# Teachers' Beliefs, Knowledge and Practice of Learner-Centered Approach in Schools of Ethiopia

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**Abstract:** The purpose of this study was to examine the beliefs teachers hold and the knowledge they have about learner-centered approach as well as the degree to which they practice it in classroom settings. It also aimed at investigating the effects of beliefs, knowledge, empowerment, class size, teaching load, and year of service on teachers' practice of learner-centered approach. The data were collected from 635 in-service teacher training program participants at Bahir Dar University, Education Faculty, who were teaching different subjects at middle and high schools in almost all parts of the country. The results revealed that the teachers tend to employ mostly the traditional teacher-centered approach of teaching. Regression analysis indicated that the three most prominent factors that contributed significantly to the variance in practice were learner-centered belief about learning, learner and teaching (Factor 1), knowledge, and instructional empowerment. In other words, teachers who had knowledge of this teaching approach, those who were empowered to have the freedom to choose their own instructional approaches, and those who had learner-centered beliefs tended to apply student-centered approach in their classrooms. This may have implication to teacher education institutes in that there is a need to incorporate learner-centered approach in their programs in the training of would-be-teachers.

## Introduction

Teachers' beliefs are important aspects in the educational process. The beliefs affect the ways they present their lessons to their students, the type of instructional methodologies they employ, and students' learning outcomes. Jonassen and Grabowski (1993: 19) stated that "learning outcomes are affected by the form of instruction. So, different instructional activities will differentially affect learning outcomes."

The idea that the form of teaching method adopted by teachers affects learning outcomes, motivation, and goal attainment of students was a concern for many prominent scientists such as Montessori, Dewey, Bruner, Piaget, Skinner, and Vygotsky. The ways

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by which students are taught either facilitates or slows down their motivation and readiness to learn, their attitudes to schools, and their academic performances as well as their future life-styles. The views, philosophies, values, and conceptions teachers have about the manner in which teaching-learning process should take place determine the nature of instructional methods they choose to present the lessons to their students, the ways they discipline the class, and the type and quality of interactions they make with their students.

In any setting of school system, teachers play a paramount role in student learning. No matter how good the curriculum may be and how well it is organized, and whether or not teaching materials are available, ultimately the quality of education rests mainly on the methodology of instruction employed by the teachers. McCombs and Whisler (1997: 2) stated, “curriculum and content are important but not exclusive factors in students’ desired motivation, learning, and achievement. What is as important as curriculum, content, and fundamental to the learning of curriculum and content, is attention to meeting individual leaner needs” mainly by the classroom teacher who is in charge of implementing the curriculum and influencing student learning.

Students differ in their competencies, aptitudes, interests, motives, personality traits, preferences, self-efficacy, and the way they construct meaning out of learning (Lambert and McCombs, 1998; Jonassen and Grabowski, 1993; Tan, 2001). Accordingly, teachers are expected to adopt their instructions to accommodate such differences among the learners in order to bolster learning rates and academic outcomes of students. A mere sharing or transmission of knowledge from the teacher to the students does not ensure and facilitate learning. Some six decades back, Montessori (1949), as quoted in McCluskey et al. (2001: 3), stated, “If education is always to be conceived along the same antiquated lines of a mere transmission of knowledge, there is little to be hoped from it in the bettering of man’s future.” In other words, an individual learns better and gets the most out of the total process of education, when education is

meaningful to him/her and he/she values learning, as well as when he/she actively participates in the learning process. Learning does not take place when the learner is a passive recipient of information presented by the teacher.

Studies carried out to investigate the role of students' active involvement in learning demonstrated that the learners' active involvement has a bearing on the level of motivation they possess, their perseverance, self-efficacy, and commitment to the task at hand which further enhances the degree of learning (Tan, 2001; McCombs and Whisler, 1997; Lambert and McCombs, 1998).

Lambert and McCombs (1998) stated that learning could be considered by students as meaningful if they see the relevance of it, i.e., the "why of learning". Researchers who adhere to the learner centered approach place the learner as the central point of the teaching-leaning process. Goldenberg (1991), as cited in Lambert and McCombs (1998), posited that when learning gives students the chance to actively engage in the process and when teachers allow them to see the relation between what they know and experienced, it encourages the development of creativity, inquisitiveness and motivated learning. An environment that operates interactively with the learner, instead of imposing pressure on him/her, can ignite interest in him/her. If students are encouraged and motivated, they become active processors of information during the teaching - learning processes (Shuell, 1986).

According to Lambert and McCombs (1998: 10):

> Learning is a constructive process that occurs best when what is being learned is relevant and meaningful to the learner and when the learner is actively engaged in creating his or her own knowledge and understanding by connecting what is being learned with prior knowledge and experience.

This description of learning represents the nature of learner-centered approach. In other words, when the learner is given the chance to actively engage in the learning process, learning becomes more meaningful and relevant to the learner. Learner-centered is defined as:

> The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners). (Emphasis from the source). (McCombs and Whisler, 1997: 9)

The above definition shows the dual focus that teachers should consider. The focuses are the learner and the learning process. Teachers are expected to help every student in their classrooms to be motivated and perform as much as possible. In this case, learners feel part of the school system and they feel they belong to the system. The above educators asserted that the traditional educational approach which focuses on teaching – transmission of knowledge and teacher-centered – failed to be successful in modern societies. Some of the problems of the traditional teaching approach identified by McCombs and Whisler (1997:37) include the following.

> High dropout rates,
> Low achievement by many poor students
> Low attendance by students who are at risk of failing
> Low student motivation to learn and or devaluation of learning,
> Student complaints that school is “boring”
> Student disrespect for adults and authority figures
> Violence in schools
> Apathy and disinterest on the part of many students

They reported that the implementation of learner-centered approach in schools has minimized many of the above problems. They maintained that "…the learner-centered model – with its combined focus on *leaning* and *learners* – provides a framework for increasing the likelihood of positive student experiences, resulting in increased student motivation, learning, and achievement as well as teacher satisfaction and excitement about reaching more students" (Emphasis from the source) (McCombs and Whisler, 1997: 39).

Teachers who emphasize the learner-centered approach assist their students to participate in decision making, encourage them to develop self-regulation skills, respect and appreciate their students, and make learning interesting to their students (McCombs, 2000, 2001; McCombs and Whisler, 1997).

According to McCombs and Whisler (1997), there are three areas of personal needs to be met in classroom settings by teachers. These are the needs to belong and feel supported, to have personal control and responsibility, and to demonstrate personal competence through challenging personal experiences. "Thus," they said, "the big benefits of the learner-centered model is that it addresses these needs of students, which, in turn, contributes to reducing students' feelings of alienation and boredom and their sense that what they are learning is irrelevant to personal and real-life issues" (p.40).

Similarly, other researchers indicated that learner- and learning-centered approach is characterized by cooperative, collaborative, and supportive culture, and it helps students and teachers to learn together (Barr and Tagg, 1995; Lambert and McCombs, 1998), which resulted in mutual understanding.

McCombs and Whisler stated that learner-centered beliefs about learners, learning and teaching represent the teachers' beliefs that students' personal, emotional and intellectual needs should be met and that learning and teaching should be geared towards this effect. These are beliefs held by teachers directed towards maximizing motivation and achievement by making students active participants in

the teaching-learning process. Teachers with these beliefs assume that students themselves construct meaning about their world when they are supported.

Summarizing the research studies, Thompson, Licklider, and Jungst (2003:1) underlined the importance of learner-centered approach as follows,

> The process of discovering what students are thinking, providing opportunities for them to examine and correct possible misconceptions, and providing situations that invite students to expand their thinking and building new knowledge is enhanced by students' active participation in guided and authentic collaborative exercises…. In addition to enhancing student learning, these approaches have also been shown to increase retention.

On the other hand, teachers with non-learner-centered beliefs about learners believe that students learn best if teachers present lessons and consider themselves the major sources of knowledge to their students. Teachers with non-learner-centered beliefs about learning assumed that learning is the process of transmitting information from the teachers to the learners. They dominate the class, talk much of the regular class time, and give little chance to the students to interact in class discussions.

From our previous discussions, we can make out that learner-centered model is a vital educational approach that should be practiced in schools. However, its effectiveness and proper implementation depend on a number of factors that mainly include teachers' beliefs, practices and knowledge about the approach.

It is not only the beliefs and knowledge teachers have about particular type of instruction that make them adopt any type of instruction, but also the "beliefs, practices, and working relationships among the teachers and students that make up the culture of the school" (Hargreaves, 1994: 255) and school related policies would affect the

day-to-day practices of teachers. In other words, teachers should have the opportunity or be empowered to exercise their pedagogical skills and knowledge. It is important to recognize that empowering teachers in making decision on choosing the contents, and employing the proper type of teaching approach they feel effective is one major condition for practicing the approach in classrooms.

Although learner-centered approach has been the center of attention for many educators elsewhere in the world, the researcher did not trace a single study on this same issue in Ethiopia. Hence, the aim of this study was to appraise the beliefs teachers hold about learner-centered approach following the criteria suggested by McCombs and Whisler (1997), the level of knowledge they possessed about this approach, the extent to which they practice it in classrooms, and the degree they were empowered to practice the approach.

The assumption is that teachers practice any new instructional method if they believe that it brings about the change they look for in their students, if they have the knowledge of it, and when they are given the freedom to practice it. As clearly spelt out in the Education and Training Policy of Ethiopia (1994), problem-solving teaching method is the major educational premise that teachers are expected to utilize. To do this, teachers should adhere to the principles of learner-centered approach. To realize such broad educational aim and improve the quality of education in the country, there need to be a shift from the traditional teacher-dominated teaching approach to learner-centered approach. Research should be in place to assess the beliefs and knowledge of teachers about learner-centered approach and the degree to which they practice it in classrooms. This research was carried out to do this task.

## Methods of the Study

### *Participants*

Participants in this study were teachers from around the country who have been teaching in middle and high schools and who were

attending Summer In-service Teacher Training Program of Bahir Dar University, Education Faculty. The total number of the participants (first to third year) was 786. During data collection, questionnaires were administered to those who were attending classes. This made their number to be 734. However, only 635 in-service teacher trainees (41 women, 594 men) provided usable and complete data.

*Data Collection Instruments*

A questionnaire consisting of five parts was used to gather the data from the participants. The first part dealt with some background information regarding years of teaching experiences, number of periods they had in the first and second semesters of the previous school year, and the minimum and maximum number of students in the classes they had been teaching in similar academic year. The other parts dealt with the following variables.

*Teachers' Beliefs about Learner-Centered Approach* - This measurement was adopted from McCombs and Whisler (1997). It was designed to gauge the beliefs teachers held about learner-centered approach. According to McCombs and Whisler (1997), teachers who favor this approach tend to concentrate on the social, emotional, physical and educational needs of their students. They also focus on communications and cooperation with their students. Contrary to this, teachers with non-learner-centered beliefs held assumptions that students need to adhere to the defined rules and regulations of the school or the classroom, focused "solely on building students' intellectual capacity, and ... on getting through the required curriculum" (McCombs and Whisler, 1997: 26).

This instrument had 35 items that were meant to measure three separate factors labeled by the designers as Factor 1 – Learner-centered beliefs about learners, learning and teaching; Factor 2 – Non-learner-centered beliefs about learners; and Factor 3– Non-learner-centered-approach about learning and teaching.

The last two factors were presumed to measure more or less the traditional or conventional views about learners, learning and teaching. Each item was scored on a 4 point scale ranging from 1 (strongly disagree) to 4 (strongly agree). Fourteen items, namely; 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 30, 32, 34, and 35, were used to measure Factor 1. Nine items (2, 5, 8, 11, 14, 17, 20, 23, and 26) were used to measure Factor 2, and the remaining items were included in the third Factor. The authors did not report the original scales' reliability indices, or did not indicate if they had determined them. The alpha coefficients found in this study were 0.80, 0.69, and 0.77 for the three Factors, respectively.

*Knowledge* - this instrument assessed teachers' knowledge of learner-centered approach. The participants were asked whether they had training related to leaner-centered approach in either teacher training colleges or other forums. Two items were constructed for this purpose and were scored on a yes–no options where "yes" was represented by 1 and "no" with 0. The $KR_{20}$ reliability estimate of this measure was 0.41.

*Practice* - This was another measure adopted from McCombs and Whistler (1997). The original instrument consisted of 25 items and was designed to evaluate the degree to which teachers practice learner-centered approach in their classrooms. In this study, however, 3 items (items 4, 8, and 13) were dropped because of their low item-total correlation indices. McCombs and Whisler did not indicate its reliability and presented it as a unidimensional measure. The alpha reliability of this 22-item questionnaire was found to be 0.91. The items were factor analyzed and four factors were extracted. Items 3, 6, 7, 10, 11, 12, 14, 15, 16, 17, 18, and 19 ($\alpha$ = 0.89) were loaded on one factor which was labeled as "Self-Regulation Skills"; items 5, 9, 21, 23, and 24 ($\alpha$ = 0.72) were loaded on another factor termed as "Emotional Support"; "Understanding of Students" was the third factor extracted and the items loaded on it were 20, 22 and 25 ($\alpha$ = 0.64), and items 1 and 2 were loaded on the last factor designated as "Appreciation" ($\alpha$ = 0.57). The teachers were asked to rate each item

on a four point verbal frequency scale (1= Almost never, 2=Sometimes, 3= Often, 4=Almost always) to indicate how often they practice it.

*Empowerment* - No matter how the teachers know what learner-centered approach is, and how important it may be to enhance student motivation and learning, and that they held such beliefs, they may not be in a position to practice it unless they are given the freedom to exercise their own authority in the selection and use of any form of instructional methodologies. Believing, therefore, that empowerment of teachers is an important element in practicing learner-centered approach, the researcher developed a 10-item instrument. The items were dichotomously scored with "yes – no" alternatives. The "yes" option was represented by 2, and "no" by 1. The estimated reliability coefficient was 0.68. Like practice items, these items were factor analyzed to examine whether the instrument was uni- or multidimensional measure. The results showed that it consisted of three factors which were termed as "Instructional Empowerment" (items 1, 2, 3, 8, 9, and 10), "Decision–making involvement" (item 5) and "Curriculum Design Involvement (items 6 and 7). The reliabilities of the first and the third factors were 0.68 and 0.39, respectively. As reliability depends largely on item and score variances, it may not be surprising to find such relatively low reliability index, given the limited number of items with limited number of options, and large number of participants.

*Data Analysis*

To determine the relationships between the variables treated in the study, Pearson Product Moment Correlation Coefficient was employed. Multiple regression was computed to examine the relative contributions teachers' background variables, beliefs, knowledge and empowerment had to the variance in teachers' practice of learner-centered approach. Factor analysis was used to inspect whether practice and empowerment were uni- or multidimensional variables. To compare the mean scores of this study with the validating means of teachers' belief scores of McCombs and Whisler (1997), t-tests

were calculated. Descriptive statistics like means and standard deviations were also determined.

Because of the large size of the sample and sensitivity to such problem of correlation coefficients, the level of significance was set at alpha 0.01.

## Results

The first set of the analysis focused on determining the means and standard deviations of the subjects on the variables treated in this study. The results are presented in Table 1.

**Table 1: Means and Standard Deviations of the Variables Treated in the Study (n = 635)**

| Variables | Minimum | Maximum | Mean | SD |
|---|---|---|---|---|
| Factor 1 | 17 | 55 | 45.23 | 6.78 |
| Factor 2 | 12 | 33 | 22.44 | 3.79 |
| Factor 3 | 13 | 48 | 38.63 | 6.12 |
| Practice | 26 | 88 | 67.18 | 10.76 |
| Self-Regulation Skills | 15 | 48 | 36.30 | 6.67 |
| Emotional Support | 5 | 20 | 16.72 | 2.58 |
| Appreciation | 2 | 8 | 5.87 | 1.38 |
| Understanding | 3 | 12 | 8.30 | 1.98 |
| Empowerment | 10 | 20 | 14.69 | 2.38 |
| Instructional Empowerment | 7 | 14 | 10.42 | 2.02 |
| Decision-Making Involvement | 1 | 2 | 1.76 | 0.43 |
| Curriculum Design Involvement | 2 | 4 | 2.51 | 0.65 |
| Teaching Load | 2 | 44 | 22.01 | 6.05 |
| Class size | 15 | 120 | 74.21 | 16.24 |
| Knowledge | 0 | 2 | 0.98 | 0.78 |
| Years of teaching | 1 | 34 | 11.51 | 6.74 |

A comparison of the mean scores obtained in this study and those validating mean scores reported by McCombs and Whisler (1997) for the three Factors was made in Figure 1.

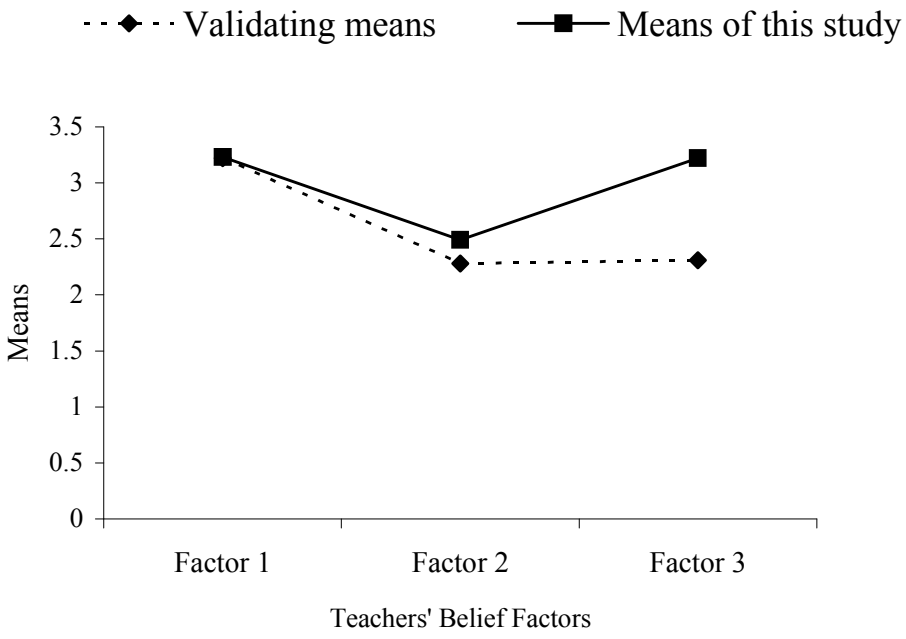


**Figure 1:** Comparison of the Obtained Means against the Validating Means of McCombs and Whisler

As displayed in Figure 1, there was convergence in the values of Factor 1. However, the obtained and the validating means for Factors 2 and 3 were significantly different from each other. The t-test values presented in Table 2 have also confirmed this significant variation.

**Table 2: Means, Standard Deviations and T-test Values of McCombs and Whisler against this Study**

| | McCombs and Whislers' | | Results of this Study | | |
|---|---|---|---|---|---|
| Variables | Means | SDs | Means | SDs | T-test Values |
| Factor 1 | 3.22 | 0.40 | 3.20 | 0.48 | 0.86 |
| Factor 2 | 2.28 | 0.56 | 2.49 | 0.42 | -7.85* |
| Factor 3 | 2.31 | 0.49 | 3.22 | 0.51 | -34.27* |

*p<0.0001

The correlations between teaches' belief factors, practice, knowledge, empowerment, teaching load, class size, and years of services are presented in Table 3. It is understandable from the results that teachers' practice of learner-centered approach correlated significantly with Factor 1 ($r = 0.351$, $p<0.001$) which was in the expected direction. Though the relationship between practice and Factor 3 was significant ($r = 0.283$, $p<0.001$), it was against expectations where teachers who value non-learner-centered approach practice mainly teacher-centered approach. That is, the direction of the correlation had to be negative. On the other hand, practice correlated significantly and positively ($r = 0.212$, $p<0.001$) with knowledge. This indicates that teachers who claimed that they have knowledge of this approach seem to practice it more often than those who did not have knowledge of it. Also related significantly with practice was Empowerment ($r = 0.179$, $p<0.001$), which was in the predicted direction. It is also interesting to note the correlation between years of experience and class size ($r = 0.197$, $p<0.001$).

Furthermore, the relation between years of service and Factor 3 ($r = -0.115$, $p<0.001$) showed that experienced teachers seem to have lesser degree of non-learner-centered beliefs about learning and teaching in comparison to the younger ones.

**Table 3: Correlations between the Variables of the Study**

| | Variables | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Teaching Load | - | | | | | | | |
| Practice | 0.090 | - | | | | | | |
| Knowledge | 0.050 | 0.212* | - | | | | | |
| Empowerment | 0.014 | 0.179* | 0.235* | - | | | | |
| Class size | 0.221* | 0.039 | 0.000 | -0.053 | - | | | |
| Factor 1 | 0.021 | 0.351* | 0.015 | 0.025 | 0.021 | - | | |
| Factor 2 | -0.012 | -0.094 | -0.060 | -0.056 | 0.022 | -0.036 | - | |
| Factor 3 | 0.020 | 0.283* | -0.034 | 0.050 | -0.008 | 0.727* | 0.104* | - |
| Years of Service | -0.091 | -0.081 | -0.092 | -0.131* | 0.195 | -0.062 | -0.004 | -0.115* |

*p<0.001.

Results from factor analyses of practice and empowerment items indicated that these two measures composed of some components. As presented in Table 4, 4 factors were extracted in the case of practice, which accounted for 51.46% of its total variance. The items loaded on each factor were with values greater that 0.50. The first component (designated as Self-Regulated Skills) explained the largest share of the variance (36.05 percent) and included 12 items. The second factor, labeled as Emotional Support, accounted for 5.74% and 5 items were loaded on it. The third and fourth components, termed respectively as understanding and appreciation, contributed 4.99 and 4.67 percents each to the total variance in practice. Principal component analysis with Oblimin rotation was used to extract the factors and those components with Eigen values greater than one were accepted.

**Table 4: Factor Loading of Practice Items**

| Item Numbers | Components | | | |
|---|---|---|---|---|
| | Self-Regulation Skills | Emotional Support | Appreciation | Understanding |
| 18 | 0.727 | | | |
| 17 | 0.724 | | | |
| 16 | 0.714 | | | |
| 14 | 0.710 | | | |
| 19 | 0.667 | | | |
| 6 | 0.649 | | | |
| 15 | 0.612 | | | |
| 7 | 0.593 | | | |
| 12 | 0.577 | | | |
| 11 | 0.567 | | | |
| 10 | 0.561 | | | |
| 3 | 0.551 | | | |
| 24 | | 0.793 | | |
| 21 | | 0.637 | | |
| 9 | | 0.626 | | |
| 23 | | 0.612 | | |
| 5 | | 0.502 | | |
| 1 | | | 0.812 | |
| 2 | | | 0.739 | |
| 25 | | | | 0.718 |
| 20 | | | | 0.605 |
| 22 | | | | 0.597 |
| Eigen values | 7.932 | 1.263 | 1.097 | 1.028 |
| Variance explained (%) | 36.054 | 5.740 | 4.986 | 4.674 |
| Total variance explained = 51.46% | | | | |

Similar statistical procedures were followed in the extraction of factors for Empowerment measure but without rotation. Accordingly, three factors, which explained 49.40% of the variance, were identified. The first factor called Instructional Empowerment accounted for 26.07% of the variance, and Curriculum Design and Decision-making

Involvement each explained 12.52% and 10.81% of the variance, respectively. The results are presented in Table 5.

**Table 5: Factor Loadings of Empowerment Items (unrotated)**

| | Components | | |
|---|---|---|---|
| Item Numbers | Instructional Empowerment | Curriculum design Involvement | Decision Making Involvement |
| 9 | 0.644 | | |
| 3 | 0.601 | | |
| 8 | 0.587 | | |
| 1 | 0.564 | | |
| 2 | 0.557 | | |
| 10 | 0.552 | | |
| 4 | 0.465 | | |
| 6 | | 0.767 | |
| 7 | | 0.663 | |
| 5 | | | 0.673 |
| Eugene values | 2.61 | 1.25 | 1.08 |
| Variance explained (%) | 26.07 | 12.52 | 10.81 |
| Total variance explained = 49.40% | | | |

Depending on the results of factor analysis, correlations between the components of Practice and empowerment, knowledge, and teachers' belief factors were determined. Among the components of empowerment, as presented in Table 6, it was only instructional empowerment (Inst.) that correlated positively and significantly with all Practice components.

The correlations between the components of practice and knowledge, and these components with teachers' belief factors (Factor 1 and Factor 3) were significant, in the case of Factor 3 in a negative direction. However, none of empowerment components related significantly to teachers' belief factors. One interesting and surprising result obtained was the correlation between Factor 1 and Factor 3

that was much stronger and higher than the rest of the correlation indices reported. Theoretically a high correlation is anticipated but in a reversed direction.

**Table 6: Correlations between Components of Practice and Empowerment, Knowledge and Teachers' Belief Factors**

| | Variables | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | SR | ES | AP | Und | Inst. | DM | CI | KG | F1 | F2 |
| Practice components | | | | | | | | | | |
| Self-Regulation (SR) | - | | | | | | | | | |
| Emotional Support (ES) | 0.670* | - | | | | | | | | |
| Appreciation (AP) | 0.498* | 0.467* | - | | | | | | | |
| Understanding (Und) | 0.593* | 0.522* | 0.380* | - | | | | | | |
| Empowerment Components | | | | | | | | | | |
| Instructional Empowerment (Inst) | 0.175* | 0.177* | 0.109* | 0.195* | - | | | | | |
| Decision-making (DM) | 0.004 | 0.032 | 0.031 | 0.033 | 0.278* | - | | | | |
| Curriculum Involvement (CI) | 0.019 | 0.002 | 0.018 | 0.019 | 0.176* | 0.127* | - | | | |
| Knowledge (KG) | 0.182* | 0.187* | 0.138* | 0.199* | 0.190* | 0.087 | 0.216* | - | | |
| Factor 1 (F1) | 0.326* | 0.338* | 0.280* | 0.170* | 0.034 | -0.015 | -0.005 | 0.015 | - | |
| Factor 2 (F2) | -0.092 | -0.099 | -0.035 | -0.050 | -0.067 | -0.008 | 0.008 | -0.060 | -0.036 | - |
| Factor 3 (F3) | 0.263* | 0.306* | 0.179* | 0.126* | 0.051 | 0.026 | 0.009 | -0.034 | 0.727* | 0.104 |

*p<0.0001

Moreover, the composite and independent contributions or predicative strengths of teachers' belief factors, empowerment, knowledge, class size, teaching load, and service years to practice of learner-centered approach were computed. A multiple regression was run to examine such effects. As presented in Table 7 in Step 1, the only factors that significantly contributed to the variance in practice were Factor 1 ($\beta$ = 0.277, t = 5.206, p<0.001), Factor 2 ($\beta$ = -0.076, t = -2.074, p<0.039), knowledge ($\beta$ = 0.172, t = 4.635, p<0.001), and empowerment ($\beta$ = 0.121, t = 3.238, p<0.001). The variables in the model jointly explained 19.5 % of the variance in practice ($R^2$= 0.195, corrected $R^2$ = 0.185). Further regression analysis was carried out after removing those variables that had no significant effects on practice, which was Step 2. The reduction in $R^2$ was not significant. The four factors made

up 18.5 % ($R^2$ = 0.185, corrected $R^2$ = 0.180). This time, however, the effect of Factor 2 on practice became non-significant. Dropping this variable from the equation eventually increased the amount of variance explained ($R^2$ = 0.189, corrected $R^2$ = 0.185).

**Table 7: Multiple Regression Analysis of the Variables Predicting Practice**

| Variables | Beta coefficients | | | |
|---|---|---|---|---|
| | Step 1 | Step 2 | Step 3 | Step 4 |
| Factor 1 | 0.277** | 0.343** | 0.341** | 0.343** |
| Factor 2 | -0.076* | -0.064 | | |
| Factor 3 | 0.085 | | | |
| Empowerment | 0.121** | 0.126** | | |
| Knowledge | 0.172** | 0.176** | 0.187** | 0.177** |
| Teaching Load | 0.061 | | | |
| Class size | 0.036 | | | |
| Years of Service | -0.024 | | | |
| Instructional Empowerment | | | 0.171** | 0.157** |
| Decision Making | | | -0.033 | |
| Curriculum Design | | | -0.047 | |
| R | 0.442** | 0.431** | 0.438** | 0.435** |
| $R^2$ | 0.195 | 0.185 | 0.192 | 0.189 |
| Corrected $R^2$ | 0.185 | 0.180 | 0.186 | 0.185 |

*p<0.05, **p<0.0001

Moreover, as shown in Step 3, instead of using the global empowerment measure, analysis was run by substituting it with its components. It was revealed that Instructional Empowerment ($\beta$ = 0.171, t = 4.486, p<0.001) was the only component of empowerment that had significant predictive capacity to teachers' practice of learner-centered approach. The end result of the analysis; i.e., Step 4, showed that the most important factors that had positive and significant effects on practice were knowledge, Factor 1 and instructional empowerment. These factors jointly accounted for about 19% ($R^2$=0.189, corrected $R^2$ = 0.185) of the variance in practice.

## Discussion

The major intent of this study was examining the level of teachers' beliefs about learner-centered approach and the extent to which they practice it as well as the knowledge they possess about this instructional approach. In addition, the degree of the influence of some teacher background variables, beliefs, empowerment and knowledge on practicing of learner-centered approach was investigated.

Following the criteria defined by McCombs and Whisler (1997), the results demonstrated that the teachers seem to favor the traditional or conventional teaching methodology, i.e., teacher-centered approach. It was clearly illustrated in Figure 1 that the teachers' mean score on Factor 3 was higher than a validating score set by McCombs and Whisler. According to them, teachers are said to have learner-centered beliefs when their means are above 3.40 on Factor 1 and below 2.00 on Factors 2 and 3; whereas, on the other hand, when teachers scored means below 2.8 on Factor 1 and above 2.4 on the other two factors, then they are assumed to have non-learner-centered beliefs. Therefore, these criteria were met, at least to a certain degree.

From everyday classroom observations and teaching traditions practiced in Ethiopian schools, it may not be a surprise to get such beliefs of teachers. As the culture is characterized by high degree of power where teachers are expected to be dominant and know "everything" (Hofstede, 1980, as quoted in Oettingen, 1995), teachers who present lesson in a more expressive way dominating the class, give notes to students, strictly manage the class, and tell the students what to do are mainly considered as effective teachers. A study conducted in Ethiopia has also shown that the society mainly values authoritarianism (Habtamu, 1998) which instills in the students a sense of conformity rather than creativity. Teachers are expected to be dominant figures to guide and control the students. The students themselves wait until they are told to do something, and expect a lot

from their teachers. Teachers determine what the students should learn, regardless of their preferences, interests, aptitudes and competencies, which has little benefit to them (McCombs and Whisler, 1997; Jonassen and Grabowski, 1993; Piaget, 1986; Dewey, 1922; Montessori, as cited in McCluskey et al. 2001; Tan 2001, Haury and Rillero, 1994). Students come to school with diverse interests, backgrounds, aptitudes, personality traits, preferences, and so on, and any teaching approach that teachers adopted impacts the learning qualities and outcomes of students (Jonassen and Grabowski, 1993; Tan, 2001; Lambert and McCombs, 1998).

Research has illustrated that for maximum learning to take place and for students to consider learning as something vital in their future life, they should actively participate in learning and construct their own meaning out of it (Bruner, 1961; Montessori, cited in McCluskey et al. 2001; McCombs and Whisler, 1997; Lambert and McCombs, 1998; McCombs, 2000, 2001). Students become underachievers not only because they lack the competence or the ability to do the task rather they may not value education for various reasons in which one could be the nature of the methodology that the teachers use in the presentation of their lessons (McCombs and Whisler, 1997).

In support of this statement, McCluskey et al. (2001) stated that students who have the intelligence or talents to do school tasks do not succeed because they perceived the educational curriculum as irrelevant, which consequently leads them to feel boredom, discouraged, and unproductive. Such consideration of the curriculum as irrelevant does not necessarily mean that the curriculum per se has a problem. Rather contrary to this, the nature of pedagogical skills and knowledge teachers lead to the development of such feelings (McCombs and Whisler, 1997). Peterson (1997), as cited in McCluskey et al. (2001:3) indicated, “the ‘tough bright’- those who don’t fit comfortably into the traditional education system-face a clear dearth of services.” This statement expounds the problem of teacher-centered approach. Unless students are encouraged to create their own ways of learning and derive meaning from their interaction with

the environment, their motivation to learn could decrease and the quality of education, which is expressed mainly through student achievement, deteriorates.

Moreover, the study assessed the degree to which teachers practice learner-centered model of teaching in classrooms based on self-report measures. The teachers reported that they practice it more often. The correctional and regression analyses revealed that teachers (See Tables 5, 6, and 7) who have reported higher levels of learner-centered beliefs, knowledge about it, and who have instructional empowerment adopt the approach more often than those whose beliefs were more of teacher-centered, who lack knowledge about learner-centered approach, as well as those who were not empowered to use any teaching approach they think is appropriate to present their lessons to their students.

It is more likely that teachers who believe that students should be encouraged to regulate their actions, emotionally supported, and be allowed to exercise their own talents and penchants tend to practice it more frequently than those who believed that students should be controlled and directed. Researchers argued that students become fully involved in a task when they have the volition to engage in the action unpressurized externally by others (Garcia, 1996; Deci, Ryan, and William, 1996; Zimmerman, 1990).

The results supported that knowledge was one key factor in the exercise of this approach. This implies that some mechanisms should be devised to incorporate learner-centered approach in the curricula of teacher training colleges and higher learning institutions to orient the would-be-teachers.

However, certain factors other than teachers' beliefs and knowledge impinge upon the practicing of learner-centered approach in schools. For instance, teachers who are empowered to use any form of teaching approach would be in a better position to exercise learner-centered approach than those who are deprived of this opportunity.

Moreover, although statistically not significant, the number of students in a classroom could detrimentally affect teachers' effort on whether or not they should use learner-centered approach. In schools where class size is a major problem; where, for example, there are 110 students in one class, it is practically impossible for teachers to use such approach. The problem becomes worse when it is coupled with high teaching load and teaching in different classes.

The researcher would like to caution readers that though learner-centered approach is said to be the most effective way of teaching-learning, it is not by any means the only best pedagogical method that maximizes learning and motivation of students. It may not be realistic or applicable in every course. The content, the context, and the level of the course determine its realization. Implementing learner-centered approach indicates the move towards the attainment of the goal of an integrated learning approach that focuses on both students and learning.

Finally, the researcher would like to emphasize that this study, though it included participants from all over the country, depended entirely on self-report measures wherein the researcher has little chance to verify the authenticity of teachers responses regarding the extent to which they practice learner-centered approach in classroom settings. It gives a baseline result for further studies to carry out a more focused and comprehensive research that makes use of interviews and classroom observations.

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