Quality Matters

Quality Matters, Vol. 7 No. 27 August 2013

A Quarterly Newsletter of the Center for Educational Improvement and Quality Assurance (CEIQA)

St. Mary's University College

In this Issue

From the Editorial Desk	2
Research Corner	3
News.	4
Perspective	5
Article	7
Photo Gallery	11

Quote of this issue

"The engineer is a mediator between the philosopher and the working mechanic and, like an interpreter between two foreigners must understand the language of both, hence the absolute necessity of possessing both practical and theoretical knowledge."

Henery Palmer

This newsletter is published every three months by the Center for Educational Improvement and Quality Assurance (CEIQA) of St Mary's University College (SMUC). The objective of the newsletter is to inform the SMUC community as well as interested public, private, non-governmental stakeholders about the activities and endeavors of the institution in fostering quality education and research in the Ethiopian Higher Education setting.

Tel.251-11-553 7999 / 8001

P.O.Box:1211

Email: ceiqa@smuc.edu.et http://www.smuc.edu.et Addis Ababa, Ethiopia

St. Mary's UC Promoted to a University

St. Mary's University College has been upgraded to a university level as of September 2013. The Ministry of Education released a letter approving the appellation proposed by the Higher Education Relevance and Quality Agency, which looked rigorously into the status of the institution. St. Mary's, which evolved from a language school 20 years ago, has incrementally and steadily grown today into a name worth its achievements. With this development, St. Mary's University commits itself to live up to the expectations of its stakeholders at home and its partners abroad. The institutional leadership would like to use this opportunity to thank St. Mary's community, the Ministry of Education and all those who have closely worked with us through the years.

International Conference Held

The 11th International Conference on Private Higher Education in Africa was held on August 24, 2013 at the UN-ECA Conference Center here in Addis Ababa, Ethiopia. Sponsored and organized by St. Mary's University College, the conference had paper presenters, including scholars from the host country, from the Sudan, Kenya, Tanzania and Zimbabwe. The major theme of the conference was Poverty Reduction and the Contributions of Private Higher Education Institutions in Africa. Among others, the papers covered issues like leadership styles in public and private HEIs, entrepreneurial education, assurance, gender HIV/AIDS quality and and mainstreaming.

Welcoming address was made by the Founder and President of St. Mary's University College, Wondwosen Tamrat (Asso. Prof.), while the opening remarks were given by Dr. Tesfaye Teshome (Asso. Prof.), Director

... Continued on Page 4

1

From the Editorial Desk

Ethiopia started engineering education in 1953 at intermediate level. It was a two year program. Accomplishing the two year program, learners were sent abroad for their B.Sc study. Then, a four year program was soon initiated in the fields of civil and industrial engineering. Engineering education has been effective for more than six decades; nevertheless, it cannot enhance the country's development as desired. Ethiopia is still an agricultural country. The livelihood of 85% of Ethiopian people depends on agriculture. The industry sector is in its infancy stage, characterized by different performance related problems which signal that a lot is expected from technology education to transform the country from agriculture to industry.

Realizing this severe problem, the country has given emphasis to engineering education, enrolling 40% of preparatory school candidates to engineering fields with the aim of producing competent engineers who can research, adapt and create technologies.

The issue of quality, however, is a stumbling block in realizing the vision and mission of engineering education without the requisite preparation of students at primary and secondary school. This results in poor performance in their preparatory leaving certificate achievement. The raw scores of students, enrolled in the public universities, displayed that learners join higher education without achieving the minimum requirement (Mulu, 2012). In fact, the total score of grade 12 students indicated that learners are poor achievers. In 2005/6, students who scored less than or equal to 250 out of 500 were 58%, and those who got between 250 and 300 were 32%, but those who achieved greater than 300 were only 10%. Despite their low scores, 97% of the students were enrolled in public higher institutions. Likewise, in 2008/9 learners who scored less than or equal to 250 out of 500 were 63%, and those who achieved between 251 and 300 were 27%, but those who got greater than 300

were only 10% of the examinees. In 2008/9 academic year, 86% of the examinees were accepted in public higher learning institutions. In both academic years, the percentage of students enrolled in public universities was greater than the percentage that scored the minimum requirement which is 50%. In other words, detainees who did not have adequate preparation for university education joined Ethiopian public higher learning institutions which have its own negative impact on the quality of engineering education.

When it comes to engineering education, it appeared, by and large, theoretical. Especially, in the past it was not networked with different companies so as to enable learners get firsthand experience. As a result, learners could not confirm the application of their theoretical knowledge in practice, and in doing so they could not develop their confidence; identify problems for their projects, and change their attitude from unfavourable to favorable when they try to tackle issues which were not clear during the theoretical learning.

Unlike the past, the practice of University Industry partnership (UIP) in Ethiopia has already started in most of the universities (Abdu, 2013). The absence of clear guidelines on the nature of the network, organizational capacity problem and lack of awareness on the significance of UIP, however, require solutions (ibid). Besides, the country should exert its effort to produce quality students in both primary and secondary schools, so that engineering learners can follow their study without facing significant problems.

Managing Editor
Atlabachew Getaye
Layout Designer
Robel Tegene

Center for Educational Improvement and Quality
Assurance (CEIQA)
St. Mary's University College (SMUC)

Tel. 251-115-53 79 99 / 53 80 01 ext. 145 P.O.Box:1211

> Email:ceiqa@ smuc.edu.et Addis Ababa, Ethiopia.

Research Corner

Title: Higher Education - Industry Resource Integration Center - Towards Solving Existing Industrial Problems

Publication: IKED- International Organization for Knowledge Economy and Enterprise Development

Researcher: Dr.-Ing. Daniel Kitaw (Associate Professor)

Partnership, according to the researcher. indispensable when it comes to engineering education. Cognizant of the above advantages, attempts were made to establish joint venture between universities and industry. For instance, in the 1980s a number of meetings were held to ascertain the partnership which resulted in the formation of the Addis Ababa University-Ministry of Industry Cooperation Programme (UICP) in February 1986. The agreement was reached between the Addis Ababa University (AAU) and the Ministry of Industry (MoI). The overall objective of UICP was to bring together Addis Ababa University and the Ministry of Industry in order to get mutual benefits from their partnership.

AAU can benefit from the link in many ways: its students can get practical experience; the institution can devise its research undertakings pertinent to the country's need in general and to the industries demand in particular; increase its research fund from the networks, and get useful feedback from industries on the teaching learning and research process of the institution which can pave the way for fine-tunings. Similarly, the host industry can benefit from the joint venture by filling manpower gaps using the internship students; identifying intervention areas; increasing its productivity and efficiency; introducing new ways of doing things and resolving different problems which can be managerial or technical, and facilitating further training for its workers. Moreover, the Faculty of Technology of Addis Ababa University commenced a Technology Faculty-Industry Linkage Unit (TFILU)

in its premises to have sustainable University-Industry Linkage. While stating objective, the Unit is expected "...to pave the way for the establishment of sustainable University-Industry Linkage. It had the responsibility of conducting needs and capability assessment of the Technology Faculty and the industrial sector at large so as to form a strong foundation for a reliable linkage. The Unit examined the activities carried out by the Addis Ababa of Industry University-Ministry (AAU-MOI) co-operation program to learn from the successes and shortcomings of their experiences." Besides, TEFILU shoulders its roles in partnership with the National Advisory Body (NAB) of the Unit and the Addis Ababa University Research and Publication Office. NAB consists of members from the Ministry of Industry, the Ethiopian Chamber of Commerce, private companies and the Faculty of Technology. Some of the roles which are expected by the Unit entail the following issues (Daniel, 2008, p.96):

- Study on "Survey on Skill Needs and Capabilities of Technology Faculty and the Industrial Sector",
- 2. Lay the foundation for (IT) technology information dissemination,
- Prepare and conduct summer courses for industrial personnel,
- Organize seminars and workshops on recent industrial issues (at least one workshop and one seminar a year),
- Organize educational visits and vacation jobs for students,
- Conduct research activities on already identified problems of industry and promote and co-ordinate research activities in the Faculty.

The Unit started its operation after it secured grant from ESTC. The main activities of TFILU are Training, Research and Consultancy, Industry-Job core whose main aim is to expose learners into the workplace as early as possible in the area of academic studies, Workshops and Seminars, and Information Technology.

There is another recent development to establish a center entitled "Higher Education-Industry Resource Integration Centre" (HEIRIC). The main objective of the Center is to coordinate the academic staff, students and research resources of higher learning to solve the problems of industry and augment productivity and advance the teaching learning process of the institution to the better. To meet the above purpose, HEIRIC proposes eleven interrelated activities. According to the researcher, the activities can enable to set up multi-disciplinary programs, responsive to industrial needs, conduct specific company sponsored projects and strengthen industry-university exchanges.

Continued from page 1...

General of the Higher Education Relevance and Quality Agency, representing the Minister for Education, H.E. Shiferaw Shigute. The keynote speakers were Mr. Arnaldo Nhavoto, Director of the UNESCO International Institute for Capacity Building in Africa (IICBA) and Ms Tricia Jenkins, Director for International Center for Excellence in Educational Opportunities, University of Liverpool, United Kingdom.

Seminar on Distance Learning Held

The College of Open and Distance Learning (CODL), St. Mary's University, held its second National Open and Distance Learning Seminar on October 3, 2013 here at the Main Campus in Addis Ababa. The research seminar covered topics, among others, like the Challenges of Student Support, Quality Research Output, and Service Delivery Disparity between Public and Private Institutions. Paper presenters came from the regions in addition to the ones from Addis Ababa. Opening remarks were given by Wondwosen Tamrat, (Assoc. Prof), Founder and President of St. Mary's University.

Twinning Program Launched

St. Mary's University, in collaboration with Marshall University, USA, is registering students who want to study Business Management, the certification of which

will be that of Marshall University. The program will be conducted at St. Mary's for two years and at Marshall for another two years. Considering the nature of the program, candidates are expected to have adequate proficiency of the English Language that would enable them do the courses with ease.

Access Micro Scholarship Students Graduated

The graduation ceremony of students of Access English Microscholarship Program took place on September 3, 2013 at St. Mary's main campus here in Addis Ababa. The two year program, financed by the government of the United States of America, was conducted by St. Mary's University staff in collaboration with the U.S. Embassy in Addis Ababa. The students who took part in the program were selected from public high schools located in and around Lideta Sub-city, where the main campus of SMU is located. The program aimed at equipping students the requisite English language skills, which would enable them succeed in university entrance examination. Welcoming remarks were made by Wondwosen Tamrat (Asso. Prof.), Founder and President of SMU, and an opening speech was made by the Honorable Deputy Ambassador of the U.S. Embassy, Mary Catherine Phee. Students received the certificates from the Honorable Deputy Ambassador. Present at the ceremony were Mr. Robert Post, Public Affairs Officer, and Thara Vose, the Cultural Affairs Officer of the Embassy, and academic and admin staff of the university college.

Meanwhile, Access students donated close to Birr 9500 to an NGO by the name Mekedonia, which serves as home to the elderly, who did not have any support to sustain their lives.

If you have comments on this issue of the newsletter or would like to contribute to future issues, please contact our office on 011 553 79 99, 011 553 80 01 Ext 145

Email: ceiqa@smuc.edu.et

Perspective UNIVERSITY INDUSTRY LIAISON

University industry liaison is essential to higher learning, industry and government alike. Universities want to be competitive and lead the knowledge economy by being innovative through their students and academic staff, generating income from the collaboration for their research, and similarly industries want to keep abreast with technological progress, and want to benefit from universities research findings. The government wants its nation to be competitive and this should be led by universities by making the requisite change in the area of knowledge economy.

Higher education institutions play a key role in producing and transmitting knowledge. They fulfill the above mission by producing skilled manpower. In the era of knowledge based economy, it is usual for higher learning institution to give due regard to innovation. Through creativity, universities are expected to contribute to the advancement of technology and science which, in turn, depends on the quality of learners. Learners can display the expected quality if they learn through practice. For this to happen there is a need to establish university industry partnership. Students should get firsthand experience in industry to become fit professional engineers and scientists who will work in the industry, academia or both. Today's students can satisfy their future employers when they are equipped in both firm specific knowledge and generic skills. To advance technology, there is a need first to advance the students in skills and practices, associated with technology. Mere theoretical knowledge does not take them anywhere.

Partnership is essential since both parties can accrue from the relationship benefits such as contemporary knowledge, sharing resources, improving problem solving skills, gaining access to staff and exchanging experiences. These merits have demanded a new relationship between industry and universities, expecting from government in setting conducive environment. Nevertheless, it is not simple to bring industry and universities together since they have different systems. Besides, in

Ethiopia the history of industrialization is short; nearly one hundred year and the numbers of universities were limited. The present massification has brought its own burden on the industry in accommodating too many students for internships.

While pointing out the problems of industry-universities linkages in Ethiopia, Daniel (2008) identified three major constraints: higher learning institutions and industries are working separately; as a result, they fail to bring technological advancement so as to have positive impact on productivity. Second, there is a fissure between the immediate need of industry and the research output of universities and their graduates' knowledge, skills and practice which may emanate from information gap which occurs between the industrial sector and higher institutions and lack of harmony between the economic and educational policies of the country. Third, most industrial enterprises in Ethiopia function below their potential due to various technical and human resource problems.

To narrow the above gaps, there should be the need for universities and industrial enterprises to work together. Nowadays, most universities have established links with industries by establishing UIPs offices (Abdu, 2013). Appreciating the networks, there is a need, however, to study the process, effectiveness and sustainability of UIPs to resolve emerging problems.

REFERENCES

- Abdu Abagibe.(2013). University Industry Partnership in Ethiopia. Unpublished PhD Dissertation, Addis Ababa University.
- Daniel Kitaw. (2008). Higher Education- Industry
 Resource Integration Center- Towards Solving
 Existing Industrial Problems". Proceeding of
 Transforming University Industry Government
 Relations.
- Mulu Nega.(2012). Quality and Quality Assurance in Ethiopian Higher Education: Critical Issues and Practical Implications. Unpublished PhD Dissertation, University of Twente.



Post Graduate Programs

- Master of Business Administration (MBA)
- ❖ Master of Business Administration (HRM Focus)
- Master of Rural Development
- Master of Agricultural Economics
- Master of Agri Business Management
- Master of Accounting and Finance

Under Graduate Programs

Faculty of Business:

- Accounting
- Management
- Marketing Management
- Tourism and Hospitality Management

Faculty of Informatics:

- Computing Science
- Information Technology
- Information Systems

Fax: 011-553 80 00 011-553 80 17 Tel: 011-553 80 01

P.O. Box: 1211

Distance Learning

- Business (four programs)
- Agriculture & Development Studies (six programs)
- Educational Planning and Management
- Economics
- Sociology

IGNOU Programs

- Master of Business Administration (MBA)
- Master of Commerce (MCOM)
- Master of Arts in Economics (MEC)
- Master of Arts in Rural Development (MARD)
- Master of Arts in Sociology (MSO)
- Master of Arts in Public Administration (MPA)
- Master of Arts in Social Work (MSW)
- Master of Arts in Political Science
- Master of Arts in Library & Information Science

For Further information

E-mail: SMU@ smuc.edu.et or

registraroffice@smuc.edu.et

http://www.smuc.edu.et

Article



THE QUALITY EDUCATION SYSTEM AND DEVELOPMENT OF JAPAN: WHAT ETHIOPIA CAN LEARN

By: ATLABACHEW GETAYE

E-mail: getayeatlabachew@ymail.com

In the past, Ethiopian intellectuals who had got the chance to pursue their modern education in the West realized the backwardness of their country and proposed 'Japanization' as a solution. They chose Japan probably because of the country's development without losing its independence and the historical parallels, observed at that time between the two countries. For instance, one of the strong proponents of 'Japanization'- Kebede Mikael- as quoted and translated in Bahru (2008, p.199) argued strongly to take Japan as a model because: "The only country that has succeeded in safeguarding her independence and in charting her own path of educational progress is Japan. If we examine her history and follow her example, we can achieve a lot in a short period of time". With regards to history, both countries were ruled by dynasties: Jimu in the case of Japan and Solomon as to Ethiopia. They were also able to defeat foreign aggressors- the Italians in the case of Ethiopia and the Russians as to Japan. Both followed closed policy for nearly a quarter of a century. For the sake of their identity, specifically to protect their religions, they evicted the Portuguese from their countries.

According to Bahru (2008), despite the above similarities, 'Japanization' failed since the objective reality between the two countries in terms of social, economic and technological factors were not on equal footing. Even prior to the adoption, Japan was more developed in the fields of ship building and military weapons technologies, and the nation also reached a higher social development. It had a strong work ethic. Besides, at that time, farming in Japan went through an intensive process of commercialization, and the

level of urbanization was also by far better than Ethiopia which made the shift from feudalism to capitalism simple. Japan was able to adopt extraordinarily the civilization of the West, but Ethiopia failed to do so. Hence, the wish of that generation to modernize Ethiopia like Japan could not bear fruits as desired (Bahru, 2008).

In fact, 'Japanization' was miscarried not only due to the above factors. The intellectuals of that time were not wise enough to formulate relevant educational curriculum, responsive to the need of Ethiopia. They did not adopt Western wisdom like Japanese intellectuals, but copied the British and American systems without restructuring. They forgot that education is always a function of time, place and circumstances. What was fruitful in the West (place) at that time was not able to work in Ethiopia because the West and Ethiopia differed in place, socio-economic and political contexts. In other words, Ethiopian thinkers could not either think like Julius Nyerere and Leopold Senghor who devoted their considerable time in using African cultures to modernize Africa, or do not know how much to borrow from the West like Japanese thinkers for the development of Ethiopia.

When we look back to the feudal Ethiopia, it had had its own native complex culture, languages, religions, world-views, agricultural practices, urbanization system (By the way, Gondar is the first modern African city (Freund,2007)), building culture (Axum, Lalibella and the Castle of Fasilides are concrete examples), indigenous handcraft technology, writing system, its own art, music, poetry, literature, dance, medicine, unique feeding style and manner of dress, Idir, administration and court systems. The country also had had its own local human right protection systems, found

their roots in Christianity, Geda, Muslim and other indigenous religions and cultures.

Instead of modifying, enlivening and strengthening the above practices by amalgamating with Western good practices, the elites of that time were trying to impose western civilization on Ethiopia, looking down the indigenous civilization even at times considering totally as unimportant and outdated. Hence, the western educated intellectuals of Ethiopia could not succeed because they brought irrelevant educational practices which could not serve as the voice of Ethiopian local civilization.

The irony is a country which maintained its independence and civilization for centuries by its uneducated nations and its being so witnessed by noted intellectuals both from the West and from the East as an 'example and a promise of what a native people untouched by modern exploitation and race prejudice might do' and a country which was a source of inspiration for most black communities fails to have an appropriate educational curriculum not only to promote the country's civilization for the better but even to maintain it. As a result, in the modern era, the issue of development has become a puzzle for Ethiopia. What a paradox ('Yabbayin lij wuha temaw' yiluwetal yihe new)!

On the other hand, Japan has continued to be the most vibrant economic force in the world. The level of economic development of Japan, as witnessed by many writers, is unmatched in modern economic history of the world. Its Gross National Product has been growing by sixtyfold since the end of the Second World War. The key factor for the development of Japan, among others, is its strong dedication to engineering education. Right after independence in 1951, the country started to adapt American education systems to its own end. Education was seen as a means for economic development, being stated in the Industrial Education Promotion Law clearly saying: 'industrial education is the basis of the development of the industry and economy of our country'. Elaborating further in the Economic Council of the Economic Planning Agency, the significance of education is highly emphasized in such a way that

'economic competition among nations is a technical competition, and technical competition has become an educational competition'. Accordingly, "Japan has stressed the expansion of scientific and technical education at all levels, both to provide the engineers and technicians needed by industry for growth and technical development, and to produce the technically literate population required to facilitate the transfer and adoption of technology on which the nation's industrialization has depended" (Lawrence, 1988, p.86).

Most importantly, to realize the above program, the country has established the highest quality elementary and secondary education systems. The structure of the country's education system is six years of elementary school, six years of secondary school: three years of lower and three years of upper secondary school and four years of college. In Japanese education system, achievement is highly capitalized, and it determines the fate of one's life and is a critical factor in national development. As a result of the high quality education system, the country has the best educated population in the world. No country, for instance, has been able to outdo, in several international competition, the Japanese students overall mastery of mathematics and science subjects since 1964. During the second international assessment of mathematics carried out in 1984, Japanese grade seven students were able to rank first in their score in each of the five groups tested by competing against grade eight students who came from nineteen other nations.

The graduates of both primary and secondary systems are highly capable and knowledgeable and are advocate of science and technology. In line with this, while expressing his satisfaction of Japanese education system, Hosai Hyuga says that 'The high level and nature of the Japanese education system makes it very easy to turn a high school graduate into an auto assembly line worker or a college graduate into an electronics engineer' (Hosai Hyuga, Chairman of Sumitomo Metal Industries).

What is even surprising about Japanese education system is that essential skills and concepts are internalized by students at an early age. This is done at greater levels of difficulty. 25% of the class time in elementary and lower secondary schools is budgeted to mathematics and science subjects. These subjects are given to learners starting from grade one. According to Lawrence (1988, p.90):

Elementary school students are taught such mathematical concepts as correspondence of geometric figures, and probability and statistics. In upper-secondary school, the curriculum is divided into two streams. Students in the academic course of study, which is completed by about 30 percent, take three years of mathematics, including at least the elements of probability and statistics, vectors, differentiation and integration, and the functions and programming of computers. Students in the non academic and vocational stream may also complete three years of mathematics. They study the same subjects, although their courses have an applied orientation. Further, at ... upper secondary schools, students interested in pursuing careers in science and mathematics may elect an intensive curriculum that includes eighteen to twenty credits of mathematics.

For an average Japanese factory worker, who passed through the above educational systems, it is so easy to formulate quality control systems, applying the required quantitative methods, to solve any production related problems. Besides, it is possible to retrain factory workers for any other advanced type of jobs.

Why does the Japanese education system give such an overemphasis to mathematics? Engineering involves both theory and practice, and, hence, mathematics plays a crucial role. Unless students have appropriate knowledge, fluency and confidence with numbers, algebra, calculus, trigonometric functions, they will not be able to collect, manage, analyze and interpret data. In line with this, George King defined engineering as 'a three legged stool' having mathematics, science and techné as legs to stand on. Techné refers to the creativity of the engineer which distinguishes him/her from other scientists.

The field of engineering is full of 'ability to' statements, having seven major components:

ability to exercise key skills in the completion of engineering-related tasks; ability to transform existing systems into conceptual models; ability to transform conceptual models into determinable models; ability to use determinable models to obtain system specifications in terms of parametric values; ability to select optimum specifications and create physical models; ability to apply the results from physical models to create real target systems, and ability to critically review real target systems and personal performance (Maillardet, 2004, p.30).

To materialize the above ability issues, the Japanese believe that learners should master mathematics which is an essential communication and modeling language of engineering.

How about the present Ethiopian education system? Is there any significant change in the present Ethiopian education system? Ethiopia is expanding its higher learning systems. For instance, the country has currently 31 public universities. From university students' intake angle, there is also a change of policy. 70% of the students are being assigned in engineering and natural science streams: 40% join the engineering field, while 30% go to the natural science fields. The enrollment system is in favor of engineering.

The country follows an Agricultural Development Led Industrialization (ADLI) Policy. According to the Natural Science, Technology and Innovation Policy (2010, p.1), "The objectives of ADLI include promotion of economic efficiency and growth, development of domestic technological capacities and capabilities for the promotion and development of small, intermediate and capital goods industries. However, it has become clear that the growth of the Ethiopian economy cannot be sustained without building its technological capability." The document states explicitly the flimsy status of the country's technological capability and the lack of foreign technology transfer in line with the need of the country, and it pinpoints the need to "devote resources to assimilation, adaptation and improvement of foreign

technologies with prior attention given to development of domestic technological capabilities"(p4).

To realize the above mission, the education system of the country is expected to play critical role through adaptive and innovative technology researches which require the establishment of quality education from the foundation (primary) to higher education levels. 'What does, then, the quality of Ethiopian education system look like?' is a fundamental question which needs scrutiny since it can provide answers about the possibility or impossibility of the fruition of the above policy.

According to the study of Ethiopian Education Review which involved 1,249 primary teachers from different regions to study the perception of primary quality education, while responding, the sampled teachers pointed out that the curriculum of primary level education lacks quality. Students were also interviewed to list down subjects which they disliked most. Even if there were regional differences, the subjects which were disliked by the students are English, Mathematics, Biology and Chemistry. And they attributed their aversion to the application of wrong methodology, lack of laboratory, lack of concept clarity in some textbooks and vocabulary difficulty. Parents and community representatives also expressed the absence of primary education quality in all regions. With regards to curriculum materials, directors, teachers and community representatives made clear that materials are inadequate, so are library and laboratory facilities (Review of the Ethiopian Education Training Policy and its Implementation, 2008).

Sampling 151 directors, 850 teachers and 1,418 students from secondary schools, the study also analyzed respondents' perception regarding the quality of secondary school curriculum. Directors and teachers spelled out that "... the quality of the curriculum in secondary schooling has not been seen in favorable terms..." (p.75). Students also made clear their worry regarding the quality of secondary school the quality of secondary school curriculum. According to the findings, "... its appropriateness for the age and maturity of learners, clarity, and relevance to student's life as well as its adequacy for research and problem solving are not appreciated by learners" (p.75).

The study also showed that the curriculum of Ethiopian higher learning does not encourage independent thinking and problem solving approach. As to students, "Such quality indicators as reflection of cultural and societal needs, appropriateness to learner needs and abilities, comprehensiveness of content and provision of opportunities for active learning were not highly appreciated by students" (p85).

Achievement is the other essential quality indicator. The national assessment mathematics average achievement scores of grade eight and ten students are very low. The mathematics average scores of grade eight students were 38%, 40.93%, and 34.1% for 1992, 1996 and 1999 academic years. When it comes to grade ten, their mathematics average scores were 18.9 and 17.97 for 1999 and 2000 academic years (National Organization for Examinations, 2001 and 2004). The mathematics average score of grade 12 students for 2005/6 academic year was 51% which is better compared to the previous scores but still it is low.

Unlike the Japanese education system which relies highly on examination, in its true sense, to decide advancement, Ethiopian education system applies a very weak assessment system, allowing learners to join universities without meeting the passing grade which, in turn, affects the quality of the teaching learning process in general and the efficiency of the graduates in being creative and problem solver in particular. It is the examination system and the capability driven curriculum, among other factors, which have enabled Japan to have an effective education system. Engineering education will serve to alleviate the major challenges of Ethiopia if and only if the students are competent, the teaching learning is capability driven and the students are ethical, being armed with Ethiopian applied values, philosophy and history. Otherwise, Ethiopian universities will manufacture unemployment as they have already started doing so in recent years, and it will be another type of failure like that of that generation's education system unless things are rectified soon.

Photo Gallery

International Conference

Virtual Links

Ethiopian Ministry of Education Web site: http://www.moe.gov.et

Higher Education Relevance and Quality Agency (Ethiopia)

Website: www.higher.edu.et

PROPHE- Programme for Research on Private Higher

Education

Website: www.albany.edu/dept/eaps/prophe/

International Network for Quality Assurance Agency in

Higher Education (INQAAHE) Website: http://www.inqaahe.org

Quality Assurance Agency for Higher Education (UK)

Website: http://www.qaa.ac.uk

Center for International Research on Higher Education

Website: http://bc.edu/bc_org/avp/soe/cihe Quality and Standards Authority of Ethiopia

Website: http://www.qsae.org/

International Institute for Capacity Building in Africa

Website: http://www.eric.ed.gov

International Network for Higher Education in Africa

(NHEA)

Website: http://www.bc.edu

European Association for Quality Assurance in Higher

Education

Website: http://www.enqa.eu Asian Pacific Quality Network Website: http://www.apqn.org







References

Bahru Zewde. (2008). Society, State and History: Selected Essays. Addis Ababa: Addis Ababa University.

Lawrence, P. (1988). "Technological education in Japan." In *Structures of technological education and contributing social factors*.

Fleurus: Bietolt Freres.

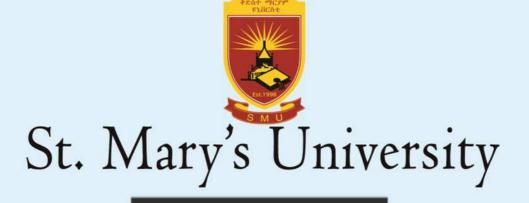
Maillardet, F. (2004). "What outcome is engineering education trying to achieve?" In Effective Learning and Teaching in Engineering. New York: Routledge Falmer.

The Federal Democratic Republic of Ethiopia. (2010). National Science, Technology and Innovation Policy: Building Competitiveness through Innovation. Addis Ababa.

The Federal Democratic Republic of Ethiopia, Ministry of Ethiopia. (2008). Review of the Ethiopian Education Training Policy and its Implementation. Addis Ababa.



ST. MARY'S HAS BECOME A UNIVERSITY SINCE SEPTEMBER 2013. CEIQA WOULD LIKE TO CONGRATULATE ALL MEMBERS OF THE UNIVERSITY COMMUNITY AND ITS PARTNERS! CONGRATULATIONS ONCE AGAIN!



Center for Educational Improvment and Quality Assurance (CEIQA) Tel: (251) 115537999

P.O.Box: 1211
Addis Ababa

ONGRATULATIONS!