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Assessment of the implementation of practical skills in the secondary school curriculum for the realization of vision 2025 in Kilimanjaro region, Tanzania

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Abstract

Vision 2025 recommends that education should lead to high quality livelihood for all Tanzanians through strategies which ensure attainment of a level of tertiary education, hard work and creativity through implementation of practical skills among learners. Presentations, interpretations and discussions of the findings of the research study, 'Assessment of the Implementation of Practical Skills in the Secondary School Curriculum has not been documented in Kilimanjaro Region, Tanzania. Thus the aim of this study was to document the findings of the current study related to implementation of practical skills among secondary school learners in general. This study used convergent mixed research methods. The sample population was 531 people including 3 DEOs, 110 Secondary School teachers, 11 heads of schools, 11academic masters and 396 Form four learners of government and private secondary schools of three district councils. Probability and non-probability sampling were used. Data were collected through questionnaires, interview guide, document analysis schedule and observation schedule. The findings revealed strategies of assigning learners practical skill activities; developing practical skill projects; positive perception of teachers and learners towards practical skills; an interlink between practical skills and employment opportunities ;challenges included difficulty of teachers in preparing practical skill activities, inadequate qualified teachers; inadequate practical skill facilities; and solutions to the challenges included Education Planners to plan refresher courses for secondary school teachers. In conclusion this implied that Vision 2025 could be realized through secondary school education by learners acquiring practical skills which help improve their livelihood. Recommendations include practical skill subjects such as agriculture and building construction to be introduced to all secondary schools.

Keywords: Assessment, implementation, practical skills, strategies

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1. Introduction

Vision 2025 recommends that education should lead to high quality livelihood for all Tanzanians. In this study the focus was on one of the Vision 2025 objectives which is high quality livelihood for all Tanzanians expected to be attained through strategies which ensure the attainment of a level of tertiary education, hard work, and creativity through implementation of practical skills among learners for the realization of the Vision 2025. These were to be achieved through education by focusing on specific subjects. This study focused on the following practical skill subjects: agriculture, home economics, building construction, carpentry, computer studies, book keeping and commerce, fine art and music. These subjects are taught in some schools as optional and in other schools as core subjects. The question is that what are the teaching strategies used by secondary school teachers? What are the perceptions of teachers and learners on implementation of practical skills for the realization of Vision 2025 for the focused subjects? What are the challenges faced by teachers in implementing these practical skill subjects and their possible solutions? These questions were addressed in the findings of this study.

Implementation of practical skills among secondary school learners has been a great concern to educationists. For example, Nyerere's idea of Education for Self Reliance (1967) emphasized integrating theory and practical skill activities. The secondary school curriculum was revised by TIE, (2013) to be in line with the expectation of Vision 2025 which emphasizes strategies such as demonstrating practical activities, developing practical projects for learners, and practical skill activities such as farming, building houses, masonry, and carpentry. The government developed education programmes through MoEVT (2010) such as Secondary Education Development Programme, SEDP1(2004-2009) and SEDP 11(2010-2014) which emphasized technical education, ICT application and promotion of practical skills development. Education training policies were also formulated such as ETP, 1995 (MoEC, 1995) which emphasized learners to learn technical skills and vocational skills. All these developments have been geared to implementation of practical skills among secondary school learners in order that Vision 2025 can be realized. But what are the teachers and learners' perceptions on these developments? Are teachers' eager to teach and receive the developments positively or not? What are the challenges faced by teachers and possible solutions in implementing practical skills among secondary school learners in Kilimanjaro Region? Do learners perceive that they are adequately prepared in practical skills for employment opportunities? These concerns are in line with the theory guiding the study, Overcoming Resistance to Change (ORC). These concerns were addressed in the findings of this study.

Statement of the Problem

Since Vision 2025 was launched in 2000(Planning Commission, 2000), many curriculum innovations have been put in place. Yet, stakeholders, education officers, teachers, learners and parents are still concerned with ordinary secondary education in leading to the realization of Vision 2025.Practical skill subjects have been introduced and made compulsory to ensure learners left secondary schools with practical skills. What is not known is whether the teachers have been trained on teaching these practical skills to

learners and if so, it is important to find out if secondary school teachers are actually teaching as recommended. Few research studies have been done on strategies such as Chib and Wardoyo, (2018); Lupeja, (2017); on perceptions such as Oloyede & Sihlongonyane, (2017); on challenges and possible solutions Machingambi, (2017). However, these studies have not been done with particular reference to Vision 2025. No known particular study has dealt with implementation of practical skills for the realization of Vision 2025 among secondary school learners in Kilimanjaro Region, Tanzania. Also up to now, we do not have proper documentation to see whether we are moving towards the attainment of Vision 2025 through secondary education. Therefore, the purpose of the current study was to document the findings and recommendations related to implementation of practical skills among learners for the realization of Vision 2025 in Kilimanjaro Region, Tanzania.

Research Questions

The study was guided by the following research questions:

1. What is the status of practical skill subjects in secondary schools in Tanzania?
2. Which strategies are used by secondary school teachers to implement practical skills among learners in Kilimanjaro Region, Tanzania?
3. What are the perceptions of secondary school teachers towards the implementation of practical skills among learners in Kilimanjaro Region, Tanzania?
4. What challenges are faced by secondary school teachers and learners in implementing

practical skills in Kilimanjaro Region, Tanzania?

5. What are the possible solutions to the challenges faced by secondary school teachers and learners in implementing practical skills in Kilimanjaro Region, Tanzania?

2. Methodology

The methodology included description of the research design, target population, description of sample and sampling procedures and description of data collection instruments.

2.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure, (Kothari,2004). This study was guided by the philosophical world view known as Pragmatism which focuses on multiple data collection method. Also the study was guided by the research approach called mixed research approach. Mixed research involves information collected from quantitative and qualitative data. Therefore, the design was derived from the research paradigm and research approach which is convergent design. The design is a concurrent design where qualitative and quantitative data sets are collected together in a single phase (Creswell & Creswell, 2018). Mixed research methods provide richer insights into phenomena of interest that cannot be fully understood using only quantitative or qualitative methods (Johnson *et al.* 2007). The researcher used this design in order to build on the strengths of both quantitative and

qualitative data and produce enough information for extending and elaborating the problem of the study (Creswell & Clark, 2018).

2.2 Target Population

In research, a target population is a group of individuals with some common defining characteristics that the researcher can identify and study. In addition, from the target population the researcher can gain from it information upon which generalization and conclusions can be drawn subsequently, (Creswell, 2009). Within the target population, the researcher can select a sample for the study. The target population was 5,278 people including 3 DEOs, 1,110 ordinary secondary school teachers,110 heads of schools,110 academic masters and 3,955 Form four learners of both government and private secondary schools in the 3 district councils of Kilimanjaro region namely A, B and C. The government secondary schools in the three district councils were 65 and the private secondary schools were 45 (BEST,2018).

2.3 Description of sample and Sampling Procedures

The researcher sampled 10 percent of the target population according to Kothari (2004) and got the following respondents 11secondary schools, 110 secondary school teachers, 396 learners,11 heads of schools, 11 academic masters. The 3 DEOs, each from the 3 district councils were included purposively by virtual of their positions thus making a total of 531 participants.

2.4 Sample and Sampling Procedures

Sampling of District Councils

Kilimanjaro Region has seven district councils namely Moshi, Moshi Municipality, Rombo, Same, Mwanga, Hai and Siha. Using simple random sampling the researcher sampled three District councils.

Sampling of Schools

Procedures for selecting the schools was by computing 10 percent of government and 10 percent of private secondary schools according to Kothari (2004). Then stratified random sampling of schools into government and private followed by simple random sampling was used to select the names of the schools that were studied. For example, in district council A, there were 29 government schools and 10percent of the schools was 3, and for private schools, 10 percent was 1 school. Therefore, the researcher wrote the names of the 29 Government schools on pieces of paper and placed them in a container S, then the researcher mixed the pieces of papers thoroughly before picking one piece of paper at a time with replacement until the required 10 percent of the names of the three schools in the district council were reached. The researcher administered the same method to get 10 percent of names of private schools and in this case it was one school. The method was administered to all 3 district councils.

Sampling of Teachers

For implementation of practical skills for the realization of Vision 2025, the researcher chose purposely to use only ordinary level secondary school teachers who were teaching Form four learners because basic education ends in Form four and so the learners have

acquired experiences in practical skill activities since they were in Form one and the teachers too are experienced in teaching the respective practical skill activities. Form four learners too are expecting to graduate and so the researcher wanted to see what practical skills they do which can help them provide employment opportunities. In each school the researcher used where possible stratified random sampling in getting males and females in order to avoid under representation of the strata. In some other schools, the researcher used availability sampling (convenience sampling) and simple random sampling where the ratio of male to female did not work.

Therefore, where it was possible, the researcher used stratified sampling by dividing the teachers available into two strata of females and males. Then simple random sampling was administered by the researcher where the names of teachers were written on pieces of papers and put them in the container noted F and M which represented female teachers and male teachers respectively. The pieces of papers in the containers were mixed thoroughly before the researcher picked one paper at a time with replacement until five female teachers in container F and five male teachers in container M were obtained respectively. This amounted to ten teachers selected per school for the study. The procedure was administered to the eleven sampled government and private schools.

Sampling of Learners

In the sampled schools, the researcher chose purposely Form four learners because they have experience in practical skills since they were in form one. The number of learners in each stream ranged from forty-five and above. On arrival at each sampled school, the researcher sampled one stream of Form four classes through simple random sampling in order to get the participating stream. Names of the streams were written on pieces of paper and then folded several times and placed on a table. Then one learner was asked to pick only one paper blindly and the number of the stream on the picked paper with replacement was the participating class.

The researcher used stratified sampling technique in choosing male and female learners to avoid under representation of the group of learners in the sampled schools. To achieve this the researcher subdivided the learners into two subpopulations by their sex. Then simple random sampling was used to choose participants available whereby names of male and female learners were written on pieces of paper and placed in container ML for male learners and container FL for female learners. For each class the researcher selected eighteen boys and eighteen girls totaling to thirty-six learners per school. The researcher mixed thoroughly the pieces of papers with names of learners in the containers. Then the researcher picked up one piece of paper at a time with replacement until eighteen boys from container ML and eighteen girls from container FL were obtained from each of the sampled schools both government and private in all the three district councils of Kilimanjaro region. Again, where the strata were heterogeneous, participants selected also varied and availability sampling was used.

District Education Officers. Each District council has one District Education Officer thus through purposive sampling each DEO was included in the study sample because they are administrators and oversee implementation of practical skills in secondary schools and quality education in Tanzania.

Heads of Schools. Heads of schools of the eleven sampled schools too were purposively included in the study sample because they are directly answerable to District Education Officers for matters pertaining learners' academic performance, teachers' professional develop pment and implementation of practical skills in ordinary secondary schools in Kilimanjaro region.

Academic Masters. Eleven academic masters corresponding to the eleven sampled secondary schools were also purposively included in the sample because they keep academic performances of learners. Then the researcher prepared a sampling matrix as shown in Table 1.

Table 1. *Sampling Matrix*

Variables	Population	Sample	Sampling Procedures	Instruments
Secondary schools	110	11	Stratified random sampling	NA
HoDs	110	11	Inclusion	Questionnaire
Teachers	1100	110	Stratified random sampling	Questionnaire, observation schedule
Form four Learners	3955	395	Stratified random sampling	Questionnaire, Observation schedule (Practical skill activities)
Academic masters	110	11	Inclusion	Document analysis schedule
DEOs	3	3	Inclusion	Interview guide
Districts	3	3	Random sampling	NA

Source: Field data 2020

2.5 Description of Data Collection Instruments

Data collection of any study relies on the type of instruments a researcher uses in order to get the required information for the study. For sufficient and usable data, a researcher is required to choose the most effective data collection instruments so as to obtain credible information, Creswell (2012). For this study all the instruments were carefully developed based on the research questions. Also this study used four types of instruments namely questionnaires for teachers, heads of schools and learners; interview guide for DEOs, document analysis schedule for academic masters and observation schedule was administered by the researcher herself. The researcher administered the questionnaires to ordinary level secondary school teachers, heads of schools and learners because they are involved in the implementation of practical skills for the realization of Vision 2025 among ordinary level secondary school learners. The questionnaires helped the researcher to get a lot of information from many respondents in this case, teachers, heads of schools and learners within a short time and also reduced bias of the researcher influencing respondents in answering the questions (Ogula, 2010). The interview guide was administered to the DEOs and document analysis schedule to the academic masters and observation schedule was administered to teachers and learners by the researcher.

Since all these respondents were literate, they could easily respond to the questions as the researcher expected.

3. Results and Discussion

The researcher carried out a document analysis schedule of the practical subjects the schools offer in the sampled 11 secondary schools and looked at the time tables to determine the number of practical subjects being taught in those secondary schools. Table 2 gives a summary of practical skill subjects found in the sampled schools.

Table 2. *Practical Subjects offered in the school curriculum in the sampled schools and skills developed (n=11)*

Subject name	**Offered in schools**		**Not offered in schools**		**Skills developed**
	f	%	f	%	
Agriculture-	8	72.7	3	27.3	Farming, livestock keeping
Home economics	4				sewing, cooking, laundry,
Computer information		27.2	8	72.7	Digital literacy/computer
Technology	3				expert
Building construction	1	9.0	10	90.0	brick work, house building, electrical installation
Fine arts	3	27.2	8	72.7	drawing/carving
Music	3	27.2	8	72.7	Entertainment, music industry
Book keeping& Commerce	3	27.2	8	72.7	Managing a shop Accounting skills
Sports and games	11	100	-	-	Sports career

Source: Field data (2020)

Table 2 shows the subjects which were focused in the study with the corresponding practical skills in each subject. The findings show that many schools (8) practiced farming, 4 practiced home economics (Needle work, cookery laundry), computer, book keeping and commerce, fine art and music each was practiced by 3 schools. However, sports and games were practiced by all 11 sampled schools. These subjects are stipulated in the curriculum reviewed by TIE, (2013). Some of these subjects are offered in secondary schools as compulsory and others as optional subjects. In the sampled schools, agriculture was being practiced by all learners in the 8 respective schools as nation building task and is not examined by NECTA. The rest of the subjects were practiced by few learners who opted for them and are examined by NECTA except sports and games which is practiced by all learners in the sampled schools. Table 2 also indicates the different practical skills in each of the subjects taught .In agriculture learners acquire the following practical skills, farming and livestock keeping which can help them earn a living; in home economics, they acquire skills of sewing, cooking and laundry and learners can be tailors or can be employed in hotels; in computer technology, learners acquire digital literacy and they can add the knowledge by training further and become system operators; building construction, learners get skills of house building and can become masons; fine art, learners can draw different pictures and get money or can carve

objects and get money. In music learners gain skills of entertainment and can also join the music industry to earn their living; in book keeping and commerce learners acquire skills of accounting and other learners can become managers of their own shops and for sports and games learners can opt for sports career

In the second research question, the researcher was interested to find out the type of strategies which teachers used in implementing practical skills for the realization of Vision 2025.The information to answer this research question was gotten from teachers and learners. Teachers are the ones who teach the learners and can explain which strategies they use to teach practical skill subjects. The learners are important because they are the ones that are taught and they can confirm if indeed the teachers used the strategies. Teachers are the stake holders who implement what the curriculum in ordinary schools directs. Teachers too are the implementers who had been trained to integrate theory and practical skills to learners for the realization of Vision 2025. The suggested strategies which teachers were required to use include assigning learners with practical activities such as farming, ICT integration with teaching, organizing field trips, demonstrating practical activities to learners such brick work and livestock, developing projects for learners such as building (TIE, 2013). Teachers therefore commented on the different strategies they used in teaching their practical subjects to enhance the implementation of practical skills among their learners. Teachers were asked to explain the strategies they used to teach practical skill subjects in their schools. Table 3 gives a summary of these strategies which were used by teachers.

Table 3. *Responses from teachers on the strategies they used to teach practical skills to learners (n=110)*

	Yes		**No**	
Strategies	**f**	**%**	**f**	**%**
Assigning learners practical tasks such as farming	71	64.5	39	35.5
Developing practical projects for learners	74	67.3	36	32.7
Demonstrating practical activities	101	91.8	9	8.2
Observing and assessing learners when they perform tasks eg sewing, brick work, etc	96	87.3	14	12.7
Integrating ICT with teaching and learning	80	72.7	30	27.3
Assessing ability of learners in the practical activity they do	56	50.9	54	49.1
Organizing field trips and escorting learners eg to waterfall	75	68.2	35	31.8
Identifying appropriate tools and materials needed for the practical task eg sand ,cement and water for brick making	93	84.5	17	15.5
Assessing the overall quality of(performance ,durability) the completed task e.g sewn material	79	71.8	31	28.2
Assessing learners promptness in starting the practical activities given	67	60.9	43	39.1
Determining the objectives to be achieved at the end of the practical session	84	76.4	26	23.6
Preparing observational check list for a fair and consistent appraisal of the learners	74	67.3	36	32.7
Assessing learners' independent handling of practical tasks	62	56.4	48	43.6

Source: Field data (2020)

Table 3 shows that teachers (56.4%-91.8%) said 'yes' to all the strategies suggested. This was so because these strategies are basic in teaching and they enhance effective teaching and learning process. For example, the teacher has to demonstrate the practical activities such as sewing before learners start doing them so that learners can perform better. These strategies helped the acquisition of practical skills among secondary school learners for the realization of Vision 2025 because all these strategies are practical oriented. They allow the learner to be actively involved in the learning process. This is supported by the theory of social constructivism, Vygotsky (1998) which allows learners to construct knowledge and become active in the mental and motor activities.

Similarly, other strategies such as assessing learners independent handling of practical skills and assessing ability of learners in the practical activity such as brick work which they do were too strategies, which helped the implementation of practical skills for the realization of Vision 2025 among secondary school learners. These strategies are in line with TIE (2013), ESDP (1997), Muneja (2015) who emphasized that these strategies are important in enhancing practical skills among secondary school learners. Based on the findings, the identified strategies from teachers are consistent with those identified by the heads of schools indicating cooperation among themselves.

These strategies correspond to the practical skills taught for example, as the researcher was observing learners in the farm, one teacher said: "*In my school we have a farm, learners are assigned to go to the field according to classes and on different days. When the learners reach the field the teacher shows them how to weed maize and they do it practically.*"

Also the researcher asked teachers the common assessment modes which they use in assessing the practical tasks learners do. The responses is presented in Table 4.

Table 4. *Responses of teachers on the assessment modes (n=110)*

Modes of assessments	**Not used**		**Very rarely**		**Rarely**		**Often**		**Very often**		**Descriptive statistics**	
	f	**%**	**f**	**%**	**f**	**%**	**F**	**%**	**f**	**%**	**Mean**	**S.D.**
Portfolios	4	3.7	5	4.6	21	19.3	40	36.7	39	35.8	3.96	1.036
Rating scales	8	7.3	1	0.9	15	13.8	60	55.0	25	22.9	3.85	1.026
Check list	0	0.0	4	4.2	11	11.5	52	54.2	29	30.2	4.10	0.761
Oral presentation	5	4.7	1	0.9	9	8.4	39	36.4	53	49.5	4.25	0.991
Project work	0	0.0	0	0.0	19	17.4	45	41.3	45	41.3	4.24	0.732
Practical tasks	0	0.0	7	6.8	3	2.9	35	34.0	58	56.3	4.40	0.844
Essay writing	0	0.0	1	1.0	4	3.8	43	41.0	57	54.3	4.49	0.622
Analysis of texts	5	4.6	3	2.8	21	19.3	34	31.2	46	42.2	4.04	1.071
Interview	5	4.8	10	9.6	25	24.0	30	28.8	34	32.7	3.75	1.155
Grading Systems	0	0.0	1	0.9	13	11.9	25	22.9	70	64.2	4.50	0.741
Continuous assessment, tests, monthly tests and final examinations	0	0.0	1	0.9	5	4.5	18	16.4	86	78.2	4.72	0.592
Morning speeches	0	0.0	9	8.5	5	4.7	28	26.4	64	60.4	4.39	0.921
Observations	0	0.0	1	0.9	16	15.1	30	28.3	59	55.7	4.39	0.775

Source: Field data, (2020)

The data presented in Table 4 shows that at least fifty percent of teachers with mean scores all above average (4.40-4.72) rated very often that practical tasks, essay writing, grading system, continuous assessments, morning speeches and observations were commonly used assessment methods and these are assessment modes which are very much emphasized in the secondary school curriculum (TIE,2013) determining whether the purposes of learning outcomes are being attained. The findings mainly show that teachers use normal traditional assessment modes.

In the data it is noted that rating scales, synthesis, portfolios were the least used modes of assessments implying that teachers were not very knowledgeable about how to use them in assessing learners' practical skills. On the other hand, continuous assessment, tests, monthly tests and final examinations together with checklists were the most commonly used assessment modes for evaluating learners' practical skills with mean score above average because they are the traditional modes and teachers are very familiar to them. From Table 4, it is observed that the responses of the common assessment modes, had mean scores above average (M=3.75- M=4.72) meaning that teachers were familiar and competent in using these assessment modes and in turn this improved the ability of learners in acquiring the required practical skills for employment opportunities.

These assessment modes too enhanced the acquisition of practical skills in learners because learners were actively involved in the doing, for example writing essays and doing practical tasks such as brick making. The grading system also motivated and encouraged learners to study hard by seeing their performance through the awarded grades. This is also in line with Tyler (1949) who emphasizes that learning outcomes should be assessed. The data also show that majority of assessment modes were very much used by secondary school teachers and so these findings implied that if these assessments methods were effectively used, they would enhance learners' acquisition of practical skills and knowledge since these modes are practically oriented and also motivate learners to learn hard. Many teachers agreed with the statements with mean scores between 3.94 and 4.72 meaning that they were using these modes of assessment for evaluation of the practical skills performed by their learners.

This means majority of assessment modes were being often used, this is in line with Tyler (1949) objective theory which emphasized evaluation of objectives in his fourth question, 'How can we determine whether these purposes are being attained?' which demands evaluation or assessment of what learners achieve in the teaching and learning process. In this study, it was the teaching of practical skills among secondary school learners, for example, through essay writing, needle work, farming and the like. Hence, learners acquired high practical skills for the attainment of Vision 2025. This was so because practical tasks were evidenced as being implemented consistently (TIE, 2013), and that learners were being assessed accordingly. Looking from the perspective of the curriculum-instruction assessment triad, Achtenhagen, (2012) comments that the idea of constructive alignment between teaching, learning and assessment of a curriculum innovation cannot succeed if the assessment side of the triad is not seriously considered. Assessment steers teaching and learning.

Preparation of learners and Interlink of practical skills with employment opportunities

The study sought to find out how well learners were prepared to acquire practical skills for employment opportunities. In order to get this, teachers rated how well ordinary level secondary school learners were prepared to acquire practical skills for employment opportunities. The results showed that seventy percent of teachers (38% and 22%) rated with very good and excellent that learners were prepared well respectively. This indicated that ordinary level secondary school learners were prepared well to acquire practical skills for the employment opportunities. This corresponds with TIE (2013), ETP (1995) and also what heads of schools and DEOs commended. In addition, the researcher was interested to seek information from teachers whether there was an inter-link between practical skills and employment opportunities. The findings indicated that teachers (32.7% and 36.4%=69.1%) rated with agree and strongly agree respectively that there was an inter-link of practical skills and employment opportunities. Chib and Wardoyo (2018) commended that practical skills such as computer or digital literacy had a significance influence on employment. Also, Ndilwa (2021) in the Citizen commented that creating jobs or developing skills both need to be pursued in a coherent, integrated manner; lack of practical inputs has for years affected graduates' ability to find jobs or even start their own business. Thus skills development is linked to employment development too.

The findings too were supported by majority heads of schools (90.2% out of n=11) who agreed that the secondary school curriculum design is helping learners to be self-employed which is in line with ETP (1995) which asserts that secondary education prepares graduates for both the world of work and further education. These findings provide evidence that there is an interlink between practical skills and employment opportunities because 96 teachers rated average, very good and excellent in preparing learners for practical skills, (Figure 1). These findings too were in line with TIE (2013) who said that learners who had practical oriented skills had higher chances of being employed than those without.

The researcher asked teachers to rate how well learners were prepared for employment skills and the responses is presented in Figure 1.

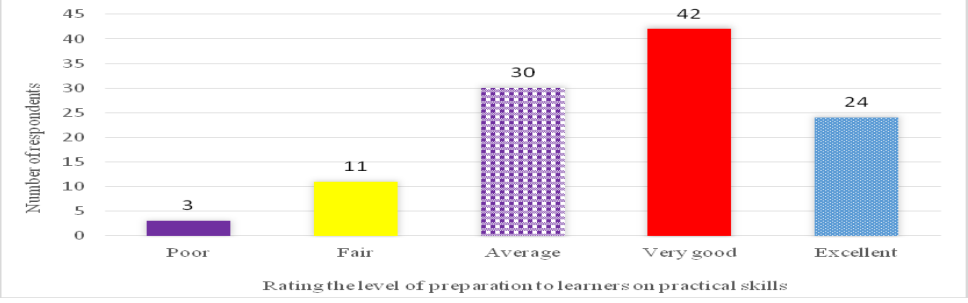

Figure 1. *Preparation of learners to acquire practical skills for employment (n=110)*
Source: Field data 2020

Figure, 1 shows that 3 teachers rated the preparation of learners was poor,11 teachers rated fair, 30 teachers rated average,42 teachers rated very good and 24 teachers rated excellent. These findings show that majority teachers (30+42+24) rated the preparation of learners to acquire practical skills was very good meaning that teachers taught practical skills to the learners well. Thus basing on these findings, there was a high possibility that learners were well prepared to acquire practical skills for the realization of Vision 2025 and that implementation of practical skills had a direct link with employment opportunities (Fig 1). This was likely to happen since ordinary secondary school curriculum design is helping learners for practical skills' acquisition and in self-employment as it was reported by heads of schools and teachers and this can make secondary school graduate learners to be self-reliant (Nyerere, 1967).

Perception of teachers and learners on implementation of practical skill activities for the realization of Vision 2025

The researcher in research question three was interested to find out how teachers and learners perceived the implementation of practical skill activities for the realization of Vision 2025. Teachers and learners were in a good position to evaluate the pace of implementing practical skills in the secondary schools because they were directly involved in the practice. Thus they could give true and reliable opinions about the implementation of practical skills in their respective schools. Therefore, questions were asked to both teachers and learners on how they perceived its implementation. The summary of their responses is presented in Table 5.

Table 5. *Perception of teachers on implementation of practical skill activities for the realization of Vision 2025 (n=110)*

	Very Slow		**Slow**		**Moderate**		**Fast**		**Very fast**		**Descriptive statistics**	
Practical skill activities	f	%	f	%	f	%	f	%	f	%	Mean	S. D.
Farming	0	0.0	0	0.0	19	17.4	44	40.4	46	42.2	4.25	0.735
Livestock keeping	0	0.0	7	6.4	21	19.3	51	46.8	30	27.5	3.95	0.854
Making bricks	7	6.7	3	2.9	36	34.3	26	24.8	33	31.4	3.71	1.141
House building	2	1.9	5	4.6	36	33.3	36	33.3	29	26.9	3.79	0.958
Cookery	3	2.9	6	5.8	29	27.9	31	29.8	35	33.7	3.86	1.047
Laundry	1	1.0	8	7.6	33	31.4	41	39.0	22	21.0	3.71	0.917
Carpentry	2	1.9	2	1.9	23	21.7	41	38.7	38	35.8	4.05	0.909
Field trips	11	12.4	13	14.6	18	20.2	18	20.2	29	32.6	3.46	1.399
Managing a school shop	4	3.7	6	5.6	31	29.0	42	39.3	24	22.4	3.71	1.000
Vegetable gardening	5	4.6	15	13.8	23	21.1	39	35.8	27	24.8	3.62	1.137
Using computer for searching info	0	0.0	17	15.9	14	13.1	26	24.3	50	46.7	4.02	1.116
Ability to present topic in front of class	0	0.0	17	15.9	13	12.1	24	22.4	53	49.5	4.06	1.123
Art and Craft	0	0.0	6	5.5	20	18.3	33	30.3	50	45.9	4.17	0.918
Creativity and reasoning	1	0.9	10	9.2	10	9.2	41	37.6	47	43.1	4.13	0.982
Participating in sport and games	0	0.0	4	3.7	11	10.1	48	44.0	46	42.2	4.25	0.784
Participation in decision in making	0	0.0	6	5.6	11	10.2	50	46.3	41	38.0	4.17	0.826
Fine Art activity	0	0.0	5	4.6	21	19.3	35	32.1	48	44.0	4.16	0.894
Music activity	1	0.9	5	4.6	27	24.8	37	33.9	39	35.8	3.99	0.938
Drama activity	1	1.1	5	5.6	24	27.0	46	51.7	13	14.6	3.73	0.822

Source: Field data (2020)

Table 5 shows responses of teachers who participated in the study said that farming and livestock respectively were fast and very fast being implemented in schools. This means that many schools, government and private were practicing these practical skill activities for the realization of Vision 2025. Not only that but also learners acquired knowledge and practical skills, this again contradicts with Lupeja (2017) who commended that secondary school graduates preferred non -farm activities. In addition, 60.2 percent of teachers said house building for teachers and classrooms was fast and very fast in helping implementation of practical skills for the realization of Vision 2025. This implied that learners acquired knowledge and building skills for their future benefits. As the researcher was observing learners perform different tasks, in one school one teacher commented that:

Learners and teachers have helped building a teachers' house although it is not yet finished. Learners are always ready to help building because they say that it is useful as a future career. Learners also help selling in our school shop. Interview on (10/9/2020).

In another school as the researcher was observing learners working in their gardens, their teacher commended that*:*

In my school we don't have a big farm, instead we have vegetable garden surrounding our school. We have divided small plots for each class to take care. We grow onions, tomatoes and cabbages which are used for the school consumption and the little surplus is sold to the villagers (11/9/2020).

Also Fine art and Music, were rated by teachers as fast and very fast in the implementation, meaning that learners were being taught these skills based subjects in many schools and so many learners too acquired the knowledge and skills which could help them in self-employment after completing school. On the whole all practical skill activities suggested in Table 5 were all rated fast and very fast by majority teachers. This implied that teachers were very eager to teach their learners all these practical skill activities for the realization of Vision 2025.Therefore Vision 2025 could be attained because teachers perceived it as progressing fast and very fast. The findings were in line TIE (2013) which reviewed the secondary school curriculum and emphasized practical oriented activities for secondary school learners.

The researcher also wanted to know the perception of teachers in the implementation of practical skills. Furthermore, the researcher sought information from teachers on how they perceived the pace of implementing practical skills for the realization of Vision 2025 in ordinary level secondary schools. The aim of seeking this information was to get teachers' level of perceptions on whether the realization of Vision 2025 was going to be attained or not. Teachers rated their perceptions into a five level scale that were very slow, slow, moderate, fast and very fast. The summary of the responses of teachers is presented in Figure 2.

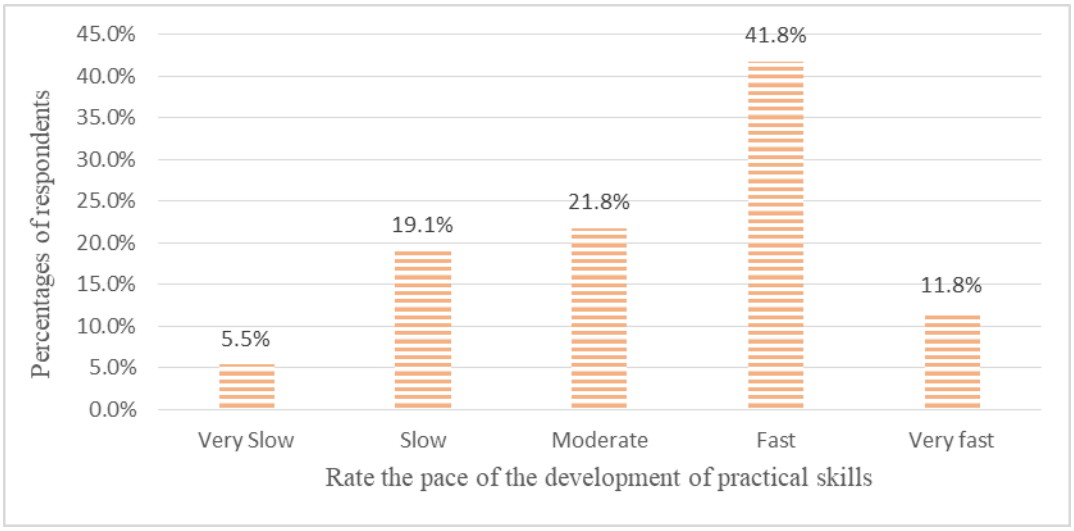

Figure 2. *Rating pace of the implementation of practical skills for the realization of Vision 2025 in ordinary level secondary schools (n=110)*
Source: Field data (2020)

The data from figure 2 shows that 41.8 percent and 11.8 percent of teachers perceived that the pace of the implementation of practical skills for the realization of Vision 2025 in ordinary level secondary schools was fast and very fast while 21.8 percent said the pace is moderate. Surprisingly, few teachers said that the pace of implementing practical skills for the realization of Vision 2025 was very slow 5.5percent and slow19.1percent when compared to other rated levels. This implied that 75.4 percent of teachers perceived the pace of implementing practical skills for the realization of Vision 2025 to be very fast implying that Vision 2025 could be realized. The teachers' responses concurred with the responses of heads of schools who agreed that Vision 2025 would be realized. Thus basing on these findings the implementation of practical skills among ordinary level secondary learners was doing best and there is a high possibility of realizing Vision 2025 through secondary school education.

Challenges of implementing practical skills for the realization of Vision 2025

The researcher in research question four of this study sought to find out the challenges facing teachers in implementing practical skills in their schools. The information was collected from teachers, heads of schools and DEOs. In realizing this objective, open-ended items for heads of schools and DEOs and Likert scale items for teachers were formulated to identify what those challenges were in place against the achievements of practical skills for the realization of Vision 2025. Therefore, information was sought from teachers, heads of schools and DEOs who each stated the challenges of implementing practical skills for the realization of Vision 2025 in their schools. The researcher asked teachers to state the challenges they were facing in implementing practical skills among secondary school learners and the responses are summarized in Table 6.

Table 6. *Challenges faced by secondary school teachers in the sample in implementing practical skills for the realization of Vision 2025 (n=110)*

Challenges	**Strongly disagree**		**Disagree**		**Undecided**		**Agree**		**Strongly agree**		**Descriptive statistics**	
	f	%	f	%	f	%	F	%	F	%	Mean	Standard deviation
In adequate qualified secondary education teachers	12	10.9	19	17.3	8	7.3	40	36.4	31	28.2	3.47	1.444
Poor infrastructure	6	5.5	12	10.9	11	10.0	49	44.5	32	29.1	3.75	1.243
Poor government monitoring of schools	3	2.7	6	5.5	16	14.5	25	22.7	60	54.5	4.18	1.127
In adequate T/L resources	10	9.2	12	11.0	13	11.9	49	45.0	25	22.9	3.60	1.248
Difficult in preparing practical activities	4	3.7	4	3.7	7	6.5	47	43.9	45	42.1	4.17	0.976
Scarcity of land area for farming	6	5.5	5	4.5	18	16.4	53	48.2	28	25.5	3.85	1.015
Overcrowded classrooms	5	4.5	12	10.9	29	26.4	30	27.3	34	30.9	3.63	1.270
Skills gap for secondary school learners	1	1.0	6	5.8	30	28.8	10	9.6	57	54.8	4.07	1.185
High cost of buying practical equipment	11	10.3	1	0.9	10	9.3	51	47.7	34	31.8	3.99	0.957
Declining academic performance of secondary school learners	2	1.9	5	4.7	20	18.9	47	44.3	32	30.2	3.93	0.998
Graduate fail to demonstrate practical skills required	10	9.2	12	11.0	13	11.9	32	29.4	42	38.5	3.75	1.348
Vision 2025 is not being reviewed every five years as planned in 2000	6	5.6	10	9.3	10	9.3	33	30.6	49	45.4	3.97	1.271
Other challenges	3	2.7	29	26.4	20	18.2	30	27.3	28	25.5	3.23	1.136

Source: Field data (2020)

The major challenges identified in Table 6 are, difficult in preparing practical activities, 86 percent of teachers agreed and strongly agreed (M=4.17) and 54.5percent (M=4.18; SD=1.127) of teachers strongly agreed that there was poor government monitoring of secondary schools and Vision 2025 not being reviewed (M=3.97).Teachers found it difficulty in preparing practical skill activities because some teachers had no practical skill training especially in the agriculture subject and also inadequate resources. These findings too correspond to the findings of Tibasima, (2017) which revealed that there was poor government monitoring in secondary schools, this could affect the implementation of

practical skills for the realization of Vision 2025.The findings too correspond to Siril *et al.* (2013) who found that absence of Vision 2025 in institutions was a challenge in implementing practical skills among learners. These challenges could cause resistance in implementing practical skills by both teachers and learners according the theory of ORC by (Coch & French, 1948).

Also 54.8 percent (M=4.07; SD=1.185) strongly agreed that there was a skills gap for secondary school learners with widely spread responses. This concurs with Tshabangu and Msafiri (2013) who identified in their study that there was poor policy implementation and lack of political will to engage stakeholders in a purposeful trust worthy environment thereby threatening healthy links between education and other national socio-economic goals like this one of implementing practical skills among secondary school learners. Teachers strongly agreed that there were inadequate qualified secondary school teachers, for example in agriculture. The schools practicing farming did not have agriculture trained teachers except in two schools. This concurs with the study of Diise *et al*. (2018) who found that the agriculture subject in Awe Senior High School in the Upper East Region, Ghana, lacked skilled farm labourers who could help teach learners agriculture skills.

This corresponds to the findings of Mosha (2016), who commended that schools have inadequate qualified teachers and few resources, therefore continuing professional development suggested by Machingambi (2017), ought to be instituted from time to time to help inadequate qualified teachers to be competent. The government has made efforts to produce qualified teachers by giving university student teachers full loans so that many can join the teaching profession but unfortunately they have not been employed because of financial constraints.

Teachers too agreed that there were inadequate teaching and learning resources 45.0 percent (M=3.60; SD=1.248) for example computers in schools teaching computer subject, learners were sharing the computers. Schools too do not have enough computer trained teachers. Learners were sharing computers because they are inadequate due to lack of enough capital. This concurs with the study done by Olofin and Imakwu (2016) who found that ICT was faced with lack of capital to buy equipment such as computers and lack of adequate skilled workers in computer literacy and Tibasima, (2017) who commended that secondary schools have inadequate computer instructors. Promoting learners' digital skills is one of the key competences in a curriculum (Sancho *et al.*2016). Therefore, schools should ensure availability of computers in their schools.

There were out of date equipment in the building construction class and in some schools, land for agriculture was inadequate especially in urban secondary schools. For home economics class there were inadequate teaching and learning resources especially materials for practical classes. This concurs with the study of Okoro (2013) on challenges in practical work in Home Economics in South Africa, who commended that inadequate teaching and learning resources was a serious challenge facing the teaching and learning of practical Home economics. Also studies done by Gamawa (2015) and Olayinka (2016) revealed that shortage of adequate equipment of practical lessons in teaching and learning home economics was a major challenge. The researcher also found that learners

were concerned about shortage of home economics teachers and inability of teachers to improvise instructional materials. This concurs with the findings of this study which revealed that there are shortages of home economics teachers because teachers who have retired and those who go for further studies are not replaced immediately.

Teachers strongly agreed that there were overcrowded classrooms 30.9 percent (M=3.63; SD=1.27) concurring with Mosha (2016) and Tibasima (2017) who found out that teachers complain about poor teaching and learning environment, shortage of resources and large class sizes which do not attract young people to the profession. In the needlework class observed in the current study was small and so the teacher hired a bigger class when teaching theory and during practical period the learners were divided into two. This concurs with Mungoo and Moorad (2015) who found that in large mixed ability classes practical teaching failed to carter for the range of learners. Other challenges with response of strongly agree included scarcity of land for farming, this was mainly for schools in the urban areas and graduates failing to demonstrate practical skills required. Graduate failing to demonstrate practical skills required has been mainly observed by some employers. These challenges together could slow down the progress of implementing practical skills for the realization of Vision 2025 especially if there were inadequate qualified teachers to teach learners the suggested practical skills (Tibasima 2017, Mosha 2016 & Makunja 2016).

In addition, if teachers were there but there were inadequate teaching and learning resources, the teachers could not do much, this corresponds to the third stage of the theory of Overcoming Resistance to Change (ORC) by (Coch &French, 1948). In the same vein, if the classes were overcrowded, the teachers would fail to demonstrate strategies which need space and are vital in enhancing the practical skills for the realization of Vision 2025, (Mungoo &Moorad, 2015) and (Tibasima, 2017). Scarcity of land was observed by the researcher mainly in the urban secondary schools where learners only had vegetable gardens instead but these schools could negotiate with the neighboring communities to give them land for farming.

The responses from heads of schools showed that there were not enough or inadequate refresher courses planned for teachers, concurring with Machingambi (2017) who commented that lack of training of teachers, shortage of resources and absence of professional development courses for teachers in schools were problems hindering implementation of practical skills among secondary school learners. This is also in line with Makunja (2016) study which revealed that secondary school teachers lacked in service training. This implied that refresher courses were important in that teachers had to be trained new education changes and new strategies of teaching practical subjects for the implementation of practical skills among secondary school learners.

Also heads of schools reported that there are inadequacies of practical skills facilities, lack of funds, poor government support for buying practical equipment and that field study as a subject was not inserted in the syllabus for realization of Vision 2025.These findings are in line with the findings of Tibasima (2017) which revealed that government secondary schools have shortages of funds to buy practical skill facilities and also is in line with Diise *et al.*(2018) who found out that the teaching of agriculture

practical skills in Awe senior high school in Ghana was faced with insufficient funding for practical skill facilities. This implied that all these challenges together could slow down the pace of realizing Vision 2025 contrary to what it was expected in 2000.These findings also concur with the findings of Machingambi (2017), Gamawa (2015) who observed that schools had insufficient funding.

Possible solutions to the challenges faced by secondary school teachers in the sample in implementing practical skills for the realization of Vision 2025

In the fifth research question, the researcher intended to explore the possible solutions to the challenges of implementing practical skills for the realization of Vision 2025 among ordinary secondary school learners. To achieve this, the researcher administered questionnaires to heads of schools and teachers. The researcher asked heads of schools to suggest possible solutions to the challenges faced by teachers in implementing practical skills among secondary school learners and the summary of the responses is presented in the Table 7.

Table 7. *Possible Solutions to the challenges suggested by Heads of Schools*

	Heads of schools	
Possible solutions	**f**	**%**
Education planners should plan regular refresher courses for teachers	10	90.9
Technology application like computers	6	54.5
Improvement of teaching and learning environment	3	27.7
Proper use of funds	3	27.7
Good standard of payment to teachers	2	18.2
Leaders commitment	3	27.3
The syllabus should state clearly the field study	2	18.2
Provision of Land for agriculture	6	54.5
Fund allocation for school facilities	2	18.2
Provision of teaching and learning materials/equipment	3	27.3
Equal treatment of private and government secondary schools	5	45.5
Science subjects have to be taught with real practical's	8	72.7

Source: Field data (2020)

From Table 7, results show that 90.9 percent of heads of schools suggested that education planners should plan regular refresher courses for teachers to create awareness and readiness and build practical skill abilities for teaching especially in the subjects of agriculture, computer, book keeping and commerce. This was also suggested by Machingambi (2017) who found that teachers in Zimbabwe were not adequately prepared to implement the performed management system due to poor articulation system, lack of training, shortage of resources in schools, absence of professional development and insufficient funding and so teachers needed refresher courses. Also Odo *et al* (2017) had a similar suggestion that the government of Nigeria should put efforts to train and produce technical skilled manpower for the achievement of the nation.

This solution would soften the implementation of practical skills for the realization of Vision 2025. Also 18.2 percent of heads of schools suggested that the government and private school owners should plan in the school budget, funds for supplying enough

facilities for practical skills especially in the focused subjects such as agriculture, carpentry, and computer and building construction. This is so because, teachers were complaining to them that the funds for buying practical skill facilities were not enough for example computers and building equipment.

This too is in line with what Machingambi (2017) asserted. Again 18.2 percent of Heads of schools suggested that the syllabus should state clearly what practical skills in each field of study were needed. The participants too suggested inclusion of field study subject in the syllabus, that is learners taking for example home economics, can visit hotels to see how the hotels are managed or they can visit a small tailoring factory. For learners taking building construction they can visit building sites. The heads of schools also said that field trips are important for learners because help them explore the environment and learn many geographical facts which can help them live better. For example, observing real soil erosion features and learn their prevention methods, the learners get the skill of problem solving. This is why they suggested it to be included in the syllabus.

These solutions are all very viable for example refresher courses enrich skills of teachers in teaching practical skills. If the government increases funds to secondary schools, the funds would help provide enough practical skill facilities such as ICT facilities for teaching learners practical skills effectively.

Practical sessions in the science subjects were lacking and not included in the curriculum of which led many (72.7%, n=10) heads of schools to recommend that school learning should be more practical oriented in science subjects to merge the theories which is very important.

For example, one head of school indicated in his questionnaire that:

Teaching and learning at secondary schools is more of theories, this leads learners less likely to acquire practical skills. Hence, I suggest the government and private owners to emphasize more practical learning so as to merge theories for the acquisition of effective practical skills towards realizing Vision 2025(18/9/2020).

This is in line with Education for Self-Reliance Nyerere, (1967) which calls for learners to integrate theory, knowledge and practice. The other nine heads of schools too supported this idea as is seen in Table 7. This was certainly true that, if all ordinary secondary schools would get involved in emphasizing practical oriented teaching in subjects such as agriculture, home economics, building construction, computer literacy, it would help increase practical skills' acquisition towards the realization of Vision 2025 and learners would acquire employment skills too.

In addition, DEOs through the interview guide, suggested possible solutions against the challenges identified. One DEO in the interview conducted by the researcher suggested the following solutions:

Proper supply of electricity, ensuring availability of resources, refreshers' trainings and seminars such as those facilitated by MWECAU during Teaching in Action (TIA), creativity and hard work for both teachers and learners, TVs for projecting lessons to

learners and schools which don't have play grounds and land for agriculture. TANESCO should be advised by the government to supply constant electricity to secondary schools and for schools without agriculture land should negotiate with the community to get some land and all schools without playgrounds must ensure to have playgrounds for sports and games (18/9/2020).

These suggestions correspond to Machingambi (2017) and Mfaume (2019) who suggested that teachers needed refresher courses. These solutions are viable and important because proper supply of electricity, availability of resources, refreshers trainings, provision of land for play grounds and farming enhance the development of practical skills among secondary school learners. Also another DEO during the interview commented that:

The government should motivate teachers by improving teachers' salaries, allowances and promotions. A teacher can work for ten years without being given an increment and promotions and that makes them to be stressed. There should also be provision of food in secondary schools for all learners, these solutions will help both teachers and learners in the implementation of practical skills (12/9/2020).

The third DEO in the interview commented that:

There should be improvement of housing for teachers, improvement of social services such as electricity, water, security, infrastructure conducive school environment, entrepreneurship education to be included in the curriculum, practical skills such as farming, keeping animals should be added to the curriculum. Also the government to separate the role of teachers and the influence of politicians in the context of Vision 2025(16/9/2020).

These solutions are viable and important because good salaries for teachers, allowances and promotions will motivate them to teach well the practical skills among learners for the realization of Vision 2025.Additionally provision of social services such as electricity, water, housing, conducive teaching and learning environment will make teachers like their teaching profession and hence they will teach well the practical skills among learners. This too will make teachers stay long at their teaching stations which will provide continuity of practical skills taught to the learners.

In the same vein, the researcher was interested in getting possible solutions to the challenges faced by secondary school teachers in implementing practical skills in the secondary school curriculum for the realization of Vision 2025. The summary of teachers' responses is presented in Table 8.

Table 8. *Possible solutions to the challenges suggested by secondary school teachers*

	Teachers	
Possible solutions	**f**	**%**
Education planners should plan regular refresher courses for teachers	22	20.0
Technology application like computers	12	10.9
Improvement of teaching and learning environment	47	42.7
Proper use of funds	2	1.8
Good standard of payment to teachers	10	9.1
Leaders commitment	17	15.5
The syllabus should state clearly the field study	10	9.1
Provision of Land for agriculture	30	27.2
Fund allocation for school facilities	11	10
Provision of teaching and learning materials/equipment	51	46.3
Equal treatment of private and government secondary schools	20	18.2
Science subjects have to be taught with real practical's	9	8.2

Source: Field data, (2020)

In table 6 majority teachers (46.3 percent) suggested that secondary schools should provide teaching and learning materials and equipment for practical skill activities in subjects such as carpentry, computer and building construction and also improve the teaching and learning environment 42.7 percent. This concurs with Mosha (2016) who comments that secondary schools have shortages of teaching and learning resources. Teachers, 27.2 percent suggested schools to provide land for agriculture subject and especially schools in urban areas. This is important for all schools to have land for agriculture so that all learners learn agriculture because it is the back bone of Tanzania's economy.

Again 20.0 percent of teachers suggested that education planners should plan regular refresher courses for teachers. This too concurs with Machingambi, (2017) who recommended that schools need refresher courses because they lack professional development which helps teachers to get chance of being trained new skills of teaching such learning how to teach practical skills. Teachers 18.2 percent suggested that there should be equal treatment of government and private secondary schools in allocation of funds for implementation of practical skills so that all learners too get equal opportunities of being taught the practical skills equally.

Another 10.9 percent of teachers suggested that the government and private school owners should provide enough ICT facilities such as computers for teaching and learning process at ordinary secondary schools. This is in line with Mfaume (2019) who commented that ICT is a strategy to be promoted because it enhances quality education of practical skills for the realization of Vision 2025. The results too showed that there was a possibility of alleviating the challenges against Vision 2025 if schools would integrate ICT well in teaching and learning process. This is because ICT accelerates interaction and collaboration in teaching and learning (Mfaume 2019).

Teachers commended that there should be proper use of the funds which are provided for practical skill facilities (Machingambi, 2017) to secondary schools. If funds are not used properly, practical skill facilities will not be enough for learners to acquire the necessary practical skills which will help them be employed or employ themselves. This concurs to the findings of Ngwenya and Shange (2019) who found that lack of funds to support facilities for practical caused South Africa to suffer from persistent youth unemployment due to shortages of necessary skills in the society (www. ajhtl.com> uploads> article, retrieved 8/7/2021.

Teachers too suggested good standard of payment to teachers so that they can be motivated to teach the practical skills better. As the researcher was observing learners work in the school workshop, one teacher complained bitterly saying: "*Several years have now passed without getting promotions nor increments! I am really frustrated, I am nearing my retiring age and life itself is a problem and so I cannot stop teaching" (18/9/2020).*

This corresponds to the theory which guides the study (ORC) in stage two which deals with personal concerns of teachers like this one of not getting standard payment which the teacher can in turn not do well in teaching learners practical skills for the realization of Vision 2025 if they are not contented with their salaries.

Additionally, teachers commended that leaders should be committed in helping practical skill implementation in secondary schools by providing support of practical skill facilities. Solutions gathered from the observational schedule were that teachers suggested that the government should replace retired teachers immediately. Teachers who go to study should be replaced immediately. Learners who show creative work like those who made electrical models should be supported financially by the government in order to make real objects. Learners showed concern on the inadequacy of brick work machines and that even the available equipment was out of date, therefore the government should provide enough funds for these practical skill facilities so that learners don't miss classes and are not discouraged in studying this subject.

From the above findings, participants had slightly similar suggestions on the possible solutions to the challenges identified and this implied that if these solutions were effectively implemented they would accelerate the acquisition of practical skills among ordinary level secondary school learners for the realization of Vision 2025. This would in turn lead to Vision 2025 to be a reality and not a myth.

4. *Conclusions*

This research paper dealt with presentations related to the implementation of practical skills among Secondary School learners. The findings revealed strategies such as assigning learners practical skill activities such as farming and developing practical projects such as building construction. There were positive perceptions of teachers and learners towards implementation of practical skills. Teachers perceived the pace of implementation of practical skills to be very fast. Learners were actively engaged in practical skills both physical such as carpentry and generic such as problem solving.

Learners were well prepared in practical skills and there was an interlink between practical skills and employment opportunities which could help learners employ themselves or be employed. Hence forth this could reduce the problem of unemployment in Kilimanjaro Region, Tanzania and the world at large. Challenges included difficulty of preparing practical skill activities, inadequate qualified teachers, in adequate practical skill facilities and land for agriculture. Solutions to the challenges included Education planers to plan refresher courses for Secondary School teachers, Government and private owners to plan enough budgets for practical skill facilities, provision of land for agriculture and provision of teaching and learning resources.

Nyerere's idea of Self Reliance was concerned on how to make Tanzanian youth serve for themselves and the country. Thus learning practical skills as found in the study could solve the problem of unemployment. However, what was found in the study was being done in some secondary schools only and we are not sure whether learners will put it into practice. In conclusion, teachers and learners face challenges in the implementation of practical skills curriculum. However, DEOs, heads of schools, teachers and learners have suggested plausible solutions for effective implementation of the same with regard to the realization of Vision 2025.This implies that if these solutions were effectively implemented they would accelerate the acquisition of practical skills among ordinary level secondary school learners for the realization of Vision 2025. This would in turn lead to Vision 2025 to be a reality and not a myth.

5. Recommendations

Basing on the conclusions, the researcher recommends parents to support their children who want to do practical subjects; Teacher Education Institutions, Colleges and Universities to develop programmes for training teachers to implement practical skills in Secondary Schools; Government to provide more resources to schools for implementing practical skill subjects. The local community to provide land for Agriculture. Also practical skill subjects such as agriculture, home economics, computer and building construction could be made compulsory for all secondary school learners in Tanzania to benefit from them.

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