
Secondary Teacher Education in Ethiopia: Top-Down Reforms and Policy Implications

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Abstract: This article aims at sharing observations, existing empirical evidence, and what research indicates about teacher education in general and secondary teacher education in Ethiopia in particular to the public at large. It focuses on the teacher education reforms and practices since the introduction of the 1994 education and training policy. Government documents were critically reviewed and interviews were conducted with the Ministry of Education and regional education bureau officials and experts by way of substantiating and balancing the analysis of data extracted from documents. The paper aims at informing educational planners and decision makers, and leaders of teacher education programs at national as well as institutional levels about epistemological as well as professional issues pertinent to teachers' role and their education. The paper attempts to investigate why secondary teacher education reforms and policies in Ethiopia oscillate. Then it sheds light on the way forward about the issue under discussion. Finally, the paper calls upon different parties working and deciding on the fate of Ethiopia's teacher education to rethink and revisit policy options and practices before things get out of our hand and cause irreversible crises in teacher education of the nation.

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Introduction

Modern teacher education in Ethiopia did not begin until September 1944 when a single room on the premises of Menelik Second School became the site of the first primary teacher education program. The first proper training institute, however, was established on a site at Gullele in Addis Ababa in 1946/47 (Mekuanent, 2000). The first seed of secondary teacher education was planted in 1951/52. It began as a single section within the University College of Addis Ababa which then developed into a 'Department of Education'. Three years later, in 1961/62, it scaled up into a 'Faculty of Education'. The Prince Bede Mariam Laboratory School, commonly known as the *Lab School*, established a few years later, served as the main feeder school for the Faculty of Education. In the course of time, the Faculty of Education also managed to start two units: elementary education and secondary education units. The former was responsible mainly for training trainers for the teacher training institutes and the latter for training teachers for secondary schools.

Until 1978 some of the best students were recruited from grade eleven students who attended in different secondary schools of the country. That is, those who passed the entrance examination for the five years secondary education program stayed for one year in Prince Bede Mariam Laboratory School, which was attached to the Faculty of Education. The recruits were grouped into Science and Social Sciences streams and took courses in Science, Social Sciences and Language as well as preparatory courses for attending teacher training courses. Successful completion of the one-year preparatory study led to the four-year degree training in the Sciences, Social Sciences or Languages. The Department of Secondary Education, Faculty of Education, was responsible for the follow up of the trainees' education. It is worth mentioning here that the curricula of the two units were related to the academic and professional skills required at the corresponding levels of education for which the trainees were prepared. Unfortunately, the two units were closed in 1978 following the

1974 government change and the massive restructuring that took place at Addis Ababa University. The restructuring removed subjects and subject-methodology instructors from the faculty and assigned them to the different subject departments (Biology, Chemistry, Physics and Mathematics in the sciences, and Amharic, English, History and Geography in the Languages and Social Sciences), leaving only foundation and curriculum and instruction staff (Aklilu, 2013; Mekuanent, 2000).

Secondary education has a direct connection with that of the goals of EFA (Education for All) in that the expansion of primary education demands post-primary education. This, in turn, implies adequate supply of teacher vis-à-vis the growing enrollment ratio in secondary education. The table below, for instance, depicts a 3.79 Average Annual Growth Rate (AAGR) of secondary education enrollment in Ethiopia.

Secondary Education	2003 E.C.	2004 E.C.	2005 E.C.	2006 E.C.	2007 E.C.	AAGR
1st Cycle (9-10)	1,461,918	1,442,226	1,541,238	1,609,315	1,682,341	2.85
2nd Cycle (11-12)	288,216	323,785	358,493	389,040	425,774	8.12
Total (9-12)	1,750,134	1,776,011	1,899,731	1,998,355	2,108,115	3.79

Source: MoE, 2016

The expansion of secondary education is thus resulting in greater programmatic diversification and flexibility of secondary teacher education as well. Countries are redefining the ways in which secondary education addresses increasingly diverse student interest and societal needs by way of redefining and restructuring their secondary teacher education programs (UNESCO, 2008). To this end, UNESCO has forwarded a logical and realistic vision of teacher education. That is, UNESCO, by 2015, will have intervened in-depth in interested Sub-Saharan countries to bring their teacher-policies,

teacher training institutions, and teacher education programs into more direct line with those countries' commitments for achieving all six EFA goals and poverty reduction goals. The results would be policy redirection, improved institutional capacities, improved teacher quality (UNESCO, 2004).

Secondary education has increasingly become a central policy concern of developing countries in general and Sub-Saharan countries in particular (Holsinger, 2000). The majority of African countries are grappling with the question of how to either provide skills and knowledge that enable their youth to move to tertiary education or ensure a smooth transition to the world of work for those who completed secondary education. The attainment of these shared goals of secondary education in Sub-Saharan countries, however, is unthinkable without developing and/or adapting and implementing appropriate, fit for purpose, kind of teacher education program. Accordingly, teacher education in general and secondary teacher education in particular has been one of the priorities of the education sector development in Ethiopia. This has been manifested through a series of top-down and short-lived reforms. A number of unsuccessful and/or short-lived reforms have been adopted in Ethiopia and each aspired to bring radical quality improvement on the output of secondary education. However, like in most Sub-Saharan countries, a number of constraining factors such as the political system, external influences, and the inability of policy implementation contributed to the failure of teacher education reforms in Ethiopia.

Methodology

This study employed a qualitative approach in general with a few quantitative data gathered from secondary sources. Existing national and international studies on teacher education, literature review, and government official documents were the basis for the analysis and discussion of the study. Furthermore, purposively selected individuals, who were familiar with the changing pattern of teacher education in

Ethiopia and working at the Ministry of Education and regional education bureaus were interviewed to help substantiate data extracted from documents. Moreover, four secondary school principals were consulted to share their observations and experiences about the implementation of the reforms. Personal experience and observations were also used to draw conclusions and address the research questions.

The study, specifically, attempted to address the following research questions:

- What are the available researches on teacher education in general and secondary teacher education in Ethiopia in particular?
- What is the nature of the changing pattern of teacher education reform in Ethiopia since the introduction of the new education and training policy in 1994 like?
- Why secondary teacher education reforms or policies are remaining swinging in Ethiopia?
- What are the way forwards regarding teacher educations in Ethiopia?

Teacher Education System Overhaul (TESO)

Teacher education reforms in Ethiopia often have involved decisions, among other things, on which university department/institute should house teacher education program (the students, the teachers, the curricula, and the academic administration)? How should the candidates be recruited for education and training? Who should do it? What should be the proportion of the various curricular components - subject or content knowledge, professional or pedagogical knowledge and skills, and the balance and or integration of the two towards Pedagogical Content Knowledge (PCK)? A good example of such reforms worth mentioning is Ethiopia's Teacher Education System

Overhaul (TESO) initiated and implemented by the Ministry of Education as a policy of teacher education in Ethiopia since 2003.

TESO, which came into existence as a reform program initiated by the Ministry of Education in 2003, emphasizes among other things the Pedagogical Content Knowledge (PCK) of teachers and teachers' professional development. TESO essentially advocates, unlike the traditional and disintegrated approach, that a teacher education system should educate teachers in a holistic process that connects ideas and disciplines to each other and to the personal experiences, environments, and communities of students (MoE, 2003). Although the TESO program in Ethiopia has encountered serious implementation problems, its potential importance for the country's future teacher development and for a meaningful role of teachers has been widely accepted among professionals in the education sector. One of the Regional Education Bureau interviewees, for instance, states that

According to my experience and observation, TESO was not a bad program to prepare professional teachers for our secondary schools. We were happy with the TESO program with all its limitations. From a professional point of view, as a teacher educator, I believe that the content and intent of the TESO curriculum was better than its previous practices. We were not consulted about the values and limitations of TESO before its termination. We were just told to stop recruiting candidates for the TESO program and to wait what would come next from the Ministry of Education.

(RSEB expert: October 2014)

On the other hand, perhaps contrary to the assessment of the implementation of the TESO program (CoE, 2008) and or without adequate empirical evidence, the Federal Ministry of Education, paradoxically, decided to quit the implementation of the reform as of

2008/9 academic year. The following interview excerpt from a senior expert at Ministry of Education substantiates the assertion:

TESO is a reform which died before it finished its life cycle. I think there was a political pressure from inside and outside which led to the termination of the TESO teacher education reform. Unfortunately, I didn't come across any formal assessment or research report about the implementation that showed the failure or success of the implementation of TESO. I can't tell why the reform was halted before it completed its life cycle and before it passed through a formal evaluation. Hence, I don't really have evidence-based information to tell why TESO was replaced by another reform.

(Ministry of Education senior expert: December 2014)

Currently, teacher education in Ethiopia seems to be at crossroads. It seems there is a silence but a big debate inclined towards disagreement on epistemology and principles of teacher education in Ethiopia. Educational decision makers and planners at all levels should re-examine the overall teacher education system in general and the secondary teacher education program in particular vis-à-vis curricular relevance, implementation modalities in context, recruitment, and teachers professional development before declaring the full termination of the TESO policy and practice. There was a top-down rush preparing the country for another policy or reform experimentation.

Postgraduate Diploma in Teaching (PGDT)

Some six years after the launching and implementation of TESO program and right after graduation and deployment of its first graduates to the teaching force, there appeared some doubts and complaints by certain segments that teachers' competence had not shown improvement. One of the interviewees of secondary school principals, for instance, says that

Compared to the quality of teachers long ago, the competence and subject matter knowledge of teachers, I could say, was not up to our expectation or not what it should be. Veteran teachers who passed through rigorous training during the previous regimes were by far better than the current young teachers who joined the teaching profession. This became a serious problem from time to time. I am not really sure about the content of teacher education curriculum at the universities. But there were complaints on the part of students that a good number of graduates of TESO were not teaching well both in terms of subject matter and pedagogy.

(Secondary school principal: June 2015)

Consequently, after a series of debates, the Ministry of Education introduced another program called Postgraduate Diploma in Teaching (PGDT), which followed different modality of teacher preparation from its predecessor. The first batch of this program graduated in the 2011/12 academic year. The rationales for launching the PGDT partly emanated from similar problems which necessitated the introduction of TESO and partly from the side of the Ministry of Education to reorient the teacher education system - pragmatic and reflective orientations (CEBS, 2013). However, evidence-based experience as a teacher educator in charge of the implementation of the PGDT showed that the problems became even worse.

The PGDT program was originally designed to be offered as a regular program in line with the normal academic calendar. However, this mode of delivery was suddenly abandoned by the Ministry of Education and a tentative new mode of delivery was introduced instead. The originally designed mode of delivery was not applied entirely. The tentative new mode of delivery was an *in-out-in* mode of delivery. This mode of delivery has clearly encountered implementation complications and a number of bottlenecks. Consultative meetings and review workshops convened by the College of Education, Addis Ababa

University, with stakeholders indicated the presence of difficulties in implementing the PGDT program through the *in-out-in* mode of delivery. This, in turn, created frustration on the part of the implementing institutions as well as on the recruited teacher candidates.

Prior to TESO, there were problems related to teachers' professional competence and mastery of teaching skills. Accordingly, as a significant paradigm shift, TESO was introduced. Again, after six years, the TESO reform encountered resistance like its predecessors and it lost trust from the side of the Ministry of Education, and PGDT was introduced. Once again PGDT has not yet proved to be better and more effective than its predecessor.

The attitudes and quality of many teachers graduating from PGDT are not promising to keep them in the teaching profession. On the other hand, these PGDT graduates are not joining the profession with conviction. Many of them are leaving the profession even for the insignificant amount of monetary incentive to join any non-teaching profession. I am not happy about them. But we don't have any other choice other than keeping them as much as we could.

(RSEB expert: June 2015)

The teaching profession in Ethiopia used to be the top number one profession a few decades ago. But, due to several explainable reasons such as remuneration and working conditions the status of teachers and the overall teachers' job satisfaction have deteriorated and this has been voiced individually and through the teachers' association that there are problems that need to be settled. A study conducted jointly by the Ministry of Education and the Ethiopian Teachers Association revealed that teachers are leaving the noble profession of teaching. In 2006 E.C. (2014 GC), a total of 17,886 teachers left the teaching profession (MoE, 2015).

In an interview with a respondent from Amhara Region – a region from which a significant number of teachers left the profession, reported that

Teachers could not survive the scale of economy. The overall job satisfaction is also not appealing. The social status given to teachers is not only minimal but also it is repelling the profession. In the Region, many of the teachers prefer working in small-scale business to continuing as teachers. Accordingly, friends who see the comparative advantage of living are tempted to leave the profession, and the situation is critical.

(Amhara RSEB, December 2015).

Again, the same problems and rationales which necessitated the launching of both reforms are still prevailing. Problems of our teacher education system are not yet resolved. We need to rethink and revisit our current practice as well as the existing policy framework (if any).

The problems of the newly introduced PGDT are multifaceted including internal and external to the implementing institutions. Some of these problems are inherently related to policy and program issues while others are related to implementation problems. These challenges include but are not limited to the mismatch between the University calendar and that of Ministry of Education calendar of PGDT, centralization of secondary teacher education planning and management, compromised university autonomy in planning and management resulting in somehow blurred accountability, lack of clarity in relation to the benefits the students are going to get such as salary increment, promotion on the career development structure, MA/MSc program opportunities or link as in other countries, student service (dormitory and other services) and lack of adequate classrooms.

The College of Education and Behavioral Studies, Addis Ababa University, has been continually reviewing and conducting workshops regarding the PGDT reform implementation. Nevertheless, the actions

taken were fixing problems here and there. Such a practice could not bring a lasting solution. Most of the discussions and workshops focused on the symptoms of PGDT problems but not its fundamental problems. It is a high time to refocus deliberations on the possibilities of redesigning a new teacher education program in consultation with the Ministry of Education and all other stakeholders.

The starting point should be the recognition that a teacher's capability is central to education quality. The effectiveness of teachers is strongly related to their mastery of the subject matter they teach. Teachers should not only know the content they teach, but they should also have a deep understanding of the content. Furthermore, they need to integrate their subject matter understanding with pedagogy and align to the objective realities of their students. Teacher education programs vary in their organization, duration, and scope, but most have common content (Coolahan 2002; Nwaboku 1996), typically including the following: academic studies, usually in the school subjects to be taught, pedagogic preparation comprising; studies in educational sciences, such as psychology and sociology of education, study of general instructional strategies, and subject-specific teaching methods, and teaching practice.

The major curriculum issues related to the balance between the academic studies (the content to be taught) and the pedagogic training (Lewin, 2000). Two predominant models of teacher preparation have evolved: concurrent and consecutive. The concurrent model involves course with academic subject knowledge combined with educational and professional studies throughout the course duration. In the consecutive model, students first get qualifications in the subjects that they wish to teach, and then undertake a shorter teacher training course (Coolahan 2002). The later one seems the intent of the PGDT which is being experimented on the Ethiopian secondary schools. In many countries, both models are provided as parallel alternative routes into teaching (World Bank, 2008).

Reform Traditions in Teacher Education

Most reforms adapted for teacher education in Ethiopia in the last five decades include: changes in ways in which prospective teachers are recruited and selected, in the content to be taught, organizational structure, implementation modality and control of pre-service and in-service programs, in the institutional conditions that facilitate or affect the work of teachers and in the structure of the career of teaching. Reforms and improvements of teacher education in Ethiopia should be linked with comprehensive effort to reform the institutional conditions and autonomy within which teacher education programs exist and the institutional conditions of schooling at all levels within which the graduates of teacher education programs are supposed to work. The role of teachers and teacher education programs deserve to be a central concern of educational reforms for a nation where education is believed to be the best tool for its development. As Liston and Zeichner (1991) argued, reform ideas alone cannot bring change unless societal conditions that are necessary to bring about the kind of changes or reforms proposed for teacher education and schooling are created. That is, in order for significant improvements to occur in teacher education and subsequently in our schooling system, we must keep in mind both a democratic conception of schooling and democratic view of society. Liston and Zeichner (1991) analyzed and identified four major traditions of reform regarding teacher education, namely a) the academic tradition, b) the social-efficiency tradition, c) the developmentalist tradition, and d) the social re-constructionist tradition.

The Academic Tradition of teacher education emphasizes teachers' role to be that of scholar and subject matter specialists. The advocates of the academic tradition forcefully argue that the mastery of content or subject matter is the most important and decisive goal in teacher education programs and accordingly pedagogical and/or professional courses will not interfere with this goal. Education and or pedagogical courses are regarded as intellectually superficial. Flexner cited in Liston and Zeichner(1991) long ago, for instance, argued that all the

rest what teachers need beyond a strong subject matter knowledge could come just from apprenticeship experience in a school. Following Flexner's strong critique of education courses many others (Lynd, 1950; Bestor, 1953; Conant, 1963) criticized the inferior intellectual quality of education courses, students, and faculty. They went to the extent of criticizing literature on education as unimportant when compared with subjects discussed by mathematicians, biologists, physicists, economists or political scientists and that education courses are considered to be a waste of time designed to frighten off intelligence (Liston and Zeichner, 1991). In the 1950s, for instance, there was a big movement towards reducing the number of education courses incorporated in teacher education programs in the USA. Even some individuals who were board members of schools and directly related to teacher education programs complained about the proliferation of education and/or pedagogical courses. Education faculties were charged by the advocators of the academic tradition for teacher education that they provide too many and too repetitive courses. Besides, these courses were also criticized for their alleged superficiality. And presumably the academic traditions consider these education courses to be irrelevant to academic teaching (Koerner, 1963).

The Social-efficiency Tradition involved a faith in the power of the scientific study of teaching to provide the basis for building a teacher education curriculum. It emphasizes the acquisition of specific and observable teaching skills that are assumed to be related to student learning. It is competency-based teacher education program (CBTEP) which is highly behavioristic and producing highly technical teachers. Liston and Zeichner (1991) point out that CBTEP was stimulated partly by application of behaviorist psychology to the training of personnel in industry and the military during the Second World War. Social-efficiency based approaches for teacher education relies on scientific study of teaching as the major source for determining the teacher education curriculum.

The developmentalist tradition has its roots in the child study movement and assumes that the natural order of the development of the learner provides the basis for determining what should be taught to students as well as their teachers. The critical idea of this tradition of teacher education was that teachers for progressive schools offering the child-centered education must themselves be educated in the same way of supportive and stimulating environment that they are expected to provide for children. Educating prospective teachers to conduct observations and to learn from and plan activities for children on the basis of the observations are key features in the developmentalist proposal for teacher education reform. Developmentalists emphasize on the teacher as naturalist and are guided by the view that a grounded understanding of developmental principles is the best preparation for teaching.

The Social-reconstructionist Tradition of reform in teacher education defines both schooling and the education of teachers as crucial elements in a movement towards a more just society. Most social-reconstructionists feel that the private economy must be regulated to help ensure full employment, economic opportunity, and adequate incomes for a fair standard of living (Stanley, 1985). It emphasizes on the role of a teacher as a social agent to indoctrinate their students with socialist and collectivist values to lead to social improvements. It, therefore, assumes teachers and teacher educators to play a key role in the reconstruction of the society. By extension, if teachers are to fulfill their role in social reconstruction, teacher education itself would have to be reconstructed. Accordingly, the emphasis in preparation of teachers should be on helping them develop adequate social and educational philosophy and an enthusiasm for the betterment of common civilization. The implication is that the teacher education programs should be community-based where prospective teachers are given the opportunity for long practicum and understanding of the social issues of the society. To this end, the social foundation of education serves as a component of the teacher education program. The foundation of education with its focus on the fundamental

problems of the school, the society, and culture would assist in the development of social and educational philosophy by prospective teachers that would enable them to assume a leadership role in the making of educational policy.

The following chart summarizes and depicts the characteristic features of the aforementioned reform traditions.

Academic tradition	Social-efficiency tradition	Developmentalist tradition	Social re-constructionist tradition
<ul style="list-style-type: none"> • Teaching has no scientific foundation • Content mastery suffice to be a teacher • Pedagogical skills should be left to be developed through school internship • Content-centered approach 	<ul style="list-style-type: none"> • Teaching has scientific foundation • Content mastery is not sufficient to be a school teacher • Content mastery and pedagogical skills are thought for prospective teachers in parallel without school internship • Teacher-centered approach 	<ul style="list-style-type: none"> • Teaching is both science and an art • Teacher as researcher of his / her pupil • Teacher education is based on the what and how of the actual classroom • Emphasize developmental principles • Child-centered approach 	<ul style="list-style-type: none"> • Teachers as social agents • Teacher education must be connected with social and economic development • Teacher education for social reconstruction • Teacher education must be informed by social as well as educational philosophies • Relatively long school internship (practicum) • Societal-centered • Community-based

Paradigms in Teacher Education

A paradigm in teacher education can be thought of as a matrix of beliefs and assumptions about the nature and purposes of schooling, teaching, teachers and their education that gives direction and shape of policy and practice in teacher education. There seem to be at least three paradigms that have dominated the discourse and debate in teacher education - behavioristic teacher education, personalistic teacher education, and inquiry-oriented teacher education (Zeichner: 1983).

The behavioristic teacher education paradigm is founded upon a positivistic epistemology and behavioral psychology. It emphasizes the development of specific and observable skills of teaching that are assumed to be related to students' learning. As per the behavioristic orientation, the knowledge, skills and competencies to be taught to prospective teachers are those that are believed by positivist teacher educators, to be most relevant to the teaching role as currently defined and are specified in advance. The development of the teacher as a person over and above mastery of teaching skills and content knowledge, and the desire to have teachers critically reflect upon the purposes and consequences of their work in terms of issues like social continuity and change are not a central concern of this perspective. This approach takes teaching as applied science and teachers as executors of the laws and principles of effective teaching (Tom, 1980). The content of the curriculum is fully determined in advance by others on the basis of research on teacher effectiveness. The prospective teacher is considered to simply receive all the professional as well as academic knowledge prepared for him/her in advance and has no or little part in determining the substance and direction of his/her preparation program. Hence, candidates in this approach are passive recipients of the training package. In other words, behaviorist perspective on teacher education currently can be equated with the technical tradition of teacher education. The primary concern of technical tradition is fostering the development of skills to perform a

predetermined task regardless of the context under which the specific task is to be performed.

The personalistic teacher education paradigm bases its foundation upon phenomenological epistemology and developmental psychology. Advocates of this approach have applied cognitive-developmental theory to the design of teacher education programs. This paradigm emphasizes the psychological maturity of the prospective teacher, reorganization of perceptions and beliefs over mastery of specific behaviors, skills and content knowledge. The knowledge and skills that prospective teachers are to master are not necessarily defined in advance to the extent the behavioristic approach to teacher education does. Requiring a teacher education curriculum to define precisely and in detail the behaviors it helps to produce may be a way to destroy the effectiveness of its product (Comb, 1972). According to personalistic view, teacher education is a process of becoming a teacher rather than a mere process of educating someone how to teach. It puts more emphasis on the attitude of self and becoming a teacher. It also attempts to be responsive to prospective teachers' own definition of their learning needs.

Inquiry-oriented teacher education paradigm prioritizes the development of inquiry about teaching and about the context in which teaching takes place. The assumption underlying this approach is that technical skills in teaching are to be highly valued not as an end in itself, but as a means for bringing about the desired ends (Zeichner, 1983). This approach attempts to prepare teachers who have the skills to analyze what they are doing in terms of its effects upon students, school, and society. This approach emphasizes on helping prospective teachers assume a greater role in shaping the direction of educational contexts according to purposes of which they are aware and which can be justified in all dimensions morally and ethically. It is a process of creating a liberated person with all rounded knowledge and skill as well as full autonomy for teaching students. The fundamental task of teacher education is therefore to develop prospective teachers'

capacities for reflective action and to help them examine the moral, ethical and political issues, as well as the instrumental issues that are embedded in their everyday thinking and practice (Dewey, 1933; Zeichner, 1983).

Implications of traditions and paradigms

The implication of the *academic tradition* goes to the extent of the avoidance or bypassing of specialized faculties and colleges organized to educate and train teachers for all levels. It assumes that what matters in teaching is only the content mastery on the part of the teacher regardless of his/her attitudes, skills, and commitment and readiness to carry the most sensitive social responsibility of teaching. Nevertheless, teaching skill is not something to be left for just apprenticeship as experimentation of making content experts professional teachers.

The implication of the *social-efficiency* tradition of teacher education is that teaching can be learned exhaustively regardless of the social and institutional context where teaching is to be applied. Although it reorganizes initial teacher education and training, it, however, is too positivist and behavioristic in that it lies its teacher education curriculum on some unpredictable and non-measurable human behaviors. Hence, heavy and exclusive reliance on the social efficiency tradition of teacher education could only end up in producing highly competent and mechanical and positivist teachers who teach the way they were taught in the universities and colleges regardless of their institutional and social peculiarities in context. Of course, this has been the dominant tradition in Ethiopia before the introduction of TESO. There are educators promoting and advocating secondary teacher education towards a kind of a combination of the academic and social-efficiency traditions. However, as far as education for human emancipation and liberation of mind, and education for democratization in a democratized school system are concerned, it is hardly possible that the combination

of these two traditions can also serve our purpose in the Ethiopian context.

Educators holding the social-efficiency tradition seem not to realize that teaching is a cultural activity as well. We learn how to teach not only by studying and applying methods and/or techniques but also indirectly through years of participation in classroom life. We are largely unaware of some of the most widespread attributes of teaching in our diverse culture. The fact that teaching is a cultural and contextual activity explains why teaching has been so resistant to change (Jams and Jams, 1999). And accordingly, it explains why contextualized initial teacher education that prepares a teacher who fits into the social and cultural settings is of necessity in the current context of Ethiopian political and educational system.

The *developmentalist tradition* of teacher education implies the importance of child-centeredness and the congruence between teacher education curriculum and school curriculum. Accordingly, it puts the learner at the center of teaching. This approach gives some room for teachers to implement whatever they are supposed to implement not only as a predetermined prescription but also as per the actual local context and as per developmental and maturity level of their students. Hence, it implies the incorporation of courses on developmental psychology, learning theory, social foundation, educational research and action research in an initial teacher education curriculum. According to this tradition, it is hardly possible to exhaustively prescribe and prepare a guideline for teachers how to teach and how to manage their students because not all students' behavior and classroom interactions are predictable and perhaps not important to do so. To this end, the extreme position of this tradition implies for the implementation of school-based teacher education. Although exclusive school-based teacher education has its own limitations, if it is combined with some carefully identified components of the other traditions discussed in this paper, it will have a significant impact in the current reform agenda of secondary teacher education in Ethiopia.

The social-reconstructionist tradition implies beyond that of developmentalist tradition regarding the role of teachers as social change agents. Both social-reconstructionist and developmentalist traditions imply the importance of student-centeredness of teacher education programs and its congruence with school curriculum. However, social-reconstructionist emphasizes and examines the role of the teacher not only in terms of his/her students' and or classroom activities but also on the social and philosophical values he/she has and applies the same in the process of nation development. It emphasizes the role of a teacher in serving for the society's cultural and economic development. Hence, it asserts that in democratic society schools and school teachers have no other option than internalizing the democratic values of society in general and striving for the achievement of creating democratic society. Accordingly, teacher education program should constitute courses on philosophy of education, sociology, multi-culturalism, social foundation of education etc. And part of teacher education and training should be school-based and reflective but harmonious with the coursework component of the training as well.

Reform waves around the Ministry of Education and teacher education institutions within universities regarding the ending of TESO and the beginning of PGDT did not seem to have been based on clear rationale based on the aforementioned traditions and paradigms. At this stage, one may ask which tradition reflects more the TESO and PGDT rationale and implementation strategy. The TESO document clearly indicates that what secondary school prospective teachers need is integrated content-pedagogy knowledge. It also suggests that each of the subject matter courses for prospective teachers be made to incorporate about 30 percent of its contents from the secondary school curriculum that prospective teachers are expected to teach. Hence, from this point of view, it is not possible to say that TESO reflects the academic tradition of teacher education.

On the other hand, TESO has clearly indicated about five competencies to be fulfilled by both prospective teachers and teacher educators (Temechegn, 2004). These competencies are more of social contexts than academic contents. And the very existence of competencies indicates the influence of behavioristic and positivistic approach and hence the social efficiency tradition of teacher education. However, since TESO has clearly articulated competencies in advance regarding skills and knowledge to be mastered by prospective teachers, it can be asserted that it has been influenced by the social-efficiency tradition of teacher education.

The fact that TESO requires the would be secondary school teachers to spend about 22 percent of the portion of their study in secondary schools by way of practicum courses which are fully school-based implies the influence of developmentalist tradition on TESO. Since prospective teachers in their practicum courses exercise and experience are expected to understand the developmental stages and the corresponding learning strategies of students in the Ethiopian context it can also be asserted that TESO has also been influenced by developmentalist tradition of teacher education. Furthermore, the fact that TESO also argues and is aimed at changing the teacher-centered approach into student-centered teaching learning approach and creating a democratic culture among teachers and students by way of democratization of schooling shows certain influence of social-reconstructionist tradition on TESO. Therefore, we can learn that whether or not it is intentional, the TESO reform, now put to an end by the originators themselves, is the combination of the three (social-efficiency, developmentalist and social-reconstructionist) traditions. Hence, at this stage of social development where pluralism dominates over individualism, policy makers in teacher education have no other option than examining the existing traditions and paradigms in teacher education to dictate their teacher education policy. The process of informed decision and participatory program development is the only option left for policymakers if their reform proposal is to be implemented and produce the desired change. On the other hand, the

PGDT reform seems skewed towards the combination of academic and social-efficiency traditions. Once again, it is hardly possible to say PGDT is better than TESO for the Ethiopian teacher education. There is no convincing rationale and evidence for replacing one of the reforms with another. Unfortunately, we are still not sure how long and why we may keep on implanting PGDT reform.

Teaching is a messy social affair and learning to teach seems also more complicated and messy affair. Hence, teacher education programs ought to aim at the articulation of prospective teachers' values and belief, and relate these values and beliefs to educational traditions. Accordingly, there ought to be strategies by which prospective teachers reflect their own social and political beliefs vis-à-vis the social context of schooling. This can be achieved through two separate but interrelated strategies of field work (practicum) and course-work training modalities largely through initial undergraduate teacher education programs. Prospective teachers should be given a relatively long period of actual school experience where they learn about the dynamic and social nature of schools and schooling.

Teachers as decision makers

Effective teaching is much more than an intuitive process. A teacher must be continually made decisions and act on those decisions. To deliver this properly, the teacher must have knowledge about learning, human behavior, and the subject matter to be taught. Furthermore, a teacher must demonstrate a range of teaching skills to facilitate students' learning and must display attitudes that foster learning and genuine human relationships. There are multidimensional issues of academic and non-academic that need decision in the school organization. Decision-making procedure refers to the way the school organizes itself in terms of its decision-making processes. It includes the structure the school set up to facilitate all decision-making needed to manage and administer the teaching-learning process. There need to be a clear rule and regulation and method of decision-making. That

is who makes what decisions at what level of the structure of the school and how decisions are made must be articulated and communicated to all concerned parties (Davidoff and Lazarus, 2002).

If we are committed to the development of a democratic structure in Ethiopia in general and democratization of education and schooling in particular, then the presence of a policy of teacher education which emphasizes the autonomy and role of teachers becomes the key issues for development. It is true that decision-making processes often relate to issues of power of control and responsibility. If we want to build democratic schools, then we have to build democratic decision-making structure and procedure at school levels and subsequently at classroom level. The question of who should be involved in decision-making process in schools is connected with teacher's right of participation and responsibility in school affairs. Maximum and professional participation of teachers in decision-making process has a moral and efficiency ground. Morally, it is a way of empowering teachers by way of allowing them to participate actively in the control of their profession and their own lives at large. The efficiency dimension is that successful implementation of any reform and or decision is largely dependent on the extent to which teachers have some sense of ownership. Asking teachers to do something when they were not part of decision-making process naturally is problematic and it is also undemocratic.

Schools are places where most educational policies are put into practice. Teachers are, therefore, the prime implementers of educational policy. Hence, if teachers do not execute the policy as prescribed, then either the policy needs to be reviewed or the implementation strategy and process need to be re-examined. The policy should address real needs experienced by teachers and schools at large. If the policy is to be implemented, teachers need to participate meaningfully and contribute towards policy decision and formulation of policy (Solomon; 2008, 2007, 2006). However, our history of education in general and school culture in particular in the

past did not show this. Although current policy discourses and practices clearly aim to include teachers in the process of educational policy formulation, this remains a daunting challenge at all levels of policy formulation and decision-making.

Teachers as Implementation Agents

According to Fullan (1991), if the change works, the individual teacher gets little of the credit; if it does not the teacher gets most of the blame. This statement indicates how decisive and sensitive the role of the teacher is in the implementation of educational policy and or reform. Put differently, educational change depends on what teachers do and think. At the teachers' level, the success of change is strongly related to the extent to which teachers interact with each other and with others who are providing technical help. Within the school, qualities such as a collegiality among teachers, mutual support and help, are positive indicators of implementation success. Significant educational change consists of changes in beliefs, teaching style, and materials but essentially it needs understanding of the change itself. It is the change that happens in the individual classroom that changes the school, and so onwards through schools, districts, and state. As Gene Hall (1995) states, one of the failures of understanding about curriculum implementation a few years ago was the fact that a school does not change until each individual teacher within the school successfully implements the innovation was not accepted. The only way that classroom effects can accumulate to be school effects is if there is the use of the innovation in each classroom. To look at the school as a whole, first there is a need to look at the use of the innovation by each teacher. Each teacher individually can have an effect but it is the accumulation of their activities, which aggregate and compound to become school effects. At a state level, the multiple schools and districts effects can accumulate. Put differently, the key building block for all this is what happens in each classroom. In addition, the teacher as a change agent determines what happens in the classroom. Unless classroom and school activities change, the most sensitive tests

possible will measure no positive changes in outcomes. The study of Newman and his colleagues as cited in Fullan (1998) indicate that more successful schools had teachers and administrators who formed a professional learning community (collaborative work culture) focused on student work (assessment), and changed their instructional practice (pedagogy) accordingly to get better results. Collaborative activity can enhance teachers' technical competence. As teachers work with students from different backgrounds, and as the curriculum demands more intellectual vigor, teachers require information, technical expertise, and social-emotional support far beyond the resource they can get as individuals working alone. When teachers collaborate productively, they observe and react to one another's teaching, curriculum and assessment practice, and they engage in joint planning.

Craig (1990) argued that even if teachers' quality were not an issue, teachers might still represent a major obstacle to the implementation of a new reform or policy. There are three possible reasons: in the first place, teachers may doubt putting such a reform or policy into practice is worth the effort. Those teachers with more ability and expertise may believe that particular reforms cannot attain the intended goals. They may also reject the pedagogical or curricular theory (if any) used to justify the reform. They may believe that the needed resources will never arrive or they may even think that the curriculum policy, however appealing in the abstract, cannot be made to work with their pupils. Furthermore, teachers often conclude, with good reasons that change means additional work without additional compensation or incentives (Fullan and Pomfret, 1977). However, if teachers are persuaded that the new reform could bring a significant improvement over the old reform, they may be willing to make the sacrifices demanded of them. But they are not easily persuaded even if a serious attempt is made, and usually a serious attempt is not made.

On the basis of the Ethiopian Education and Training Policy, a paradigm shift with regard to teachers' education has also been introduced in the system. The education and training policy gives the

background for the shift of paradigm when it states as (TGE, 1994, p 20-21):

Teacher education and training components will emphasize basic knowledge, professional code of ethics, methodology and practical training.... ascertain that teacher trainees have the ability, diligence, professional interest and physical and mental fitness appropriate for the profession.... Teachers will be certified before they are assigned to teach at any level of education.

To this end, Teacher Education System Overhaul (TESO) program that was initiated by the Ministry of Education as per the 1994 education policy required teachers of all levels to exhibit competencies in producing responsible citizens, in subject and methods of teaching, in the classroom, in areas related to the school and the education system, and in the values, ethics and abilities essential to professionalism. The teacher education curricula were designed in such a way that they emphasized integrated content-pedagogy knowledge and the practicum (would-be teachers' actual school experience from the very beginning of their study up to their completion of the program). TESO assumes that teacher education and training in Ethiopia at all levels should be school-based in the sense that they should devote about 22 percent of the training time on school-based students' practicum, and similarly they should incorporate about 22 percent of contents from the school curriculum (Temechegn, 2004). The curricula of teacher education at all levels need to serve its purpose by correlating with the curriculum and context of the respective level of school system. Hence, there is another gap between rhetoric and practice within teacher education. Put differently, TESO was implemented as per the rhetoric and its aspiration.

Teachers as researchers

Studies on Ethiopian secondary schools teachers' practice and context imply the importance of revisiting the system of teacher education in order to facilitate the process of teaching and learning in secondary schools. Teachers' established practice and the culture of professional development in Ethiopia did not really assist the process of curriculum implementation. A change of teachers' classroom practice and their professional culture is necessary to facilitate the process of curriculum implementation in Ethiopian secondary schools. This, in turn, requires defining, redefining and designing teacher education with the spirit of the teacher *as a researcher*. That is, teachers should be allowed to exercise professional judgment in the context of academic autonomy. Solomon (2008), for instance, has made the following conclusions on the basis of detailed case studies he conducted on some secondary schools in Ethiopia:

- The axiom teacher as a researcher is neither well understood by a significant number of secondary school teachers in Ethiopia nor properly recognized by teacher education curriculum;
- Secondary school teachers in Ethiopia are neither encouraged to adapt the given curriculum in to their school/ classroom context nor the teacher education program created such quality teaching force;
- A good number of secondary school teachers in Ethiopia neither have the culture of learning from each other nor developed the habit of learning from their own practice.
- Teachers in Ethiopia are treated as instruments of government's design and their role is limited to putting into practice the fixed curriculum given from the Ministry of Education (a top-down reform implementation); and

- A paradigm shift from *Teacher as technician* to *Teacher as researcher* seems to be a necessity to facilitate the process of curriculum implementation in Ethiopian secondary schools.

Instructional problems in Ethiopian secondary schools among other things are connected to teachers' academic as well as professional levels of competencies. This is very much connected to our teacher education curriculum that is virtually geared towards linear academic qualification of teachers as a major requirement. Teachers and teacher educators particularly those who joined the profession during the last two decades in Ethiopia lack adequate knowledge about the subject matter, how to teach, and they do not know enough about how to integrate content and pedagogy. Nor do they know enough about how to understand and influence the conditions around them. Above all, the fact that teacher education in both initial and in-service programs is not tailored and practiced in line with the values of *'teacher as researcher'*, added with a lack of a culture of continuous learning has limited the quality of teaching and learning in Ethiopian secondary schools (Solomon; 2008).

Teacher education cannot be inert because unless it is dynamic it can't prepare teachers in line with the dynamic nature of knowledge itself. It, therefore, needs to be continually tested and re-tested in classrooms. Bridges's (1996) argument of teacher education's poverty of pragmatism particularly holds true for Ethiopia. A pragmatic theory of knowledge (McDermott in Elliott, 1998, p. 140):

views reflective thought not as the process of 'copying' or 'mirroring' the objects of experience in terms of their invariant essence, but as the process of taking account of the ways in which more effective and more profitable relations with these objects may be established in the future.

By the extension of Bridges's and Elliott's arguments, it can be asserted that teachers' knowledge and skills of teaching can only be

developed if we recognize '*teachers as researchers*' rather than '*teachers as technicians*' who perform what they studied from a book of rules. A pedagogically driven curriculum as opposed to standard driven curriculum which in a way recognizes the importance and application of a pragmatist theory of knowledge (Elliott, 1998) could bring about a significant change not only to teacher education but also to the overall system of education if adapted in Ethiopia because its prime concern rests on the construction of knowledge by the learners themselves. We need to revisit and reconstruct our secondary teacher education curricula in order to obtain quality teaching forces that are fit for the purpose.

To sum up, governments (federal and regional), curriculum workers, school principals, and teachers in Ethiopia need to promote the professionalism of teachers by way of injecting the spirit of '*teacher as researcher*' in the professional culture of teachers in secondary schools. Teachers also need to be encouraged to reflect on their teaching, to carry out action research in their classroom context, to engage in professional dialogue with their colleagues, to open their classroom and treat their school as a base of change. Both federal as well as regional governments need to encourage and help secondary school teachers to develop their understanding and sense of ownership of the policy/ curriculum and subsequently how to implement in their own classroom context. Successful curriculum implementation is ultimately the result of teachers' understanding and translation of innovation into classroom practice contextually. This, in turn, requires our teacher education policy/ curriculum to value and incorporate the spirit of '*teacher as researcher*' as its major paradigm.

Pedagogical Content Knowledge (PCK) as an essential tenet in teacher education

In the 1950s, 1960s and 1970s curriculum was produced to be 'teacher proof'. Subject area specialists who made little or no comment about teacher or resource adaptation to specific classroom contexts

developed curriculum and resources for teachers. In the early 1970's researchers became interested in the role of the teacher in the instructional process. The research about the role of the teacher in the instructional process yielded a profile of how complex classroom teaching is with hundreds of decisions being made by the teacher each minute. Further research identified how much pedagogical knowledge came to bear on each decision. With the synthesis of many studies terms such as "expert teacher", "effective teaching" and "teacher competencies" emerged. An expert teacher must demonstrate knowledge of the subject being taught and knowledge of pedagogy. However, it is where these two areas overlap that the facilitation of learning in a specific subject area begins. Whereas a teacher's knowledge of the subject area may be personal and applied in many personal situations and experiences these experiences in and of themselves do not necessarily foster understanding of subject or concepts for students. In other words, successful teachers cannot simply have an intuitive or personal understanding of a particular concept, principle, or theory. Rather, in order to foster understanding, they must themselves understand ways of representing the concepts for students. Despite a teacher's deep understanding of a subject area he/ she should also be able to foster understanding of subject or concepts for students. Shulman (1981, p. 9) calls this *pedagogical content knowledge*. Pedagogical content knowledge includes:

... the most regularly taught topics in one's subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations - in a word, the ways of representing the subject that make it comprehensible to others. . . It also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to learning.

Pedagogical content knowledge is grounded in beliefs and practices of the teacher. It also includes conceptual and procedural knowledge, a range of varied techniques or activities (which meet different learning styles or preferences) knowledge of techniques for assessing and evaluating, and knowledge of a variety of resources, which can be easily accessed for use in the classroom. Pedagogical content knowledge according to Marks (1990:9) *represents a class of knowledge that is central to teachers' work and that would not typically be held by non-teaching subject matter experts or by teachers who know little of that subject.* In other words, being a teacher with generic 'pedagogic knowledge' or just being able to speak the language we teach (with content or subject knowledge) are not sufficient conditions for being an effective teacher of, say, mathematics. Indeed, one must possess knowledge of varied pedagogical factors such as evaluation strategies, lesson planning, classroom management, etc. and knowledge of the subject being taught. But a teacher of a subject must also have and be able to apply knowledge of how to teach specific aspects of the subject to an age-specific group of learners. That final point is PCK.

Pedagogical Content Knowledge (PCK) should be an essential tenet in the current attempt of reforming secondary teacher education in Ethiopia. Content and Pedagogy should not be treated as mutually exclusive. What is meant by content? From literature and experience, content refers to the subject knowledge a teacher should possess. Content understanding relies on much more than the rote

memorization of facts. People in content disciplines teach many content-specific courses. The content knowledge of the prospective language teacher, for instance, may develop primarily in language courses taught by a person with strong background of pure linguistic but preferably with a person with strong background of both pure linguistic and pedagogy of teaching a specific language. Accordingly, all language teacher candidates should be provided with a carefully designed, balanced content curriculum leading to a demonstrated knowledge of the concepts and relationships they are preparing to teach. Pedagogy includes actions and strategies of teaching, organization of classroom experiences, providing for diverse learner needs, evaluation and implementation of learner's prior notions, and transformation of ideas into understandable pieces. Teachers should be able to provide all students the opportunity to learn from classroom instruction, to make sense out of the subject they are learning and to want to do more on the nature and application of the subject taught in and out of classroom. Hence, pedagogy virtually involves multiple tasks including addressing all students' needs, planning activities that allow and encourage students to learn and reason about problems, trying to make sense of the world and instilling in students the desire to learn how to learn and learn more (National Research Council, 1996).

Why do we consider PCK an essential part of teacher education? There are many explanations for this. Shulman (1987) developed the construct of "*Pedagogical Content Knowledge*" (PCK) in response to some of the problems of teaching and teacher education. There is a connection between content knowledge and pedagogical knowledge in teaching. For example, the pedagogy suggests that teachers know about organization of classroom experiences. However, to design such "organizations" requires a deep understanding of content. This is what Shulman (1987:15) is talking about when stating, *the key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy.*

Several studies have examined, for instance, the practical connections of PCK to science and mathematics teaching. These studies examine the value of attempting to teach this principle to prospective teachers. For instance, a study by van Driel, Verloop, and de Vos (1998) reviews the existing literature and finds both support and change in teachers as a result of developing pedagogical content knowledge. They found, through empirical study, that there might be value to having prospective teachers study subject matter from a teaching perspective. The studies have also shown the importance of PCK in teaching. To have a set of standards that implies that pedagogy takes precedent over content or the reverse seems to ignore this research. To this end, the current reform (PGDT) of secondary teacher education in Ethiopia seems to be in contradiction with these research findings in that it assumes content to take precedence over pedagogy. Put differently, the reform has a plan and is being executed by adding pedagogical component to prospective teachers after they have completed all the content area courses (add-on approach).

Teachers of a given subject need to be prepared to help students uncover the embedded texts of scientific ideas. PCK provides a useful lens for teachers to begin to help students see the assumptions of that specific subject. However, this requires more than knowing content and how to teach. It requires an understanding of how to teach the content, namely PCK. For teachers to build on and challenge student conceptions, it is necessary for them to have deep conceptual as well as pedagogical understanding. This application of pedagogical understanding to content understanding is a fundamental premise behind pedagogical content knowledge. Therefore, if we are to change students' learning in the Ethiopian context, we must start with changing subject teaching. This requires a shift of paradigm in the structure of teacher education. The current paradigm of learning to teach is not organized in a true sense of the principles of PCK and is virtually supporting the existing divergence and does not force teachers and students to examine the embedded texts of subject knowledge. Such a shift is found in a model of teacher education built around PCK, as an

essential tenet to making improvements in students' learning. While this model or approach may not be a kind of cure-all, it certainly provides opportunities for improvement of teacher education programs at primary as well as secondary levels. The PCK model can easily and truly be realized via initial undergraduate teacher education modality where students are housed in specialized teacher education institution at university level.

Concluding remarks

The paper explored the context and practice of teacher education in Ethiopia, the changing pattern of reforms and the way forward. Teacher education in Ethiopia has been politically and externally influenced and is swinging in the dreams of "radical change" and "big reform" but with no or little change. It is hardly possible to determine teacher education framework without knowing what teachers were doing and why they were doing whatever they did inside and outside classrooms. At this stage of our social development, and the knowledge we have about teaching and teacher education, a kind of policy and/or guideline imposed top-down through which an identical diet is rigidly dispensed to all students on secondary teacher education program in all institutions in the country is simply authoritarian.

There is a valid concern among the general public and teacher educators in general and the government in particular that a good number of students graduating from teacher education institution are weak in the knowledge and skills fundamental to teaching. One possible response to this growing concern of and criticism of the quality of teachers being graduated is rethinking and working on the standard and criteria used in admitting candidates. Virtually, everyone agrees that upgrading admission standard is desirable but it is not the whole solution. Besides this, criteria that better predict teacher success and effectiveness are needed. Both quantitative as well as qualitative criteria should be devised and employed in recruiting and admitting candidates. Accordingly, potential candidates would come from three

overlapping sources: committed pre-professional students, undecided students learning towards the professions, and liberal arts and science students in general. The challenge of recruiting such candidates is formidable, but the establishment of special teacher education and teacher certification needs to be viewed and practiced in their own distinct line without losing their unavoidably overlapping and complementary nature. This is because there is no single and final solution for a problem of such nature. Formal teacher education programs should primarily select individuals with the desirable quality and characteristics and prepare them for the teaching profession. The preparation of teachers for all levels should devote sufficient time and resource for the development of realistic and practical experiences in observation, community-based experience, and actual teaching and research. One way of doing this is to emphasize on the selection of candidates rather than recruitment and providing appropriate experience and training in an integrated modality.

The need to develop in prospective teachers a stronger focus on teaching content is apparent. Accordingly, teacher education programs need to integrate knowledge and skills about the subject matter disciplines, ways to organize and deliver content to facilitate student learning, and methods of evaluating student achievement as part of the effort to strengthen student learning. The structure of the content discipline and the skills necessary to organize and made learnable to the appropriate learners are not mutually exclusive (Cassandra et.al, 1983). The professional education components of teacher education include courses and/or experiences on special methods of teaching certain age groups, ability groups, subjects matter, skills, etc. Knowledge about how students learn is another component of teacher education programs.

It is, therefore, unprofessional and fallacious to assume and argue that pedagogical and/or education courses for prospective teachers are unnecessary. Azeb (1984) is correct when she argued against the position of persons holding the academic traditions who emphasize

that all teachers need to know is the subject matter and methods will take care of themselves as ignorance. It is also equally wrong to assume that a reduced time for professional courses and practice teaching. Because it is these professional courses and practice teaching together with other inputs that distinguish prospective subject expert from a prospective subject teacher. Hence, prospective teachers should be given an adequate number of professional courses and training within a relatively adequate period of time. Knowledge from at least three categories, in an integrated way, is required for prospective professional teachers - general knowledge, subject area or specialized knowledge, and professional knowledge.

We should also learn from our past unsuccessful and short-lived reform history. Such a national agenda (teacher education policy) should not be thought of as a political and or ideological victory of a group holding a specific type of thinking over the others. The researcher also believes that it is of necessity for Ethiopian government to connect its teacher education programs with its national development agenda and policies in particular. In so doing, it is of paramount importance for policy decision makers to examine and understand rival perspectives and reform traditions as well as paradigms by way of revisiting their ideologically and politically laden reform agenda. Context and pedagogical driven instead of standard driven, school-based instead of university-based, holistic (integrated) approach instead of specialist (content expert) approach should be the governing and deriving framework of our teacher education programs. Currently it seems that there is a policy gap regarding secondary teacher education in Ethiopia because there is no clear reform tradition and or paradigm of teacher education, at least equally clear to all of us, that is guiding and or informing our policy or decision makers. Accordingly, secondary teacher education in Ethiopia needs to be rescued.

The way forward

There is a need for solid teacher education policy. Teacher education policies, in most cases, clearly state recruitment criteria, management, career structure, the nature of the training, curriculum, finance, location and national distribution, and certification criteria. These dimensions of teacher education policy could vary over time. They frequently change in response to the changing contextual factors such as socio-economic, political, and economic realities. Even though a separate policy document dealing exclusively with teacher education policy is relatively a recent phenomenon, elements of teacher education policy can be traced as far back as 1946 (Tilahun,1990). To this end, it could be argued that Ethiopia has no solid and comprehensive policy for teacher education. Although there are guidelines and frequently changing curriculum framework, the absence of solid and comprehensive policy on teacher education has created inconsistency of implementation.

Thus, it is the time to think and make our teacher education reform to be based on research and our own history. Our teacher education policy generally should recognize that teachers' knowledge is highly personal and is highly contextual and that a significant part of it should take place in the context of schools and classrooms. The policy should guide explicitly about who should come to initial teacher education, the kind of professional education and the importance of school-based training as well as the Pedagogical Content Knowledge (PCK) as a tenet of teacher education and training.

The solutions to our teacher education system may not be found at our fingertips. However, it could be worked out as short-term and long-term solutions. Accordingly, the following are forwarded as short and long term possible solutions:

Short term solutions:

- Improve the implementation of the current PGDT program by rectifying the observed implementation problems as early as possible.
- Reconsider the *in-out-in* mode of implementation of the PGDT program. That is admitting the PGDT candidates in a regular program for one year training as it was originally planned to be.
- Implement both modalities in parallel. That is *concurrent/blended* and *consecutive* modes of teacher education in parallel. This can be tested in a few universities and could be scaled up.
- Revise the PGDT curriculum in such a way that it constitutes and blends with the school subject contents which the candidates are expected to teach upon graduation.
- Listen to the voices of the candidates and make the program attractive by way of improving their interest and motivation.

Long term solutions:

- Establish a national University of Education.
- Establish Center of excellence in Teacher Education.
- Develop a comprehensive and solid policy exclusive to teacher education. This can be done by forming a national taskforce for the purpose.
- Establish a National Agency for Teacher Education (NATE) which permanently dwells on policy and practices of teacher education at all levels (preschool, primary, and secondary).
- Revisit the undergraduate (BA/BSc.) curricula in such a way it directly contributes for teacher development programs. This could be done by tracking the existing curricula in to teaching and none teaching or any other feasible strategy.

Our teacher education policy generally should recognize that teachers' knowledge is highly personal and is highly contextual and that a

significant part of it should take place in the context of schools and classrooms. The policy should guide explicitly about who should come to initial secondary teacher education, the kind of professional education and the importance of school based training as well as the PCK as a tenet of secondary teacher education and training.

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