

## Use of Human Resources in Technical Schools for the Acquisition of Sustainability Competences amongst Students in the South West Region of Cameroon

*Nchange Elizabeth Ngwa*<sup>1</sup>

*Dr. Agborbechem Peter Tambi (AP)*<sup>2</sup>, *Dr. Ebot Ashu Frederick*<sup>3</sup>

<sup>1</sup>Supervisor, <sup>3</sup>Co-Supervisor

<sup>1,2,3</sup>University of Buea, South West Region, Cameroon

### ABSTRACT

*The study focused on the use of Human Resources in Technical Schools for the Acquisition of Sustainability Competences Amongst Students. The survey research designed was used for the study; the sample population of the study was made up of 530 participants distributed as follows: 315 teachers, 15 administrators and 200 technical students in the south west region of Cameroon. The purposive and the convenient sampling techniques were used to select the above sample of the study. The instruments used for Data collection were; questionnaire, interview and focus group discussion. Test items on the Questionnaire were designed using the four- point likert scale. The Cronbach's alpha reliability test was above 0.7. Data was analyzed using the statistical package for social sciences (SPSS) version 25. The study found out that: human resource quality had significant effects on the acquisition of sustainability competences. Based on the findings, it was recommended that, more attention be paid to teachers' quality and their professional development. Also, the different ministries in charge of teacher education should work in collaboration in order to address teachers and students needs of the country.*

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### **Introduction**

The study sought to investigate the use of Human Resources in Technical Schools for effective teaching/learning to ensure that students acquire sustainability competences. According to Wenglinsky (2005) the availability and utilization of human and non-human resources determines the efficiency of the school system. According to Usman (2016) human resource constitutes a vital vein of any institution. Human resources in the school system includes teachers, support staff, students, parents, community members and a host of other interest and social groups. Human resources are responsible for planning, organizing, coordinating, controlling, manipulating and maintaining other forms of resources. Its administrative and forecasting ability placed it ahead of other forms of resources. Also, the availability of human resources in terms of quality and quantity must be considered if effective and efficient teaching and learning must occur (Usman, 2016). According to Likert (1969) all activities of any institution are initiated by the persons that make up that institution. Plant, offices, computer, automated equipment's and all inputs that an institution uses are unproductive except for human effort and direction. Nakpodia (as

cited in Usman, 2016) every aspect of an institution's activity is determined by the competence, motivation and general effectiveness of its human resources. It is noteworthy that, the quality of human resources in any educational system determines to a great extent the quality of the system itself, and professional staff in particular are crucial to the formulation and successful implementation of the education policies and programmes in any country. Teachers are expected to render a significant contribution in promoting student learning while working on their overall growth and development.

### ***Background to the Study***

Technical education in Cameroon is not a new field or venture; technical and vocational education had long existed in Cameroon before the coming of the missionaries and Europeans as seen in Africa's indigenous system of education. More so, this form of education still exists in present day Cameroon. In recent years, an increasing need for a highly skilled and differentiated labour force that would be able to promote and capitalised upon scientific and technological advancement for the economic benefit of the nation, has led to an increased concern for the provision of technical secondary education, basic development and the expansion of secondary technical schools in Cameroon (Fonkeng, 2006).

As history has it, technical education in Cameroon can be traced from indigenous or traditional African education. This type of education was education that was provided by African societies to their younger generations before the coming of missionaries or colonial masters from Europe. This form of education specifically focused on and encouraged teaching indigenous leadership knowledge, beliefs, practices, customs, models, methods and content within formal and non-formal educational systems (Ebot, 2016, p.7).

According to Ebot Ashu (2016,p.8) this type of education had the following characteristics: a lifelong process of learning which was continuous throughout one's lifetime from childhood to old age, individuals acquired skills, knowledge and values, that were not separated from the society; it was community oriented and prepared learners to fit into their community and solve the problems of the community; Instructional activities were geared towards the social life of the community and emphasis was placed on practical learning, young adults learnt by watching, participating and executing what was learnt. Skills like carving, masonry, clay-working, cloth-making, canoe-making, cooking and home management were insisted upon among the children of the community because they were the basic skills, knowledge and attitude that enabled individuals to live and function effectively in the community; it was functional, relevant for immediate and long term usage in the local community.

During the indigenous period, parents where predominantly responsible for teaching their children, and older siblings were also responsible for teaching their siblings. At a certain age, elders, secret societies in which the children were initiated also taught them the cultures of the land. Patrons in apprenticeship centres were also teachers, and sometimes it was the responsibility of the community to correct and bring up their young ones as they carry out group farming and other activities together (Ihim, 2003). European missionary societies ushered Western education in Cameroon, with the aim of civilising a primitive people. Their activities focused on school, church and hospital in order to develop Cameroonians physically, mentally and spiritually.

The foundation of vocational education was laid in Cameroon by the London Baptist missionary society, the very first effort of the educational enterprise. They opened the first school in Cameroon, Alfred saker exposed indigenous Cameroonians to new technologies such as Brick-making and printing. The Basel mission also created TVE schools and opened vocational centres. Alfred saker and other missionaries were teachers and later on, a teacher training centre was created in Nyasoso and by 1914, 53 teachers had been trained. Text books and savage materials were used as teaching learning materials. The German Catholic Pallotine fathers also did much in TVE in the schools in Buea where they taught agriculture, blacksmithing, shoemaking, tailoring and carpentry. It was in these areas and more that constitute what is known today as Technical and Vocational Education (TVE).

According to Endeley and Zama (2021, p. 85) in the colonial era, African schools' curricula directly served the needs of the colonial master. The subjects taught were limited and directly related to the interest of the colonial masters. Colonial schools sought to extend foreign domination and exploitation of the colony thus Cameroon was not an exception. The German's took over Cameroon in 1884 to 1914,

during this period great emphasis was placed on vocational and technical education, the prescribed syllabus for schools in German Cameroon from April 25, 2010, included domestic economy (skills). There was no proper system for inspecting schools and nothing was efficiently done to ensure that pupils were provided with favourable circumstances, proper equipment and other learning facilities. There were eleven trade (vocational) schools during this period (two of which were government owned), practical work was emphasized in all schools while in-service training facilities were provided in various government departments. In some of the vocational and technical schools a certain amount of theoretical work was offered while in others, no academic work was undertaken by some of the students who ended up only as illiterate artisans, as was the case with the agricultural school in Dschang and the carpentry and brick making school in Kribi (Fonkeng 2006). The German administrators and missionaries didn't place much importance to the so-called comprehensive trade schools, where theory and practical work would have been combined. That notwithstanding, the emphasis placed on vocational and technical schools was worthy of praise in spite of the shortcomings (Fonkeng, 2006).

Technical Education in British Anglophone Cameroon (1914-1961), technical education was neglected during the mandate period and Cameroonians were forced to receive such training from Nigeria. During the Trusteeship period the administration developed vocational and technical education. In 1950, a technical college was opened in Ombe (Ombe Trade Center) by the Colonial Government for apprentice type training. Macojong (2008) puts it, the centre was a free boarding training institution and students received a monthly allowance of ten shilling. Admissions were rigorously selective and contingent on passing a medical examination. Staffed by British contract personnel, the centre offered training in Carpentry, bricklaying, welding and metal works, electricity, cabinet making, motor mechanics, woodwork, painting, decoration and machine fitting. Emphasis was on apprenticeship and not studentship, the training varied from two to five years at the end apprentices sat for the London City and Guilds Examination. According to Fangyong (2014, p.123) during independence, southern Cameroon had only one technical college. Government technical school Ombe that opened in 1950, the centre was designed to produce skill craftsmen. Technical colleges were few and mostly ran by private agencies (Macojong, 2008).

According to Fonkeng (2005) since the mid-1980s, Cameroon has been undertaking comprehensive school reform program in technical and vocational education due to the important role this type of training played in the economic and social life of the people. The sixth 5<sup>th</sup> year development Plan titled the "The New Deal Plan" emphasizes that more attention be paid to technical education considering its impact on the socio-economic efforts of the nation. Preference was given to institutionalised technical and vocational education to ensure mastery of technological advances. The objectives were focused on the construction of technical high schools, renovation of existing technical colleges and high schools, qualified teachers, equipped classroom and many more but the expectations were not met because it was too ambitious.

This type of education was not very popular in Anglophone Cameroon; many people still considers it as education for the academically weak as Fonkeng (2005) explained. Progress in this sector was almost as higher education is almost inexistent, Moreover, few opportunities for direct employment existed in this predominant sector of the country and self-employment was not readily possible. In recent years' government has made enormous stride creating technical colleges in almost every division of the Anglophone regions with the financial assistance of the Canadian government in the construction and equipment.

### ***Human Resource Quality in Technical Schools***

Human resources refer to the individuals, personnel or work force within an organization responsible for performing the task given to them for the purpose of achieving the goals and objectives of the organization. This can be possible only through proper recruitment and selection, providing proper orientation and induction, training skills developments, proper assessment of employees (performance appraisal) which is the process of the human resource management (Elton Mayo, 1880).

An educational institution has teaching staff, non-teaching personnel and students including their knowledge, abilities and skills as human resources. Essentially, the personnel within the institutions and

their capabilities in contributing to productivity and achievement of institutional objectives are referred to as human resources (Titanji, 2017). Human Resources are the people who comprise the staff of the organization, this includes all those who work to ensure that the school works smoothly on a daily basis such as administrators, teachers, teacher assistants, school nurses, custodial workers, food service workers, office personnel, ground workers, transportation workers, volunteers, and anyone else who is involved in daily operations (Mucui, 2013). There are many human resources that are essential for success in a school such as administrators, teachers, mentors and support staffs, but for the purpose of this study the researcher will focus on teachers and administrators as one of the critical aspects of human resource in technical schools.

According to UNESCO (2002) in order to ensure high quality in technical and vocational education, priority should be given to the recruitment and initial preparation of adequate numbers of well-qualified teachers, instructors/trainers, administrators and guidance staff, and to the provision of continuous professional upgrading throughout their career, and other facilities to enable them to function effectively. Appropriately qualified, well-supported and remunerated, highly motivated teaching personnel working in a stimulating teaching and learning environment are the most important element of any education system. Major components of human resource include teachers' recruitment and selection, induction, training and professional development (ILO, 2012).

According to ILO (2012) in the 1960s international standards adopted and emphasized that teaching was a profession requiring expert knowledge and specialized skills, acquired and maintained through rigorous, ongoing education and training, and a sense of personal and collective responsibility for the education and welfare of learners. No educational system can rise above the quality of its teachers, teachers form the basis for good education in schools. According to Rigden (as cited in Endeley, 2002) what teachers know and can do makes a crucial difference in what students learn. Moreover, one cannot teach what one does not know, thus finding the right people for the job, determining that the hired staff has necessary skills and positioned accordingly, staff should be hire in accordance with organizational objectives and help with his/her professional or personal development (Endeley, 2002).

### ***Employment and Recruitment of Teachers***

From the principle of ILO Employment and Occupation Convention (1958) and the ILO/UNESCO (as cited in ILO, 2012), Recommendation concerning the status of teachers urges that, professional competence, equal opportunity amongst others are crucial to attracting and retaining able, committed and motivated individuals in the teaching profession. Reasons being that these principles are fundamental to creating and maintaining widespread respect for the profession.

Recruitment is the process of generating a pool of competent applicants needed to fill the available positions in an organization, the key to the quality of an institutional program is the competency of its professional staff. Recruitment of teachers should be based on professional competence, considering their professional qualification, recruitment and employment of teachers (includes access to vocational training, access to employment and to particular occupations, and terms and conditions of employment). Recruiting teachers on the basis of professional competence is a key to both providing good quality education and to maintaining a teaching profession which is held in high esteem. Moreover, policy makers and recruiters to teacher training programs needs to offer particular support to candidates who are considered to have the potential to develop a high level of professional competence but whose background has been a barrier to developing some of the requisite skills (ILO, 2012).

According to OECD (2005) most countries use eligibility criteria for the engagement and recruitment of teachers or trainee teachers for pre-service teacher training, these criteria vary widely and include: qualifications, certification, citizenship, medicals security checks, etc. For most countries candidates' educational level or performance are taken into account, and some use teaching skills as a criterion for selecting teachers, surprisingly only 11 out of 21 OECD countries observe eligibility criteria.

### ***Teacher Certification Processes***

Teacher certification establishes entrance criteria for the teaching profession, setting national professional standards depends on the training institutions own standards, although there should be some means to

create coherence. This function may be performed by: higher education institutions, such as teacher training colleges or universities; professional bodies such as teachers' councils composed of a representative sample of education stakeholders, including teacher associations or teachers' unions; and state authorities (ILO, 2012).

Certification may involve passing an examination or successfully completing a competitive recruitment process and/or successfully completing a period of probation or teaching experience. Examinations may include tests of subject matter knowledge, literacy, numeracy and ICT, observation of the candidate's teaching, in-depth interviews or consideration of portfolios recording work experience and achievements (ILO, 2012). For instance, in Countries like South Africa and United Kingdom (Scotland), teachers teaching in a Scottish state school must be registered with the General Teaching Council for Scotland (GTC Scotland). Being registered allows someone to teach and also provides assurances to head teachers, parents and children that the teacher meets a national standard of teaching. In South Africa, every educator must be registered with the South African Council for Educators (SACE) before appointment to a teaching post; employers may not recruit an educator unless that person is registered with the Council. Registration is regarded as a guarantee that teachers satisfy the ethical and standards contemplated in the South African Code of Professional Ethics for Educators and that they have the required academic and professional qualifications (ILO, 2012).

According to Feistritzer (as cited in ILO, 2012) some countries use alternative forms of certification to employ well-qualified candidates who have not completed a teacher training program to begin teaching, mostly done in schools that have difficulty attracting qualified teachers. Alternative fast track certification programs are equally used to recruit potential teachers as a practical means to solve teacher recruitment challenges experienced by hard to-staff schools and in certain subject matters, or overall teacher shortages. Policy makers and those responsible for teacher recruitment considering the use of fast track programs should be vigilant to ensure that, the risk of de-skilling the teaching profession and devaluing public education is avoided (Glass, 2008, as cited in ILO, 2012). When teachers are provided through alternative entry routes, provisions should be made for their on-going training and CPD and for mentoring by more experienced colleagues, even if they have extensive experience in other fields or specialized subjects. Moreover, as a condition of continued employment such teachers are required complete their qualifications (ILO/UNESCO Recommendation, 1966).

### ***Induction for New and Returning Teachers***

Induction refers to the professional support and training provided to new teachers at the start of their career. It's a good practice for teachers to undergo an induction process to ensure they receive adequate support at the beginning of their career or when they move to a new role or school, induction process may occur any time within the system, it is strongly advised to provide induction for new teachers (ILO, 2012).

In some countries, induction programs for beginning teachers are mandatory while for others, induction is at the discretion of the school or the individual teacher; some countries do not offer formal induction. The duration of new teacher induction varies in different countries for instance, in OECD countries it ranges from seven months in the Republic of Korea to two years in Canada (Quebec), Switzerland and parts of the US (OECD, 2005). The beginner teacher receives a salary during induction and may have a reduced workload to allow time for professional development and mentoring by a designated mentor. Teachers returning to the profession after a career break should also be offered induction as an opportunity to update skills and renew confidence.

In the Republic of Korea, teacher induction usually begins with a two-week period of pre-employment training in the metropolitan and provincial institutes of educational training, with focused on cases related to the field and practical tasks with emphases on student guidance, classroom management skills and basic teacher capacities. After recruitment, new teachers are involved in a six-month-long field training led by the school principal, vice principal and advisory teachers that encompasses instructional guidance and evaluation, classroom supervision, student assessment, and assistance with administrative tasks. A third phase involves reflection and discussion with other beginning teachers and teacher educators

(OECD, 2005).

Induction, professional support and mentoring programs for beginner teachers can enhance the effectiveness of new teachers, and improve retention: school districts in the US have managed to reduce beginning teacher attrition by more than two thirds by providing mentoring to first year teachers (OECD, 2005). On the other hand, where teachers are thrown in at the deep end with little or no induction or other professional support, this frequently has a negative impact on effectiveness and leads to attrition (Bennell and Akyeampong, 2007).

### ***Mentoring Programs for Human Resource***

Induction processes ideally involve regular mentoring of new teachers by a designated mentor, who should be an experienced teacher, usually a more senior colleague. The mentoring role may include, help with lesson planning and assessment, assistance in translating theory acquired during teacher training into good classroom practice, reciprocal classroom observation, and discussion to talk through problems encountered and provide advice, encouragement and support. School management should provide support for the mentoring process by promoting this as a priority and ensuring both mentor and beginner teacher have sufficient time, space and resources for the activity to be carried out in a satisfactory and productive manner. The mentor may have a reduction in teaching hours or may be remunerated for this role and where possible, mentors should receive training in mentoring techniques (ILO, 2012).

In the United States research and practice suggested that well designed mentoring programs based on high-quality instructional mentoring (selection of experienced teachers for this task and their training is crucial, as well as adequate time with novice teachers and coordination of their work with school leadership) have the capacity to improve new teacher performance and commitment to their jobs as well as enhance learning outcomes (Cooper & Alvarado, 2006; Moir et al., 2009). According to OECD (2005) mentors might equally improve on their own professional practice based on their mentoring experiences in the field.

In Norway, school principals are asked to assign an experienced staff member who is considered well fit to guide new teachers. The teacher education institution provides these mentor teachers with training on how to guide new teachers and also takes part in school-guidance. New teachers take part in local support sessions and in sessions with new teachers from the other schools involved in the program to help with difficult issues for new teachers, such as student behavior and collegial relations (OECD, 2005).

### ***In-service Training and Professional Development of Human Resources***

Fullan (2007) defines professional development as the total sum of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement. Professional development refers to those opportunities offered to educators to develop new knowledge, skills, approaches, and dispositions to improve their effectiveness in their classrooms and organizations (Loucks-Horsley et al., 2010). According to Guskey (2000) professional development refers to those processes and activities designed to enhance the professional knowledge, skills, beliefs and attitudes of educators so that they might in turn improve the learning of students. He regards professional development as a systematic effort that eventually results in improved learning opportunities for students. Teacher professional development in this study involves all processes and designed activities that enable teachers to acquire knowledge, skills, attitudes and behaviors enhancing their abilities to be effective in their teaching to enable students acquire sustainable competences.

As a result of economic, social and technological change, people everywhere need to develop their knowledge and skills, on a continuous basis, so that they can live and work meaningfully in the knowledge society (UNESCO/ILO, 2002). Teaching staff should be encouraged to continue their education and training, whatever their specialized field, and should have the necessary means to do so. Lifelong learning should be made available in a wide range of facilities, and should include:

- (a) Continuous review and updating of knowledge, competencies and skills;
- (b) Continuous updating of specialized professional skills and knowledge;
- (c) Periodic work experience in the relevant occupational sector (UNESCO, 2002).

According to ILO/UNESCO (1966) Recommendation, in-service training and professional development is very crucial for teachers, continuing professional development (CPD), is a cornerstone for human resource development, it should be designed in collaboration with teachers' organizations and should be free of charge. Continuing professional development (CPD), is the process by which teachers reflect upon their professional skills and practices, maintain and develop them further through study or training (ILO, 2012). In-services training are necessary to ensure that educators remain updated in terms of the changes that are taking place within the overall system of education. Professional development is teaching employees the skills needed for both present and future positions. Personnel need to learn new skills and develop their abilities to the fullest, which is done through assessment, training and evaluation.

Staff development is the process of appraising staff performances and identifying their key skills and competences that need development or training to improve their skills for better performance. It involves providing development programs and training courses that are suitable for the program. The progress of educational organization hinges on the strength and quality of staff members. There is need to change through training and to improve and grow in competence, this can be done through in-service training, conferences, workshops and seminars. Appraisal or performance appraisal is a method by which a teacher 's job performance is evaluated, as part of assessing teaching effectiveness or as part of guiding and managing career development (ILO, 2012).

According to ILO (2012) research has proven that continuing professional development has a positive impact on teachers' attitudes, beliefs and practices, students' learning outcomes and successful implementation of educational reforms. A good CPD program enhance the quality of teaching and most likely makes the profession more attractive and less challenging for teachers. Recently, there has been increased interest in the importance of CPD, the type of activities, methods that effectively plan for, create and manage change in teaching practices which all together constitute a vital factor in lifelong learning systems (ILO, 2000a, cited in ILO, 2012).

So many reasons prove that investing in strong CPD programs for teachers makes sense. Considering the fact that teachers form the largest part of education expenditure in all countries, when they are competent and qualified it is most likely that their efficiency will increase and for this reason the resources put in CPD will be valued. CPD is essential for the following reasons:

1. Changes in subject/learning area: the need to keep abreast of changes in areas of specialization;
2. Changes in pedagogy: the need to keep abreast of new approaches to teaching, learning and assessment;
3. Policy changes: the need to keep up to date with key policy changes in education;
4. Teacher motivation: the need to motivate, encourage and revitalize teachers and make staff feel more valued;
5. Enhancement of knowledge and skills: the need to improve the content and skills knowledge of teachers, individually or as a group (ILO, 2012).

CPD has been recognized as an integral part of teacher management and development as such, it must be supported by corresponding adequate programs of pre-service training and induction. Teachers should not be expected to learn "on-the-job" but instead be given the opportunity to learn new skills, new methods and learn from their peers as they move forward in their career. An induction period for newly qualified teachers is essential for bridging the gap between the initial teacher training and the subsequent period of teaching as professional teachers. An induction period can tailor individual challenges faced during the beginning of the professional career and make a firm foundation of teaching, and should be built upon individual knowledge, skills and attitudes developed in the initial teacher training.

In-service training methods in Japan provide a concrete example of CPD which includes the key principles outlined above. Japan has one of the most referred to methods of team-based, teacher-led and ongoing CPD program "jugyokenkyu" a Japanese term which is translated as "lesson study". This method has existed for over 200 years in Japan, teachers are brought together to plan, discuss and

improve on their teaching practice. A key example of a lesson that was studied involved teachers getting together to plan a lesson, then sat to observe a member of the group presents the lesson to students. Following the lesson, the group of teachers gathers to discuss how the lesson went, how students reacted and what can be improved. This method has been highly successful in Japan and has also been adapted and implemented in other countries like America and Guinea, the method isn't void of some challenges but overall it has positive outcomes.

The lesson study methods include all the key characteristics of a successful CDP activity. The lesson study is based in the classroom and usually linked to school-wide efforts as all teachers in the school are encouraged to participate. It is highly participatory because it is entirely teacher led and focuses on discussions on how to improve teaching practices. It is centered on students, what they are being taught and how they are learning and it is an ongoing process with constant feedback (ILO, 2012). CPD has widely been recognized as a key improving the effectiveness of teachers, not all programs are equally successful. In order to be worthwhile, a good CPD program must produce real change in attitudes and practice and improve teaching in a way that positively affects the learning outcomes of learners.

### ***Roles and Responsibilities of Teachers***

The ILO/UNESCO Recommendation (1966) and recommendations of education authorities, private employers' and teachers' organizations (ILO, 2000a: & OECD, 2005) outline teacher roles and responsibilities within the framework of teaching as a profession and (largely) a form of public service with emphasis on multiple roles and responsibilities in a constantly changing, lifelong learning environment. The roles and responsibilities of individual teachers and learners are:

1. Knowledge: Acquisition and maintenance of expert knowledge in at least one field of learning.
2. Pedagogic skills: Development of specialized skills to transmit knowledge to learners, acquired and maintained through continuing professional development (study and training), including integrated use of ICT.
3. Dynamic learning: Facilitating learner' acquisition of generic skills for managing one's life and further learning, including fostering active, interactive learning, problem-solving skills and self-directed learning.
4. Evaluation: Assessing learners' strengths, weaknesses and progress and guiding their further development (with due regard to fairness and individual capacity and needs) through a range of methods – observation, test results, homework, project work and others, both formative and summative.
5. Student welfare: Applying and communicating a high degree of personal (and corporate) empathy and responsibility for the education and welfare of students in their charge.
6. Self-learning: Research, reflection on and change as necessary in teaching practice - the teacher as learner who is also partly responsible for their own professional development. Classroom and school
7. Collaborative work: Developing and implementing collaborative and team-teaching practices.
8. Learning diversity: Teaching cross-curricular subjects (life skills, citizenship, and sustainable development) to a multi-cultural student population and integrating special needs learners in classrooms.
9. School cohesion: Working for social inclusion and cohesion in a multi-cultural, ethnically and religiously diverse school population.
10. School planning and management: Team work to establish common goals through school plans and the organization and management to achieve school and inter-school or system (local or larger) objectives as part of enlarged school leadership.
11. Decision-making: Participating individually and collectively (through associations or unions) in classroom and school decision-making on instructional and social organization (school councils and evaluation or disciplinary bodies), Parents and communities.



12. Parent guidance/relations: Communicating professional feedback and guidance to parents or guardians on student difficulties and progress and parents' supportive roles.
13. Community outreach: Building wider support for individual and school learning capacity and success through outreach and partnerships with community leaders and institutions, private enterprises/employers, professional associations and trade unions.

All of these roles are constantly evolving over time, as social, economic, political and technological change impacts on the teaching and learning environment. To ensure that teachers successfully execute these roles/responsibilities individually and collectively, requires strong understanding, support and training through professional development programs. On World Teachers Day 5 October 2011, the Director General of UNESCO made the following statement: *"Teachers... ultimately determine our collective ability to innovate, to invent, to find solutions for tomorrow. Nothing will ever replace a good teacher. Nothing is more important than supporting them"* (UNESCO, 2012).

### **Teacher Evaluation, Assessment and Feedback**

Teacher assessment and evaluation are essential and sometimes under-used teaching management tools. A Teaching and Learning International Survey (TALIS-OECD, 2009) of 24 countries, seven found out that overall teachers felt positive about teacher appraisal and feedback and noted that it was fair and useful to their development as teachers (ILO, 2012).

The ILO/UNESCO Recommendation (1966), clearly states that teachers' evaluation and assessment programs should be fair and objective, supportive of efforts to enhance teacher professional competencies. Also, Teachers have the right to appeal against assessments which they considered to be unjustified. The purpose of an evaluation system is to promote positive teacher professional growth so as to attain professional development and improved teaching and learning objectives:

The purpose of School Evaluation is to enhance professional development; teacher evaluation is an important way to identify areas for future professional development. Once an evaluation has been carried out, the teacher can, along with his or her evaluator, identify missing or weaker skills and develop a plan for improvement.

Furthermore, teacher evaluation has its central goal as the improvement of teaching and learning, thus emphasis should be placed on the reward of good practices, as much as on the improvement of weaker ones. Such appraisal should be largely diagnostic and formative, identifying weaknesses in skills and competencies, and should be holistic, based on all variables in the school setting that affect teaching and learning (ILO, 2000a).

Effective teacher evaluation should therefore enhance teacher solidarity, collegiality and team cohesion. To achieve the objectives of appraisal and professional growth it is essential that the teacher evaluation system is sound and robust. To this end, it should be based on the following criteria and principles:

**Formative:** A sound evaluation system should be formative as it focuses on identifying strengths and weaknesses in skills and competencies and ways to improve professional practice. The feedback from the evaluation should encourage freedom, initiative, responsibility and responsiveness to student's needs.

According to ILO (2000), any process of evaluating teachers should be objective, holistic, standardized but flexible and transparent. The process of evaluating teachers begins with a planning and preparation stage to determine baseline data or reference marks and to clarify and communicate criteria and procedures. It will not end before the assessment results or feedback are communicated, all clarification or appeals procedures are exhausted and the necessary post-evaluation training to improve performance and correct weaknesses has been completed. The process usually utilizes a range of methods and tools of obtaining information about teacher performance including: classroom observations; interviews with the teacher, either one to one or with a panel; self-evaluation questionnaire for the teacher; the teacher's qualifications, for example if professional development activities have been undertaken, can also be used as an assessment tool and be part of the evaluation criteria questionnaire to students; and the use of teacher portfolios based on a range of teacher activities, in print or video format. Especially if summative with a view to denial of rewards, application of sanctions or disciplinary measures. Teachers should have

access to assessment results, results should be clearly communicated (preferably in writing) and to appeal negative assessments. It is important that appeals' procedures ensure the individual teacher's right to be heard and represented before any final recommendation is made and guarantee the impartiality and sensitivity of the appeals procedure and decision-making body. Independence from the initial assessor, for instance by means of an independently constituted board of peers and experts not connected to the school leader or body making the assessment and careful attention to gender and cultural sensitivities enhance a sense of fairness and acceptance of the final results. Unless a final decision concludes with termination of employment, teacher assessment then continues through the remedial training recommended as needed for improving/strengthening teacher performance or correcting weaknesses.

### **Teacher Quality and Effectiveness in Technical Schools**

Among the three priorities in UNESCO's Teacher Education Strategy, improvement of teacher quality was identified as one. Teacher quality is very important for quality education. On the 5 October 2012 World Teacher's Day, the Director General of UNESCO message emphasized on: quality assurance of teacher education, measurement of teachers' performance and their professional development. Good Education policies, well-intentioned and well-crafted official curricula, cannot succeed without the teacher, whose professional management of the teaching-learning process ensures that education really takes place. It is not just any teacher that can make education happen. It has to be the effective teacher, who benefits from quality professional preparation and is systematically supported by quality career-long professional development. Owing to the universal standpoint that "Teachers Do Matter", traditional gadgets and modern ICTs do certainly play a role in facilitating learning, but these can only be a support to (and not a replacement) for the teacher. To add, all the six Dakar Education for all (EFA) goals place due emphasis on quality thus the teacher, being the most important input in the education quality equation, should radiate quality (UNESCO, 2012).

According to the Report of Sector Wide Approach to Education (2006) at all levels, Cameroon's educational system is suffering from a shortage of qualified teachers, which had led to the unemployment of unqualified persons a situation which prevails more in the private sector. Some teachers use teaching as a stepping stones while others have had no training they would have loved to have. Teachers are an essential resource for learning: the quality of a school system cannot exceed the quality of its teachers. Teachers interact with students daily and help students acquire the knowledge that they are expected to have by the time they leave school. The type and quality of the training they receive, as well as the requirements to enter and progress through the teaching profession, have significant consequences on the quality of the teaching force (OECD, 2005). The quality and effectiveness of any education system relies upon many different inputs, both material and human and the efficiency and appropriateness of structures adopted to organize these inputs. However, if one was to seek a "bottom-line" with regard to effective schooling, available research evidence clearly showed that the quality in any education system ultimately depends upon the characteristics, knowledge, skills and sensitivities of those individuals who are employed as teachers in schools.

According to Interstate New Teacher Assessment and Support Consortium INTASC (1992) in charge of standards-based reform through the development of licensing standards for beginning teachers, defining teacher quality is no simple task, because the criteria for doing so vary from person to person, from one community to another and from one era to the next. Teacher quality is a general term for teacher cultivation, professional qualifications and abilities. Peng (1999) holds that the content of teacher quality can be categorized into a) common quality, b) professional knowledge, c) professional beliefs and attitude, d) personality and e) professional subject accomplishment.

From a multi-layer approach teacher quality is not limited to teachers' credentials but also to the perspective teachers bring to the classroom, the instructional strategies that they use, and the surrounding organization of the school and community. Teachers engaging in education tasks, with certain characteristics and being able, to conduct activities arousing students' interest in learning, and enhancing students' learning achievements (Heck, 2007). For Cochran-Smith and Fries (2005) teacher quality refers to all teacher-related characteristics that produce favorable educational outcomes.

Interstate New Teacher Assessment and Support Consortium (INTASC) (1992), National Council for

Accreditation of Teacher Education (NCATE) (2000b), and the National Board for Professional Teaching Standards (NBPTS) (1997) brought out current conceptions of teacher quality. Contemporary views of teacher quality entails what teachers need to know and do to promote student learning. Many internal and external factors in the fields of education and teacher preparation have come together to necessitate the development of teacher standards. Contemporary views of teacher quality are; Teachers who are committed to their students and students' Learning, Teachers who have deep subject matter knowledge, Teachers who manage and monitor student learning, Teachers who are reflective about their teaching and, teachers who are members of a broader community

## **Sustainability Competences**

Sustainability is a long-term goal and an approach of thinking about the future in which environmental, social, and economic considerations are balanced in the pursuit of development and an improved quality of life. According to UNESCO (2012) sustainability is best described as a long-term goal, such as attaining a more sustainable world. The word sustainability has its etymology from a Latin word "Sustinae" meaning to "hold" meaning the ability to endure or maintain. Sustainability refers to a state or an ability, most often view from three perspectives economic, social or socio cultural and environment or ecological aspects, often referred to as the triangular vision of sustainability. The term sustainability is derived from so many sources, sustainability is a difficult term to grasp because it bears a great deal of ambiguity (Molderez & Ceulemans, 2018, as cited in Bianchi, 2020). With the variations in the concept of sustainability most researchers base their work on the definition of sustainable development given by the World Commission on Environment and Development, and agree that the origins of the term are in the 1987 publication of "Our Common Future" that is the "Brundtland Report".

According to UNESCO/ILO (2002) technical and vocational education should meet the needs and aspirations of individuals; (a) permit the harmonious development of personality and character, and foster spiritual and human values, the capacity for understanding, judgment, critical thinking and self-expression; (b) prepare the individual for lifelong learning by developing the necessary mental tools, technical and entrepreneurial skills and attitudes; (c) develop capacities for decision-making and the qualities necessary for active and intelligent participation, teamwork and leadership at work and in the community as a whole; (d) enable an individual to cope with the rapid advances in information and communication technology. According to UNESCO (2007) review, sustainability competences refer to an interlinked set of knowledge, skills, attitudes, and values that enable effective, embodied action in the world of work with respect to real-world sustainability problems, challenges, and opportunities. In a nutshell, sustainability competences are those competences that young graduates and professionals need to possess in order to be change agents and contribute to sustainability problems and opportunities.

According to Fonkeng (2006, p.185) a competence is a manner of reacting efficiently and effectively in a complex situation using elementary knowledge. Competency is a coordinated group of knowledge, know-how, and skills displayed in a given context. The mastery of a competence necessitates therefore the acquisition of the knowledge and knows-how, its integration consists of acquiring knowledge from learning situations and applying on problem-solving activities. According to Tchombe (2019, p.40) competences refer to the ability to effectively demonstrate skills in a particular context. Competences consist of activities related with real life situations for surviving in the social environment and relating to learners' real ability.

### ***Statement of the Problem***

It has been observed with keen interest that unemployment in our society particularly in the South West region is increasingly high. The economy of Cameroon faces various challenges and this is evident in the high level of unemployment especially amongst youths. McGrath (as cited in Che, 2007) Cameroon is facing the problem of a glut of educated graduates who are unable to find viable employment in the formal or modern economic sector. The alarming issue of unemployment has been a major call for concern by stakeholders, the governments, parents, students and the general public. For some reasons, graduates find it difficult to be gainfully employed or create employment for themselves upon completion of studies. When graduates are unable to gain employment or create decent jobs for themselves upon

completion of studies, they become additional burdens to their family, community and society at large instead of contributing positively. They are disgruntled and frustration sets in, which results to societal vices and increased poverty in the community. In terms of technological advancements, graduates lack technological and sustainability competences such as problem-solving skills, creativity and critical thinking skills which are major issues as they are unable to meet the needs of the society and the country cannot be fully industrialised. There is equally the challenge of “low productivity” drawing our attention to issues of quality control, poor quality outputs/services and lack of effectiveness which has a negative effect on the economy and community.

According to the 1998 law of education part IV chapter III, teachers are the principal guarantors of quality education; it was on this back drop that the researcher deemed it necessary to examine the quality of teachers (human resources) used in technical schools in relation to the acquisition of sustainable competences amongst students. The quality of education in a school system is so dependent on the quality of teaching, to the extent that one can affirm that the quality of education depends on the quality of the teaching force (Tambo, 2012). As such the quality of the teaching force would depend on the educational opportunities and welfare available to teachers; teachers have a lot to contribute in the acquisition of technical skills and sustainability competences.

**Research Objective**

- 1) To find out whether the human resources in technical schools have the required qualities to enable students acquire sustainability competences.

**Research Question**

- 1) Does the quality of Human resources used enable students to acquire sustainability competences?

**METHODOLOGY**

The survey research designed was used for this study, according to Creswell (2012, p.25), “survey designs are procedures in quantitative research in which you administer a survey or questionnaire to a small group of people (called the sample) to identify trends in attitudes, opinions, behaviors, or characteristics of a large group of people (called the population)”

The study was carried out in the South-West Region of Cameroon, which constitute one of the ten administrative regions of the country and is situated in the coastal area of the country. The Southwest region is divided into six divisions: Fako, Koupe-Muanengouba, Lebialem, Manyu, Meme, and Ndian. Buea is the capital of the Southwest Region, the capital towns in the South-West region are Buea, Kumba, Limbe, Tiko, Bangem, Mamfe, Menji and Mundemba. The region is inhabited by a variety of people with different cultural, linguistic traits and language. English and French serve as the official languages for formal education and administration.

The population of this study comprised of Technical Secondary and high Schools in the South West Region of Cameroon. There were 54 Government Technical High schools and 17 Government Technical Schools in the South West Region of Cameroon which constituted the main population of the study. The table below shows the total population of students and teachers in the divisions of the South-West region of Cameroon.

**Table 1: Statistics on the Number of Teachers and Students an Each Division (Technical Secondary Schools)**

Divisions	Number of Teachers			No of Students		
	Men	Women	Total	Boys	Girls	Total
Fako	393	569	962	9646	16243	25889
Kupe	142	75	217	365	415	780
Muanenguba						
Lebialem	35	44	79	76	91	167
Manyu	88	53	141	972	1398	2370
Meme	168	150	318	3476	4427	7903
Ndian`	NP	NP	137	988	977	1965

<b>Total</b>	<b>826</b>	<b>826</b>	<b>1854</b>	<b>15523</b>	<b>23551</b>	<b>39074</b>
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NP=Not Provided

**Source: Regional Delegation of Secondary Education, South-West region of Cameroon, 2020/21**

Statistics showed that in the South-West Region of Cameroon, there were 1854 teachers of which 826 are male and 826 are female. As for the students' population, statistics gave a total of 39,074 students of which 15,523 are boys and 23,551 were girls.

The target population of the study consisted of Government Technical High schools and Government Technical Schools in the South West region of Cameroon, precisely in Fako, Meme and Manyu Divisions. These divisions were chosen for the study because, most students in others division have relocated to major towns and cities due to crises in the region. Government Technical High Schools (GTHS) and Colleges (GTC) were eligible for the study, reasons being that most private schools are involved in the commercial sections in technical schools due to lack of funds to go operational in the industrial sections. The table below shows the target population of the study.

*Table 2: Distribution of the Target Population of the Study*

Divisions	Number of Teachers			No of Students		
	Men	Women	Total	Boys	Girls	Total
Fako	393	569	962	9646	16243	25889
Manyu	88	53	141	972	1398	2370
Meme	168	150	318	3476	4427	7903
<b>Total</b>	<b>649</b>	<b>649</b>	<b>1421</b>	<b>14094</b>	<b>22068</b>	<b>36162</b>

**Source: Regional Delegation of Secondary Education, South-West region of Cameroon, 2020/21**

Statistics shows that a total number of 36162 students and 1421 technical teachers, constituted the target population of the study.

#### *Accessible population*

The accessible population of the study included, students, teachers and administrators in GTHS and GTC's in Fako, Meme and Manyu Divisions. The student population consisted of forms 4,5,6 and 7 in GTHS in the major towns of Fako, Meme and Manyu Division.

The sample population of the study therefore consisted of 200 technical school students from GTHS/GTC'S in Fako, Meme and Manyu Divisions and 15 administrators. The Students of Form 4, 5, 6 and 7, were eligible and selected for the study because we assumed that, from class 1 right up to class 4, when they will write their CAP industrial exams, they must have covered so much in the syllabuses that warrants them to have acquired sustainability competences and are fit for the job market upon graduation, and the same follows suits for ITM (Intermediate Technical Certificate) and ATM (Advanced Technical Certificate) examinations respectively.

*Table 3: Sample Distribution*

Divisions	Number of Teachers		No of Students	
	Total	Sample	Total	Sample
Fako	962	210	25889	273
Manyu	141	35	2370	25
Meme	318	70	7903	83
<b>Total</b>	<b>1421</b>	<b>315</b>	<b>36162</b>	<b>381</b>

The purposive sampling technique was used to select the target and accessible population, to ensure that only schools that were functional at that time and could provide the best information for the study were selected for the study, as such technical students in GTHS/GTC's in Fako, Meme and Manyu Division as well as teachers and administrators provided the information needed. The convenient sampling technique was used by the researcher in selecting teachers who were available on campus on the day of the researcher's visit to the school to fill the questionnaire items. As well as the focus group discussions for

students. The instruments used for Data collection were the questionnaire, interview guide and focus group discussion.

A letter of authorization was obtained from the Department of Educational Foundations and Administration, Faculty of Education, University of Buea by the researcher (see appendix for details). The researcher then went to the field to administer the instruments. The research permit was presented to the administrators of the various institutions. The questionnaires were administered to teachers in their respective schools until the required sample was gotten.

As for the interview guide for school administrators, the research permit presented was presented to the administrators. A face-to-face approach was used whereby the researcher introduced herself, a sample of the interview guide was provided to the participants to fill at their own convenience for those who requested it that way. On the other hand, for those who accepted to be interviewed, they chose a day that was convenient for them, while the interview was ongoing the researcher took down notes on the vital issues of interest, since they didn't want their voice recorded, the researcher later reach them on phone on issues that were not well addressed on the day of the interview. As for the focus group discussion with students, they were arranged in groups of 6-10 for discussions and the discussions were recorded.

The qualitative and quantitative methods were used in analyzing the data of the study. Qualitative data was presented in the form of a report with direct quotations from the respondents. Quantitative data collected from the field was coded, organized and summarised into numerical values and analysed as follows, the questionnaire was numbered and a coding frame was formulated. After numbering the questionnaire and specification of the coding frame, an excel spread sheet was created that was used to enter the data. The reason why the questionnaire was coded and serial number assigned to each of them was to ensure that on the data base, one should easily trace the individual responses of participants and to ease verification in areas of uncertainty if they arise. When data collected with the aid of questionnaire were keyed in for each participant, the entire data base was exported to SPSS version 25 for proper cleaning before analysing. After that, the quantitative data was analyzed using the Pearson Product Moment Correlation Analysis. The items on the Likert scale were coded as follows strongly agreed, agreed, disagreed and strongly disagreed were assigned 4,3,2 and 1 for positively worded items respectively. Meanwhile negatively worded items took the reverse, that is: 1, 2,3 and 4 respectively as seen in the table below

**Table 4 Illustration of the Scoring of Items on the Likert Scale.**

<b>Options</b>	<b>Positively worded</b>	<b>Negatively Worded</b>
Strongly agreed (SA)	4	1
Agreed(A)	3	2
Disagreed (DA)	2	3
Strongly disagreed (SD)	1	4

## ***FINDINGS***

The results of this study are presented based on the hypothesis research question under investigation

### ***Hypothesis***

**H<sub>02</sub>:** There is no significant relationship between human resource quality and the acquisition of sustainability competences.

**H<sub>a2</sub>:** There is a significant relationship between human resource quality and the acquisition of sustainability competences.

The independent variable in this hypothesis was human resource quality, while the dependent variable was acquisition of sustainability competences. The scores of the independent variable were gotten from the responses recorded from a ten (10) items of a four- point Likert scale questionnaire that measured human resource quality. The scores of the dependent variable were gotten from a nine (9) items of a four-point Likert scale questionnaire that measured acquisition of sustainability competences. The statistical

analysis technique used to test this hypothesis was the Pearson Product Moment Correlation analysis.

The correlation coefficient formula used was;

$$r_{xy} = \frac{n \sum xy - \sum x \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Where  $x$  is the independent variable,  $y$  is the dependent variable and  $r_{xy}$  is the correlation coefficient for  $x$  and  $y$ .

The result of the analysis is presented in Table:16

**Table: 5 Pearson Product Moment Correlation Analysis of Human Resource Quality and Acquisition of Sustainable Competencies. (N= 299)**

Variable	$\frac{\sum X}{\sum Y}$	$\frac{\sum X^2}{\sum Y^2}$	$\sum XY$	$r_{xy}$	p-value
Human Resource Quality (X)	6342	139724	165040	0.178	0.002
Acquisition of sustainable competencies. (Y)	7743	204439			

$p^* < 0.05$ ;  $df = 297$ ; critical  $r_{xy} = 0.124$

The result of the analysis revealed that the calculated  $r_{xy}$  -value of 0.178 is higher than the critical  $r_{xy}$  -value of 0.124 at a 0.05 level of significance with 297 degrees of freedom. Also the p-value of 0.002 is lower than 0.05. With the result of this analysis, the null hypothesis was rejected while the alternative hypothesis accepted. This result therefore meant that there was a significant relationship between human resource quality and acquisition of sustainability competences.

Since there exists a significant relationship between human resource quality and acquisition of sustainability competences, a further exploration of the relationship showed that the  $r_{xy} = 0.178$  was positive. This indicated that the higher the human resource quality, the better the acquisition of sustainability competences.

**Table: 6 Open Questions on Human Resource Quality**

Themes	Responses
Limited and redundant personnel	“Industrial teachers are lacking and the francophone teachers in this section have language problem and cannot maximize teaching” “Some teachers in certain departments do not have the related certificates but end up being recruited. Thus, they refuse to take professional subjects because they do not have the required skills or inappropriate teaching is done if they accept teaching.”
Qualified staff	“Some teachers have a grasp of new reforms and methods in their teaching areas, though others are still lagging behind.” “Some teachers plan their lessons”
Aging staff	“Attribution of lesser workload to more trained and qualified teachers (PLET have 18 hours per week and earning higher salaries whereas IETs have 24 to 26 hours with lesser pay”

**Table: 7**

Human Resource Quality	
Themes	Responses
Qualified teachers	“Qualified teachers from ENSET do their best in practical lessons” “Trained teachers, government teachers are good”
Language barrier	“Francophone teachers who do not master English language face difficulties explaining concepts to students”
Absenteeism	“Some trade subjects have teachers who do not come to class”

More theory

“Students are sometimes left to struggle on their own because teachers do not come for lessons”

“No practical lessons, mostly theory”

From the findings, respondents expressed some dissatisfaction at the level of teachers' quality, shortage of Industrial teachers, teacher commitments, pedagogy (some have the knowledge but lack teaching skills), communication problems and many others. The study revealed that, human resource quality affects the acquisition of sustainability competences by students. There was a significant relationship between human resource quality and acquisition of sustainability competences at p-value of 0.002 is lower than 0.05 ( $P > 0.05$ ). To support this finding, Mugure (2012) established that shortage in the number of teachers in most schools has a negative impact on educational outcome and consequently affects the acquisition of sustainability competences amongst students. According to Ekweli (2018) there is a call for concern on the quality of teachers in secondary technical schools, as some teachers in technical secondary schools were not qualified. Moreover, some teachers had challenges in using new equipment thus making practical exercises far fetch as some students go a whole term without a single practical lesson in their trade subjects thus having negative repercussion on the acquisition of sustainability consequences.

Also, the human resource quality, the type of pre service and in-service training that teachers received, teaching methods employed by the teachers, their capabilities of using new equipment\instrument affects the outputs of graduates from technical schools. Considering that teachers constitutes a key element in the provision of quality TVE programs. It is therefore important that TVE teachers should be all round qualified and processes academic knowledge in their field of teaching to ensure that they put in their best (Ekweli, 2018). When teachers put in their best, it is envisaged in the learning outcome of the students, it develops interest in the learners and they are motivated to learn new things and acquire sustainability competences.

According to Dewey (1897) reality, knowledge and truth are constantly changing thus teachers as resource persons, facilitators ought to keep abreast of changes in their areas of specialization. There is the need for teachers to be current, well informed with key policy changes in education and innovations in technical education such as new approaches to teaching, learning and assessment, improvements on their knowledge content and skills. There is equally the need for teachers to use different strategies and medium in teaching to step up their teaching.

To support the findings, Schultz (1961), identified people as the source of Economic growth, there should be investments in human beings in order to develop their capabilities, increased their knowledge base, skills and competences. Moreover, there should be investments in teachers' induction and in-service trainings to increase teachers' knowledge and skills which affect their ability to do productive work, enhances their capabilities and be open to opportunities.

According to ILO/UNESCO (1966) Recommendations, in-service training and professional development is very crucial for teachers, continuing professional development (CPD), is a cornerstone for human resource development, it should be designed in collaboration with teachers' organizations and should be free of charge. In-services training are necessary to ensure that educators remain updated in terms of the changes that are taking place within the overall system of education. Personnel need to learn new skills and develop their abilities to the fullest, which is done through assessment, training and evaluation.

In the same perspective according to UNESCO (2002) in order to ensure high quality in technical and vocational education, priority should be given to the recruitment and initial preparation of adequate numbers of well-qualified teachers, instructors/trainers, administrators and guidance staff, and to the provision of continuous professional upgrading throughout their career, and other facilities to enable them to function effectively.

According to Torff (2005) lack of pedagogic skills and knowledge is a bigger threat to teacher quality. In the 1960s international standards emphasized that teaching is a profession requiring expert knowledge and specialized skills, acquired and maintained through rigorous, ongoing education and training, and a sense of personal and collective responsibility for the education and welfare of learners (ILO, 2012).

In addition, ILO (2012) strongly recommended that induction be provided for new teachers based on the



notion that, Induction, professional support and mentoring programs for beginning teachers can enhance the effectiveness of new teachers, and improve their retention, and on the other hand when teachers are thrown in at the deep end with little or no induction, or other professional support it usually has a negative impact on teachers' effectiveness and leads to attrition that is, reduces their effectiveness (Bennell and Akyeampong, 2007). Finally, Nchombe (2019) reiterated that without teachers' commitment we risk doing away with the quality of education, no matter how well-defined the policies may be. In recent times, modernization and advancements in information technology, teachers have to be reflective practitioners.

## **CONCLUSION**

From the discussion of the findings, it seems obvious that human resource quality is an essential component in the teaching learning process. When they are not readily available in quality and quantity, this somehow mar the teaching learning process and renders the learners less impactful and less empowered as they are unable to maximize their potentials in the acquisition of sustainability competences.

Considering the pivotal role that the use of quality human resources plays in school effectiveness, the attainment of educational objectives and students' acquisition of sustainable competences, it is therefore important that more attention be paid to teachers' quality and their professional development, so that they are better equipped to help students acquire sustainability competences. The quality of teachers in technical industrial education is very important, not just any kind of teacher because the teacher is an important resource person and facilitator in the teaching learning process. The quality of teaching and teachers will determine the quality of students' outcome and their ability to reproduce quality services/products and solve societal problems.

Given that technical education is very expensive to run, the government needs to heavily subsidize in terms of equipment and training materials. To ensure that teachers have the facilities and materials to do their job, when training materials are provided on time, to a greater extent they are effectively used in the teaching learning process such that, students and teachers can maximize their potentials in the acquisition of sustainability competences. Upon completion of studies students must have acquired relevant skills and abilities for immediate employments and successfully adapt in a dynamic environment like ours. When these resources are available and appropriately used, quality and sustainable education is guaranteed in technical schools.

## **Recommendations**

Teaching is a dynamic profession and not everything about teaching can be covered in teacher training. Colleges thus, teachers need assistance. There should be cooperation in the teaching corps, a single teacher can't possibly achieve all the educational objectives likewise quality education doesn't happen by chance there should be unity amongst teachers in order to effectively achieve educational objectives as one of the characteristics of effective schools is a shared vision and goals: Unity of purpose, consistency of practice (Yu, 2007 as cited in Ebot Ashu, 2013).

In order to ensure continuity, old teachers who are fading out due to age should help the young ones. Older teachers should understand that they have the responsibility of helping new colleagues that just join the profession, it's not time for them to relax and say work has reduced and abandon the job on them with no directives, give them assistance, mentor them, and don't let them get lost in the deep, it's the responsibility of senior colleague to assist the younger ones to ensure continuity. ILO (2012) strongly recommended that induction be provided for new teachers they should not be thrown in at the deep end with little or no induction, or other professional support.

Also, in order to give assistance to newly recruited teachers, older Teachers should be willing to help their younger colleagues and work as a team. It was observed that some older teachers were not willing to help their new colleagues "In the name of when I came I had nobody to help me" in addition, the online census

done yearly with each teacher's work profile or professional information, additional information should be provided on that data base or platform where teachers put in information on the number of new teachers they have successfully mentored for that year, and give remarks for the mentee teachers on aspects such as: submission, respect and collaborate etc where by the principal, the mentee and the mentor teacher affirms by giving in their signatory. So that the form can be transmitted electronically to the ministry directly, and manually to the divisional and regional delegations. Administrators should set up a data base for all newly posted teachers in their institutions and the mentors assigned to them with appropriate follow up strategies. Such innovations will ensure that newly recruited teachers are effectively mentored and well equipped for the task that awaits them.

In-service training is supposed to be a must for all technical teachers of all categories and grades since the technologies of all technical trade are evolving every day. In-service training should be well structured, the ministry should Carefully plan in service training and teachers' professional development. Also, special focus should be given to contract technical teachers as some work and go for retirement without ever been given a chance for in-service training.

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