Perceptions of Pre-Service Teachers towards Teaching: A Case study on the Eritrea Institute of Technology[1]

Ravinder Rena*

Namibia's University of Science and Technology

Windhoek , NAMIBIA

Ali Suleman

College of Education

Eritrean Institute of Technology, Eritrea

_____

Abstract

In Eritrea, education has been considered as the corner stone of economic and social development. Since investment in education has a direct and positive effect on productivity as well as development, therefore investment in education is imperative. The Government of Eritrea (GoE) has been working hard to provide free education from pre-primary to the higher education level. As part of the recent educational reforms, the Ministry of Education (MoE) has been emphasizing on student-centered and interactive approach. This paper explores the teacher education in Eritrea Institute of Technology (EIT) with a special focus on pre-service teachers' recruitment and their perceptions towards teaching. The study examines and assesses the background of pre-service teachers who are part of the teacher education programme at the College of Education. This data is also compares with that of College of Science and College of Engineering in terms of their academic performance. The study further probes different views of the pre-service teachers on teaching that in turn influences the learning outcomes of the children at schools.

1. INTRODUCTION

Eritrea lies between 12 and 18 degrees north, and 36 and 44 degrees east longitude. The country occupies 121,144 sq km of land area and is approximately the same size as England. Eritrea has an important position northeast of the Horn of Africa. The country possesses 1000 km coastline. Eritrea is bounded in the west by Sudan, on the south by

---

[1] This article is a revised version of the paper submitted in the National Workshop on the theme Improving Quality of Education by Focusing Teaching in Eritrea held at Hotel Intercontinental –Asmara 24-25 January 2008.

Ethiopia and Djibouti, Saudi Arabia and Yemen in the east across the Red Sea. The newly independent young nation, with a population of 4.5 million is geographically placed, in the most important but strategically sensitive position of the region. Eritrea won a long war of liberation against Ethiopia and finally got its independence in May 1993 (Encyclopedia Wikipedia, 2006; Rena, 2006). Eritrea has a diverse population reflecting many languages, cultures, and religion.

At the tertiary level, there was one higher education institute i.e. University of Asmara[1], which used to produce substantial number of manpower to the nation. The newly established Eritrea Institute of Technology (EIT) at Mai-Nefhi possesses four colleges and five other colleges are located in different parts of the country. The total number of students at all levels was about 186,000 in 1991 and reached about 700,000 in 2006 (MoE, 2006b). Eritrea places strong emphasis on education. The Macro Policy of Eritrea states, among other things, that in the long term, Eritrea will be producing "knowledge intensive" goods and services able to penetrate the world market (GoE, 1994). The emphasis on education is also reflected on the government's policy on poverty eradication (Rena, 2006). However, Eritrea's literacy level remains low. As much as 40% of Eritreans lack basic literacy. About 50% of Eritrean children drop out of school at the elementary level, and just 13% of high school students graduate (MoE, 2004). Most of the dropouts belong to the poorest segments of society, particularly those from rural Eritrea (Rena, 2007b).

As in all other countries, education in Eritrea has been considered as a corner stone of economic and social development. It is strongly believed that investment in education has a direct and positive effect on productivity as well as development of social and cultural activities. Recognizing the importance of education in achieving overall developmental goals, the Government of Eritrea (GoE) has exerted efforts in developing education as one of the strategies for human resource development. Education is a fundamental right of every citizen in this country, regardless of their sex, ethnicity, religion, and learning ability. At present, education is free starting from pre-primary to the higher education level. The provision of education in Eritrea is under the responsibility of Ministry of Education (MoE).

Eritrea has, ever since gaining independence, been committed to increasing access and improving quality of education. Notably, elementary school education in all the nine Eritrean languages has been developed and implemented. The spread of elementary school and middle school education and to some extent high school level education has increased. However, in 2002 the whole education system was labeled as "wastage" (GoE, 2002, p:2). The shortcomings of the education system were identified as follows:

1. Access at elementary, middle and high school levels was low in the academic year 1999/2000 i.e. enrolment was 38% at elementary, 11% at middle school and 9% at high school level,

2. The opportunity for higher education was also low. Only a very small proportion (10-15%) got chances of any type of higher education which was then confined to University of Asmara,

3. The products of the education system were not prepared for employment (GoE, 2002).

In line with the reforms, the prevailing school curricula have been revised considerably. In order to implement the curriculum, school teachers are advised to shift from a traditional teacher-centered mode of delivery towards a student-centered and interactive approach (MoE, 2006b). Teachers have to be prepared for such shift of roles. This is because teachers can play a pivotal role in implementing such reforms and can make a difference on students' achievements (Fullan, 2001). In order to provide a quality education to every student, an adequate supply of competent individuals who are willing to serve as teachers are required. Darling-Hammond (2000) also provides useful teacher-qualification information and she indicates that there is a link between teacher qualifications and student performance. Her findings underscore the importance of improving teacher pre-service programmes because improvements in teacher preparation are expected to lead to improvements in student performance. These new demands on increasing access and improving quality of education in Eritrea put increasing demands on the MoE in assuring that all students are taught by qualified and competent teachers.

Therefore, the MoE recognizes that the success of any reform in the education sector depends largely on the quality of teachers which, in turn, depends to a great extent on the quality of teacher education she/he has undergone. The quality of teacher education is in turn influenced by a number of factors, such as the quality of candidates entering into the teaching profession, the standards that are set for entry into the profession, the relevance of teacher education curricula, inputs into the professional preparation of teacher education, teaching practice, the quality of in-service training, and the working environment of the teachers (Lewis, et al., 1999; Rena and Eyob, 2009).

Hence, the quality of education being provided became policy priority; as a result the GoE initiated a structural reform in order to improve access and quality of education in the country. In response to the implementation of this reform, at higher education, access was dramatically increased by opening several higher education institutions[2] including Eritrea Institute of Technology (EIT).

2. PROFILE OF THE INSTITUTE AND BACKGROUND OF THE STUDY

EIT was established in February 2004 to catalyze the vision and mission of the country which is centered on the National Education Policy as part of ongoing National Reconstruction Process. Youths of Eritrea played a vital role for its Freedom and have been actively participating in the nation-building process. EIT was entrusted to rehabilitate the youths of war-returned veterans, along with the regular secondary school graduates, towards the corridor of academic excellence. The massive EIT campus was found with dozens of classrooms, computer laboratories, and also equipped with boarding and lodging facilities to educate more than 7,000 students at a time. The number of faculty working in EIT is about 350. The four colleges of EIT have been offering several programmes within 24 departments.

The College of Education at EIT is responsible for educating teachers for middle schools and high schools, at diploma and degree levels respectively. At present, there is a two year diploma programme that prepares pre-service teachers to teach in the middle schools. Therefore, the pre-service programme needs to be carefully designed to produce committed and dedicated teachers to meet the growing demands of different schools in the country.

The purpose of this paper is to provide preliminary information about the pre-service teachers who have already begun their teacher preparation programme at the College of Education. The study examines pre-service teacher recruitment at the College of Education and their perceptions towards teaching; this is because for the success of change initiatives in any education system, teachers' views should not be neglected (Fullan, 2001).

The paper has been divided into five sections. Section one and two provides the theoretical framework of the study together with pre-service teacher perceptions. Section three deals with methods of data collection and section four presents the results and discussion of the research. Section five provides summary and conclusions of the study.

1. Theoretical Framework

Preparing the teaching force is a lengthy process. Pre-service teachers should be equipped with high-quality learning experiences based on sound theoretical principles. Adequate time should be allotted for applying these theoretical principles to practice. Pre-service teacher education programmes play a significant role in the preparation of highly qualified teaching workforce. They prepare teachers in subject matter, professional education, and teaching methods (Swift, 1985).

The importance of well-prepared teachers for student learning is unquestionable. Better prepared teachers are more academically able and are rated as more effective by their directors, supervisors, and colleagues. In contrast, less well prepared teachers have more

classroom difficulties and are rated less effective by evaluators and colleagues. Therefore, an education system that aims to offer a quality education for all its citizens should be able to rely on teachers who are well prepared, competent and committed ones (Guarino, et al., 2006). Evidences indicate that the strongest predictor of student achievement is quality of teaching. Quality of teaching make a difference in students' learning gains (Milanowski, 2004). The finding of Darling-Hammond (2005) also indicates that in order to improve quality of education delivered to students; one should be able to produce quality teachers. Thus, recruiting academically successful teachers into teaching, then preparing them for the challenges of teaching, and retaining them in the profession are the main goals in helping students to achieve high academic standards.

Recruitment

Among the most important features of teacher education are the criteria and procedures by which candidates are selected or recruited for entry into the teaching profession. Entry requirement is an important component that contributes to the effectiveness of teacher preparation programmes. Unlike some other professions, teaching often suffers from a shortage of qualified candidates and it often does not enjoy the privilege of being able to attract quality candidates in competition with the other professions. Hence, many countries are suffering from a shortage of teachers[3], or at least quality teachers. This is because teachers are leaving their profession in favor of more advantageous working conditions and career prospects. In some countries (for example, the United States, the United Kingdom, Australia, France and Germany) where sufficient number of teachers are prepared, many newly prepared teachers either choose not to teach at all or leave teaching within a few years. However, in other countries (for example, Japan, the Czech Republic, Portugal and Hong Kong) teaching is an attractive career (Cooper, J. M. and Alvarado, A., 2006). In Eritrea, as in several countries, there is a shortage of qualified teachers at all levels, i.e. elementary, middle and high school levels. Teaching does not attract quality candidates. As a result the MoE is forced to recruit and employ teachers from abroad particularly from India.

Evidences also confirm that individuals with more employment opportunities are less likely to enter teaching (Guarino et al., 2006). Knowing who enters into teaching profession can provide valuable indications about how to potentially attract new candidates into the teaching profession. Several studies consistently indicated the characteristics of individuals who enter the teaching profession. The academic level of candidates who enter into teaching profession is one particular concern. Many candidates who enter into teaching profession have low academic qualifications necessary for entrance and are unlikely to have secure grounding on core subjects. There is also evidence to suggest that teacher candidates who enter into teaching profession had significantly lower scores than the others who entered into

non-teaching profession (Shugart and Hounshell 1995). Therefore, many teacher education institutions are not working towards the production of quality teachers. The situation in Eritrea is not different from other countries. Many of the candidates who enroll into teacher education programmes are those with low academic scores. Asmara Teacher Education Institute (ATEI), is one of the oldest educational Institute in the country that provides training for Elementary School teachers in Eritrea. It has been observed that the ATEI gets the trainees who scored less than 1.8 Grade Point Average (GPA) in the matriculation. The University was accepting the candidates, who secured 2.30 and above. This implied that the candidates, who failed to get into the University, are joining the ATEI. Many assume that similar trend has been continued after the establishment of EIT.

The extent to which undergraduates with merit are not inclined to choose the teaching profession is based on several factors. The pre-service teachers consistently cite low salary, poor social status, heavy workload, large class sizes, and limited prospects for professional development major reasons why a career in teaching is unattractive (MoE, 2006b).

Several studies suggested that females formed greater proportions of new teachers than males as males have historically a wider choice of jobs than women (Guarino et al., 2006). This is true for many developed and developing countries. However the opposite situation is observed in Eritrea. Many of the candidates who enroll in the teacher education programmes are male (more than 60%) in elementary and other levels, a situation very different from that in most northern countries. This may be because of the cultural stigmas (women should work at home) that are prevalent in Eritrea for centuries. The Government of Eritrea exerted so many social reform programmes during 16 years of its independence, but still the perception of the society towards female education has not been changed. For example, our survey results support that women teachers are found to be less than 20 percent in the total.

Pre-service teachers' perception on teaching

Research suggests that pre-service teacher education often provides the first step in the professional development of teachers. It exposes pre-service teachers to new perspectives as well as prepares them in knowledge and skills (Wilke, 2004). It equips them with knowledge of subject matter, and pedagogical content knowledge, or knowledge of how to teach (Wilke, 2004; Shulman, 1987). The pre-service teachers need to know how to organize and present the content in a way that makes it accessible for the students. They must be able to make decisions about choosing materials, instructional approaches, and assessment. In addition, teachers must possess general competencies in the areas of classroom management and discipline. In addition to equipping pre-service teachers in

knowledge and skills (Wilke, 2004), the teacher educators must also take into consideration the perception that the pre-service teachers bring to and develop during their training (Pajares, 1992; Atwater, et al., 1991).

A series of studies have taken into consideration the perception that pre-service teachers bring with them when they enter into a teacher education programme. Upon entering teacher education, most pre-service teachers come with a well developed perceptions about teaching (Joram & Gabriele, 1998) which are related to teachers and students, students learning and methods of teaching, curriculum, and school (Pajares, 1992). These perceptions are derived from their personal experiences as students (Joram & Gabriele, 1998; Clark, 1988). The perceptions that pre-service teachers bring with them have been shown to affect what they learn from teacher education and how they learn from it. Some of these perceptions may be long standing, stable, deeply entrenched and resistant or difficult to change (Joram & Gabriele, 1998; Clark, 1988). Others may change as the pre-service teachers undergo the formal training provided by teacher education programmes (Bramald, et al., 1995). It is important for teacher education institutions to understand the perceptions of pre-service teachers as an essential step in improving their professional preparation (Driver, et al., 1994).

A number of educators have suggested that the perceptions that the pre-service teachers bring with them strongly influence both the way they view the theoretical components of teacher education process (Clark, 1988; Holt-Reynolds, 1992; Anderson, et al., 1995) and their teaching behaviours during practice teaching (Goodman, 1988). What perspectives on teaching as a profession do prospective teachers have upon entering a teacher-education programme? Do these perspectives change as they undergo training, especially as they learn various concepts, principles, and theories from their professional education courses, and experience actual teaching in line with their practicum? If changes do occur with regard to these beliefs, can these changes be attributed to features of their teacher-education programmes? These are questions that teacher educators ask themselves as they face prospective teachers.

The prior perceptions about teaching were found to be stable and more difficult to change (Pajares, 1992). Farrel (1995) concluded that the numbers of years of a teacher's schooling are generally positively correlated with student's performance. In another study showed that teacher training had a significant impact on the teachers' classroom behaviour, this being positively correlated with student achievement. The perceptions that pre-service teachers carry with them, in relation teaching as a profession, may invariably influence their expectations about the preparations entailed by their training, the competencies required of a teacher, and the philosophical, social, and emotional dimensions that are integral to the

profession. Over the last 15 years, research has consistently identified the inextricable links between the quality of teachers, the quality of teaching, and the achievement of students (Darling-Hammond, 2000).

3. METHOD OF DATA COLLECTION

This study was based on both the primary and secondary data. The primary data has been collected through a questionnaire especially designed to ascertain the pre-service teachers' inclinations towards teaching. Participants in this study were drawn from the students enrolled in the Diploma Programme of the College of Education, EIT. The age group of pre-service teachers ranges between 20-23 years. The study concentrates on a group of pre-service teachers (PST), who completed their teaching practice from 26 November 2007 to 7 December 2007. The questionnaires were distributed and collected back during the period 10-15 December 2007. All in all, 174 out of 500 pre-service teachers were randomly selected and the questionnaire has been distributed to all of the three programmes[4]. However, of the 174 questionnaires distributed 155 have been collected. The sample covers over 30% of the total. We have also used open ended questions and sought frank perceptions of the pre-service teachers. The Secondary data was collected from different reports of the MoE, Eritrea, books, articles and news papers etc. We reviewed only those articles, books, and monographs that we considered to be rigorous in quality, according to generally accepted standards for quality. In addition, the secondary data was also collected from the Registrar Office, EIT regarding students' Cumulative Grade Point Average (CGPA) of the three colleges.

The paper provides some concluding remarks and policy implications for pre-service teacher education in the country. It is also hoped that the issues that come up from this study will serve as a platform for stimulating further investigation and awareness in the field of teacher education. Simple percentages are calculated for different variables and analyses have been made accordingly. The survey results are furnished in the form bar charts.

4. RESULTS AND DISCUSSION

In the last few years there has been increasing support for teacher education reform in Eritrea. However, more and more Eritreans are coming to recognize that the failure of children to perform well academically is not simply a personal problem for them and their families; it is a problem of the entire society, one with far-reaching economic, political, cultural, and moral consequences. The recruitment and retention of quality teachers, in other words, is everybody's business.

In line with this, there is an increasingly intense 'national dialogue' taking place (in the recent past) over how to attract and keep good teachers and improve working conditions for teachers. Yet, education policymakers, zoba, sub-zoba and school administrators, teachers, and the community are all having their say to enrich the educational system in the country.

This part of the article presents the demography of the candidates who enters into the teacher education programme at the College of Education, how they are recruited, and the kinds of experiences, perception and impression on the teaching profession.

Who enters into teaching?

Gender and Ethnicity:

The survey results clearly indicate that there is a glaring disparity in gender. As in many developing countries, a high proportion of the male teachers enter into the teaching profession than their female counterparts. More boys than girls regularly participate in elementary education; the ratio is about 55/45. Female enrolment falls remarkably in the middle and secondary schools for many years. The enrolment of girls significantly decreased at higher education institutions (Ministry of Education, 2004).

Out of 155 respondents only 28 were females, constituting 18% in total. The low female enrolment is likely to be due to the cultural stigmas and economic barriers. Besides, the majority of the participants belong to Tigrigna, the largest ethnic group that constitutes 50% of the total population, dominates with 86%. The other ethnic groups represent with small percentages i.e. Tigre (9%), Saho and Bilen 2% each, and 1% Afar (see Table – 1). The cause for this disparity of enrolments into higher education goes back to the colonial periods where these ethnic groups were disadvantaged and forgotten by the colonizers for years. Even though the MoE is trying to redress the issue of enrolment at grassroots level, still much has to be done to minimize the gap. Hence, the women participation and recruitment of students from various ethnic groups should be enhanced by using some affirmative action.

Table 1: Demography of the respondents (Figures are Percentages in total).

| S. No.	Ethnic group	Male	Female	Total
1	Afar	1	0	1
2	Bilen	1	1	2
3	Saho	2	0	2
4	Tigre	7	2	9
5	Tigrigna	71	15	86

Source: Primary data, N = 155

Academic qualifications:

Students were generally admitted into the colleges at the end of the first year. The students are assigned to different colleges based on their choices and available vacancies. In order to examine the nature of students with respect of Cumulative Grade Point Average (CGPA), we have studied the first year results of two cohorts of students from the 2005 and 2006 academic years across the three colleges. The graphical distribution of the first year result of the different colleges is presented the Figures 1 and 2.

Figure 1: First year CGPA of the three colleges in the year 2005
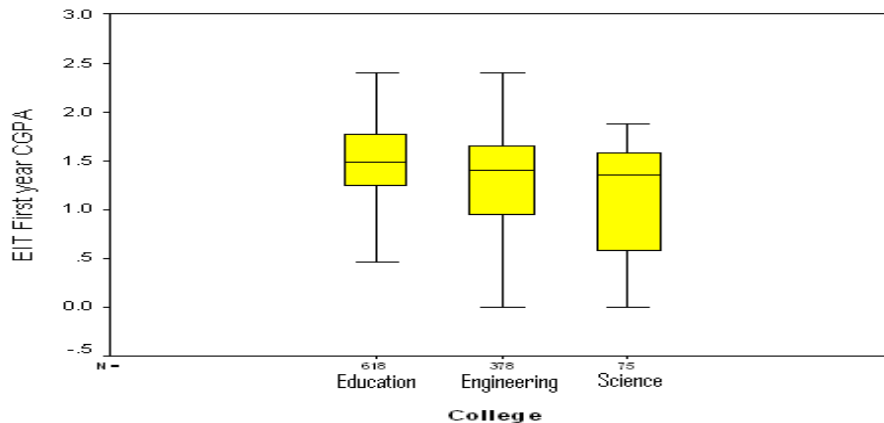
Figure 2: First year CGPA of the three colleges in the year 2006
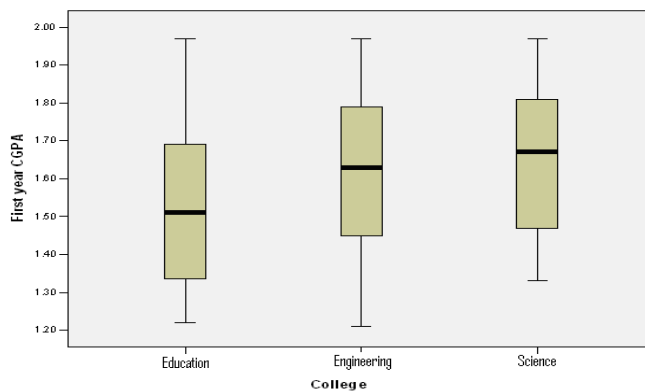
From Figures 1 and 2, it can be seen that there a difference in CGPA among the colleges. However, to test whether significant difference exists, we conducted analysis of variance (ANOVA). F test shows (see Table – 2 and Table – 3) that there is a significant difference in first year CGPA between the three colleges. Further multiple comparisons (applying Scheffe test) between the colleges reveal that there was significant difference between College of

Education and the remaining two colleges. The analysis of these comparisons reveals that students from College of Science and College Engineering were better than in terms of their first year CGPA for the academic year 2006. However, for the academic year 2005, the average performance in terms of the first year CGPA of the College of Education was better than the other two colleges.

Table 2: First year CGPA of the three colleges in the year 2005

	(I) College	(J) College	Mean Diff. (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	Education	Engineering	0.2183(*)	0.03074	0.000	.1429	.2937
		Science	0.3597(*)	0.05757	0.000	.2186	.5008
	Engineering	Education	-0.2183(*)	0.03074	0.000	-.2937	-.1429
		Science	0.1414	0.05952	0.060	-.0045	.2873
	Science	Education	-0.3597(*)	0.05757	0.000	-.5008	-.2186
		Engineering	-0.1414	0.05952	0.060	-.2873	.0045
* The mean difference is significant at the .05 level.							

Table 3: First year CGPA of the three colleges in the year 2006

	(I) College	(J) College	Mean Diff. (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	Education	Engineering	-0.06882(*)	0.0206	0.0039	-0.11929	-0.01835
		Science	-0.10390(*)	0.0339	0.0096	-0.18719	-0.02060
	Engineering	Education	0.06882(*)	0.0206	0.0039	0.01835	0.11929
		Science	-0.03508	0.0325	0.5583	-0.11479	0.04463
	Science	Education	0.10390(*)	0.0339	0.0096	0.02060	0.18719
		Engineering	0.03508	0.0325	0.5583	-0.04463	0.11479
* The mean difference is significant at the .05 level.							

Thus, based on the two years data it is difficult to conclude the nature of candidates who enter into teaching profession and those who enter into non-teaching profession.

Perceptions on teaching profession:

Reason for taking teaching as a career

The data results indicated that majority (71%) accepted the teaching profession primarily because they find teaching intrinsically rewarding in the society. Others indicated that they

like to work with children (48%); yet some other reveal that they like to interact with the students (77%). This implies that they wanted to be teachers (33%). Others indicate that teaching was not their choice and they accepted it only because they had no other option (52%) and majority (85%) indicated that they have been assigned to the teachers education programme by the institute against their choice. However, significant majority (88%) expressed that teacher salary is not attractive and not in par with the price index (see Table – 4).

The PSTs perceived that teaching provides a platform for sharing of knowledge (89%), respect in the society (71%), job security (47%), and personal and life-long learning (52%). On the contrary, they are aware that teaching is a job that involves heavy work load (52%), means working in remote areas under poor working conditions (71%), working with scarce resources, dealing with notorious students and controlling their behaviours (56%), and pressure put by teaching (68%) They also indicated that the financial rewards do not correspond to their contributions and majority stated that the salary is low (83%). Despite the fact, some are determined to remain in the teaching profession with the hope that they would become future administrators in the education sector. The substantial number of PSTs (56%) indicated that they like to leave teaching profession in quest of better jobs (see Table – 4).

Table 4: Pre-service teachers' perception about teaching profession (Figures are Percentages in total).

1. Reasons for taking teaching as a career	Yes	No	Undecided
I have always wanted to be a teacher	33	64	3
I like to work with children	48	50	2
The salary for teaching profession is attractive	9	88	3
It is my family's choice	15	81	4
Teaching provides job security	47	44	9
I have been assigned by the Institute	85	10	5
I had no option other than entering into the teaching profession	40	52	8
2. Plans of the pre-service teachers after graduation	Yes	No	Undecided
Continue in the teaching	42	50	8
Take on the director or supervisor post	40	50	10
Do other job in the educational sector	61	32	7
Change career / job	56	37	7
Do business	53	39	7
Continue my studies	75	21	4

3. What teachers like about the teaching profession?	Yes	No	Undecided
The job itself	44	52	4
The process of sharing knowledge	89	8	3
Interacting with students	77	20	3
Interacting with fellow teachers / colleague	65	29	6
The respect in the society	71	25	4
Attractive salary	26	68	6
Because teachers get more holidays	21	73	6
Because a teacher is a lifelong learner	52	42	6
Because teaching put relatively less pressure	27	68	5
4. What teachers dislike about the teaching profession?	Yes	No	Undecided
Administrative duties associated with teaching	49	45	6
Dealing with notorious students & controlling their behaviors	56	37	7
Preparatory work / work load	52	42	6
Meeting with parents	33	60	7
Low salary	83	15	2
Lack of respect in the society	43	51	6
Working in remote areas	71	25	4

Source: Primary data, N = 155

Views about aspects of the teacher education programme

The overall impression of the PSTs is that they see the teacher education programme to be very important and useful. They have also stated that they acquired necessary knowledge and skills that enabled them to prepare effective lesson plans, lesson notes, and teaching-learning aids. We also found that the English Language Teaching PSTs are not taking pedagogy course. However, 42 % stated that the duration of teaching practice is sufficient; whereas the same percentage of PSTs indicated that the duration is not sufficient (see Table – 5).

One teacher responded, "*Yes! I am satisfied with the courses that I have taken during the programme. Since I was a social science student in my school level, but I was given science subject which was not my choice. In the teaching process, I was given mathematics, only God knows what I did.*"

In response to 'how to improve the quality of teachers in Eritrea,' one of the respondent said, "*the main point in education is societal value; in other words, those who are educated they are highly respected. The teaching profession must not be by force; it should be voluntary. If we make it by compulsory, we may not get the good teachers into this*

profession. Besides, the Government can encourage the private sector in education to improve the standards through competition." Another respondent commented that "*I am frustrated because I entered into this profession, which was not my choice and my brain is blocked. I do not like to be a teacher, who will enter into this profession. I was assigned to this teaching programme by the Institute (EIT) itself* .

Table 5: Pre-service teachers perceptions about the teacher education programme

S. No.		Strongly	Agree	Undecided	Disagree	Strongly
1	Acquired necessary information that will enable me to prepare effective lesson plans	39	43	8	5	5
2	Acquired necessary information that will enable me to use lesson plans effectively	41	38	11	7	3
3	Gained necessary skills on how to prepare lesson notes	31	47	12	7	3
4	Gained necessary information on how to prepare relevant teaching aids	28	48	13	6	4
5	Gained necessary information on how to use relevant teaching aids	27	49	14	6	4
6	The courses enabled me to select and use relevant teaching methods	33	43	12	7	5
7	Gained necessary information on how to manage the classroom effectively.	43	37	12	6	1
8	Gained necessary skill on how to assess student performances	31	43	15	5	5
9	The teaching practice was successful	49	27	12	5	7
10	The teaching practice enabled me to put the theory into practice	43	35	11	6	5
11	The duration of the teaching practice was sufficient	17	25	16	17	25

Source: Primary data, N = 155

Many teachers expressed that "the teacher curriculum has to be changed and teachers' code of conduct has to be developed by the Ministry of Education. One said that "*I wonder*

*during my teaching practice that teachers in elementary schools were not well-oriented with
the new curricula and the teaching methods as well.*"

In order to motivate candidates in the teaching profession, some of the PSTs
indicated that "*teachers who are really inclined to this profession should be encouraged.*"
Some other teachers are on the opinion that they should be given an opportunity to continue
their studies till degree or more after the successful completion of their Diploma. This may
encourage others to enter into this field.

Salary

Salary was a matter that repeatedly appeared in the responses to the open ended questions.
One respondent, for example, indicated that "*teachers work hard but they are less paid*".
Their views match with the views of many teachers in general. Yet the majority of educators
in Eritrea are of the opinion that financial incentives may be the most effective strategies for
attracting the new teachers. As a matter of fact, money gives people access to what they
need and want for themselves and their families; like everyone else, teachers need money in
order to live. But there is much more to money than the mechanics of getting and spending.
Among other things, money is used to measure social value. One PST put it this way: "Our
culture respects the teachers." In this direction, it is important to cite the Ministry of
Education Document:

> It is to note that those who went to schools in Eritrea in the late 1950's and 1960's
> would remember; teachers then commanded a high degree of professional and
> moral authority. They were generally perceived as 'light-givers', guides, and arbiters
> in resolving conflicts and as vanguards against illiteracy and ignorance. It has been
> observed that in four decades or so, the pendulum has heavily swung in the other
> direction, so much as, these days it is common to hear the remarks like: "I will not
> allow my daughter to marry a teacher", or "*deki memher doh tsegibom yehadru
> koynom!*"- the off-springs of a teacher often go to bed with half-full stomachs". If
> true, this is not only an indictment on teaching but also a reflection of perhaps the
> unrealistic aspirations of some parents who judge teachers solely by the amount of
> money they receive! (MoE, 2006a: 15)

One PST observed that, "*Until society regards teachers as intellectuals and/or professional
like: lawyers, engineers, scientists, doctors…it will be difficult to attract qualified individuals
into the teaching profession.*" Some respondents linked the status of teaching to the level of
pay teachers receive. Another respondent suggested: "*Raise professional respect by paying
teachers salaries comparable to salaries received by other professionals who have similar
educational requirements and degrees.*"

Among the wide range of solutions being proposed and employed to attract prospective teachers, recruitment strategies based on financial incentives are likely to have a great effect in encouraging more qualified individuals to become teachers. Although, some PSTs discounted the importance of financial considerations in their own decisions to become teachers, a significant number (88%) of the respondents considered teacher salaries to be a large obstacle standing in the way of attracting new and potential teachers (see Table – 4). Hence, financial incentives should be the most effective recruitment strategies for new teachers. Many cited higher beginning salaries for new teachers; bonuses for teachers working in remote areas and environmentally difficult places as the most effective strategies for recruiting quality teachers. One teacher commented, "We are not attracting bright, energetic [individuals] to the profession." Another wrote, "We need to make it economically feasible for individuals to choose teaching." We also found that the salary is not only the issue for prospective teachers, but also lack of opportunities to pursue further education. As stated earlier, majority of the respondents indicated that they are interested to continue their education even after their graduation.

With regards to the salary structure for elementary teachers, 43% felt that the minimum salary should be in the range of Nakfa 1000-1300 and 28% felt Nakfa 1400 -1600, whereas 4% felt that it should be more than Nakfa 2000. In the case of middle schools, 40% felt that the salary range must be Nakfa 1300-1500; 33% felt Nakfa 1600-2000 is appropriate and 5% felt that Nakfa 2600-3000 is ideal to meet the current inflation in the country. Finally, with regard to secondary schools, 51% of the teachers suggested that the salary must be Nakfa 1800-2300 and 21% felt that Nakfa 2400-3000 is reasonable (see Tables – 5).

Table 6: Suggested Monthly Salary structure for teachers in Nakfa

1. Elementary schools	%		2. Middle schools	%		3. Secondary schools	%
a. Up to 900	1		a. 1300- 1500	40		a. Up to 1700	10
b. 1000 - 1300	43		b. 1600 - 2000	33		b. 1800 - 2300	51
c. 1400 - 1600	28		c. 2100 - 2500	7		c. 2400 - 3000	21
d. 1700 - 2000	10		d. 2600 - 3000	5		d. 3100 - 4000	3
e. Above 2000	4		e. Above 3000	1		e. Above 4000	2
f. Undecided	14		f. Undecided	14		f. Undecided	13

Source: Primary data,   N = 155

Future career plans

It is important to note that, whatever the reasons for entering into teaching profession, considerable number of the PSTs stated that they will continue in the teaching profession

(42%), or continue working in the education sector as director or supervisor (40%). At the same time, many (75%) opined that if they were given opportunity, they would continue their studies (see Table – 4). Eventhough, there is no explicit intention to leave the teaching profession, the desire of the PSTs to further their studies after their graduation is a good sign for personal and professional development. However, there are limited opportunities for continuing higher education.

Exit Criteria

Although, the GPA entry requirement for the Diploma programmes in all the colleges found to be low i.e. less than 2.00 but the completion requires a CGPA of at least 2.00.

5. SUMMARY AND CONCLUSION

The findings of this study indicate that the pre-service teachers at the College of Education are mostly males that are in their early twenties. The large proportion of the pre-service teachers are mainly from one ethnic group i.e. Tigrigna.

The analysis of the first year CGPA between the three colleges indicates that there was significant difference between College of Education and the remaining two colleges. The finding reveals that students from College of Science and College Engineering were better off, in terms of their first year CGPA for the academic year 2006 than the students from College of Education. However, for the academic year 2005, the average performance in terms of the first year CGPA of the College of Education was better than the other two colleges. Thus, based on two years data, it is difficult to conclude the nature of candidates who enter into teaching profession and those who enter into non-teaching profession.

Regarding teaching as a career, the data tends to suggest an ambivalent view. On the positive side, the PST value teaching as a profession that enables them to help children in sharing their knowledge with and serve the county and the society. In more practical terms, they are pleased to work with children, eventhough the profession is a low paid profession. They also hoped to continue their studies (after their graduation) and get better jobs however, the opportunity is found to be limited. On the contrary, they are aware that teaching is a job that involves hard-work, means working in remote areas, working with lack of resources, poor working conditions, and managing students' behaviours. They also indicated that the financial rewards do not correspond to their contributions. Despite the fact, some are determined to remain in the teaching profession with the hope that they would become future administrators in the education sector. The substantial number of PST teachers indicated that they like to leave teaching profession in quest of better jobs.

Many PSTs emphasized that the teacher education programme found to be useful. They agreed that the programme equipped them with necessary knowledge and skills that will enable them to teach effectively in the schools. However, the PSTs felt that the duration of the teaching is not adequate.

Endnotes

1. As part of the educational reforms in 2003, the human resources of the University have been distributed to the various newly established colleges in the country.

2. Eritrea Institute of Technology (EIT) is one of the several higher education institutions established in Eritrea recently. The EIT has three colleges in it, namely College of Education, College of Science, and College of Engineering. The other higher education institutions are College of Agriculture, College of Marine Sciences, College of Business & Economics, College of Health Sciences, and Orotta School of Medicine.

3. It is to be noted that America needs 2 million teachers by 2010, due to the shortage of teachers, it has been planning to bring from developing countries like India and others.

4. They are: Diploma in English Language Teaching; Diploma in Science Education; and Diploma in Social Science Education.

REFERENCES

Anderson, L.M. & Holt-Reynolds, D. (1995). Prospective Teachers' Beliefs and Teacher Education Pedagogy: research based on a Teacher Educators' Practical Theory. Retrieved December 12, 2007 from http://ncrtl.msu.edu/http/rreports/html/pdf/rr956.pdf

Atwater, M., Gardner, C., & Knight, C. (1991). Beliefs and Attitudes of Urban Primary Teachers toward Physical Science and Teaching Physical Science. *Journal of Elementary Science Education*, 3(2), 3-12.

Bramald, R., Hardman, F., & Leat, D. (1995). Initial Teacher Trainees and their views of Teaching and Training. *Teaching and Teacher Education,* 11(1): 23-31.

Clark, C.M. (1988). Asking the Right Questions about Teacher Preparation: Contributions of Research on Teacher Thinking. *Educational Researcher,* 17(2): 5-12.

Cooper, J. M. and Alvarado A. (2006). Preparation, recruitment, and retention of teachers. UNESCO: International Institute of Educational Planning (IIEP). 7-9 rue Eugene-Delacroix, 75116 Paris. Retrieved November 24, 2007 from http://www.unesco.org/iiep.

Darling-Hammond, L. (2005). Preparing Tomorrow's Teachers: Linda Darling- Hammond on the Role of Collaboration in Our Schools (18-19). Retrieved November 24, 2007 from http://www.nwrel.org/nwedu/11-01/darling/cloak/q&a.pdf.

Darling-Hammond, L. (2000). Teacher Quality and student Achievement: A review of State Policy Evidence. *Educational Policy Analysis Archives,* 8(1) [Online]. Retrieved November 29, 2007 from http://epaa.asu.edu/epaa/v8n1/

Driver, R., Asoko, H., Leach, J., Mortimer, E., & Scott, P. (1994). Constructing Scientific knowledge in the Classroom. *Educational Researcher,* 23 (7): 5-12.

Encyclopedica Wikipida (2006). Online Encyclopedica retrieved on 28 November 2007.

Farrel, J. P. (1995). Planning for Effective Teaching in Developing Nations. In: L. Anderson (ed.), *The encyclopedia of Teaching and Teacher Education (*Second Edition). New York: Pergamon Press.

Fullan, M. (2001). *The New Meaning of Educational Change*. New York: Teachers College Press.

Government of Eritrea (1994). *Macro Policy Document*, Asmara. Eritrea: Government Press.

Government of Eritrea (2002). Concept Paper for a Rapid Transformation of Eritrean Educational System, Draft, Asmara, Eritrea.

Goodman, J. (1988). Constructing a Practical Philosophy of Teaching: A Study of Pre-service Teachers' Professional Perspectives. *Teaching and Teacher Education,* 4: 121-137.

Guarino, C. M., Santibanez, L., and Daley, G. A. (2006). Teacher Recruitment and Retention: A Review of the Recent Empirical Literature. *Review of Educational Research,* 76(2): 173-208.

Holt-Reynolds, D. (1992). Personal History-based Beliefs as Relevant Prior Knowledge in Coursework. *American Educational Research Journal,* 29(2): 325-349.

Joram, E. & Gabriele, A. (1998). Pre-service teacher's Prior Beliefs: Transforming Obstacles into Opportunities. *Teaching and Teacher Education,* 14(2): 175-191.

Lewis, L., Pasad, B., Carey, N., Barfati, N., Farris, E., Smerdon, B., & Greene, B. (1999). Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers (NCES 1999-080). Washington, DC: National Center for Education Statistics. Retrieved November 29, 2007 from http://www.nces.ed.gov/pubs99/1999080.pdf .

Milanowski, A. (2004). The Relationship between Teacher Performance Evaluation Scores and Student Achievement: Evidence from Cincinnati. *Peabody Journal of Education,* 79(1): 33-53.

Ministry of Education (2001). Action Plan for the Development of National Framework, Asmara: Ministry of Education.

Ministry of Education (2004). *Eritrea: Basic Education Statistics from 1995-2004,* Asmara: Ministry of Education.

Ministry of Education (2006a). *Document - A: Teacher Education and Development - Master Plan,* Asmara: Ministry of Education (May).

Ministry of Education (2006b). 'Tertiary Education in Eritrea: Issues, Policies, and Challenges', *Eritrea Profile,* Vol. 13, No. 56(Part- I on 20 September); Vol.13, No. 57 (Part-II on 23 September).

Pajares, M. F. (1992). Teachers' Beliefs and Educational Research: Cleaning up a Messy Construct. *Review of Educational Research,* 62(3): 307-333.

Rena, R (2006). *A Hand Book on the Eritrean Economy: Problems and Prospects for Development.* Dar Es Salaam (Tanzania): New Africa Press.

Rena, R (2007a). Factors affecting the Enrollment and the Retention of Students at Primary Education in Andhra Pradesh – a Village Level Study. South Carolina, USA: *Essays in*

Education 22(4):102-112 Retrieved 15 December 2007 from http://www.usca.edu/essays/vol222007/ravinder%5B1%5D.pdf

Rena, R (2007b). Higher education in Africa – A Case of Eritrea, New Delhi: *Journal of Educational Planning and Administration,* 21(2): 125-140.

Rena, R. & Kidane Eyob (2009) *Eritrean Educational Reforms– Issues, Perspectives and Policy Implications,* Hyderabad, (India): The ICFAI University Press, pages: 285.

Shugart, S. & Hounshell, P. (1995). Subject Matter Competence and the Recruitment and Retention of Secondary Science Teachers. *Journal of Research in Science Teaching* 32(1): 63-70.

Shulman, L.S. (1987). Knowledge and teaching: Foundations of the New Reform. *Harvard Educational Review,* 57(1): 1-22.

Smylie, M. A., & Conyers, J. G. (1991). Changing Conceptions of Teaching Influence the Future of Staff Development. *Journal of Staff Development,* 12(1): 12-16.

Swift, D (1985). Facilitating Certification and Professional Development for Small Schools.: Eric Digest: Small Schools. ERIC Clearinghouse on Rural Education and Small Schools Las Cruces NM. ED260884.

Wilke, R. (2004). How Content area Influences Choice of Instructional Methods: an Examination of one Component of Pre-service Teacher Belief. Unpublished master's thesis, The Florida State University, College of Education, USA.

* * * * *