Curriculum Change and Teacher Participation: A Comparative Study in Adventist Secondary Schools in Uganda and Tanzania

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Abstract

This study attempted to explore curriculum change and teacher participation in terms of frequency, significance, and preparedness in Ugandan and Tanzanian Adventist Secondary Schools. Convenient sampling established 130 teachers who filled the questionnaire. Descriptive statistics established mean scores for teachers' attitudes while t-test determined differences. Expert judgment validated research instrument and acceptable reliability was established through SPSS. The study establishes that teachers regard curriculum changes important for school operations but they are not comfortable with modalities of curriculum change. Changes are introduced before sufficient time elapse and thus teachers are not comfortable with the pace. There is lack of teacher preparedness for curriculum changes due to absence of seminars and workshop. The rate of teacher involvement in both countries is very low and channels to air out their views are not clear. The study recommends that changes should be introduced after sufficient time elapses. Administrators in Adventist education systems need to increase the rate of teachers' involvement in curriculum changes and organize for frequent seminars and workshops before new changes are introduced.

Keywords: Curriculum Change, Teacher Participation, Teacher Preparedness, Adventist Secondary Schools, Uganda, Tanzania

1. Introduction

Curriculum has a number of definitions and its use depends on different circumstances. As argued by Kelly (2009, p. 9), "any definition of curriculum ... must offer much more than a statement about the knowledge-content or merely the subjects which schooling is to teach or transmit or deliver." The term curriculum in this paper, therefore, is viewed as "desired goals or set of values that can be activated through a development process culminating in experiences for students" (Wiles and Bondi, 2007 in McKernan, 2007, p. 11). With this definition, curriculum change becomes a broad issue that embraces modification of anything that touches the life of students, teachers and other education stakeholders. Thus, curriculum change is one of emerging issues in education systems.

Studies in curriculum change are necessitated by the fact that "education has changed drastically in the last twenty or thirty years. ... Many important modifications have been made to all aspects of education systems" (Kelly, 2009, p. 5). With these trends, therefore, curriculum change becomes an important endeavour that must exist for proper functioning of educational institutions. "Education system is a social institution which should be expected to change along with other such institutions. It would be more surprising ... if the education system were to stand still while all else changed (Kelly, 2009, p. 5).

D'souza (2007) argues that change must take place in any organization and nothing remains the same. Samuel Certo (1992) in Amagoshie-Viglo (2014, p. 94) contend that "change is the process of modifying an existing organization to increase effectiveness in the accomplishment of its strategic objectives." In an education point of view, it is a way through which new discoveries, new technologies and new approaches are incorporated in running educational institutions in a more appropriate manner. Ngussa and Makewa (2014) refer to curriculum change as a process of reforming, re-designing or re-structuring documents, content, experiences and activities which learners go through in day-to-day life in and out of school premises. They further consider it as educational endeavours to convey the image of starting anew, of changing not only content but also form, of shifting from thinking with the old order to inventing a new order that is found on new assumptions, values and vision. In this study, the term curriculum change is used inclusively to mean all types of changes in school settings.

While curriculum change is a necessary endeavour in education systems, its modalities have impact on how the changes will be received by education stakeholders. Teachers being important ingredients in school systems, the influence of their reaction toward curriculum changes cannot be ignored. Their involvement in change process is therefore highly anticipated if changes in question will benefit school's performance. It is teachers that spend more time with students than any other education stakeholder. It is teachers that bring educational policies, rules and regulations into practical application with the learners. Their preparedness for and participation in curriculum change is therefore very important.

Not much has been published on modalities of curriculum change in Adventist Secondary Schools in Uganda and Tanzania. A few related studies have looked into curriculum change in the countries separately, and not in Adventist Schools. Since Adventist Secondary Schools operate in an interconnected system, there is a need to compare modalities of curriculum change in different countries for further improvement. The present study, therefore, responds to this need. It investigates on curriculum change modalities using comparative research design. The study, particularly attempts to explore the perceptions of teachers on curriculum change in terms of participation, frequency, significance, and preparedness.

The present study attempts to answer the following research questions regarding curriculum change and teacher participation:

- 1. What are teacher's attitudes toward curriculum change in terms of frequency, significance, preparation and involvement?
- 2. Is there significant difference in curriculum change involvement by teachers categorized according to country?
- 3. Is there significant difference in curriculum change involvement by teachers categorized according to gender?

4. Is there significant difference in curriculum change preparedness by teachers categorized according to age?

2. Review of Related Literature and Studies

Review of related literature is organized into curriculum change variables that are used in this study. These are: Significance, frequency, preparedness and involvement.

2.1 Significance of Curriculum Change

Significance of curriculum change is brought to view by the fact that society is dynamic in nature. As we live in societies that experience daily changes, educational institutions, which are parts of societies, cannot remain the same. In view of this, Kelly (2009, p. 5) argues that "The nature and structure of our education system *must be* changing so extensively at a time when we have been experiencing social change of an equal dramatic kind, much of it prompted by rapid technological advance." Significance of Curriculum change is further brought to view by Amagoshie-Viglo (2014) who has it that "if an organization needs to be successful, it must change continually in response to significant developments such as public expectations, technological breakthrough, and governmental regulations." This implies that changes must exist in school systems in order to realize success and reach intended objectives. Kelly (2009, p. 5) further argues that "education system must develop and respond appropriately not only to other changes in the society but also to our increasing understanding of the educational process which is the central concern of curriculum studies.

2.2 Frequency of Curriculum Change

Having discussed the significance of curriculum change, we need to see how frequent should curriculum change take place. Curriculum changes are determined by factors that come from the society to which the curriculum is serving. Therefore the needs, desires, appropriate assessment and instruction will drive the frequency of curriculum change. Bayer and Liston (1996) noted that the society and culture served by an educational community dictates the needs, obligations, and responsibilities expected of the educational programme, hence dictating the need for curriculum change.

D'Souza (2007, p. 379-380) contends that change has always been a part of human condition. Change must take place the difference is the pace in which the change takes place. He also gives a number of variables that make different organizations to expect rapid changes especially in this age of great science and technologies. Among others, these include: Technology in the form of production machines, mass media and computer; a more literate, critical and socially aware work force which is the result of education; trade union membership, research and development of new products; women liberation movements. Hall and Hord (2001) in Sowel (2005, pp. 194-195) contends that change is a process, not an event. It occurs over time, usually a period of time. They also give the following points that can be used to determine frequency of Curriculum Change:

Individuals must change before organizations change; Horizontal views of change are better than other views; Administrators must secure the necessary infrastructure changes and longterm resource support; Effective change must be accompanied by continuing communication, on-going training, on-site coaching, and time for implementation; school staff and leaders have key responsibilities for change but because school is part of a larger entity in the society it need to move with and be supported by other parts of the larger entity; change is a team effort that needs collaboration; change works best when it is facilitated well. This implies that change leaders must be well prepared; the school context influences the change process.

2.3 Preparedness for Curriculum Change

Teacher preparedness is an important factor in curriculum change processes. In view of this, Bishop (1985) states that curriculum implementation involves two main processes. First, changing the attitudes of educational stakeholders which include policy makers, administrators, supervisors, teachers, and any other group of stakeholders. Secondly it involves providing materials and administrative means to make curriculum implementation possible. This implies that teachers, the chief implementers of curriculum changes must be thoroughly prepared to receive and implement the changes in question.

Okello and Kagoire (1996) noted that successful implementation of the curriculum processes, requires sufficient supply of well trained teachers who are able to understand and undertake the educational responsibility. It therefore important to note that the training of the teacher is an important factor in curriculum change.

Importance of teachers' preparedness for curriculum change is in that change is a complex process which is associated with issues that touch people's norms, beliefs and culture (Chance and Chance, 2002). Unless teachers are prepared to receive changes, their participation in change implementation may not be effective. Henson (2010) considers curriculum change to be complex in nature and argues that many teachers have avoided meaningful involvement and advises that in order for changes to be effective they must begin with change of teachers' behaviour. That is, teachers must be prepared to accept changes in question.

2.4 Involvement in Curriculum Change

Many authors have addressed the issue of teacher participation in curriculum change, considering teachers to be the key persons. McNeil (2009), for instance, regards teachers as crucial makers of curriculum policy and not mere implementers. Miel (1945) noted the teachers' role in curriculum implementation and stated that, "A teacher is the most important person in curriculum implementation. Teachers implement the ideas and inspirations of the designer. Success of the curriculum therefore depends on the teacher". Okello and Kagoire (1996) state that we should be aware that adoption of a new curriculum plan requires support and significant commitment of the teachers.

Ornstein and Hunkins (2009) note that teachers occupy the central position in curriculum decision making. They decide which aspect of the curriculum, newly developed or ongoing, to implement or stress in a particular class. Teaches decide how much time to spend on developing basic or critical-thinking skills.

"In order to get teachers to use the new curriculum, it is recommended that the curriculum leaders first involve the teacher in the review, evaluation and exploration of the relevance of the new materials" (McNeil, 1981, p. 136). Henson (2010, p. 271) maintains that "transforming ineffective schools into effective schools requires teachers' involvement with

the total school, especially with curriculum matters." He further argues that when teachers participate in curriculum changes they gain power to convince their peers to accept and support the changes that are being introduced. Shulman (1986, 1987) in Sowel (2005, p. 27) considers teachers to possess the following characteristics that make them key factor in curriculum change: content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners and their characteristics, knowledge of educational contexts and knowledge of educational philosophies.

Henson (2010) argues that teachers must be initiators if intended changes need to be effective. Oliva in Ornstein and Hunkins (2009) argues that teachers are the primary group in curriculum development. Their role is to develop, implement, and evaluate curriculum. Amagoshie-Viglos (2014) recognises teachers as important ingredients in curriculum change process and asserts that if change needs to be successful, stakeholders must be part of the process and that they must be made to confess the need for change, taking it as their own obligation. Schwahn and Spady (1998, p. 45-47) in Henson (2010, p. 275) support this idea and give rules for effective change process in school settings: People don't change unless they share a compelling reason. People don't change unless they have ownership in the change. People don't change unless their leaders model that they are serious about the change. People are unlikely to change unless they have a concrete picture of what the change will look like for them personally. People cannot make a change or make it last unless they receive organizational support for the change.

Most important changes in schools have been unplanned and have been stimulated by external forces rather than from teachers (Henson, 2010). Lapan, S. D. and Hages, P. A. in Henson (2010, p. 180) have it that "very often in the education world change is imposed on, rather than initiated by, classroom teachers. This results into teachers' reluctance to embrace changes and the change processes.

3. Methodology of the Study

This section outlines research design, population and sampling procedure, validity of research instruments and data analysis procedures.

3.1 Research Design

This study employed survey research design. Ahuja (2003) describes survey research design as gathering research information about a large number of people by gathering data from a few of them or a process of collecting information about a larger group of people by using information from a few of them. Kothari (1985) describes survey design as concerned with hypotheses formulation and testing relationships of non-manipulated variables.

3.2 Population and Sampling Technique

The study was conducted in Adventist Secondary Schools in Uganda and Tanzania. Convenient sampling procedure was used to secure a total of 130 representative teachers who participated in filling the questionnaire. Seventy-four of these teachers were from Uganda while fifty-six were from Tanzania. Males were 95 while females were 35.

3.3 Validity and Reliability

Questionnaire was the only research instrument by which data was collected from respondents. Before actual data collection, expert judgment was employed through a critical look into the research questions and corresponding questionnaire items in order to ensure that questionnaire items provide useful information that respond to research questions. Experienced research experts looked at the content and format of the items, reading over the items in the instruments and commenting on each item that they felt does not measure the objectives of the study. Adjustments were done accordingly.

Reliability is defined as a measure of the degree to which a research instrument yields consistent results after repeated trials (Mugenda and Mugenda (2003). Reliability of research instrument was established through Statistical Package for Social Sciences (SPSS) as follows: Frequency (6.18), Significance (7.74), Preparation (7.09) and Involvement (6.95). Items that lowered reliability were removed from the system to raise the reliability.

3.4 Data Analysis Procedures

Quantitative approach was employed to determine mean scores and differences in four research questions. Both descriptive and inferential statistics were employed in data analysis. Descriptive statistics established mean scores of teachers' attitudes toward frequency, significance, preparation and involvement in curriculum change in response to the first research question. T-test analyzed research questions 2 to 4 to determine differences while Pearson product- moment co relational coefficient analyzed relationships in the 5th research question.

3.5 Data Gathering Procedures

Before the researchers went to the field for data collection, certain procedures were done. First, consultation with relevant authorities was made. Upon acceptance of the request, the researchers visited the schools, introduced themselves and were given permission by the headmasters to collect data from teachers in schools under investigation.

4. Analysis and Discussion of Findings

In this section results are presented, analysed and discussed in the light of existing literature. The purpose of this study was to investigate on curriculum change and teacher participation in Ugandan and Tanzanian Adventist Secondary Schools. The study sought to answer five research questions that guided this study.

Four of these research questions called for hypothesis testing using the Statistical Package for Social Sciences (SPSS). The mean scores of teachers' responses to the questionnaire items were interpreted in four response zones namely: 3.50-4.00 = Strongly Agreement, 2.50-3.49 = Agreement, 1.50-2.49 = Disagreement and 1.00-1.49 = Strongly Disagreement.

1. What are teacher's attitudes toward curriculum change in terms of frequency, significance, preparedness and involvement?

In order to determine the attitude of teachers toward curriculum change modalities, descriptive statistics were employed. Table 1 displays mean scores of teachers in different

dimensions of curriculum change namely frequency, significance, preparedness and involvement. The mean scores are arranged in a descending order:

•	Significance	of Curriculum Change	2.9123 (Agreement Zone)
•	Frequency of C	Curriculum Change	2.3823 (Disagreement Zone)
•	Preparedness f	or Curriculum Change	2.2582 (Disagreement Zone)
•	Involvement	in Curriculum Change	2.1742 (Disagreement Zone)

As far as the display of mean scores is concerned, teachers in Adventist Secondary Schools in Uganda and Tanzania agreed that curriculum changes are important in school operations. The teachers, however, showed disagreement with modalities of curriculum change in terms of frequency, preparedness and involvement:

The mean score of teachers in terms of frequency of Curriculum change appears within disagreement zone, implying that frequency for curriculum change is not favourable for teachers. This necessitated analysis of individual items for frequency of Curriculum Change variable as seen in Table 2 which also indicates that the mean score in all five items is below 2.49 meaning that frequency of curriculum change is not satisfactory. This implies that: changes are introduced before sufficient time elapses, trends of Curriculum Change does not consider time factor and that teachers are not comfortable with the pace of Curriculum Change.

The mean score of teachers in terms of Preparedness for Curriculum change appears within disagreement zone, implying that teachers are not prepared to receive Curriculum Changes. This necessitated analysis of individual items for Curriculum Change Preparedness variable as seen in Table 3 which also indicates that the mean score in all six items is below 2.49 meaning that teachers' preparedness for Curriculum Change is not satisfactory. This implies that teacher preparation is not considered before new changes are introduced and therefore modalities of teachers' preparation for Curriculum Change are not satisfactory. There are no seminars and workshops before new changes are introduced. As a result teachers are not ready to receive newly introduced changes and they are unaware when new changes are introduced.

The mean score of teachers in terms of involvement in Curriculum Change appears within disagreement zone, implying that teachers are not involved in Curriculum Change. This fact necessitated analysis of individual items for Curriculum Change involvement variable as seen in Table 4 which also indicates that the mean score in all five items is below 2.49 meaning that teachers' involvement in Curriculum Change is not satisfactory. Particularly, teachers are not involved in Curriculum Change plans and their voice for Curriculum Change is not heard; teachers do not determine what needs to be changed and channels for teachers to air out their views are not appropriate.

2. Is there significant difference in curriculum change involvement by teachers categorized according to country?

This research question called for testing of the following null hypothesis using t-test through Statistical Package for Social Sciences (SPSS):

There is no significant difference in curriculum change involvement by teachers categorized according to country.

As far as Group Statistics for Teachers' Involvement by country (in Table 5) is concerned, the mean score for both groups was below 2.49 implying lack of involvement. The teachers of Uganda seemed to have slightly higher mean score (2.2338) as compared to their Tanzanian counterparts (2.0955). Levene's Test for Equality of Variances in Table 6 produced the Sig. of .002. This leads us to opt for equal variance not assumed Sig. of .192, which is greater than the critical value (.005) leading us to accept the null hypothesis that there is no significant difference in curriculum change involvement by teachers categorized according to country, both groups lacking involvement in the processes of Curriculum change.

This calls for school administrators in both countries to increase the rate of teachers' involvement in curriculum changes. As argued by Oliva in Ornstein and Hunkins (2009) teachers are primary group in curriculum development. Amagoshie-Viglos (2014) also recognises teachers as important ingredients in curriculum change process and asserts that if change needs to be successful, stakeholders must be part of the process and that they must be made to confess the need for change, taking it as their own obligation.

3. Is there significant difference in curriculum change involvement by teachers categorized according to gender?

This research question called for testing of the following null hypothesis using t-test through Statistical Package for Social Sciences (SPSS):

There is no significant difference in curriculum change involvement by teachers categorized according to gender.

As far as Group Statistics for Teachers' Involvement by gender (Table 7) is concerned, the mean score for both groups was below 2.49 implying lack of involvement. Male teachers seemed to have slightly higher mean score (2.1879) as compared to their female counterparts (2.1371). Levene's Test for Equality of Variances in Table 8 produced the Sig. of .403. This leads us to opt for equal variance assumed Sig. of .649 which is greater than the critical value (.005). This leads us to accept the null hypothesis that there is no significant difference in curriculum change involvement by teachers categorized according to gender, both groups lacking involvement in the processes of Curriculum change. This implies that gender does not influence involvement of teachers in Curriculum Change.

4. Is there significant difference in curriculum change preparedness by teachers categorized according to age?

This research question called for testing of the following null hypothesis using t-test through Statistical Package for Social Sciences (SPSS):

There is no significant difference in curriculum change preparedness by teachers categorized according to age.

As far as Group Statistics for Teachers' Preparedness by age (Table 9) is concerned, the mean score for both groups was below 2.49 implying lack of preparedness. Teachers of above 40 years seemed to have slightly higher mean score (2.4133) than teachers of below 40 years (2.2300). Levene's Test for Equality of Variances in Table 10 produced the Sig. of .031. This leads us to opt for equal variance not assumed Sig. of .298 which is greater than the critical

value (.005). This leads us to accept the null hypothesis that there is no significant difference in curriculum change preparedness by teachers categorized according to age, both groups lacking preparedness for Curriculum change. This implies that age does not influence preparedness for Curriculum Change.

5. Summary, Conclusions and Recommendations

Based on findings of this study researchers come up with the following summary, conclusions and recommendations regarding curriculum change and teacher preparedness in the context of Adventist Secondary Schools:

5.1. Summary of the Study

- Teachers in Adventist Secondary Schools in Uganda and Tanzania regard curriculum changes as an important endeavour for school operations. Teachers, however, are not comfortable with modalities of curriculum change in terms of frequency, preparedness and involvement.
- Teachers in both countries are not involved in curriculum change processes; their voices are not heard due to the fact that channels to air out their views are not appropriate. Gender does not influence involvement of teachers in curriculum change processes.
- Changes are introduced before sufficient time elapses and therefore trends of curriculum change do not consider time factor. Thus, teachers are not comfortable with the pace of curriculum change.
- There is lack of teacher preparedness for curriculum changes due to absence of seminars and workshop. As a result, teachers are not ready to receive newly introduced changes and they are actually unaware when new changes are introduced.

5.2.Conclusions of the Study

Based on findings of this study researchers come up with the following conclusions regarding curriculum change and teacher preparedness in the context of Adventist Secondary Schools:

- 1. Teachers regard curriculum changes as an important endeavour for school operations but they are not comfortable with modalities of curriculum change in terms of frequency, teacher preparedness and involvement.
- 2. Changes are introduced before sufficient time elapses and therefore trends of Curriculum Change does not consider time factor. Thus, teachers are not comfortable with the pace of curriculum change.
- 3. Absence of seminars and workshop leads to lack of teacher preparedness for curriculum changes; thus, teachers are not ready to receive newly introduced changes and they are unaware when new changes are introduced.

4. Involvement of teachers in curriculum changes is so limited and channels for teachers to air out their views are not clear.

5.3 Recommendations of the Study

Based on findings of this study researchers come up with the following recommendations regarding curriculum change and teacher preparedness in the context of Adventist Secondary Schools:

- 1. Since teachers in Adventist Secondary Schools in Uganda and Tanzania regard curriculum changes as an important endeavour, there is need for school administrators to adjust modalities of curriculum change in terms of frequency, teacher preparedness and involvement to suit the needs of teachers.
- 2. Changes should be introduced after sufficient time elapses in order to make teachers comfortable with the pace of curriculum change.
- 3. Education administrators in Adventist church systems and school heads need to organize for frequent seminars and workshops before new changes are introduced in order to increase teacher preparedness for curriculum changes.
- 4. Schools need to increase the rate of teachers' involvement in curriculum changes. Teachers' voices should be heard and channels for them to air out their views should be made clear.
- 5. Since frequency of curriculum change correlates with preparedness and involvement, teachers should be well prepared and involved for changes to take place smoothly.

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Tables

	N	Minimum	Maximum	Mean	Std. Deviation
FREQUENCE	130	1.00	4.00	2.3823	.56821
SIGNIFICANCE	130	1.33	4.00	2.9123	.57608
PREPAREDNESS	130	1.00	4.00	2.2582	.58002
INVOLVEMENT	130	1.00	4.00	2.1742	.56039
Valid N (listwise)	130				

Table 1: Teachers' Attitude toward Curriculum Change

	N	Minimum	Maximum	Mean	Std. Deviation
Frequency of curriculum change is satisfactory	130	1.00	4.00	2.2769	.89802
Sufficient time elapses before new changes are introduced	129	1.00	4.00	2.4729	.81084
The most recent curriculum change was timely	129	1.00	4.00	2.4574	.82923

The trend of curriculum change considers time factor	126	1.00	4.00	2.4524	.92613
I am comfortable with the pace of curriculum change	130	1.00	4.00	2.2538	.92604
Valid N (listwise)	124				

Table 2: Descriptive Statistics for Frequency of Curriculum Change

	N	Minimum	Maximum	Mean	Std. Deviation
Teacher preparation is considered before new changes are introduced	130	1.00	4.00	2.3538	.95529
Modalities of teachers' preparation for curriculum change are satisfactory	125	1.00	4.00	2.1440	.68042
Teachers attend workshops before new changes are introduced	130	1.00	4.00	2.2462	.90701
Teachers are always ready to receive curriculum changes	129	1.00	4.00	2.4264	.76827
Teachers are aware when new changes are introduced	128	1.00	4.00	2.2578	.84412
The intensity of teachers' preparation for curriculum is satisfactory	130	1.00	4.00	2.1077	.79967
Valid N (listwise)	123				

Table 3: Descriptive Statistics for Curriculum Change Preparedness

	N	Minimum	Maximum	Mean	Std. Deviation
Teachers are involved in the process of curriculum change	130	1.00	4.00	2.1308	.82957
The rate of teachers' involvement is satisfactory	130	1.00	4.00	2.0538	.73991
Teachers' voice for curriculum change is heard	129	1.00	4.00	2.0775	.76661
Teachers determine what needs to be changed	126	1.00	4.00	2.2063	.90613
Channels for teachers to air out their views are appropriate	127	1.00	4.00	2.3780	.80602
Valid N (listwise)	122				

Table 4: Descriptive Statistics for Involvement

	In which country do you teach?	N		Mean	Std. Deviation	Std. Error Mean
INVOLVEMENT	Ugandan		74	2.2338	.43164	.05018
	Tanzanian		56	2.0955	.69153	.09241

Table 5: Group Statistics for Teachers Involvement by country

			Test for Variances		t-test for Equality of Means							
									95% Confidence Interval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper		
INVOLVE MENT	Equal variances assumed	10.414	.002	1.398	128	.165	.13825	.09889	05742	.33392		
	Equal variances not assumed			1.315	86.544	.192	.13825	.10515	07077	.34727		

Table 6: Independent Samples Test for Teachers' Involvement by Country

	What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
INVOLVEMENT	Male	95	2.1879	.59843	.06140
	Female	35	2.1371	.44661	.07549

Table 7: Group Statistics for Teachers' Involvement by Gender

		Equal	Test for lity of ances	t-test for Equality of Means						
						Sig. (2-	Mean Differen	Std. Error Differen	95% Confidence Interval of the Difference	
		F	Sig.	t	df	tailed)	ce	ce	Lower	Upper
INVOLVEM ENT	Equal variances assumed	.703	.403	.457	128	.649	.05075	.11115	16918	.27068
	Equal variances not assumed			.522	81.03	.603	.05075	.09731	14286	.24436

Table 8: Independent Samples Test for Teachers' Involvement by Gender

Group Statistics

		F			
	What is your age?	N	Mean	Std. Deviation	Std. Error Mean
PREPAREDNESS	Below 40	110	2.2300	.54696	.05215
	Above 40	20	2.4133	.73344	.16400

Table 9: Group Statistics for Teacher Preparedness by Age

		Levene's Equal Varia	ity of		t-test for Equality of Means						
						S: (2	Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Differenc e	Differenc e	Lower	Upper	
PREPARE DNESS	Equal variances assumed	4.731	.031	-1.304	128	.195	18333	.14061	46156	.09489	
	Equal variances not assumed			-1.065	22.99 6	.298	18333	.17210	53934	.17268	

Table 10: Independent Sample Test for Teacher's Preparedness by Age