



International Journal of Indonesian Education and Teaching
<http://e-journal.usd.ac.id/index.php/IJIET>
Sanata Dharma University, Yogyakarta, Indonesia

INTERROGATING THE PURPOSE OF SECONDARY EDUCATION IN ETHIOPIA: RHETORIC AND REALITY

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<https://doi.org/10.24071/ijiet.v6i2.4903>

received 15 July 2022; accepted 18 July 2022

Abstract

The study examined the prevailing purpose of secondary education. Interview, questionnaire and observation are the tools used to collect data from curriculum experts, secondary school leaders, teachers, students and classrooms. Independent t-test was used to analyze quantitative data. Qualitative data obtained through interview, observation, and document analysis were analyzed using narrative description. Though the results from analysis of the Education Policy and related documents indicated the purpose of secondary education is to prepare students both for the world of work and for further education, key stakeholders perceived preparation for national examinations and higher education as the major intent of secondary education. It was found that experts, educators and students had no adequate understanding about the half part mission of secondary education, preparation for work. It was also found that the curriculum wasn't designed to prepare students for work and teacher centered approach was the dominant pedagogical strategy employed in the schools. As a result, it is concluded that the prevailing purpose of secondary education is to prepare students for examination and higher education. It was suggested to enhance key stakeholders understanding about the entire purpose of secondary education and to revise the curriculum in use and pedagogical practices of the schools.

Keywords: competencies, curriculum, secondary education, work skills, world of work

Introduction

Secondary education provides the optimum setting to prepare young people, predominantly adolescents, for productive adult lives, including participation in social, political, and economic spheres (Jacob & Lehner, 2011). In developed countries, the education that children receive during their teenage years has long been recognized as crucial to development of job skills and other attributes that affect the

ability to function productively as a member of society (Eubanks & Eubanks, 2009). Gradually attempts were made to change and improve the role of secondary education in Africa in line with the progress of development of the countries. Previously, in most African countries, the role of secondary education is mainly to enable students acquire the knowledge and skills that are important to prepare them for the future education (Bregman & Bryner, 2003). Recently, it is perceived as the level at which students develop knowledge, attitude and skills for work and higher education, and it serves as a bridge for school to the world of work. Ndala (2006) also noted that the goal of secondary education of some African countries was changed and aimed to produce graduates who stand on their own feet after completing secondary education. According to UNISCO (2005), secondary education provides effective preparation for those proceeding to academic or professional tertiary education as well as for those entering the world of work either as trainees, wages employees or as self-employed entrepreneurs.

From a holistic point of view, secondary school should equip young people with the tools they need to become resourceful and active members of their communities. This demand schools and school systems to do more than just focus on preparing students for academic tests and improving their test scores. Therefore, the purpose of secondary education shouldn't only to prepare students for examinations, but also to equip them with the skills that are essential in the world of work. However, there is a widely accepted opinion that students' success and schools' effectiveness is determined based on the result of assessment and national examination results that involve passing or not certain tests, subjects. For most countries and people, including political authorities, parents and educational administrators, relevance of education and the status of school is defined in terms of students' examination results. For instance, OECD countries have been using PISA (Programme for International Student Assessment) results as a tool to measure students' performance in key subject areas (reading, mathematics and science) (Lamas, 2015), and as a benchmark to improve their education policy (Schleicher, 2007). However, Llorente (2013) argued that it is a falsehood that the PISA report evaluates competencies (cited in Lamas, 2015). The only chance students have to do is to choose between the given options. In other words, the assessment is objective tests type, which can often be guessed by chance. Besides, the reality is that PISA examines certain aspects of the three subjects based on a competency-based model which is no longer minimized to the three subjects. Lamas (2015) suggested, what is really useful and important is to analyze the contexts and difficulties we encounter, define the educational goals we want to achieve, and create mechanisms of action that will allow us to achieve the intended goals.

No one can consider effectiveness of education system by ignoring relevance of what the system provides the school. What is taught, and how it is taught must be relevant, i.e. learning activities and environments must give learners the best possible opportunities for success and provide an appropriate curriculum and flexible delivery arrangements to meet their diverse destinations (Colby, 2000). Marriott & Goyder (2009) believe that education must be relevant to the present and future interest and

destinations of students. However, most Africa countries including Ethiopia gave more emphasized to expansion of secondary education without giving attention to the relevance of education. Failure to turn out students with relevant knowledge and skills has been the major problem of secondary schools in Ethiopia (Joshi & Verspoor, 2013), and in Africa at large (UNESCO, 2005). Tedesco, Operti, & Amadio (2013) also argued that, if education is irrelevant, curriculum contents and the teaching and learning process are increasingly perceived as outdated with regards to the knowledge, skills, attitudes and values (the competences) needed to live in an ever-changing world and a century that is filled with uncertainties.

Relevant secondary education facilitates the acquisition of knowledge and development of skills and attitudes that have intrinsic value to address learning goals and the demands of the world of work. Hence, the role of education should not be only to fill up students' mind with theoretical knowledge that prepares students for examination but also the work skills that are essential in the world of work. In line with this, Colby (2000) suggested that education system should provide schools with a curriculum which enables every child to acquire the core academic curriculum and basic cognitive skills, together with essential life skills that equip them to face life challenges, make well-balanced decisions and good social relationships. Operti (2017) also suggested that checking learning objects in light of the balance between the needs or interests of pupils and the principle of the development of personality, and between theoretical elements and those that are immediately applicable/ practical, or between conceptual aspects and exercises should be among the strategies to secure relevance of education.

Interactive teaching methods promote students' self learning rather than rote memorization. Also, they are vital to make pedagogical practices of schools more effective to equip learners with cognitive, interpersonal, interpersonal and social skills. Based on the result from the rigorous literature review conducted on pedagogy, curriculum, teaching practices and teacher education in developing countries Westbrook et al. (2013) argued that student-centered learning pedagogic approaches increase students' positive outcome. Laura (2013) also suggested that it is crucial to employ learning practices that can equip students with the core work skills which emphasis more on learning by doing and working in teams and thinking creatively and to use authentic assessment methods. To help students gain the competencies and the skills that will enable them develop the capacities to work, students must be given the opportunity to participate in learning activities (Johan, et al., 2012). This demand schools a productive teacher, the one with a solid knowledge of the subjects and has the ability to employ interactive pedagogy and provide students with helpful feedback.

Secondary education plays an important role in preparing labor market entrants as a workforce and providing skills to be upgraded throughout the working career (Karoly & Panis, 2004). Manufacturing industry, agriculture, construction, business sectors, services and public sectors are among the labour markets inviting secondary school graduates around the world (Seetha, 2014; International Labour Organization, 2016). In Ethiopia, organizations that have been absorbing secondary school graduate

as employee are industries, public sectors, private and non-public organizations (Education Development Centre, 2018). The three main sectors in the formal Ethiopian economy that offer the most opportunity for employment for youth are construction, manufacturing, and the services sector (Education Development Centre, 2018). The research conducted by Berhe & Tsegay (2018) revealed that services, industry and agricultural sectors contributed 68.5%, 23.6% and 7.9% of the total employment, respectively. Apparel/textiles, leather, agribusiness, metal products and wood products are the top five manufacturing industries in Ethiopia, and in 2006 and 2014, the share of secondary school graduates' employment in industry was 29.1% and 25.5%.

Historically, hard skills or technical skills are perceived as the only skills necessary for career employment (Robles, 2012). However, today's labor market requires workforce not only equipped with technical skills and attributes but also laborers who possess adequate generic competencies, not occupation-specific practical capabilities and skills that are relevant to the workplace (Susan, 2019). These skills are a combination of competencies and skills that are necessary for individuals to be successful in work environments (Ball, Joyce & Butcher, 2016). The skills are not specifically related to a particular job, task, academic discipline or area of knowledge and that can be used in a wide variety of situations and work settings (Wood, 2012). Whittemore (2018) also believes that the skills are transferable across domains, geographies, work and life contexts, and cross-functional and cross-curricular in education. Thompson (2017) categorized these skills to cognitive and non cognitive domains (cited in Wood, 2012). Cognitive skills are critical thinking, problem solving, collaboration, communication, and learning to learn that can be demonstrated within core academic content areas that are important to success in education, work, and other areas of adult responsibility. Non cognitive skills are personal qualities, attitudes, behaviors, competencies, and skills that enable people to perform well, effectively work well with others, and achieve the identified goals.

The challenge of secondary education in Africa is three-fold (UNESCO, 2005). First, there is a real need for the expansion of secondary education. Second, there is a quality imperative to ensure that secondary school graduates are competitive on the labour market and can make a real contribution to Africa's economies. Third, the education provided must be relevant and meet the peculiar needs of a wider variety of learners and responding to the changing nature of knowledge and the world of work. In addition, the challenge of secondary education is mainly related to the existing narrow conception of the goals of secondary education. That is, preparation for tertiary education has been accorded undue reference over the other equally important goals; personality development and preparation for the world of work.

A number of studies conducted on secondary education (Holsinger & Cowell, 2000; Jidamva, 2012; Rolleston and Frost, 2013; Stevenson, 1995 cited in UNESCO, 2005) revealed that, in most developing countries, there was a considerable gap between what is learned and the real life context and students' present and future world. It was also found that, general secondary education in some less developed

countries wasn't understood as the best preparation area to enter into labour market. Though efforts had been made to relevance of secondary education, local studies (Amare et al, 2016; Joshi & Verspoor, 2013; Solomon & Aschale, 2019) realized that lack of relevance was among the bottleneck problems observed in the education system. However, the local studies didn't try to assess how curriculum makers and users perceive secondary education and curricular responses to the intended purpose of secondary education. More specifically, the study was intended to:

- Examine subject curriculum experts', school leaders', teachers' and students' understanding about the purpose of secondary education vis-a- vis the official proclaimed purpose
- Assess the space accorded both preparation for higher education and the world of work in the secondary school curriculum.
- Appraise the curricular and pedagogical practices against the prevailing understanding of the purpose of secondary education.

Method

Mixed research method was employed to study the prevailing purpose of secondary school curriculum and instruction. The approach was employed with the assumption that it involves collecting, analyzing, and integrating quantitative and qualitative data in a single study (Onwuegbuzie & Johnson, 2006). One of the purposes of this form of research is that both qualitative and quantitative approaches, in combination, provide a better understanding of a research problem or issue than either research approach alone.

Case study is often associated with a qualitative research design. However, Yin (2003) argues that case studies can be used with both qualitative and quantitative data. Descriptive case study was selected with the assumption that it allows the use of a wide range of data collection methods to collect data from the selected areas (Tharenou, Donohue & Cooper, 2007).

The target population of the study was subject curriculum experts, secondary school principals, teachers and students. Burayu town was selected among areas where different industries inviting secondary school graduates are available. Nekemte town was preferred among areas where high school graduates have limited employment opportunity using convenient sampling technique. Three schools from each town, Burayu and Nekemte, a total of 6 secondary schools were included in the study using convenient sampling technique. Stratified sampling method was used to select four subject curriculum experts from the two streams, that is, two from each (Chemistry, Biology, Geography & History). All the accessible 141 teachers and proportional number of students from each school, a total of 150 students were selected randomly. Education Policy (1994), curriculum framework for KG-grade 12, and Education Sector Development Program III (EDSP III) are the documents selected purposely.

Interview, questionnaire, observation and document analysis are the tools used to collect data from the different sources. Questionnaire allows researchers to secure

data from many people and selected for its natural characteristics that let informants express their ideas and opinions freely. Both open-ended and close ended items included in the questionnaire were used to gather data from teachers and students on the purpose of secondary education, relevance of curriculum and effectiveness of pedagogical practices employed in school. The close-ended questions were prepared in five level Likert-type scales ranging either from strongly agree to strongly disagree (strongly agree, agree, undecided, disagree, and strongly disagree) and never to always (never, rarely, sometimes, often and always).

Semi structured interview guides were used to conduct interviews with subject curriculum experts and school leaders were to learn their understanding about the purpose of secondary education, curricular responses to the world of work and pedagogical practices of the schools. Classroom observations were made to triangulate the data obtained through questionnaire from teachers, school leaders, and students and to make valid conclusions. Twelve classrooms were observed while teachers were teaching in different classrooms and the data were recorded using field notes and video recorder. Document analysis was employed to review the mentioned policy documents.

The data collected were organized and analyzed under different themes that are created based on the specific research objectives. Both quantitative and qualitative methods were used to analyze the collected data. Quantitative data gathered through questionnaire were analyzed using SPSS-24 and independent t-test was employed to see the current status of secondary school curriculum as well as pedagogical practices of the school as perceived by teachers and students. This test is also used to see the variations of two mean scores of the two groups. The qualitative data collected through document analysis, observation, interview and open-ended questions were presented and analyzed qualitatively using narrative description.

Results

As discussion in the Education Policy, curriculum framework and ESDP-III documents, the goal of secondary education is to prepare students for further education and for the world of work (TGE, 1994; MoE, 2005; MoE, 2009). Providing students with the knowledge, skills, abilities and attitudes that enable them to make all rounded participation is among the aims of education listed in the policy document (TGE, 1994). Preparing students for work and encouraging them to develop positive work habits and high regard for work is also the major target of education in Ethiopia. From these findings, it is being learned that majority of the skills the labour market require from high school graduates are presented in the different policy documents as aim or objective of education. Base-line skills, life skills, higher-order skills, independence, adapting to change and time management are identified as key competencies and skills students need to learn and work (MoE, 2009). Satisfying the need for trained middle level human power and the demands of tertiary level of education is also among the major concern of ESDP III (MoE, 2005). Based on these results, it is concluded that the intended purpose of secondary education is to equip

students with competencies and skills that are essential to prepare them for higher education and for the world of work.

Table 1. The Skills Addressed in the Policy Documents

Documents	Critical thinking	Problem solving	Communication	Creativity	Collaboration& teamwork	Decision making	Self regulation	Use of technology	Technical skills
Education policy (1994)									
i. Aims			√			√			√
ii. Objectives	√	√	√	√	√				√
B. Curriculum framework									
i. Vision	√	√			√			√	√
ii. Values	√	√			√	√			
iii. Principles	√	√		√					√
iv. Key competencies	√	√	√	√	√	√		√	√

Purpose of Secondary Education: Educators’ Perspectives

As mentioned repeatedly, secondary education prepares students for different destinations; the next level of education and preparation for work. However, curriculum experts clearly stated that secondary education is mainly to prepare students for national examination and higher education. For instance, one of the interviewees reported as follows:

The main purpose of secondary education is to prepare students for examination that let them to enter university. It is also to bring holistic development to learners. The target of ‘my subject’ area is to equip students with theoretical knowledge and practical skills that are essential to help students effective in life and education (Gurmu, social science expert 2).

The other social science curriculum expert also replied that secondary education is planned to develop positive attitude and global (broader) perspective and the skills help students to be effective in their individual life and to live with others (Bosona, Social science expert 1). Natural science curriculum experts didn’t answer preparation for work as the major purposes of secondary education. One among the natural sciences experts also explained secondary education as:

The goal of secondary education is mainly to prepare students for higher education. Moreover, the aim of secondary education is to produce citizens who competent at national and international level. The demand of the government including moral issues is also considered as part of the goal of secondary education (Jiksa, natural science expert 2).

It was revealed that school leaders understanding about the purpose of secondary education is similar to curriculum experts' views. One among the school principals said:

The major goal of secondary education is to prepare students for national examination and university. Hence, our responsibility is to make the teaching learning processes and school environment conducive for students' maximum learning and succeed in entrance examination (Qabso, school leader1).

On the same issue, another school leader responded as follows:

The target of our school plan and its implementation is to improve students' academic achievement including teacher made evaluations and national examination. Teachers are required to meet the agreed-on benchmarks and evaluated based on their performance that are directly or indirectly referred to student's result (Guma, school leader 2).

Teachers also believed that the role of secondary school is to provide students the subject matter knowledge which is essential to be successful in examinations and to get prepared for higher education. Few of them mentioned university, technical and vocational college and teacher training college as examples for which secondary education prepares students. Data from all students also confirmed that secondary education is to provide theoretical knowledge and attitudes that are crucial to prepare them for further learning. In response to the question asked to identify their destinations after secondary school, all informants responded as they have planned to be university student. Few (9.32%) of those who decided to go to university were also interested to create their own job or employed in nonpublic or public organizations.

For the question asked to identify if the skills demand of employers is considered during curriculum making, one among natural sciences experts reported that:

Curriculum is changed based on the need of the government to improve or to update or totally change the curriculum in use. Evaluation of the curriculum in use and assessment of the international best practices were among the major tasks in curriculum development process. However, we don't clearly define the specific employers of secondary school graduates. Consequently, I'm not confident to assure you that the skills and knowledge demand of employers are included in the textbook (Jiksa, natural science expert 2).

Regarding the nature of stakeholder's participation, the study identified that curriculum experts, international organizations, consultants (advisors), teachers, public sectors representatives, and Teachers' Association were directly or indirectly involved in the process curriculum making (Bosona, Social science expert 1). However, another expert expressed his worry as follows:

Though secondary school curriculum framework was designed by group of experts, competition for textbook preparation was open for any international and local organization that has got credibility from government/MoE. The selected

organization in turns invites local and international textbooks writers that have no any/little understanding about educational context of the country and knowledge and skills required to develop relevant curriculum (Obsa, natural science expert 1).

Similarly, another expert who took part in preparation of curriculum framework and serving as textbook evaluator expressed his observation as follows:

One of the factors that have been affecting the achievement of the intended purpose is competence of textbook writers. In my observations, I'm not convinced with the knowledge and skill of some of the textbook writers. Some of the drafts I evaluated don't satisfy the minimum requirement to be a textbook (Jiksa, natural science expert 2).

Relevance of Curriculum to the Purpose of Secondary Education

This section presents the extent to which curriculum elements, including learning objectives, review activities and exercises are aligned with the intended purpose of secondary education.

Table 2. Teacher Response on Relevance of Secondary School Curriculum

No	Secondary school curriculum	Mean	SD	t	P
1	prepares students for work	2.61	1.14	3.70	.001
2	serves students who have planned to go to higher education and world of work equally.	2.55	1.37	1.39	.172
3	encourages students to develop cognitive work skills	3.10	1.18	1.97	.051
4	The curriculum provides students with interpersonal skills that are essential to be effective workforce	3.02	1.14	.182	.856
5	enables students develop intrapersonal skills	2.72	1.17	2.34	.021
6	Both theoretical knowledge and practical skills are equally emphasized in the curriculum	2.61	1.20	.507	.613
7	The curriculum encourages students to develop work habits and attitudes that are essential for work	2.69	0.97	1.95	.053

Expected mean =3.00, it is the middle score in a five-Point Likert Type Scale, P< 0.05

As can be seen from the Table 2, teachers labeled the status of secondary school curriculum to promote cognitive skills and interpersonal skills employers expect from high school graduates as medium (3.10; 3.01). On the other hand, it was below the average mean for intrapersonal skills (2.72). The result of the study revealed that the integration of work habit and positive attitude towards work (2.69) and practical skills (2.61) in secondary school curriculum was not to the expected level. It was also learned that the curriculum doesn't serve equally students who have planned to go to higher education and the world of work (mean=2.55). Relevance of the curriculum to prepare students for work was below the expected mean (2.61). Based on these findings, it is concluded that secondary school curriculum better serve students interested to go to the next level of education.

Pedagogical Practices of the Schools

The three domains of competencies and the core work skills, including critical thinking, creative thinking, decision making, and problem-solving skills, communication skills, leadership skills, teamwork, ability to learn, work independently and time management are used to assess effectiveness of pedagogical practices of the schools to prepare students for work. The following four tables present how often teachers implemented instructional activities that are expected to encourage students to develop the core work skills.

Table 3. Implementation of Instructional Activities Intended to Teach Cognitive Skills

No	How often teachers:	Mean (T)	Mean(S)	Agg.	t	P
1	ask students to do learning activities that demand them to analyze, synthesize and evaluate data	2.90	2.61	2.75	3.30	.001
2	encourage students to solve problems	3.32	3.10	3.21	1.06	.342
3	provide activities that demand students to generate ideas and test out ideas	2.95	2.61	2.78	4.66	.001
4	ask students to make decisions and explain the rationale behind their decisions	2.90	2.58	2.74	3.23	.003
5	encourage students to draw their own conclusions	2.78	2.56	2.67	3.43	.011

Expected mean =3.00, it is the middle score in a Five-Point Likert Type Scale, $P < 0.05$

The study found that the mean score for items representing instructional activities employed to promote higher order cognitive skills was below the average. That is, the mean scores for critical thinking skills, creativity, and decision-making skills were 2.75, 2.78 and 2.70, respectively. However, implementation of activities employed to encourage problem-solving skills was slightly above average (3.21). Except for problem solving skills ($t=1.06$, $P>.05$), the independent t-test result indicated that the mean difference between teachers and students is statistically significant for all the skills ($P<0.05$). However, both groups agreed that pedagogical practices of the schools did not encourage students to develop the cognitive work skills to the expected level.

Table 4. Instructional Activities that are identified to Teach Interpersonal Skills

No	How often teachers:	Mean (T)	Mean(S)	Agg	t	p
1	arrange group discussion/work during instruction	3.32	3.07	3.18	1.18	.252
2	give students different responsibilities (leader, time keeper, presenter) during group discussion	2.91	2.74	2.82	2.18	.031
3	encourage students to prepare and deliver oral presentation/reflection in the classroom	2.89	2.52	2.70	3.31	.001
4	arrange debate at school / classroom level	2.53	2.07	2.27	2.07	.040

Expected mean =3.00, $P < 0.05$

The study revealed that the extent to which teachers arranged small group discussions during instruction was average (3.18). However, the instructional activities employed in the schools didn't encourage students to develop the ability to prepare and deliver oral presentations and debate and to prepare them for different responsibilities during group discussions were below the expected level (2.70, 2.27, 2.82). The independent test indicated that there is statistically significant different between the mean score for the two groups ($p < 0.05$), excluding the mean scores for item 1 ($t=1.18, P>.05$). Based on these results, it is concluded that pedagogical strategies delivered in the schools did not support students to develop interpersonal skills.

Table 5. Implementation of identified Instructional Activities to Teach Intrapersonal Skills

No	How often teachers:	Mean (T)	Mean (S)	Agg.	t	P
1	give students activities to be done individually	3.10	2.75	2.92	6.51	.001
2	give students chance to supervise & provide feedback to other students' work	2.87	2.25	2.53	3.02	.003
3	give students tasks to be completed within the given time using the prescribed criteria	3.36	3.23	3.29	.63	.538
4	encourage students to be aware of and obey classroom and school rules & norms	2.95	2.62	2.79	4.05	.001

Expected mean =3.00, $P < 0.05$

The mean score for items representing pedagogical activities supposed to support students to develop the skills to evaluate others work and give feedback and self control skills was below the expected mean value. On the other hand, it was found that the status of pedagogical practices of the schools to encourage students to complete tasks independently and within the given time were medium. Except for time management ($t=.63, P>.05$), the result for independent t-test showed that the mean difference for teachers and students is statistically significant ($P < 0.05$). However, both groups agreed that instructional practices of the schools didn't allow students to develop intrapersonal skills the work environments require from employees.

Table 6. Instructional Activities Intended to Teach Independent Learning and Practical Skills

No	How often teachers:	Mean (T)	Mean(S)	Agg	t	p
1	employ the different interactive instructional strategies in teaching the lesson	3.28	2.92	3.07	1.68	.96
2	use majority of the instructional time to lecture a lesson	3.67	3.42	3.55	3.10	.003
3	invite students to do project work or conduct laboratory experiment when needed	2.21	1.64	1.92	4.55	.001

4	order students to write & submit laboratory / project work reports	2.26	1.79	2.00	1.82	.071
5	arrange study trip to help students visit different industries or historical areas	1.97	1.50	1.71	2.21	.027

Expected mean =3.00, P< 0.05

In order to encourage students to develop transversal competencies and the work skills, teachers are expected to integrate the skills into classroom instructions and required to change their role from being transmitters of knowledge to facilitators of students learning. However, as can be seen from Table 6, the study depicted that teachers occasionally employed active learning strategies in teaching the lessons (3.07). It was also identified that majority of the instructional time was used to lecture the classes (3.55). Similarly, the extent to which teachers invited students do experiments and/or project works, report laboratory and project results and arranged study trip so that students get first-hand experience was very low (1.92, 2.00, 1.71). From these results, one can conclude that the instructional activities employed in the schools did not encourage students to do tasks independently and develop technical skills that are essential to be effective in the world of work.

Discussion

As said earlier, secondary education offers learners the opportunity to develop attitudes and skills enable them develop job-oriented skills, and continue learning. However, the study revealed that that subject curriculum experts, school leaders, teachers and students believed preparation for national examination (and/or for higher education) as the only major purpose of secondary education. None of them mentioned preparation for the world of work as the major purpose of secondary education. In consistence with this finding, the research conducted by Sifuna & Sawamura (2010) indicated that the results of national examinations were used to assess efficiency of the secondary schools. Based on the results of the study, it is possible to conclude that curriculum experts, school leaders and teachers didn't consider preparation for work while they were designing curriculum and delivering instruction. Similarly, students weren't conscious about their destinations after secondary school other than higher education institutions.

In order for participatory processes to be truly effective, all stakeholders must participate effectively in curricula development, implementation, and evaluation process (Lindeberg, 2009). In contrast, the study indentified that curriculum development team at Ministry of Education and local and/ or international organizations were the only active actors in the process of textbooks preparation. It was found that potential employers of secondary school graduates were not clearly identified. The study further revealed that involvement of employers of the graduates in the process of curriculum development was not confirmed. As a result, it is possible to infer that secondary schools are using curriculum that does not adequately reflect the skills needed in the world of work. This doesn't mean that the others were totally ignored. Few representatives of public sectors and professional associations

were participated during validation of the curriculum. Besides, the procedure and criteria used to prepare the curriculum do not support realization of the purpose intended to prepare students for the world of work.

Secondary school curriculum needs to strike a balance to meet the needs of young people who will enter the labour force directly from secondary education and those who are interested to proceed to post-secondary education. However, the result indicated that secondary education was not providing equal serves for students who have planned to different destinations; higher education and world of work. That is, the space provided for the different destinations students will join after secondary education was not equal, and it seems the priority was given to preparation for examination and higher education. Similarly, the study conducted by Akyeampong (2014) indicated that secondary education systems in most African countries place a strong emphasis on knowledge and competencies for higher academic education, even though most school-leavers do not enter tertiary education. It was also disclosed that the curriculum didn't provide considerable space to practical skills and work habits and attitudes that are essential to prepare students for work.

The instruction which is derived from a mix of constructivist approaches promotes participatory, more interactive, discover-oriented pedagogy and cooperative learning (Sayre, 2013). In relation to this, it was found that interactive instructional strategies were not demonstrated to the level required to encourage students develop the required work skills. Teachers used most of the instructional time to present the lessons and students were passively attending teachers' lecture throughout most of the lessons. Sifuna & Sawamura (2010) also identified that the main teaching strategy that characterizes secondary school teaching is the large amount of teachers' talk, which involves mainly the teacher presenting to the students, intersperse with questions asked to the whole class, with predetermined answers. Teacher centered approach that don't encourage students to develop the skills that prepare them for work, including the ability to independently complete tasks, solve problems and work with others with minimum support was the instructional method frequently employed in the schools.

When students work cooperatively together, they learn to give and receive help, share ideas and listen to other students' perspectives, and seek new ways of clarifying differences and resolving problems (Gillies, 2016). However, the findings of the study showed that there was no strong evidence that proofs the pedagogical activities delivered in the classrooms strengthen students' active participation. Consistent with this finding, it was identified that the teaching practices in Eastern European countries was largely traditional and centered around the teacher (e.g., delivering a lecture to the whole class) (OECD, 2021). Besides, the classrooms and instructional activities weren't organized in ways it allows students to develop the skills help them to work together with others and actively engaged in learning activities. The result has also indicated that cooperative learning strategy which encourages students to develop critical thinking skills, teamwork and cooperation, time management, self control, and leadership skills wasn't implemented to the level it prepares students for the world of work.

When students work collaboratively, there is an expectation that each student contributes equally and assigned specific roles within their group. The primary reason for assigning role is to ensure that no group member dominates the group, or contributes nothing (Yager, 1991 cited in Kim, 2005). Conversely, the result of the study revealed that students were rarely assigned to different responsibilities during discussions in small groups. Collaborative interactions include taking on leadership roles, making decisions, building trust, communicating, reflecting, and managing group (Carpenter & Pease, 2013). In the classroom where cooperative learning was evident, one or two students in each group were trying to deal with the provided learning tasks and share their understandings to the group members and to the whole class. Besides, teachers weren't arranged different stages at classroom or school level so that students develop the work skills including analytical skills, oral-communication, social-interaction, ability to synthesize the arguments, speak impromptu, and make informed decisions and judgments that are expected to be achieved through debate and oral presentations. It implies that the instructional approaches used in majority of the classrooms didn't invite students to get prepared for different life and work responsibilities.

The results of the study indicated that the intention to promote the skills to solve problem was encouraging. However, it was learned from the classroom instructions that the intention of the problems students required to solve don't require higher order cognitive skills. Instead of providing further guiding questions that foster critical thinking skills and push students to give answer by themselves, most teachers tried to give answers to students' questions. Instead of devising alternative techniques to search for solutions and cooperate with others to find answer through discussion, most of the students wait for teachers to provide answers. Similarly, the study conducted by Kurniawati, Zubaidah, & Mahanal (2015) found that critical thinking skills of public senior high school students are still not well developed and even need to be improved. It was also disclosed that students were not provided with tasks that demand them to analyze, synthesize and evaluate information and help them to get opportunity to develop critical thinking skills and problem-solving skills that are required in the world of work. Unless teachers encourage students and provide them activities that force them to deal with problems that demand cognitive process, they wouldn't develop the skills help them to look for alternative solutions for a problem (Greenstein, 2012; Mayer, 2013). Conversely, the actual classroom practices didn't encourage students to develop the skills that employees need to solve problems they will face in the work environments.

Critical thinking skills, well-developed problem-solving skills, ability to identify the problem and seek different alternative solutions are the key prerequisite for decision-making skills. Though students were asked to select from alternatives in different forms (to make decision), the results revealed that the instructional activities employed in the classrooms were rarely invite students to make decisions that require critical thinking skills, problems solving skills and justification for their choices. Alismail, & McGuire (2015) suggested problem-based learning strategy to develop the ability to identify, analyze and define problems, to know and apply strategies for

dealing with unfamiliar problems, to generate, analyze and select problem-solving strategies and to make justifiable decisions. However, the instructional activities employed in the schools didn't invite students to generate ideas, test out ideas and invent a solution to a problem. From these findings, it is concluded that the school pedagogical practices didn't support students to develop the higher order cognitive work skills that are essential to get prepared for the world of work.

Instructional activities that are responsive to the world of work require teachers to encourage students to develop the ability to learn independently throughout their life, the ability to solve problems independently, acquire the core academic knowledge, and facilitate the development of higher-order thinking skills. Though the study confirmed that teachers were tried to encourage students to complete tasks individually, the tasks focused on theoretical concepts that don't require students to use inquiry skills and the skills that are vital in the world of work. Similarly, previous study conducted by Tate and Swords (2013) demonstrated that high school learning focused on memorizing and understanding concepts. As a result, many first-year students in the United Kingdom experience 'a skills gap' in the transition to university. It is also identified that for most teachers independent learning is merely students working alone. The important roles teachers play in supporting and enabling students' independent learning was not considered. This might be due to misconceptions with the teachers understanding about the concept of independent learning.

Inquiry-based practical work require students to think of problems, formulate hypotheses, observations and draw conclusions from scientific phenomena and requires purposeful observations or scientific inquires by manipulating equipment and materials (Hofstein, 2017; Lederman & Lederman, 2012). There are considerable number of projects works and experiments in high school science textbooks. However, observations revealed that neither of them was implemented in the schools due to different reasons. Lack laboratory room, chemicals, apparatuses and laboratory technician were among the factors hindered implementation of experiments listed in the textbooks. In consistent with this result, Boyuk et al. (2010) identified that lack of materials needed for the required laboratory work is vital for experiment and insufficient information for carrying out the experiment are problems teachers encountered to conduct laboratory work. In the absence of real engagement in project work and laboratory experiment, it is unusual to expect written or oral report from students. As a result, it is concluded that the schools weren't encouraging students to develop critical thinking skills, problem solving, working with others, practical skills and the ability to prepare and deliver oral and written reports expected to be acquired through project work and experiments.

Selective observation which is supported with experts' explanation encourages students to develop work habit, positive attitude towards work, connect theory to practice, and ability to analyze, synthesize and summarize information and reflect on their observation. There are industries and historical areas that are conducive for students to gain direct experience. However, the result of the study showed that the opportunity to acquire the work skills and work habits and attitudes that are required

in the world of work and expected to be achieved through study trip was totally denied. Students weren't given chance to visit any relevant location (industry or historical places). This finding is directly in line with previous study's findings conducted by Behrendt & Franklin (2014) which stated that field trips have become less common due to limited funding and limited available time.

Hard-working, the ability to complete tasks in time and consistency are the characteristics of people with well-developed self-discipline. People with low self-discipline create behavioral problems that disrupt the learning and working environment and limit the individual performance. Unlike the efforts made to help students develop time management skill, the study found that the instructional activities delivered to help students learn and develop self-control skills were not encouraging. Moreover, the instructional strategies employed in the classrooms didn't allow them to be more responsible for their actions, encourage a reflexive approach to learning, involves learners in judging their performance or that of their peers, and also the developing and using of evaluative expertise, and providing, seeking and utilizing feedback. To sum up, the instructional activities employed in the classrooms weren't sufficient to equip students with the skills secondary school graduates required to become effective in the world of work. As a result, it is concluded that the major intention of the pedagogical practices observed in the schools wasn't to prepare students for work.

Conclusion

As mentioned in the policy documents, preparing students for higher education and for the world of work are the equally important goals of secondary education. However, the current study showed that subject curriculum experts, school leaders, teachers and students perceived preparation for national examination and higher education as the major goal of secondary education. They associated students' success and schools' effectiveness with students' national examinations result that determines the success to join higher education institutions. They weren't conscious about the other half part mission of secondary education; preparation for the world of work. It was also realized that teachers, school leaders and students weren't aware of the different destinations students will join after secondary education other than the next level of education. Though experts mentioned some of the skills required in the world of work as they are essential for students' future career, they had no clear idea about importance of the skills to the world of work. Consequently, it is concluded that key stakeholders had no clear understanding about the entire purpose of secondary education.

Regarding the emphasis given to preparation for work and higher education in secondary school curriculum, it was confirmed that the curriculum was mainly intended to equip students with the knowledge that help students to be successful in national examination and to join university. Similarly, the room provided for theoretical knowledge and practical skills and the behaviors and skills that are essential in the world of work is not balanced; it is theory-oriented curriculum. It was also found that teacher centered instructional strategies that have no significant role to

encourage students to develop the work skills was the dominant approach employed in the schools. Most of the instructional time was used to lecture the class and the teachers dominated the instructional activities. In addition, the instructional activities employed in the schools didn't encourage students to develop the skills and attitudes that are essential to prepare them for the world of work. Hence, it is possible to infer that secondary school curriculum and pedagogical practices of the schools were less relevant to prepare students for work.

The study revealed that the criteria and procedure used to prepare the textbooks didn't consider the local context and the knowledge and skills that are essential to prepare students for work. It was also confirmed that potential employers of secondary education graduates aren't clearly defined. Besides, it wasn't confirmed to conclude that employers were participated in the curriculum development process and their demands are adequately integrated in the curriculum. Hence, it is concluded that the effort made to connect secondary school curriculum and instructional activities to the world of work didn't bring noticeable effect.

In order to prepare responsive curriculum, subject curriculum experts and textbook writers are recommended to be aware of the entire purposes of secondary education and to design curriculum that could serve demands of the internal and external users of the output of secondary education. Identifying the potential employers and addressing their demand is among the suggestions that are essential to enable curriculum experts and textbook writers to design curriculum that prepare students for work. They are also recommended to have not only clear understanding about the goal of education and subject matter knowledge but also adequate knowledge and skills that are required to prepare curriculum that are responsive to the entire purpose of secondary education. Similarly, school leaders, teachers and students are advised to have adequate understanding about the whole purpose of secondary education and the alternative destinations of students after secondary education/school, and the schools are recommended familiarized with the work skills students need for work and to deliver instructions that could prepare students for the world of work.

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