	146	0.214
27	5	4	4	4	3	5	4	4	33	139	0.411
28	4	4	4	4	3	5	4	5	33	139	0.411
Total X	95	101	103	104	105	117	118	112		$\Sigma \Sigma x_i^2$	18.447

$$\Sigma x = 865 \quad \Sigma x^2 = 94173$$

$$\Sigma x^2 = 92.125$$

$$\alpha r = \frac{28}{27} \left(1 - \frac{18.447}{92.125} \right) = 0.8294$$

Summary of Pilot Result on Internal Consistency of the Attitude Scale

Item No.	Raw Scores of Respondents								Σx_i	Σx_i^2	$S_{x_i}^2$
	01	02	02	04	05	06	07	08			
1	5	4	4	5	4	5	5	5	37	173	0.268
2	1	4	2	1	4	5	5	3	25	97	2.696
3	5	4	4	5	4	4	5	5	36	164	0.286
4	3	4	4	4	4	3	4	5	31	123	0.411
5	5	4	4	5	5	4	5	5	37	173	0.268
6	3	3	4	5	5	5	4	4	33	141	0.696
7	3	4	2	3	3	3	3	3	24	74	0.286
8	1	3	5	4	4	5	5	5	32	142	2.00
9	4	4	4	4	3	5	4	5	33	139	0.411
10	4	4	4	3	4	3	4	5	31	123	0.411
11	5	2	4	4	4	4	5	5	33	143	0.982
12	3	4	4	4	3	5	5	5	33	141	0.696
13	4	4	4	4	4	5	4	4	33	137	0.125
14	3	3	4	4	4	5	2	5	30	120	1.071
15	2	2	2	2	2	5	4	2	21	65	1.411
16	4	4	4	5	4	5	5	5	36	164	0.286
17	3	3	3	3	4	4	4	3	27	93	0.268
18	4	5	4	4	4	5	5	4	35	155	0.268
19	4	4	4	4	4	4	4	5	33	137	0.125
20	3	4	4	2	3	3	3	5	27	97	0.839
21	3	3	4	4	4	5	4	5	32	132	0.571
22	2	5	4	4	5	2	5	5	32	140	1.714
23	4	3	4	4	5	4	5	4	33	139	0.411
24	3	4	4	4	4	3	4	5	31	123	0.411
25	1	1	1	1	1	1	3	1	10	16	0.50
26	4	4	4	4	4	5	4	5	34	146	0.214
27	5	4	4	4	3	5	4	4	33	139	0.411
28	4	4	4	4	3	5	4	5	33	139	0.411
Total X	95	101	103	104	105	117	118	112		$\Sigma S_{x_i}^2$	18.447

$$\Sigma x = 865 \quad \Sigma x^2 = 94173$$

$$S_x = 92.125$$

$$\alpha r = \frac{28}{27} \left(1 - \frac{18.447}{92.125} \right) = 0.8294$$

Appendix D

Summary of inter-observer agreement (pilot result)

	<u>First session</u>		<u>Second session</u>	
	<u>Observer 'A'</u>	<u>Observer 'B'</u>	<u>Observer 'A'</u>	<u>Observer 'B'</u>
1	66	61	70	71
2	54	56	56	54
3	66	65	62	60
4	60	62	60	67
5	60	63	60	70
6	54	56	49	53
7	65	66	68	70
8	61	58	66	68
$\Sigma X_1 = 486$		$\Sigma Y_1 = 487$	$\Sigma X_2 = 491$	$\Sigma Y_2 = 513$
$(\Sigma X_1)^2 = 236196$		$(\Sigma Y_1)^2 = 237169$	$\Sigma X_2^2 = 30461$	$\Sigma Y_2^2 = 33279$
		$\Sigma Y_1^2 = 29751$	$(\Sigma X_2)^2 = 241081$	$(\Sigma Y_2)^2 = 263169$
$\Sigma X_1^2 = 29690$	$\Sigma X_1 Y_1 = 29692$			$\Sigma X_2 Y_2 = 31779$

$$r = \frac{n \Sigma XY - \Sigma X \Sigma Y}{\sqrt{(n \Sigma X^2 - (\Sigma X)^2) (n \Sigma Y^2 - (\Sigma Y)^2)}}$$

$$r_1 = \frac{8 \times 29692 - 486 \times 487}{\sqrt{(8 \times 29690 - 236196) (8 \times 29751 - 237169)}}$$

$$= \frac{237536 - 236682}{\sqrt{1324 \times 839}}$$

$$= \underline{\underline{0.8101}}$$

$$r_2 = \frac{8 \times 31779 - 491 \times 513}{\sqrt{(8 \times 30461 - 241081) (8 \times 33279 - 263169)}}$$

$$= \frac{254232 - 252883}{\sqrt{2607 \times 3063}}$$

$$= \frac{2349}{\sqrt{2607 \times 3063}}$$

$$= \underline{\underline{0.8313}}$$

Appendix E

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF
CURRICULUM AND INSTRUCTION

Multicultural Awareness Questionnaire and Multicultural Attitude
Scale to be Filled by Teacher Trainers

The purpose of the multicultural awareness questionnaire is to obtain information on the extent of awareness of teacher trainers on the concept of multicultural education and its significance in teacher training program of primary school (1-4 grades). Whereas, that of multicultural attitude scale is to gain information on the attitude of teacher trainers toward the implementation of multicultural education in teacher training program of primary school.

The information procured through the questionnaire and attitude scale will be used only for statistical analysis purpose. Any information that you give will be kept confidential. Hence, your cooperation in giving genuine information is highly valuable for the accomplishment of the study.

N.B. This booklet contains two parts. Each part has its own direction. Please attempt all questions.

There is no need of writing your name on the booklet.

Thank you in advance for your cooperation!

Bio-data

Please fill in the blank space with appropriate response regarding your personal information.

1. Sex: M _____ F _____
2. Ethnic background _____
3. Years of Service in TTI _____, in other _____
4. Area of specialization _____
5. Qualification: MA/MSc _____
 BA/BSc _____
 Diploma _____
 If other, specify _____

The contextual meanings of Technical Terms used in the Questionnaire and Attitude Scale.

1. Culture - learned, shared and symbolic pattern of thinking, believing and behaving.
2. Multicultural education - a process of providing classroom instruction from culturally diversified points of view.
3. Multicultural classroom - a classroom which comprises trainees of diverse cultural background.
4. Multicultural teacher trainer - an instructor who trains trainees to perform classroom instruction from multicultural perspectives.
5. Multicultural society - a society of several cultures.
6. cultural diversity - the existence of two or more cultures among people who live in a single region or country.
7. Values - aspects of cultural practices, objectives or action that are needed by a society.

8. Value clarification - an explanation on a standard of judgement by which people decide on desirable goals and outcomes.
9. Stereotypic expression - is an expression of traits or behaviour which is over generalized to all members of a certain group.
10. Multicultural teacher training - the training of teachers to help them teach in a culturally diversified classroom.
11. Multicultural instruction - classroom instruction from culturally diversified points of view.

Part - I

Multicultural Awareness Questionnaire

Direction: The followings are statements referring to concept, and significance of multicultural education. Five point scales (from 0 to 4) are given corresponding to each statement. Please circle anyone of the scales which best describes your assessment of each statement.

N.B. Scale 4 = Definitely correct

3 = Probably correct

2 = Probably incorrect

1 = Definitely incorrect

0 = Don't know

No.	Items	Response categories				
		Def. Correct	Prob. Correct	Prob. Incorrect	Def. Incorrect	Don't know
1	A comprehensive understanding of the values of culturally diversified trainees is important to teach a multicultural classroom.	4	3	2	1	0
2	Cultural diversity which exists among trainees in the classroom facilitates learning if properly utilized.	4	3	2	1	0
3	There are many different but somewhat related cultures in Southern Ethiopia Peoples' Region.	4	3	2	1	0
4	Cultural values and experiences influence trainees to think and behave in a particular way.	4	3	2	1	0
5	Value clarification, in a multicultural education, involves a series of strategies which do not establish one set of right value for all trainees.	4	3	2	1	0

No.	Items	Response categories				
		Def. Correct	Prob. Correct	Prob. Incorrect	Def. Incorrect	Don't know
6	In a multicultural society, the language of various cultural groups are seen as different rather than deficient.	4	3	2	1	0
7	Multicultural education requires an educational system which values differences and individuality rather than similarity and imitation.	4	3	2	1	0
8	The elimination of biases, prejudices and discriminatory practices from the classroom are important tasks of a multicultural teacher trainer.	4	3	2	1	0
9	The provision of knowledge about how to teach culturally diversified trainees and conducting practice teaching in a multicultural classroom are the two important aspects of multicultural teacher training.	4	3	2	1	0
10	Multicultural education is a process of making the educational experiences more relevant to the culturally diversified trainees.	4	3	2	1	0
11	Multicultural teacher training facilitates the recognition and acceptance of the right of cultural differences to exist in a society through teaching a lesson from multicultural perspectives.	4	3	2	1	0
12	Multicultural education enhances understanding and mutual respect among individuals of diverse cultures.	4	3	2	1	0

No.	Items	Response categories				
		Def. Correct	Prob. Correct	Prob. Incorrect	Def. Incorrect	Don't know
13	Multicultural education promotes an appreciation of similarities and differences among several cultures.	4	3	2	1	0
14	Multicultural instruction facilitates the cultural enrichment of all trainees in the classroom.	4	3	2	1	0
15	Multicultural education brings together cultural and psychological differences of learners to enhance individual learning environment.	4	3	2	1	0
16	Multicultural education develops trainees' rational acceptance of cultural diversity as a resource to society	4	3	2	1	0
17	Multicultural education helps teacher trainers to incorporate cultural values and experiences of trainees in his or her classroom discussion.	4	3	2	1	0
18	A well designed multicultural education promotes commitment to and respect for justice, equity and human dignity among trainees of diverse cultures.	4	3	2	1	0

Part - II

Multicultural Attitude Scale

Direction: The following are statements referring to the implementation of multicultural education in teacher training program. Five scales from strongly agree to strongly disagree are given corresponding to each statement. Please circle of the scales that best describes your reaction to each statement.

N.B. Scale A = Strongly agree

B = Agree

C = Undecided

D = Disagree

E = Strongly disagree

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
1	Knowing about another individual's culture helps to understand why the individual behaves the way he /she behaves.	A	B	C	D	E
2	The role of cultural factors in classroom learning should be overlooked.	A	B	C	D	E
3	Teacher training institutions have the responsibility to teach commitment to and respect for justice, equity and human dignity for culturally diversified trainees.	A	B	C	D	E
4	Classroom learning would be easier for trainees if teacher trainers could prepare and present their lesson in culturally relevant terms.	A	B	C	D	E

Part - II

Multicultural Attitude Scale

Direction: The following are statements referring to the implementation of multicultural education in teacher training program. Five scales from strongly agree to strongly disagree are given corresponding to each statement. Please circle of the scales that best describes your reaction to each statement.

N.B. Scale A = Strongly agree

B = Agree

C = Undecided

D = Disagree

E = Strongly disagree

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
1	Knowing about another individual's culture helps to understand why the individual behaves the way he /she behaves.	A	B	C	D	E
2	The role of cultural factors in classroom learning should be overlooked.	A	B	C	D	E
3	Teacher training institutions have the responsibility to teach commitment to and respect for justice, equity and human dignity for culturally diversified trainees.	A	B	C	D	E
4	Classroom learning would be easier for trainees if teacher trainers could prepare and present their lesson in culturally relevant terms.	A	B	C	D	E

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
5	Teacher trainer involved in the teaching profession need to show respect toward the culture of his /her trainees.	A	B	C	D	E
6	Any attempt to modify teacher education curriculum in order to address cultural diversity is a waste of time.	A	B	C	D	E
7	Classroom instruction from a monocultural perspective results in a low academic achievement motivation with those trainees whose cultures are unconsidered.	A	B	C	D	E
8	Showing respect for trainees cultures positively contributes to better relation with them.	A	B	C	D	E
9	In a multicultural classroom, the teacher trainer need to clarify ideas from the stand point of the commonly shared cultures of various ethnic groups.	A	B	C	D	E
10	The diverse cultural groups of Southern Ethiopia Peoples' Region are culturally interwoven since they are economically interdependent.	A	B	C	D	E
11	Trainees in the institute do not need to be aware of the cultural realities of other regions apart from the Southern Ethiopia Peoples' Region through their trainers.	A	B	C	D	E

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
12	Each trainee in the classroom, regardless of his /her cultural background, has the potential to reach the highest academic status.	A	B	C	D	E
13	A teacher trainer should encourage trainees in the classroom to clarify ideas from their cultural perspectives.	A	B	C	D	E
14	Trainees need to be prepared (in their knowledge and skills) for cultural difference they might encounter in their professional career.	A	B	C	D	E
15	The learning of culturally different trainees can be negatively affected by teacher trainer's unfavorable attitude toward their cultures.	A	B	C	D	E
16	The understanding of trainees' behaviors from the point of view of their cultures is important for the effectiveness of classroom management.	A	B	C	D	E
17	There is no way of making classroom instruction responsive to cultural diversity.	A	B	C	D	E
18	The preparation of prospective teachers for elementary school (1-4 grades) in Southern Ethiopia Peoples' Region should include cultural awareness skill training in all aspect of the training program.	A	B	C	D	E

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
19	Trainees need to be aware of other peoples who live in the same society but have different cultures from their own.	A	B	C	D	E
20	A trainee's behavioral problems related to his /her culture could easily be solved by a culturally aware teacher trainers.	A	B	C	D	E
21	A teacher Trainer's cultural preparedness would increase the likelihood of his /her success in teaching culturally diversified trainees.	A	B	C	D	E
22	Each trainees in a classroom, regardless of his /her cultural background, deserves respect from the trainer.	A	B	C	D	E
23	The skill in how to deal with trainees of diverse cultures is necessary to teach a multicultural classroom successfully.	A	B	C	D	E
24	The teacher trainer's display of respect for different cultures in a classroom influences the trainee to do the same when he /she become a teacher.	A	B	C	D	E
25	Teacher trainer could be successful in teaching multicultural classroom without having training if they are sincere to and sympathetic with culturally diversified trainees.	A	B	C	D	E

No.	Items	Response categories				
		Strongly Agree	Agree	Undecided	Dis-agree	Strongly disagree
26	The provision of the classroom exercise for trainees to work together facilitates the development of cross-cultural communication among them.	A	B	C	D	E
27	Trainers' understanding of other cultures become better if they have a clear conception of their own cultural background.	A	B	C	D	E
28	When trainees' cultural values and experiences are incorporated into instructional lessons, they will perform better academically than they would if the case is otherwise.	A	B	C	D	E

Appendix F

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF
CURRICULUM AND INSTRUCTION**

Performance Rating scale to be Filled by Observers

The purpose of this performance rating scale is to collect information on classroom performance of the teacher trainers from a multicultural perspective in two teacher training institutes. The information procured through the Performance rating scale will be used only for the purpose of statistical analysis. Any information that you give will be kept confidential. Hence, your cooperation in giving genuine information is highly valuable for the accomplishment of the study.

N.B. There is no need to write your name and the name of the observed teacher trainer.

Thank you in advance for your cooperation!

I. Name of the Institute _____

II. Biodata regarding the observer

Sex M _____ F _____ (put an "x")

Years of service in TTI _____, in other _____

Qualification MA/MSc _____

 BA/BSc _____

 Diploma _____

 If other, Specify _____

III. Biodata of the observed teacher trainer

Sex M _____ F _____

Years of service in TTI _____, in other _____

Qualification MA/MSc _____
BA/BSc _____
Diploma _____
If other, specify _____

Area of specialization _____

Subject he /she instruct _____

Performance Rating Scale

Direction: The following are statements referring to a teacher trainers' classroom performance from a multicultural perspective. Five point scales (from 1-5) are given in correspondence with each statement. Please circle anyone of the scale that best describes your assessment of the teacher trainer's performance against each statement.

N.B. Scale 5 = Very good

4 = Good

3 = Satisfactory

2 = Fair

1 = Poor

No.	Items	Response categories				
		Very good	Good	Satisfactory	Fair	Poor
1	The exemplification of ideas and concepts from different cultural backgrounds.	5	4	3	2	1
2	The use of trainees cultural knowledge and life experience as a starting point for teaching-learning process.	5	4	3	2	1
3	The teacher trainer's effort in utilizing a variety of instructional techniques (explanation, questioning, dialogue, illustration...) within the period.	5	4	3	2	1
4	The efficiency of the classroom activities provided in motivating culturally diversified trainees to work together.	5	4	3	2	1
5	The teacher trainer's effort in utilizing the cultural experiences of trainees to enrich the teaching learning process.	5	4	3	2	1

No.	Items	Response categories				
		Very good	Good	Satisfactory	Fair	Poor
6	The extent to which the teacher trainer encourage trainees of different cultures to respect one another during classroom interaction.	5	4	3	2	1
7	The teacher trainer's willingness to entertain different views from culturally diversified trainees.	5	4	3	2	1
8	The clarification of questions that arise from trainees from diverse cultural points of view.	5	4	3	2	1
9	The conduciveness of the classroom atmosphere for trainees to discuss cultural issues.	5	4	3	2	1
10	The teacher trainer's ability to initiate and maintain positive interaction among culturally diversified trainees during discussion.	5	4	3	2	1
11	The extent to which the teaching aids are used being free of bias toward a certain ethnic or cultural group.	5	4	3	2	1
12	The non-verbal communication patterns of the teacher trainer in encouraging the involvement of culturally diversified trainees in the teaching learning process.	5	4	3	2	1
13	The teacher trainer's effort in encouraging trainees to appreciate their own cultural identities by giving examples from the point of view of their culture.	5	4	3	2	1

No.	Items	Response categories				
		Very good	Good	Satisfactory	Fair	Poor
14	The ability of the teacher trainer to take on different roles (i.e. as a guide, facilitator or as a task master...) during classroom instruction.	5	4	3	2	1
15	The extent to which instructional aids are used being free of bias against certain ethnic or cultural group.	5	4	3	2	1
16	The fairness of the teacher trainer in expressing appreciation for classroom participation of the culturally diversified trainees.	5	4	3	2	1
17	The efforts of the teacher trainer in avoiding stereotypic expression from his /her discussion.	5	4	3	2	1
18	The teacher trainer's ability in stimulating and promoting the feeling of cooperation and interdependence among trainees of diverse culture through group work.	5	4	3	2	1
19	The condition of the classroom environment in ensuring each trainee to feel that his /her status is equal to every other trainee.	5	4	3	2	1
20	The fairness of the teacher trainer in interacting with different trainees of diverse cultures.	5	4	3	2	1
21	The relation of the lesson taught to the lives of culturally diversified trainees.	5	4	3	2	1

No.	Items	Response categories				
		Very good	Good	Satisfactory	Fair	Poor
22	The teacher trainer ability in clarifying common features from the culturally diversified trainees description of ideas from their cultural points of view.	5	4	3	2	1
23	The teacher trainer mastery of the content he/she teaches in making it clear to the culturally diversified trainees.	5	4	3	2	1

Appendix G

The relationship among awareness, attitude and classroom performance, and scores on sub-categories of awareness, attitude and classroom performance.

No.	Awareness (X1)	Attitude (X2)	Classroom performance (Y)	Awareness		Attitude		Classroom performance	
				Concept	Signi- ficance	Cultural diversity	MCE	Presen- tation skills	Dis- cussion and act.
1	48	90	51	40	32	59	56	33	37.5
2	50	93	52	39	29	55	60	30	31.75
3	51	94	55.25	34	22	55	46	26.25	29.75
4	52	98	55	30	29	64	51	28.75	29.25
5	56	100	57.5	26	22	64	59	30	31.75
6	57	101	56	40	32	66	49	31	33.5
7	59	104	60.75	36	25	61	55	27.5	34.25
8	60	106	57.75	25	26	67	55	34.75	36.25
9	61	108	60	35	32	59	55	31	31.75
10	62	109	58	30	26	64	51	27.25	30.5
11	63	112	60.25	38	32	48	45	24.5	30.5
12	64	113	58.75	34	30	60	52	29.75	34.5
13	64	114	60.5	38	29	48	58	29	31.25
14	64	115	61.75	37	31	55	47	32	33.75
15	65	115	61.75	36	29	57	52	29	31.5
16	65	115	61.75	36	31	55	46	24	28
17	65	107	62.75	36	30	50	48	31.75	33.5
18	65	115	62.75	27	25	63	56	32.75	36.25
19	65	116	64.24	38	27	55	52	31.75	35.75
20	66	101	64.25	36	32	64	59	30.25	33
21	66	116	64.5	29	28	52	53	30.5	33.75
22	67	118	62.25	27	23	63	51	31.25	31.5
23	67	102	63.25	34	30	69	62	35.5	40.75
24	67	119	65.25	34	29	52	48	27.75	29.75
25	67	105	65.25	32	28	63	55	33.5	38.25
26	68	122	65.5	36	28	49	45	25	26.25
27	68	122	65.75	36	29	53	55	30.25	30.5
28	68	123	67.5	33	32	69	65	26.25	29
29	68	123	71	38	30	47	43	28	30.75
30	69	115	70.5	36	31	52	52	29.5	32.75
31	70	131	69	35	27	60	56	29.75	30.25
32	72	134	71.75	37	32	67	55	31.5	33.75
33	72	140	76.25	35	30	75	65	31.25	34.25

$$r = \frac{N\sum(xy) - \sum x \sum Y}{\sqrt{[N\sum x^2 - (\sum x)^2][N\sum Y^2 - (\sum Y)^2]}}$$

$$r_{x_1x_2} = 0.8537, \quad r_{x_1y} = 0.923,$$

$$t = *9.13 \qquad t = *13.395$$

t - test for correlation (t)

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n-2}$$

$$r_{x_2y} = 0.863$$

$$t = *9.553$$

Appendix H

The Regression of Y on X (i.e. the effect of awareness on attitude)

No.	Awareness score (X)	Attitude score (Y)	\hat{Y}	$(Y - \bar{y})^2$	$(Y - \hat{Y})^2$
1	48	90	87.42586	484	6.6262
2	50	93	90.62486	361	5.6413
3	51	94	92.22436	324	3.1529
4	52	98	93.82386	196	17.4402
5	56	100	100.22186	144	0.0492
6	57	101	101.822136	121	0.6759
7	59	104	105.02036	64	1.0411
8	60	106	106.61986	36	0.3862
9	61	108	108.21936	16	0.0481
10	62	109	109.81886	9	0.6705
11	63	112	111.41836	0	0.3383
12	64	113	113.01786	1	0.0003
13	64	114	113.01786	4	0.9646
14	64	115	113.01786	9	3.9289
15	65	115	114.61736	9	0.1864
16	65	115	114.61736	9	0.1464
17	65	107	114.61736	25	58.0242
18	65	115	114.61736	9	0.1464
19	65	116	114.61736	16	1.9117
20	66	101	116.21686	121	231.5528
21	66	116	116.21686	16	0.0470
22	67	118	117.81636	36	0.0337
23	67	102	117.81636	100	250.1572
24	67	119	117.81636	49	1.4010
25	67	105	117.81636	49	164.2591
26	68	122	119.41586	100	6.6778
27	68	122	119.41586	100	6.6778
28	68	123	119.41586	121	12.8461
29	68	123	119.41586	121	12.8461
30	69	115	121.01536	9	36.1846
31	70	131	122.61486	361	70.3106
32	72	134	125.81386	484	67.0129
33	72	140	125.81386	784	201.2466
Total	$\Sigma x = 2091$	$\Sigma y = 3696$		$\Sigma 4288$	$\Sigma 1154.6381$
	$\Sigma x^2 = 133715$	$\bar{y} = 112$			
	$(\Sigma X)^2 = 432281$				

$$\hat{Y} = a + bx \longrightarrow \text{regression line equality}$$

$$\sum Y = Na + b\sum x \longrightarrow \text{Normal equation}$$

$$\rightarrow \sum xY = a\sum x + b\sum x^2$$

$$\left. \begin{array}{l} 63.36364 \times (3696 = 33a + 2091b) \\ \underline{236146 = 2091a + 133715b} \end{array} \right\} \longrightarrow \text{simultaneous equation}$$

$$- 234192 = \cancel{2091}a + 132492.37b$$

$$\underline{236146 = \cancel{2091}a + 133715b}$$

$$\frac{\cancel{1954}}{1221.63} = \frac{\cancel{1221.63}b}{1221.63}$$

$$b = 1.5995$$

$$a = ? \quad 236146 = 2091a + 133715b$$

$$236146 = 2991a + 133715 \times 1.5995$$

$$2091a = 236146 - 213877.1425$$

$$\underline{\cancel{2091}a = \underline{22268.8575}}$$

$$\underline{\cancel{2091}} \quad \underline{2091}$$

$$a = 10.64986$$

$$\hat{Y} = bx + a \quad \text{equation for the regression line}$$

$$\hat{Y} = 1.5995X + 10.64986 - \text{the regression line}$$

$$SST = SS_{reg} + SS_{res}$$

$$SS_{reg} = SST - SS_{res}$$

$$= 4288 - 1154.6381$$

$$= 3133.3619$$

$$r^2 = \frac{SS_{reg}}{SST} = \frac{3133.3619}{4288}$$

$$= 0.73073$$

Test of significance

$$F = \frac{R^2/K}{(1 - R^2)/(N - k - 1)} = \frac{0.731/1}{(1 - 0.731)/(33 - 1 - 1)}$$

$$= 84.24$$

The regression of Y on X (i.e. the effect of awareness on classroom performance)

No.	Awareness score (X)	Class Performance score (Y)		$(Y - \bar{Y})^2$	$(Y - \hat{Y})^2$
1	48	51	49.459973	130.3410	2.3717
2	50	52	51.146644	108.5076	0.7282
3	51	55.25	51.989979	51.3616	10.6277
4	52	55	52.833314	55.0074	4.6945
5	56	57.5	56.206654	24.1739	1.6727
6	57	56	57.049989	41.1740	1.1025
7	59	60.75	58.736659	2.7779	4.0535
8	60	57.75	59.579994	21.7781	3.3489
9	61	60	60.423329	5.8404	0.1792
10	62	58	61.266664	19.5072	10.6711
11	63	60.25	62.109999	4.6946	3.4596
12	64	58.75	62.953334	13.4447	17.6680
13	64	60.5	62.953334	3.6737	6.0189
14	64	61.75	62.953334	0.4445	1.4480
15	65	61.75	63.796669	0.4445	4.1889
16	65	61.75	63.796669	0.4445	4.1889
17	65	62.75	63.796669	0.1111	1.0955
18	65	62.75	63.796669	0.1111	1.9955
19	65	64.25	63.796669	3.3610	0.2055
20	66	64.25	64.640004	3.3610	0.1521
21	66	64.5	64.640004	4.3401	0.0196
22	67	62.25	65.483339	0.0278	10.4545
23	67	63.25	65.483339	0.6944	4.9778
24	67	65.25	65.483339	8.0276	0.0545
25	67	65.25	65.483339	8.0276	0.0545
26	68	65.5	66.326674	9.5067	0.6834
27	68	65.75	66.326674	11.1109	0.3326
28	68	67.5	66.326674	25.8399	1.3767
29	68	71	66.326674	73.6730	21.8400
30	69	70.5	67.170009	65.3397	11.0888
31	70	69	68.01344	43.3398	0.9735
32	72	71.75	69.700014	87.1105	4.2024
33	72	76.25	69.700014	191.3602	42.9023
Total	$\sum X = 2091$	$\sum Y = 2059.75$		$\sum 1018.95815$	$\sum 177.94143$
	$\sum X^2 = 4372281$	$\bar{Y} = 62.4267$			
	$(\sum X)^2 = 133715$				
	$\sum XY = 131543.5$				

$\hat{Y} = bx+a$ - regression line equation

$$\sum Y = Na + b\sum x$$

$$\sum xY = a\sum x + b\sum x^2$$

$$63.36364x(2059.75 = 33a + 2091b)$$

$$131543.5 = 2091a + 133715b$$

$$130513.2575 = 2091a + 132493.3712b$$

$$- 131543.5 = 2091a + 133715b$$

$$-1030.2425 = 1221.6288b$$

$$1221.6288 \quad 1221.6288$$

$$b = 0.84333$$

$$a = ? \quad 2059,75 = 33a + 2091 \times 0.843335$$

$$33a = 2059.75 - 1763.413485$$

$$33a = 296.336515$$

$$-33 \quad -33$$

$$a = 8.979894$$

$\hat{Y} = 0.843335x + 8.979894$ - the regression line

$$SS_{reg} = SST - SS_{res}$$

$$= 1018.95815 - 177.94143$$

$$= 841.01672$$

F - test

$$\frac{0.825}{1}$$

$$1$$

$$r^2 = \frac{SS_{reg}}{SST} = \frac{841.01672}{1018.95815}$$

$$= 0.82537$$

$$F = \frac{(1-0.825)}{33-1-1}$$

$$= 146.14$$

The regression of Y on X (i.e. the effect of attitude on classroom performance)

No.	Awareness score X	Class Performance score Y		$(Y - \bar{y})^2$	$(Y - \hat{y})^2$
1	90	51	53.1597	130.3410	4.6643
2	93	52	54.42201	108.5076	5.8661
3	94	55.25	54.84278	51.3616	0.1658
4	98	55	56.52586	55.0074	2.3283
5	100	57.5	57.3674	24.1739	0.0176
6	101	56	57.78817	41.1740	3.1976
7	101	64.25	57.78817	3.3610	41.7553
8	102	63.25	58.20894	0.6944	25.4123
9	104	60.75	59.05048	2.7779	2.8885
10	105	65.25	59.47125	8.0276	33.3940
11	106	57.75	59.89202	21.7781	4.5883
12	107	62.75	60.31279	0.1111	5.9400
13	108	60	60.73356	5.8404	0.5381
14	109	58	61.15433	19.5072	9.9498
15	112	60.25	62.41664	4.6946	4.6943
16	113	58.75	62.83741	13.4447	16.7069
17	114	60.5	63.25818	3.6737	7.6076
18	115	61.75	63.67895	0.4445	3.7209
19	115	61.75	63.67895	0.4445	3.7209
20	115	61.75	63.67895	0.4445	3.7209
21	115	62.75	63.67895	0.1111	0.8630
22	115	70.5	63.67895	65.3397	46.5267
23	116	64.25	64.09972	3.3610	0.0226
24	116	64.25	64.09972	4.3401	0.1602
25	118	62.25	64.94126	0.0278	7.2429
26	119	65.25	65.36203	8.0276	0.0126
27	122	65.5	66.62434	9.50674	1.2641
28	122	65.75	66.62434	11.1109	0.7645
29	123	67.5	67.04511	25.8399	0.2069
30	123	71	67.04511	73.6730	15.6412
31	131	69	70.41127	43.3398	1.9917
32	134	71.75	71.67358	87.1105	0.0058
33	140	76.25	74.1982	191.3602	4.2099
Total	$\sum X = 3696$	$\sum Y = 2059.75$		$\sum = 1018.9583$	$\sum 259.7892$
	$(\sum X)^2 = 13660416$	$\bar{Y} = 62.4167$			
	$\sum X^2 = 418240$				
	$\sum XY = 232496.25$				

$$\hat{Y} = bx + a \text{ - regression line equation}$$

$$\sum Y = Na + b\sum x$$

$$\sum xY = a\sum x + b\sum x^2$$

$$112 \times (2059.75 = 33a + 3696b)$$

$$232496.25 = 3696a + 418240b$$

$$\begin{array}{r} 230692 = \cancel{3696}a + 413952b \\ - 232496.25 = \cancel{3696}a + 418240b \end{array}$$

$$\frac{1804.25}{21288} = \frac{4288b}{4288}$$

$$\frac{1804.25}{21288} = b$$

$$b = 0.42077$$

$$a = ?$$

$$230692 = 3696a + 413952 \times 0.42077$$

$$230692 = 3696a + 174178.583$$

$$3696a = 230692 - 174178.583$$

$$\frac{\cancel{3696}a}{\cancel{3696}} = \frac{53513.41696}{\cancel{3696}}$$

$$a = 15.2904$$

$$\hat{Y} = 0.42077x + 15.2904 \text{ - the regression line}$$

$$SS_{reg} = SST - SS_{res}$$

$$= 1018.9583 - 259.7892$$

$$= 759.1691$$

$$F\text{-test}$$

$$\frac{0.745}{1}$$

$$F = 1$$

$$r^2 = \frac{SS_{reg}}{SST} = \frac{759.1691}{1018.9583}$$

$$= 0.745$$

$$\frac{(1 - 0.745)}{33 - 1 - 1}$$

$$= 90.59$$

Appendix I

Extent of awareness of teacher trainers from the point of view their teaching experience.

$$\begin{aligned} \chi^2 &= \frac{\sum(O_i - E_i)^2}{E_i} = \frac{(10 - 10.667)^2}{10.667} = 0.04171 \\ &= 0.04171 + 0.08342 + 0.03926 + 0.07851 \\ &= 0.2429 \end{aligned}$$

The attitude of teacher trainers from the point of view of their teaching experience.

$$\begin{aligned} \chi^2 &= 0.0044 + 0.006 + 0.00411 + 0.0056 \\ &= 0.0203 \end{aligned}$$

The classroom performance of the teacher trainers from the point of view of their teaching experience and qualification.

$$\bar{X}_1 - \bar{X}_2$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left[\frac{1}{n_1} + \frac{1}{n_2} \right]}}$$

Experience

$$\begin{aligned} t &= \frac{62.33 - 62.62}{\sqrt{\frac{(16 - 1) \times 47.88644 + (17 - 1) \times 19.1844}{16 + 17 - 2} \left[\frac{1}{16} + \frac{1}{17} \right]}} \\ &= 0.1447 \end{aligned}$$

Qualification

$$\begin{aligned} t &= \frac{60.48 - 63.84}{\sqrt{\frac{(11 - 1) \times 21.7156 + (22 - 1) \times 33.4025}{11 + 22 - 2} \left[\frac{1}{11} + \frac{1}{12} \right]}} \\ &= 1.634 \end{aligned}$$

Classroom performance of teacher trainers between high awareness and low awareness group.

$$t = \frac{58 - 66.57353}{\sqrt{\frac{(16 - 1) \times 11.433 + (17 - 1) \times 15.09973}{16 + 17 - 2} \left[\frac{1}{16} + \frac{1}{17} \right]}}$$

$$= 6.743$$

Between High attitude group and Low attitude

$$t = \frac{58.609357 - 66}{\sqrt{\frac{(16 - 1) \times 17.258 + (17 - 1) \times 19.36872}{16 + 17 - 2} \left[\frac{1}{16} + \frac{1}{17} \right]}}$$

$$= 4.954$$

Attitude of teacher trainers between high awareness and low awareness group

$$t = \frac{105.4375 - 118.177}{\sqrt{\frac{(16 - 1) \times 73.196 + (17 - 1) \times 115.78}{16 + 17 - 2} \left[\frac{1}{16} + \frac{1}{17} \right]}}$$

$$= 3.749$$

Appendix J

The correlation between awareness and classroom performance when the influence of attitude is held constant.

X_1 = awareness, X_2 = Attitude, Y = Classroom performance

$$r_{yx_1.x_2} = \frac{r_{yx_1} - r_{yx_2} r_{x_1x_2}}{\sqrt{(1 - r_{yx_2}^2)(1 - r_{x_1x_2}^2)}}$$

$$= \frac{0.9234 - 0.8632 \times 0.8537}{\sqrt{(1 - (0.8632)^2)(1 - (0.8537)^2)}}$$

$$= 0.70933$$

Test of significance

$$t = \frac{r}{\sqrt{1 - r^2}} \times \sqrt{n - 2 - v} = \frac{0.70933 \times \sqrt{33 - 2 - 1}}{(1 - (0.70533)^2)}$$

$$= 5.512$$

Coefficient of determination (r^2)

$$r^2 = 0.5031 \quad \text{F - test}$$

$$F = \frac{r^2/k}{(1 - r^2)(N - k - 1)} = \frac{\frac{0.50315}{1}}{(1 - 0.50315) \frac{33 - 1 - 1}{1}}$$

$$= 31.39$$

Between attitude and classroom performance, their awareness controlled

$$r_{yx_2.x_1} = \frac{0.8632 - 0.9232 \times 0.8537}{(1 - (0.9234)^2)(1 - (0.8537)^2)}$$

$$= 0.37467$$

$$t = \frac{0.375}{\sqrt{1 - (0.375)^2}} \times \sqrt{33 - 2 - 1}, \quad r^2 = 0.141$$

$$= 2.78$$

$$F = \frac{0.141}{1} = \frac{(1 - 0.141)}{33 - 1 - 1}$$

$$= 5.1$$

The effect of awareness on classroom performance, the influence of attitude is controlled.

Partial regression coefficient, b_1 and b_2 , when standardized β_1 and β_2

$$b_1 = \frac{(S_y)}{(S_{x_1})} \times \frac{r_{yx_1} - r_{yx_2} r_{x_1x_2}}{1 - r_{x_1x_2}^2}$$

$$= \frac{5.6429}{6.1787} \times \frac{0.9234 - 0.8632 \times 0.8537}{1 - (0.8537)^2}$$

$$= 0.6281$$

$$\beta_1 = \left[\frac{S_{x_1}}{S_y} \right] b_1 = \frac{6.178}{5.6426} \times 0.6281$$

$$= 0.6877$$

$$b_2 = \left[\frac{S_y}{S_{x_2}} \right] \times \frac{r_{yx_2} - r_{yx_1} r_{x_1x_2}}{1 - r_{x_1x_2}^2}$$

$$= \frac{5.6429}{11.5758} \times \frac{0.8632 - 0.9234 \times 0.8537}{1 - (0.8537)^2}$$

$$= 0.1346$$

$$\beta_2 = \left[\frac{S_{x_2}}{S_y} \right] b_2 = \frac{11.5758}{5.649} \times 0.1346$$

$$= 0.2761$$

Appendix K

The correlation of awareness and attitude jointly with classroom performance

x_1 = awareness , x_2 = attitude, y = classroom performance

$$\begin{aligned}
 R_{y. x_1x_2} &= \sqrt{\frac{r^2_{yx_1} + r^2_{yx_2} - 2r_{yx_1} \cdot r_{yx_2} \cdot r_{x_1x_2}}{1 - r^2_{x_1x_2}}} \\
 &= \sqrt{\frac{((0.9234)^2 + (0.8632)^2) - (2 \times 0.9234 \times 0.8632 \times 0.8537)}{1 - (0.8537)^2}} \\
 &= 0.9345
 \end{aligned}$$

Test of significance

$$\begin{aligned}
 F &= \frac{R^2/k}{(1 - R^2)/(N - k - 1)} = \frac{(0.9345)^2}{2} \\
 &= 103.381
 \end{aligned}$$

The joint effect of awareness and attitude on classroom performance.

$\hat{Y} = a + b_1x_1 + b_2x_2$ - regression line equation

$$\begin{aligned}
 \Sigma y^2 &= \Sigma Y^2 - \frac{(\Sigma Y)^2}{n} & \Sigma x_1^2 &= 133715 - \frac{4372281}{33} \\
 &= 129581.6875 - \frac{4242570.063}{33} & &= 1221.636364 \\
 &= 1018.95838
 \end{aligned}$$

$$\begin{aligned}
 \Sigma x_2^2 &= 518240 - \frac{13660416}{33} \\
 &= 4288
 \end{aligned}$$

$$\begin{aligned}
 \Sigma x_1y &= \Sigma x_1Y - \frac{(\Sigma x_1)(\Sigma Y)}{n} , \Sigma x_2y &= 232496.25 - \frac{3696 \times 2059.75}{33} \\
 &= 1030.25 & &= 1804.25
 \end{aligned}$$

$$\sum x_1 x_2 = \sum X_1 X_2 - \frac{(\sum X_1)(\sum X_2)}{n}$$

$$S_y^2 = \frac{\sum Y^2}{n-1} = \frac{1018.958418}{33-1}$$

$$= 31.84245$$

$$= 236146 - \frac{2091 \times 3696}{33}$$

$$= 1954$$

$$S^2_{x_1} = \frac{1221.636364}{32}$$

$$= 38.1761$$

$$S^2_{x_2} = \frac{4288}{32}$$

$$= 134$$

$$b_1 = \frac{(\sum x_2^2)(\sum x_1 y) - (\sum x_1 x_2)(\sum 2y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2}$$

$$= \frac{(4288 \times 1030.25) - (1954 \times 1804.25)}{(1221.636364 \times 4288) - (1954)^2}$$

$$= 0.6282$$

$$b_2 = \frac{(\sum x_1^2)(\sum x_2 y) - (\sum x_1 x_2)(\sum x_1 y)}{(\sum x_1^2)(\sum x_2^2) - (\sum x_1 x_2)^2}$$

$$= \frac{(1221.6364 \times 1804.25) - (1954 \times 1030.25)}{(1221.6364 \times 4288) - (1954)^2}$$

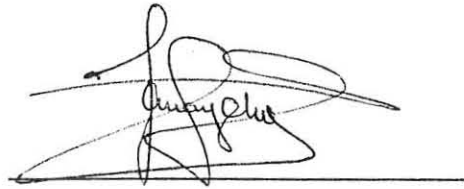
$$= 0.1345$$

$$a = \bar{Y} - b_1 \bar{X}_1 - b_2 \bar{X}_2 = 62.4167 - 0.6282 \times 63.364 - 0.1345 \times 112$$

$$= 7.5474 \Rightarrow \hat{Y} = 0.6282x_1 + 0.1345x_2 + 7.5474 \rightarrow \text{regression line}$$

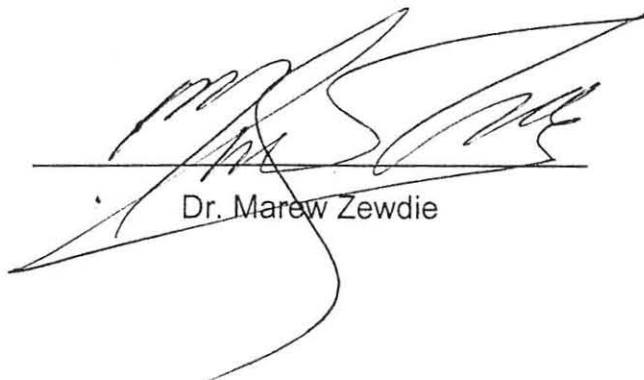
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university and that all source of materials used for the thesis have been dully acknowledged.

A handwritten signature in black ink, appearing to read 'Alemayehu Belachew', is written over a horizontal line.

Alemayehu Belachew

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

A handwritten signature in black ink, appearing to read 'Dr. Marew Zewdie', is written over a horizontal line.

Dr. Marew Zewdie