Pedagogical Research
2023, 8(4), em0170
e-ISSN: 2468-4929
https://www.pedagogicalresearch.com

MODESTUM

Research Article **OPEN ACCESS**

Teacher educators' views vis-à-vis their practices on facilitating learning to teach

Abayneh Ergogo Sullamo [1,2*], Enguday Ademe Mekonnen [1], Dawit Mekonnen Mihirete [1]

[1] Department of Curriculum and Instruction, Addis Ababa University, Addis Ababa, ETHIOPIA
[2] Hossana College of Teacher Education, Hosaena, ETHIOPIA
***Corresponding Author:** abayergosull@gmail.com

Citation: Sullamo, A. E., Mekonnen, E. A., & Mihirete, D. M. (2023). Teacher educators' views vis-à-vis their practices on facilitating learning to teach. *Pedagogical Research, 8*(4), em0170. https://doi.org/10.29333/pr/13477

ARTICLE INFO

Received: 04 Apr. 2023

Accepted: 04 Jun. 2023

ABSTRACT

To delineate a clear process for learning to teach and set a standard for effective teaching, detecting the link between teacher educators' views and their practices on facilitating learning to teach becomes imperative. This study examined this link by employing a qual→quan (exploratory sequential) mixed-methods design. By the instruments of questionnaires (234) and unstructured interviews (five), a total of 239 teacher educators teaching in three colleges participated in the study. Data were analyzed using thematic approaches, descriptive, and inferential techniques. The results revealed that in addition to the teacher educators' comparable views on learner-centered and teacher-led approaches, they heavily utilized the conventional teacher-led techniques. Furthermore, the significant and positive correlation between the teacher educators' views and practices were also found. Supplemental recommendations that were meant to aid in the execution of better teacher education pedagogy were made based on the views held and the practices of learning to teach that prevailed.

Keywords: learning to teach, pedagogical approaches, teacher education, views of learning

INTRODUCTION

Background of the Study

Teaching young people to be critical, creative, and independent thinkers who can question and participate in societal expectations or norms could possibly be the function of quality education (Biesta, 2015). Quality teaching greatly determines the quality of citizens, societies, and nations. As asserted by studies, the quality of a nation depends upon the quality of its citizens and the quality of its citizens depends not exclusively, but in a critical measure, upon the quality of their education, which in turn, is determined by the quality of their teacher" (OECD, 2009, 2012). In particular, the contribution of quality education becomes vital at the primary level; because studies confirmed that life experiences at the stage of primary education have enduring effects that are difficult to overcome in later stages of development (Asfaw, 2015; Egne, 2015). By implication, teaching potential teachers of this level to inspire rather than simply to talk about their conceptual and pedagogical knowledge of their subjects needs to ensure the proper views of learning to teach and also practicing accordingly.

Among the views or perspectives that avail contemporarily in the discourses of teacher education, applied science approach has been considered as a major aspect of the professionalization process that involves preparing teachers based on dominant theoretical knowledge, followed by microteaching accompanied by feedback on their use of the skills (Korthagen, 2016). However, it considers teachers as technicians. Applied science approach became prominent until replaced by the performance-based or competency-based (CBTE) model. CBTE was also called the "technical-rationality model" in which concrete, observable behavioral criteria could serve as a basis for the training of novices (Burke, 2005). A collection of disconnected courses presented with little connection to practice; the fact that a good teacher cannot be described solely in terms of isolated competencies; and its rigidity (Hunt et al., 2010) rendered it insufficient. Humanistic-based teacher education (HBTE), also known as teacher identity, is a model of teacher education in which the central role is reserved for personal growth and the dignity of the individual teacher (Rodgers & Scott, 2008).

To the need to clearly delineate a process for learning to teach and set a standard for effective teaching, a kind of model that emphasizes reflective teaching, known as the *realistic model*, was proposed (Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2006a; Weimer, 2006). According to this model, teacher development is conceptualized as an ongoing process of developing one's own insights into teaching through the interaction between personal reflection and theoretical notions under the guidance of an

expert. To connect learning with real-world issues, reflective teaching plays its greatest role in teacher preparation. Reflection is another element of the theme of pedagogical practical works, which is included in the arena of reasoning in pedagogy.

As stated by Hollins (2015), pedagogy has three approaches, which include behaviorist, constructivist, and liberationist. In behaviorist pedagogy, sometimes called traditionalist pedagogy, the teacher should be the sole authority figure, which results in the domestication and dehumanization of students and stimulates oppressive attitudes in society (Abda, 2017; Dewey in Tadesse, 2010). The constructivist, sometimes described as a progressive teaching style, is based on the notion that learners come ready to learn and the teacher must build activities to facilitate their learning. The third approach, liberationist, is a transformative pedagogy in which value is placed on having the teacher as a learner and the class discovering subjects together. It uses collaborative critical inquiry to enable students to analyze, interpret, and understand the social realities of their own lives and those of their communities in order to make useful, lasting changes (Egne, 2021).

Professional knowledge of teaching, also known as a knowledge base for teachers, is the knowledge required by teachers to help their students learn effectively. As Shulman and Shulman (2007) defined it, the knowledge base for teaching includes content (subject) knowledge, pedagogical skills, and pedagogical content knowledge, among the other categories. While content knowledge refers to the "what" of teaching or the knowledge of the subject matter of a specific field, pedagogical knowledge refers to the "how" of teaching and is a special reference to those broad principles and strategies of classroom management and organization of the subject matter. Similarly, pedagogical content knowledge is practical knowledge that represents the blending of content and pedagogy into an understanding of how particular topics are organized and adapted to the diverse interests and abilities of learners. While a lack of knowledge and skills may limit what teachers can do, having them does not guarantee their wise use (Feiman-Nemser, 2014). In other words, teachers must know not only what to teach but also how to teach topics in ways that learners can understand. According to some studies, PCK includes knowledge of general pedagogy, knowledge of the subject matter, knowledge of the students and any potential misconceptions, knowledge of curricula, and knowledge of environmental contexts like knowledge of technology. These studies criticize Shulman and Shulman's (2007) PCK conception as being compartmentalized and static and suggest additional notions of PCK (Cochran et al., 2014).

Statement of the Problem

As discussed above, teachers are the most important school-based factor influencing student learning (Barber & Mourshed, 2009; Hargreaves & Fullan, 2012; Mugambi, 2015; Strong, 2011). Teacher educators also influence student teachers' achievement, teaching effectiveness, teacher attrition, and school collegiality in schools (Barber & Mourshed, 2010; Chong & Ho, 2009; Danielson, 2007; Hargreaves & Fullan 2012; Hattie, 2008). Consequently it requires the teacher educators to have proper views of learning to teach and practice accordingly in their pedagogy.

In this regards, there is a move from the conventional theory-to-practice approach of teacher preparation to the integrated and reflective approach, known as the realistic approach (Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2006a). The former views have been criticized for being characterized by fragmented and weak pedagogy, lack of coherence among courses (and between courses) and field experiences, as well as scarce of a set of organizing themes, shared standards, and clear goals. Contrary, the later views conceptualized teacher development as an ongoing process of developing one's own insights into teaching through the interaction between personal reflection and theoretical notions under the guidance of an expert (Feiman-Nemser, 2008; Weimer, 2006; Zeichner, 2006). Studies serve as evidence that reasoning through reflection is crucial to the practice of education as a pedagogical strategy and a professional development tool to support teachers in acquiring higher order thinking ability to apply newly learned material to challenging classrooms (quality teaching) (Kuswandono, 2012). In this process, learners relate new knowledge to prior understanding, think in both abstract and conceptual terms, apply specific strategies to novel tasks, and understand their own thinking and learning strategies. It also provides learners with an opportunity to correct misconceptions and fill in gaps by helping them to think about what they are doing and why they are doing it, boosting critical thinking skills, encouraging them to think about their own thinking (meta-cognition), and helping students prepare for assignments and examinations (Melis et al., 2007). Above all, it helps to build a shared identity and collective intelligence garnered over time in a collective critical inquiry known as "communities of practice." Thus, teacher preparation needs to be viewed and also practiced from perspectives that consider learning to teach in an integrated approach rather than to stick on a single perspective. To put it in its shortest form, the realistic approach goes from practice to theory.

Consequently, while some teacher educators view teacher education pedagogy as a traditional theory-into-practice approach in which student-teachers learn the theory first and then apply it, others view knowledge as situated and strongly interwoven with experience and emotion (Korthagen et al., 2006). Some teacher education programs also incorporate a hybrid set of approaches as different components of the program, with the idea that the most important thing is the surfacing of assumptions and purposes for teacher education in order to build an informed conversation. On the other hand, teaching about teaching must make the pedagogical reasoning that underpins high-quality practice clear, explicit, and meaningful to teachers (Darling-Hammond, 2006b; Korthagen, 2016; Loughran, 2007). In essence, then, the pedagogy of teacher education illustrates the importance of moving beyond technicist views of the practice of teaching and making the tacit dimensions of knowledge of practice explicit and meaningful in learning about teaching (Loughran, 2007). Accordingly, the pedagogy of teacher education requires teacher educators to explicitly "unpack" for student-teachers the pedagogical expertise that allows examination of practice to push beyond the technical while still responding to the need to develop and display appropriate attitudes, knowledge, and skills for teaching itself.

Based on these perspectives of learning, views of learning to teach can be framed as either learner-centered or teacher-led learning, depending on the level of learners' choice, activeness, and use of power. The former, constructive or learner-centered approach calls for greater student engagement and opens up opportunities for students to participate in shaping their learning

experiences more fully and constructing their own knowledge structures. In the latter, behaviorist or teacher-led approach, the teacher should be the sole authority figure and lead the lesson (Pritchard & Woollard, 2010).

The government of Ethiopia has development vision of becoming the lower middle-income country by the year 2030 (Ministry of Education [MoE], 2018). Moreover, there is the education sector's aim of "teaching will be developed as a profession of choice" (MoE, 2015, p. 35). In this regard, quality-oriented teacher education of preparing expertise, capable of contributing to the development goal, becomes imperative. Despite the government efforts, education in Ethiopia in general and in the Southern Regions of Ethiopia in particular has been entangled with challenges of not only low quality of outcomes but also persistent high rates of dropout and repetition (Mekonnen, 2007, 2008; MoE, 2006, 2021; MoE & USAID, 2008; Negash, 2006). Other studies also characterized Ethiopian teacher education pedagogy as a conventional uninspired pedagogy (Abda, 2007; Gemeda & Tynjälä, 2015; Kassa, 2014; MoE, 2015; RTI International & MoE of Ethiopia, 2013; Tesfaye, 2014; Tessema, 2017). This, in turn, inevitably widens the gap between the teachers we train and the teachers we need. On the other hand, teachers' views and beliefs about pedagogy have a direct bearing on the implementation of their pedagogy. It is because our teaching approaches, strategies, and styles reflect our personal view and beliefs. According to Thomas R. Guskey, improvement or positive change in teachers' practice generally resulted after a significant change in teachers' attitudes and beliefs (Guskey, 2002). Other studies also advocate that our teaching perspectives and the consequent view of students' learning have a significant impact on the way we teach (Pratt, 2002) and improve students' learning (Clarke & Hollingsworth, 2002). This initiated the researchers to quest about teacher educators' pedagogical views and the related practices, as could be one of the reasons behind this kind of pedagogy. As a result of these situations and also since there is hardly any research (or discourse) on the views and practices of learning to teach in the colleges of the Southern Regions of Ethiopia, examining the teacher-educators' views and practices of pedagogy on learning to teach seems significantly found effective teacher educators' pedagogy.

Therefore, in an effort to rethink pedagogy for effective learning to teach, this study attempted to examine teacher educators' views and their practice on how to learn to teach with the intention of gaining insight into beliefs that are held or developed. More specifically, the study considered how teacher educators conceptualize teaching in the colleges of teacher education and what instructional techniques (strategies) they employ when they prepare teachers. Moreover, it is concerned with identifying whether there is any statistically significant relationship between teacher educators' views and their teaching practices.

Objective of the Study

In an effort to rethink pedagogy for effective learning to teach, this study attempted to examine teacher educators' views as well as practice that threats facilitating learning to teach with the intention to have an insight into opinions that are held or developed. Accordingly, this study considered the following research questions:

1. How is learning to teach viewed by the teacher educators in the colleges of the southern regions?
2. What teaching strategies and methods do the teacher educators use in their teaching?
3. How well are the views of learning to teach and the teaching strategies interrelated?

MATERIALS AND METHODS

In this study a qual→quan exploratory sequential mixed methods design, grounded in a pragmatic paradigm, was employed as illustrated in **Figure 1**. This design was chosen since it gives broader perspectives and a fuller account to investigate (Ary et al., 2010; Creswell, 2012). In addition to their independent best advantages, such mixed methods help to expand the scope and breadth of research in a better way by reducing the limitations of single methods and offsetting the weaknesses of either approach alone (synergy) (Driscoll et al., 2007). From three selected colleges by cluster sampling among five colleges found in the southern regions of Ethiopia, 234 teacher educators were selected using stratified random sampling for the survey of questionnaires. Besides, five teacher educators were selected purposively for interviews. While the qualitative data were analyzed thematically, both descriptive as well as inferential analysis techniques were used for the quantitative data. Questionnaires of both open-ended and closed-ended items as well as unstructured interviews were the instruments of the study. Open-ended items were used to gather data from respondents' full freedom to express their opinions. On the other hand, the close-ended items were prepared on a Likert scale of five options ranging from "strongly disagree" (1) to "strongly agree" (5) for views of learning to teach of the teacher educators as well as from "never" (1) to "very often" (5) for practice on learning to teach of the teacher educators.

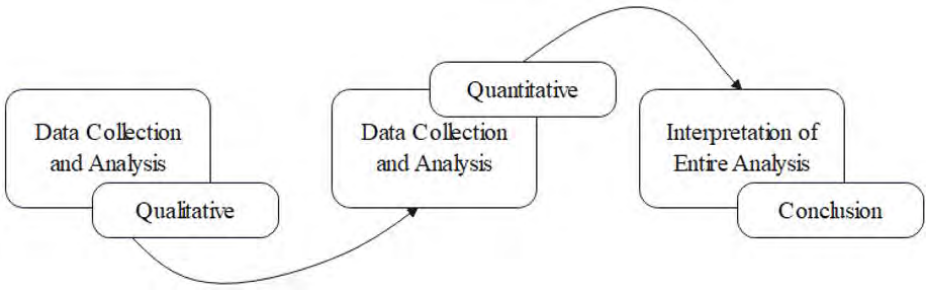

Figure 1. A framework of data collection & analysis for the study (Source: Authors' own elaboration)

Cronbach's alpha of 0.824 was tested to ensure the internal consistency between items, which meant that the internal consistency between items in the scale was quite high enough to judge the instrument as reliable for the study (Orodho, 2012). Item reliability statistics were also calculated and found the least 0.794, indicating the items were quite reliable. The data gathered through interviews and open-ended questions of the questionnaires were analyzed and interpreted independently using a thematic approach. Presumably, it is suitable to analyze data associated with discernible patterns inherent within participants' experiences, views, conceptions, and intentions as expressed in verbal and written data (Braun & Clarke, 2006). For the quantitative analysis, the data was summarized and presented by using descriptive statistics such as percentages and inferential analysis like Chi-square test to investigate whether the significant difference exists between the views of the learning to teach.

RESULTS AND DISCUSSION

In this section of the study an attempt was made to indicate the results and discussions of the teacher educators' view on student teachers' learning and their teaching based on the data from the interviews and questionnaires focused on three learning enhancing interventions (themes). The interventions include teacher educators' views on learning to teach; teaching strategies and methods viewed in learning to teach and factors that either inspire or deter teacher educators from holding these perspectives and practices were investigated.

Teacher Educators' Views of Learning to Teach

The views of teacher educators on learning to teach were examined by thematic analysis using data from the questionnaire's open-ended questions and from the interviews, as shown in **Figure 2**. As shown in **Figure 2**, the teaching strategies or sub-themes emerged from the codes of the data, which in turn grouped to the more general ones into categories and themes. Based on this, engaging in active, explicit and meaningful practical learning as well as creating supportive learning environments are grouped under constructivist theme. Similarly, the sub-themes direct instruction as well as lecture is grouped under behaviorist theme.

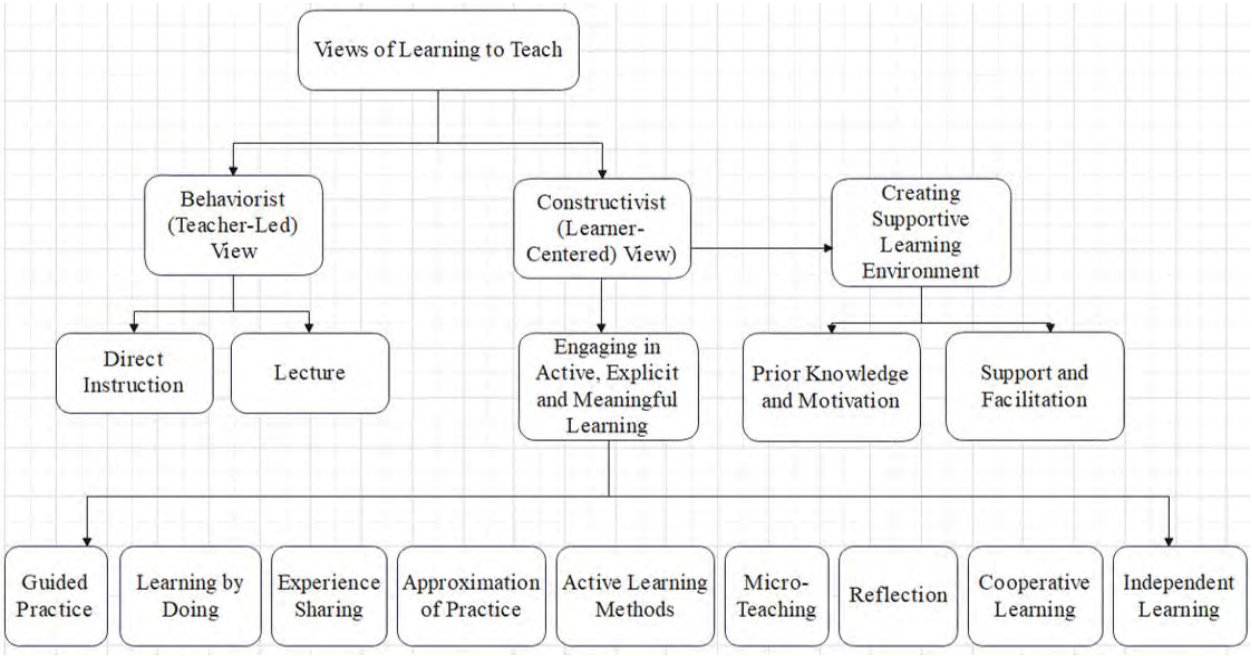

Figure 2. Ways teacher educators' conceptualize learning to teach (Source: Authors' own elaboration)

To observe the magnitude of each sub-theme and also that of the themes, it was analyzed by the frequency chart, of the data from the open-ended questions of the questionnaires. Considering the total percentages of each implied theme in that learner-centered methods are rated as 69.0%, the teacher-led teaching approach is rated as 16.0% and supportive learning environment 15.0%, the learner-centered approach of view in learning to teaching seams the most widely viewed conception in the pedagogy of teacher education. Moreover, as presented in **Table 1**, the survey data from Likert-type questions with 10 items that were divided into teacher-led perspectives (the first four items) and learner-centered (the second six items) perspective on learning to teach was analyzed.

Table 1. Summary of teacher educators' views on how to learn teach

No	Pre-service teachers learn best when	SD		D		ND		A		SA	
		f	%	f	%	f	%	f	%	f	%
1	Teaching is demonstrated by teacher educators only.	9	3.9	25	11.0	37	16.0	116	50.0	46	20.0
2	They are told merely to follow theories of teaching.	29	13.0	46	20.0	48	21.0	88	38.0	21	9.1
4	They primarily learn theories & then practice those theories.	8	3.5	16	6.9	42	18.0	116	50.0	49	21.0
6	Similar tasks are practiced by them.	18	7.7	38	16.0	51	22.0	101	43.0	25	11.0
Sub-total		64	6.9	125	13.0	178	19.0	421	45.3	141	15.2
3	They learn in and from practice of teaching.	5	2.2	11	4.8	32	14.0	114	49.0	69	30.0
5	They create their own techniques & insight of teaching.	8	3.5	37	16.0	40	17.0	113	49.0	33	14.0
7	They learn in groups and identify their learning gaps.	5	2.1	29	12.0	49	21.0	109	47.0	42	18.0
8	They think of solutions to problems by themselves first.	9	3.9	55	24.0	40	17.0	102	44.0	24	10.0
9	Tasks of varied levels of complexity are offered with scaffoldings.	3	1.3	44	19.0	62	27.0	100	43.0	23	9.9
10	Instructional experiences are adjusted to ongoing assessments.	7	3.1	29	13.0	41	18.0	123	54.0	29	13.0
Sub-total		37	2.7	205	15.0	264	19.0	661	47.7	220	15.8
Total		101		330		442		1082		361	

Note. S: Strongly disagree; D: Disagree; ND: Not decided; A: Agree; & SA: Strongly agree

As displayed in **Table 1**, the majority of participant teacher educators who took the teacher-led items (items 1, 2, 4, and 6) evident 60.5% agreed with the idea that pre-service teachers learn more when teacher-led methods of instruction are used, whereas 20.0% of the participants disagreed and 19.5% were unsure. Similarly, the widely held number of the participant teacher educators (63.5%) who attempted the learner-centered items (items 3, 5, 7, 8, 9, and 10) rated at least "agreed," while 17.5% of the participants rated at least "disagree" and 19.0% rated "undecided". It was also complemented as displayed in **Figure 3**.

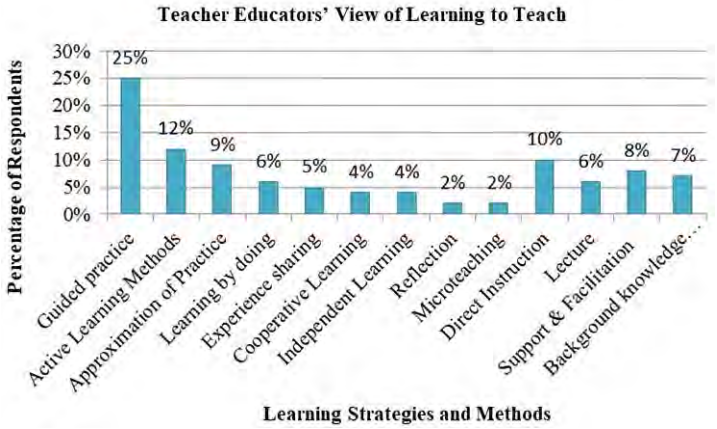

Figure 3. Teacher educators' views on learning to teach (Source: Authors' own elaboration)

Comparing the percentage of the respondents who attempted the two sets of items, the percentage of the respondents who rated at least "agree" on the learner-centered items increased slightly by 3.0% (63.5%-60.5%=3.0%) than the percentage of the respondents rated at least "agree" on the items of teacher-led teaching approaches. However, by a Chi-square test, the differences of the two views (teacher-led and learner-centered approaches) of the teacher educators in learning to teach were found insignificant in that $\chi^2(1)=0.656$ and $p=0.418$ at $\alpha=0.05$.

From the interviews data, it was analyzed thematically that student teachers learn best when teaching strategies are framed by making the lesson authentic and giving them enough opportunity to practice by raising their interest by having concern for student teachers of equipping them with knowledge base of teaching; engaging them in active, explicit and meaningful practical works; creating supportive learning environment. They observed also that teacher candidates learn to teach effectively if teaching strategies (categories) are tailored with specific methods that enhance each teacher-candidates' achievement of both practical methods as well as conceptual understandings about teaching. As reflected by the participants, as follows:

> Although there is no one best method to teach; pre-service teachers learn best by connecting the lesson with their prior knowledge and life experience, making lesson authentic and giving them enough opportunity to practice, helping them learn to teach by themselves and changing assessment from exam-orientedness to performance-orientedness" (PHo 1).

One respondent to the open-ended questions of the questionnaire has also said the following:

> "The philosophy of teaching and learning held in leaders, teacher educators', and student teachers minds could be one possible challenge. The meaning we attach to teaching and learning should be properly conceptualized. Thus, the assumptions we held behind our actions must be tested."

Some other few participant teacher educators, in particular, were able to identify the concept in effective teacher education pedagogy by stating as "they learn to teach from the practice of teaching and other school practices in authentic classrooms and provide feedback on their reflection of their practical teaching experience" (PHo 94). Moreover, they added that "student-teachers in colleges of teacher education can learn to teach through relating what they learned to what they will teach" (PHo 54). Here the

participants' view seems that teacher educators can learn best to teach if the pedagogy is framed in both practice and theory of teaching and in an integrated manner. As Melrose et al. (2013) defined, individuals create their own new understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact. As others approved, this view of pedagogy helps to practice teaching and encourages student teachers to develop their own theory of teaching based on the interaction between what they already know, believe, and experience (Melrose et al., 2013).

According to the transformative perspective, teaching is viewed as a situated, reflective, and collaborative activity requiring teachers' judgment in apprehending events of practice in a user-friendly and facilitated environment. And its modes of knowing are primarily based on reflexivity about teaching and learning processes, rather than delivering declarative knowledge of teaching (Rowan et al., 2019). In addition, learning about teaching requires a view of knowledge as a subject to be created rather than as a subject already created. Studies summarize that "much of what prospective teachers would have to learn in and from practice rather than in preparing to practice" (Freunthal, 1978, as cited in Korthagen et al., 2006). Successful learning occurs as a result of those learners' being able to solve contextual, real-world problems through collaborative exploring, evaluating, manipulating, and integrating available information from an array of sources, as opposed to passively acquiring information from texts selected by the teacher (Kaya & Akdemir, 2016; McLoughlin & Lee, 2008). According to transformative pedagogy, teacher development is conceptualized as collaborative critical inquiry that enables students to analyze, interpret, and understand the social realities of their own lives and those of their communities in order to bring about useful, lasting changes (Egne, 2015).

However, the data from interviews and some open-ended questions on the questionnaire, based on the insisted reflection about the dominant existence of a teacher-led view of teaching in learning to teach, do not support this. The teacher educators' adhered view of a teacher-led method of teaching, due to contextual factors (which will be discussed in the next part), prevented them from implementing the other reformed methods of teaching. As stated by one of the participants,

> In teacher education, although all approaches have their strengths and shortcomings, it is more advantageous if practical activities are integrated with those of theoretical ones both in classrooms and in catchment schools. This is to say that engaging teacher candidates in practical activities based on the theoretical basis would make the candidate-teachers of better ones. I think modular approach that candidate teachers learn would make them tend to learn theoretically (TEr 2).

Other participants added that student teachers learn best about the teaching profession when an appropriate level of theoretical skills and knowledge is imparted. Hence, they indicated that they learn best when teacher educators impart an appropriate level of theoretical knowledge before practical learning and assessing accordingly (PHo 78; PHa 53; PBo 34). After learning theories through the lecture method in their colleges, student teachers practice what they have learned in schools (TEr 2). This implies that the teacher educators are preparing the student teachers with the traditional method of teaching, whose epistemology views knowledge as an objective entity that exists "out there" external to the knower and whose teaching relies on faculty (textbooks and teachers) as the primary source of learning (Boaler, 2015; Hiebert, 2013).

Nonetheless, this traditional approach to teaching has received a lot of criticism and debate for decades as its epistemology of logical positivism view propagates knowledge as an objective entity that exists "out there" external to and independent of the knower, and its teaching relies on faculty (textbooks and teachers) as the primary source of learning (Hiebert, 2013). In this approach, while teachers are viewed as the knowing experts, the sages on the stage who expound the material, pupils are supposed to take in and accurately report back the information presented by the teacher as the sole information they need to acquire (Bonawitz et al., 2011; Khalid & Azeem, 2012). The researchers extend their explanation about the approach as that, its pedagogy exposes students to the established social facts through the one-way delivery of specially created instructional spaces and media. Also, the students are viewed as tending to perceive the information provided by the teacher as the only information they need to learn. As a one-way channel, the students' involvement in such a teaching strategy is limited to listening and occasionally taking notes if necessary.

Teaching Strategies and Methods Used by Teacher Educators'

Based on the data from interviews and from open ended items of the questionnaires, the prevailing teaching strategies and methods that are characterized the teacher educators' practices were portrayed as follows. Discussions on the major pedagogical strategies (methods and techniques) with the interview participants revealed two major themes–student-centered and teacher-led themes, which were formed from the four sub-themes of cooperative learning (group work method), questioning and answering method, guided practice methods, and lecture (traditional) method. They forwarded their ideas on their use of learner-centered methods, instance cooperative learning, so that students can collaborate to optimize both their own and each other's learning. As Johnson and Johnson (2009) summarized, cooperative learning approach is crucial for fostering cooperative interdependence, personal responsibility, in-person communication, learning for all, scholastic success, and social skills of group process. Most significantly, these approaches effectively address the issue of individual differences by taking advantage of students' diverse abilities to improve their cognitive, psychological, and social performance. Participants also mentioned that an effort is made to guarantee participation by using questions and answers to gauge and assess students' subject matter understanding.

As they reported, teacher educators typically give them a task or activity to demonstrate in class or labs. They also noted that some teacher educators make their students respond to queries in order to break away from the traditional lecture format. On the other hand, the participants openly admitted that they abundantly implement conventional teacher-led teaching strategies in their classes. As put in the following quote, they tend to apply the methods by which they had learned, and they taught in their teacher education.

> To tell the truth, teacher educators use the traditional lecture approach of teaching from the beginning to end. It would be better to give chances for both learners and teachers for practical activities. There are challenges to practice the effective teacher education pedagogy (TEr 2).

The other added:

> Teacher educators primarily use lecturing. Some teacher educators use the question-and-answer method of teaching, while others use practical work in laboratory classes. However, most teacher educators employ the traditional method in which student teachers learn theories and then apply them in their practicum (TEr 3).

> We usually present the theory of content and show how to apply it at the primary school level. In a practicum, we needed to see how they could apply the theoretical content covered in the theoretical lecture (TEr 5).

More sincerely, others expressed their irritation with the state of implementing pedagogical strategies as that it is the teacher centered lecture method as usual, which is commonly known by the adage "chalk and talk!" (PBo 10, 13, 28, and 36). One of the participants had to express that it would have been better if the pedagogical strategies in the teacher education classes had been theory-practice integrated. Besides, research, scholarship, and experiential learning would result in improving teacher-educators' pedagogical perspectives and practices.

> Student centered approach, beyond its immensity for the teacher, is believed good. What side effect it has is that it is time consuming. The time for group formation, and then to discuss and to reflect, the allotted "50 minutes" period will not be enough and therefore, very few teachers, whose subject suits use it (TEr 1).

Participants also gave their understanding in written responses to the open-ended question about their practice. Their responses were categorized under themes, as presented in **Figure 4**. As shown in **Figure 4**, 164 (53.0%) teacher educators use lecture, 43 (14.0%) direct instruction, 40 (13.0%) group work, 13 (4.0%) guided practice, 10 (3.0%) microteaching, two (1.0%) field/project work, seven (2.0%) questioning and answering, five (2.0%) seminar, three (1.0%) independent works, six (2.0%) reflection, two (1.0%) modeling, three (1.0%) research, three (1.0%) case study, and two (1.0%) portfolio development. While adding up two percentages, those rated as lectures and direct instruction give 67.0%, which meant that teacher-centered pedagogical practices were largely used. Again, adding up the rest also gives 33.0%, which means extent of using learner-centered pedagogical practices such as group work, guided practice, microteaching, field/project work, questioning and answering, seminar, independent works, reflection, modeling, research, case study, and portfolio development is less when compared to that of teacher-centered pedagogical practices. Teacher educators also predominantly use traditional lecture method of teaching. In these strategies, as in previous discussions of current study, student teachers are required to learn theory through a traditional lecture method of teaching in college classrooms and are expected to practice in schools during practicum phases.

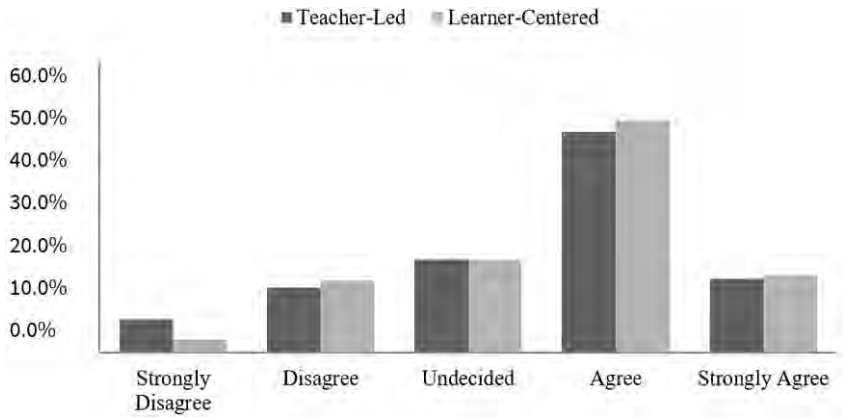

Figure 4. Teacher educators' views on learning to teach (Source: Authors' own elaboration)

Furthermore, as shown in **Table 2**, the survey data of Likert-type questions with 10 items that were split into learner-centered (the first six items) and teacher-led perspectives on learning to teach (the second four items) was analyzed. As shown in **Table 2**, the majority of the participants (45.8%), on the learner-centered items (item 23, 24, 25, 28, 30, and 31) rated that they practice the learner-centered teaching strategies at most "sometimes" to prepare their teachers. Similarly, 24.5% participants rated "average", while 29.7% rated at least "often". Meanwhile, among the teacher-led items (item 26, 27, 29, and 32) of the questionnaires, 48.8% rated at least "often" for their practice of teacher-led teaching strategies. Similarly, 29.6% participants rated "average", while 21.5% rated that they practice teacher-led teaching strategies at most "sometimes" to prepare their teachers.

Table 2. Summary of teacher educators' practices on how to learn teach

No	How often do you use following teacher education pedagogical strategies (methods & techniques)	1 (N)		2 (S)		3 (A)		4 (O)		5 (VO)	
		f	%	f	%	f	%	f	%	f	%
23	**Case studies** (teaching pre-service teachers systematically both from particular contexts (case) & from more generalized theory about teaching).	34	6.0	81	35.0	65	32.0	43	23.0	10	4.3
24	**Field work** (giving opportunity to pre-service teachers to go into their field to collect & correlate data on a specific topic).	39	17.0	76	33.0	60	26.0	40	17.0	18	7.7
25	**Microteaching** (giving pre-service teachers opportunities to teach a small portion of a lesson to a small group).	39	6.4	56	20.0	59	34.0	50	27.0	30	13.0
28	**Seminar** (to bring together groups of pre-service teachers to conduct debates, discussions, experience sharing, etc. on a particular subject).	49	12.0	70	30.0	50	26.0	48	25.0	16	6.9
30	**Cooperative learning** (form of learning in a small groups so that pre-service teachers work together to maximize their own & each other's learning).	36	2.6	57	16.0	52	31.0	44	32.0	45	19.0
31	**Guided practice** (helping pre-service teachers to construct their own meaning about teaching through practice).	31	4.7	64	43	52	27	40	34	26	11
Sub-total 1		228	16.5	404	29.3	338	24.5	265	19.2	145	10.5
26	**Lecture** (presenting abstract information all at once, which pre-service teachers have to fit into their existing schemata).	5	2.1	26	11.0	52	22.0	83	36.0	67	29.0
27	**Modeling** (teacher educators' deliberate showing of specific teaching strategy).	8	3.4	57	25.0	78	34.0	69	30.0	20	8.6
29	**Presentation** (learning that exist in a didactic format, where lecturer is seen as expert disseminating knowledge).	5	2.2	39	17.0	80	35.0	78	34.0	30	13.0
32	**Direct instruction** (any instruction led by teacher educator regardless of quality).	24	10.0	36	16.0	65	28.0	76	33.0	31	13.0
Sub-total 2		42	4.5	158	17.0	275	29.6	306	32.9	148	15.9
Total (sum of sub-total 1 & sub-total 2)		270	11.7	562	24.3	613	26.5	571	24.7	293	12.7

The results in **Table 2** are also complemented in **Figure 5**. This also shows that the teaching strategies and methods used by the teacher educators are dominantly teacher-led strategies such as lecture, modeling, presentation as well as direct instruction. To be more precise, we calculated a Chi-square test by merging the above data into "at most sometimes" ("never" + "sometimes") and "at least often" ("often" + "very often"). Accordingly, as the result of $\chi^2(13.25)>0.0003$, at df=1, and $\alpha=0.05$, the difference is significant. Observing the magnitude of the difference (48.8%-29.7%=19.1%), the teacher-led approach is approximately 19.0% more advanced than the learner-centered. Therefore, the teacher-educators are predominantly practicing the teacher-led strategies. In these strategies, the teacher-educators act as technicist, simply training teachers to replicate a formula for teaching and the student-teachers are required to learn theory through a traditional lecture method of teaching in college classrooms and are expected to practice in schools during the practicum sessions.

Figure 5. Teacher educators' pedagogical views on learning to teach (Source: Authors' own elaboration)

However, teacher educators' pedagogy should be conceptualized as and practiced from a constructivist perspective that considers a learner-centered approach to teaching and learning. Teaching strategies and methods that should characterize the teacher educators' pedagogy are analyzed as the use of varieties of teaching methods to raise interest, engaging them in active, explicit, and meaningful practical work, concern for student teachers to provide them with a teaching knowledge base, and facilitating a supportive learning environment. It is because, teaching about teaching needs to make the pedagogical reasoning that underpins quality practice clear, explicit, and meaningful for learners, which is fundamentally different from those teachings in general schools in which teachers teach the subject matter only. This helps develop a professional identity among the student teachers (Korthagen, 2016; Loughran, 2007). As put by Starkey (2017), "effective learning" is a kind of learning that considers each student's learning progress (cognitive development), focuses on students' active participation, includes agency in the learning process through explicit teaching, meta-cognitive strategies, the provision of formative feedback, self-regulation, and self-reflection (agentic), and considers the social, cultural, emotional, and personal development needs of the student teachers.

According to studies, "currently, the field of teacher education is undergoing a major shift–a shift away from a predominant focus on specifying the necessary knowledge for teaching toward specifying teaching practices that entail knowledge and doing" (McDonald et al., 2013). As discussed in the preceding parts of the present study, teaching about teaching needs to make the pedagogical reasoning that underpins quality practice clear, explicit, and meaningful for learners, which is fundamentally different from those teachings in general schools in which teachers teach the subject matter only. This helps develop a professional identity

Table 3. Correlations between scales

		Teacher-led views	Learner-centered views	Learner-centered practices
Spearman's rho	Learner-centered views	.525**		
	Learner-centered practices	.266**	.335**	
	Teacher-led practices	.253**	.112	.530**

Note. **Correlation is significant at p< 0.001 level (2-tailed)

among the student teachers (Korthagen, 2016; Loughran, 2007). This is because prospective teachers tend to model and learn from their teachers, educators and schoolteachers.

Correlation of Teacher Educators' Views and Their Practices on Learning to Teach

Based on the above findings about two concepts (views and practices of learning to teach that characterized teacher educators' pedagogy), although the teacher educators have a view of constructivist pedagogy or a learner-centered approach, they openly admitted that they abundantly use the conventional teacher-led teaching strategies. In this case, the teacher educators' practices for preparing their teachers are different from what is expected. We suppose that their practice could be constructivist pedagogy or a learner-centered approach as it was analyzed that constructivist view outweighed the behaviorist views among the teacher educators. To investigate if there was a statistically significant association between teacher educators' practices and their views, a correlation was computed. By the test of the assumption of normality, we used the spearman rho statistics. Accordingly, as shown in **Table 3**, almost all scales show a positive and statistically significant correlation with each other except the scales between learner-centered views and teacher-led practices (r[234]=0.112, p=0.087). This type of relation was expected, since, in the discussions of the preceding parts of the present study, the teacher educators' views and their practices were not consistent. The positive significant correlation between the views and the practices indicates that the views of learning to teach by the teacher educators were contributors to their practices. This agrees with the data from the interview that was discussed earlier and was started by one of the participants who said that it would have been better if the pedagogical practice in teacher education had been theory-practice integrated one. Similarly, a moderate correlations between learner-centered views and teacher-led views (r[234]=0.525, p=0.00) as well as learner-centered practices and teacher-led practices (r[234]=0.53, p=0.00) show that there is no clear and bold differentiation between the two views and practices among the teacher educators. This is also consistent with the last section analysis of Chi-square test by which the differences of the teacher-led and learner-centered views of the teacher educators in learning to teach found insignificant.

The results show that teacher educators' views of learning to teach and their practices are positively and significantly related. Moreover, teacher educators with either of their views of learning to teach practice either learner-centered or teacher-led teaching strategies. The correlations vary between 0.112 and 0.53, or 10.0% to 28.0% (Morgan et al., 2004), which points to the fact that, at most 28.0% of variance in practice can be predicted from views of learning to teach of the teacher educators. As the views and the practices moderately correlated, this shows that there is no clear differentiation between the views and practices among the teacher educators. These all indicate that, though the teacher educators' views contributed to their practices, they adhered to the conventional teacher-led views and practices of learning to teach. These are also complemented by the moderately significant correlation between teacher-led and learner-centered views as well as between teacher-led and learner-centered practices. The correlation between the learner-centered views and learner-centered practices (r[234]=0.335, p=0.00) was found to be more significant than the correlation between the teacher-led views and teacher-led practices (r[234]=0.253, p=0.00). This shows that the contribution of learner-centered views found higher than the contribution of teacher-led views to practice. This is also consistent with the finding in the present study that specify though not significant, teacher educators had more a view of learner-centered than teacher-led views in learning to teach.

As discussed above, change in practice occurs gradually and as a result of multiple activities of teachers' professional development rather than as a result of changes in attitude and beliefs. They should have practice-oriented changes in views of learning to teach. Furthermore, the nexus of teacher change in views and in practices described in this article presents a variety of opportunities for future research. As a result, more pressured or learner-centered views of learning to teach accompanied with experience of successful implementation or practice on colleges of teacher education pedagogy is required to effect genuine changes in the views and practices of teacher educators. Although individual variability presents within teacher educators' practices, the results indicate that teacher-led views is correlated more than learner-centered views of the teacher educators on the practice of learning to teach. Consequently, it sounds to conclude that the teacher-led practice of the teacher educators was contributed by their teacher-led views of learning to teach.

CONCLUSIONS AND IMPLICATIONS

Conclusions

As discussed earlier, teacher educators' ideas, beliefs, attitudes, knowledge, and expertise about the teaching profession make up their pedagogy. In an effort to this, this study attempted to examine teacher educators' views, practice and threats on how to learn to teach with the intention to have an insight into opinions that are held or developed. Based on this, the following points are concluded:

1. The difference in the views of teacher educators on both constructivist and behaviorist views of learning to teach is found insignificant. Consequently, the teacher educators have comparable perspectives of both learner-centered and teacher-led approaches on learning to teach.
2. Participants admitted that they had abundantly implemented the conventional teacher-led teaching strategies.
3. Among the teaching-interventions that teacher educators used most of the time were lectures, direct instruction, group work, guided practice, microteaching, questioning and answering, seminar, and research are investigated.
4. Research, scholarship, and experiential learning are the other interventions reported that result in improving teacher-educators' pedagogical perspectives and practices.
5. The significant and positive correlation found between the views and the practices of the teacher educators indicate the basic areas for intervention. Accordingly, to undergo a major shift - a shift away from a predominant adherence of the conventional teacher-led views and practices to the reformed learner-centered views and practices of learning to teach fostering a change on the teacher-educators views becomes crucial. As observed from the data, at most 28% of variance in practice can be predicted from their views of learning to teach of the teacher educators.

Implications

Colleges of the teacher educations need to develop qualified teachers with the goal of raising future students' performance in the general education system. Moreover, "teaching will be developed as a profession of choice," as stated as the Ethiopian Education Sector's goal (MoE, 2015, p. 35). As part of the strategies of these purposes, after having an insight into teacher educators' approaches to preparing teachers, the following points have been observed from the present study. Therefore, following implications can be listed:

1. Colleges could organize pedagogical training that focused on effective views and practices of learning to teach for the teacher-educators to further develop their teaching. The training programs should be tailored practically to guide student teachers' active learning and processing of the knowledge. It should also be focused on moving the teacher-educators from the "technical" understandings and implementation of their pedagogy towards continually evolving, reflexive, experiential, and inspirational teaching.
2. The interaction of research, scholarship, and experiential learning that would result in improving teacher-educators' pedagogical perspectives and practices to inspire teacher educators to their views and practices needs strategic interventions for teacher education pedagogy. Moreover, group work, guided practice, microteaching, questioning and answering, seminar, and research should be familiarized by the teacher educators as their common teaching strategies. Therefore, policy directives need to foster a close relationship between effective teaching and teacher preparation at both the institutional (colleges, regional education bureaus, and the ministry of education) and individual levels.

Author contributions: All authors have sufficiently contributed to the study and agreed with the results and conclusions.

Funding: No funding source is reported for this study.

Ethical statement: The A-authors stated that the work did not require ethics committee approval as it was for the purpose of promotion for the corresponding author and led by the advisory role of the coauthors. However, informed consent was obtained from the participants. Moreover, a confidentiality agreement was made between the researchers and the participants about the use of the participant data, which was exclusively utilized for the purposes of this study.

Declaration of interest: No conflict of interest is declared by authors.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

REFERENCES

Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education* (8th Edn.). Wadsworth, Cengage Learning.

Asfaw, A. (2015). *Quality of primary education in Ethiopia: The case of early grade mathematics competency in Tigrai* [PhD thesis, Addis Ababa University].

Barber, M., & Mourshed, M. (2010). *Shaping the future: How good education systems can become great in the decade ahead*. McKinsey & Company.

Biesta, G. (2015). How does a competent teacher become a good teacher? On judgment, wisdom and virtuosity in teaching and teacher education. In R. Heilbronn, & L. Foreman-Peck (Eds.), Philosophical perspectives on teacher education. Wiley-Blackwell. https://doi.org/10.1002/9781118977859.ch1

Boaler, J. (2015). *What's math got to do with it? How teachers and parents can transform mathematics learning and transform success*. Penguin.

Bonawitz, E., Shafto, P., Gweon, H., Goodman, N. D., Spelke, E., & Schulz, L. (2011). The double-edged sword of pedagogy: Instruction limits spontaneous. *Cognition, 120*(3), 322-330. https://doi.org/10.1016/j.cognition.2010.10.001

Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. https://doi.org/10.1191/1478088706qp063oa

Burke, P. (2005). *History and social theory*. Polity.

Chong, S., & Ho, P. (2009). Quality teaching and learning: A quality assurance framework for initial teacher preparation programs. *International Journal of Management in Education, 3*, 302-314. https://doi.org/10.1504/IJMIE.2009.027352

Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education, 18*(8), 947-967. https://doi.org/10.1016/S0742-051X(02)00053-7

Cochran, J. C., Mears, D. P., Bales, W. D., & Stewart, E. A. (2014). Does inmate behavior affect post-release offending? Investigating the misconduct-recidivism relationship among youth and adults. *Justice Quarterly, 31*(6), 1044-1073. https://doi.org/10.1080/07418825.2012.736526

Cochran-Smith, M. (2005). Studying teacher education: What we know and need to know. *Journal of Teacher Education, 56*, 301-306. https://doi.org/10.1177/0022487105280116

Cohen, L., Manion, L., & Morrison, K. (2005). *Research methods in education*. Taylor & Francis.

Creswell, J. W. (2012). *Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.

Danielson, C. (2007). *Enhancing professional practice: A framework for teaching*. ASCD.

Darling-Hammond, L. (2006a). Constructing 21st century teacher education. *Journal of Teacher Education, 57*, 300-314. https://doi.org/10.1177/0022487105285962

Darling-Hammond, L. (2006b). *Powerful teacher education: Lessons from exemplary programs*. Jossey-Bass.

Driscoll, D. L., Appiah-Yeboah, A., Salib, P., & Rupert, D. J. (2007). Merging qualitative and quantitative data in mixed methods research: How to and why not. *Ecological and Environmental Anthropology*, 18.

Egne, R. M. (2015). *Ethiopia in transition: A multicultural education perspective in secondary teacher education policies, curricula, and practices* [PhD dissertation, University of Oslo].

Egne, R. M. (2021). Pedagogical science practices in public higher education Institutions of Ethiopia: Progress made but challenges remain. *Athens Journal of Education, 8*(1), 21.

Feiman-Nemser, S. (2008). Teacher learning: How do teachers learn to teach? In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntrye, & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (pp. 697-705). Routledge.

Feiman-Nemser, S. (2014). *Inspiring teaching: Preparing teachers to succeed in mission-driven schools*. Harvard Education Press.

Gemeda, F. T., & Tynjälä, P. (2015). Professional learning of teachers in Ethiopia: Challenges and implications for reform. *Australian Journal of Teacher Education, 40*(5). https://doi.org/10.14221/ajte.2015v40n5.1

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching, 8*(3), 381-391. https://doi.org/10.1080/135406002100000512

Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. Teachers College Press. https://doi.org/10.1080/15582159.2012.733288

Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge. https://doi.org/10.4324/9780203887332

Hiebert, M. (2013). *Education for sustainable development in small island developing states*. Commonwealth Secretariat.

Hollins, E. R. (2015). Teacher preparation for quality teaching. *Journal of Teacher Education, 62*(4), 395-407. https://doi.org/10.1177/0022487111409415

Hunt, T., Carper, J., Lasley, T., & Raisch, C. (Eds.). (2010). *Encyclopedia of educational reform and dissent*. SAGE. https://doi.org/10.4135/9781412957403

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher, 38*(5), 365-379. https://doi.org/10.3102/0013189X09339057

Kassa, M. (2014). *Mathematics teacher education and teachers' professional competence in Ethiopia* [Master's thesis, Addis Ababa University].

Kaya, Z., & Akdemir, S. (2016). *Learning and teaching: Theories approaches and models*. Çözüm Publishing.

Khalid, A., & Azeem, M. (2012). Constructivist vs traditional: Effective instructional approach in teacher education. *International Journal of Humanities and Social Science, 2*(5), 170-177.

Korthagen, F. A. J. (2016). Pedagogy of teacher education. In J. Loughran, & M. Hamilton (Eds.), *International handbook of teacher education* (pp. 311-346). Springer. https://doi.org/10.1007/978-981-10-0366-0_8

Korthagen, F. A. J., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education, 22*, 1020-1041. https://doi.org/10.1016/j.tate.2006.04.022

Kuswandono, P. (2012). Reflective practices for teacher education. *Language and Language Teaching Journal, 15*(1), 149-162. https://doi.org/10.24071/llt.2012.150102

Loughran, J. (2007). *Enacting a pedagogy of teacher education*. Routledge.

McDonald, M., Kazemi, E., & Kavanagh, S. S. (2013). Core practices and pedagogies of teacher education: A call for a common language and collective activity. *Journal of Teacher Education, 64*(5), 378-386. https://doi.org/10.1177/0022487113493807

McLoughlin, C., & Lee, M. J. W. (2008). The three P's of pedagogy for the networked society: Pesonalization, participation and productivity. *International Journal of Teaching and Learning in Higher Education, 1*, 10-27.

Mekonnen, D. M. (2007). Evolution of the aim of education policy into curricular materials and the status of teachers' awareness and classroom practice. *The Ethiopian Journal of Education, 27*(2), 25-63.

Mekonnen, D. M. (2008). Reflections on teacher education system overhaul (TESO) program in Ethiopia: Promises, pitfalls and propositions. *Journal of Educational Change, 9*, 281-304. https://doi.org/10.1007/s10833-008-9070-1

Melis, E., Ullrich, C., Goguadze, G., Libbrecht, P., & Moormann, M. (2007). How ActiveMath supports moderate constructivist mathematics teaching. In *Proceedings of the 8th International Conference on Technology in Mathematics Teaching*.

Melrose, S., Park, C., & Perry, B. (2013). *Teaching health professionals online: Frameworks and strategies*. Athabasca University Press. https://doi.org/10.15215/aupress/9781927356654.01

MOE & USAID. (2008). *Ethiopian third national learning assessment of grade four students*. General Education Quality Assurance and Examinations Agency.

MoE. (2006). *Five year education sector capacity development strategic plan*. https://planipolis.iiep.unesco.org/upload/Ethiopia/Ethiopia_Education_Plan_August_2005.pdf

MoE. (2015). *Education sector development program V (ESDP V)*. Ministry of Education.

MoE. (2018). *Education statistics annual abstract*. Planning and Resource Mobilization Directorate.

MoE. (2021). *Education sector development program VI (ESDP VI)*. Ministry of Education.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for introductory statistics use and interpretation* (2nd Edn.). Psychology Press.

Mugambi, M. D. (2015). *The role of principals in promoting students' academic performance in secondary schools in Tigania West Sub-County, Meru County, Kenya* [Unpublished master's thesis]. Kenyatta University.

Negash, T. (2006). Education in Ethiopia: From crisis to the brink collapse. *Nordiska Afrikainstitutet*. https://openknowledge.worldbank.org/handle/10986/7537

OECD. (2009). *Creating effective teaching and learning environments: First results from TALIS*. OECD Publishing.

OECD. (2012). *Better skills, better jobs, better lives: A strategic approach to skills policies*. OECD Publishing. https://doi.org/10.1787/9789264177338-en

OECD. (2012). *Education at a glance 2012: Highlights*. OECD Publishing.

Orodho, J. (2012). *Elements of education and social science research*. Kenezja Publisher.

Pratt, D. D. (2002). Good teaching: one size fits all? In J. Ross-Gordon (Ed.), *An update on teaching theory*. Jossey-Bass, Publishers.

Pritchard, A., & Woollard, J. (2010). *Psychology for the classroom: Constructivism and social learning*. Routledge. https://doi.org/10.4324/9780203819166

Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education*. Routledge.

Rowan, L., Brown, J. L., & Ryan, M. (2019). Teaching teachers: What [should] teacher educators "know" and "do" and how and why it matters. *Asia-Pacific Journal of Teacher Education, 47*(3), 210-215. https://doi.org/10.1080/1359866X.2019.1601837

RTI International & MoE of Ethiopia. (2013). Baseline assessment of pre-service teacher education programs at colleges of teacher education in Ethiopia. *USAID*. https://pdf.usaid.gov/pdf_docs/pa00mhtb.pdf

Shulman, L. S., & Shulman, J. H. (2007). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies, 36*(2), 257-271. https://doi.org/10.1080/0022027032000148298

Starkey, L. (2017). Three dimensions of student-centred education: A framework for policy and practice. *Critical Studies in Education, 60*(3), 375-390. https://doi.org/10.1080/17508487.2017.1281829

Strong, M. (2011). *The highly qualified teacher: What is teacher quality and how do we measure it?* Teachers College Press.

Tadesse, A. (2010). *Student-centered instruction: Analyzing opportunities, practices and challenges of implementation in the custer and linear program at Debremarkos College of Teacher Education* [Unpublished thesis]. Debremarkos College of Teacher Education.

Teshome, A. (2014). Teachers' perceptions and practices of active learning in Haramaya University, Eastern Ethiopia: The case of faculty of education. *Science, Technology and Arts Research Journal, 1*(4), 74. https://doi.org/10.4314/star.v1i4.98828

Tessema, K. A. (2007). The teacher education reform process in Ethiopia: Some consequences and its implications. *Teaching Education, 18*, 29-48. https://doi.org/10.1080/10476210601151532

Weimer, M. (2006). *Learner-centered teaching: Five key changes to practice*. Jossey-Bass.

Zeichner, K. (2006). Reflections of a university-based teacher educator on the future of college- and university-based teacher education. *Journal of Teacher Education, 57*(3), 326-340. https://doi.org/10.1177/0022487105285893