



ASSESSMENT OF THE ADEQUACY OF RESOURCES AND FACILITIES TO ENHANCE LEARNER CENTRED PEDAGOGY IN SECONDARY SCHOOLS IN KILIMANJARO REGION, TANZANIA

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Abstract:

This study was to assess the perception of teachers and students on adequacy of resources and facilities for the implementation of Learner Centred Pedagogy (LCP) in secondary schools in Kilimanjaro region, Tanzania. Learner centred pedagogy was introduced in Tanzania curriculum since 2009. Learner centred pedagogy emphasizes the active role of learners in the process of learning to enhance creativity and critical thinking in acquiring knowledge, skills, and competences. This study was guided by the following research questions: To what extent secondary schools in Kilimanjaro region are equipped with adequate resources and facilities to implement LCP? To what extent the government supports schools with resources and facilities for the Implementation of Learner Centred Pedagogy? What are the bottlenecks in equipping secondary schools in Kilimanjaro region with adequate resources and facilities for LCP? What can be done to equip secondary schools with adequate resources for implementation of LCP? The researcher adopted mixed research methods for data collection and analysis. Specifically the researcher used triangulation design. This study sampled 580 students, 115 teachers, 6 heads of secondary schools and one education inspector. Data collection instruments were questionnaires for students and teachers, in-depth interview guides for heads of school and educational inspector, observation guide and document analysis guides. The study found that teaching and learning resources are inadequate in schools. The government commit in supporting secondary schools is also lagging behind the required standards. Despite the fact that the government supports public secondary schools, yet private schools are far better in terms of resources and application of LCP. The government has to provide adequate

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resources for schools, training more teachers and change of mind set and attitude of teachers who maintain teacher centred pedagogy.

Keywords: pedagogy, learner centeredness, assessment, resources and facilities

1. Introduction

1.1 Social Constructivism and Learner Centred Pedagogy

Constructivism was a theory advocated by constructivist psychologist like Bruner and Vygotsky on learning by discovery and problem solving, which requires pupils to hypothesize, ask questions and discuss lines of enquiry (Bruner, 1967). According to Cuseo (2000), in learner-centred pedagogy which is the application of the theory in practice, the student's role changes from being a passive receptacle and recipient of teacher-delivered information to being an engaged learner and active agent in the learning process, learning how to learn and developing lifelong learning skills such as critical thinking, problem solving, and communication skills. Ginsburg (2006) argued, student-centred pedagogies are advocated by researchers and policy makers around the world. This approach emphasizes the role of learner in the process of learning and changes the role of teacher to a guide, to engage students with active learning and discovery learning or problem solving, and frequent student questions and discussion.

1.2 Adoption of learner centred pedagogy in Tanzania

The Tanzania Development Vision 2025 focused on five important areas of concern namely: high quality livelihood; peace, stability and unity; good governance; a well-educated and learning society and finally a strong and competitive economy. The Vision accords high priority to the education sector, so as to impact positively on the economic development of the country. From the document it is stated:

Education should be treated as a strategic agent for mind-set transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges which face the Nation. In this light, the education system should be restructured and transformed qualitatively with a focus on promoting creativity and problem solving

(United Republic of Tanzania, 2008)

As a reaction to the implementation of Vision 2025, the Ministry of Education and Vocational Training (MoEVT) had to review the former curriculum to ensure that it addresses the broad national Vision. Moreover, the Ministry had to consider external changes in educational approaches and theories that were taking place all over the world. The influence of globalization has caused the world nations to harmonize their ways of doing things for the sake of opening up opportunities for better interactions between nations. This has meant, for education, addressing issues such as teaching approaches whereby the emphasis was directed to the learner rather than the teacher.

1.3 Learner Centred Pedagogy as a Resource and Facilities Intensive Approach

Implementation of LCP may not be accomplished properly without provision of adequate resources and facilities. As previously noted, Kafumu (2010) in addressing 3rd conference on practice of learner-centred education in Dar es Salaam Tanzania argued that a Learner-centred curriculum needs to have a synergy between all the key educational elements that include: sufficient numbers of well qualified teachers; supported and supervised teachers; adequate classrooms; appropriate teaching and learning materials (quality and quantity); relevant content and an aligned assessment regime. That implies that for any successful implementation of learner-centred pedagogy, it is imperative to have various variables in the process and proper managements of the process.

Physical resources and general infrastructure in schools are crucial for quality education provision. According to Levacic, Jenkins, Vignoles and Allen (2005) good schools must have adequate teaching and learning equipment and go beyond providing books. Jensen (2000) carried out a research in Nebraska, USA, to determine the status of the resources in schools. His focus was on rural schools and he observed that rural schools face significant challenges in upgrading their technology infrastructures. Rural school districts tend to have older school buildings that have multiple problems and lack climate control, adequate space, and necessary wiring. He reiterated that in rural districts, it may be difficult to find the leadership and expertise needed to provide professional development, create an appropriate technology plan, and manage and maintain building and system infrastructures.

Phurutse (2005) carried out research in South Africa on learner centred pedagogy. In his findings he argued that success of competence approaches depends on appropriate levels of physical resources and a high degree of commitment from teachers who have been exposed to both the theory and practice of constructivist approaches. He established that many of the schools serving the poorest communities in South Africa do not have photocopiers, libraries, sufficient textbooks for learners or

reference materials for educators to prepare meaningfully. According to the findings, it has been estimated that 62% of educators serving in public ordinary schools in South Africa are under qualified. When the researcher looks at a country like South Africa which is far well off economically and yet facing these big challenges, one wonders how it would be in poor countries like Tanzania.

Current studies on the implementation of learner-centred pedagogy in Tanzania indicate some serious challenges related to LCP. For instance studies on learner centred pedagogy done by Barret (2007), Kabendera (2008), Salema (2009) reported shortages of qualified teachers, shortage of infrastructure and shortage of teaching resources and many administrative challenges. A similar study (Haki Elimu, 2010) found that the implementation of new curriculum leaves a lot to be desired if skills and competences are to be realized, to facilitate quality learning and production of quality graduates in the public school system.

The purpose of this study was to explore the extent to which secondary schools in Kilimanjaro are equipped with resources and facilities for proper implementation of learner centred pedagogy after its eight years of implementation.

2. Research Questions

This study was guided by the following research questions:

1. *To what extent secondary schools in Kilimanjaro region are equipped with adequate resources and facilities to implement LCP?*
2. *To what Extent the Government Supports Schools with Resources and Facilities for the Implementation of Learner Centred Pedagogy.*
3. *What are the bottlenecks in equipping secondary schools in Kilimanjaro region with adequate resources and facilities for LCP?*

3. Hypotheses:

H_{a1}: There is a significant difference between public and private secondary schools on their perception on adequacy of resources for the implementation of LCP.

H_{a2}: There is a significant difference between teachers from different areas of specialization on the way they rate resources adequacy for LCP.

4. Literature Review

Implementation of LCP may not be accomplished properly without provision of adequate resources and facilities. Various studies have contributed to the discourse of learner centred pedagogy in relation to resources and facilities. According to Barrett, Chawla-Duggan, Lowe, Nickel and Ukpo (2006) curricular reform needs to be aimed at moving teachers and learners towards a constructivist view at the same time as taking into account the professional, material and social realities of the contexts in which teaching and learning takes place. Implementation of learner centred pedagogy in Kilimanjaro may need the same consideration for harmonious implementation of the same. Vavrus and Salema (2012) in their research in private schools on working lives of teachers focused mainly on the material and social constraints of teachers and not other aspects of LCP. This study revealed the challenges related to infrastructure, personnel and classroom materials and facilities. However the study covered only private secondary schools and was qualitative in nature. In this current study the researcher assessed implementation of learner centred pedagogy in public and private secondary schools in Kilimanjaro and applied a mixed method to afford making some generalizations.

A study carried out by Barrett (2007) wanted to address the question whether quality teaching is achievable in contexts of economic scarcity. The study was done in primary schools in Tanzania using a qualitative method. The findings of the study indicated that teachers in classrooms can apply mixed palette techniques and ideas to fit in teaching where resources are scarce. The research also argues that there are lot of teacher dominant approaches where students play a very minimal role in the process of learning and the reason is that there are not enough resources for learner centred approaches. The researcher concluded that it is true that for the most part of this may be attributed to economic scarcity, which leads to insufficient preparation, development, supervision and monitoring of teachers as well as working and living conditions that spread demoralization in teaching force. This study focused only on primary schools. Studies on secondary schools and even tertiary levels are scarce to determine the extent to which implementation of learner centred pedagogy is being executed. This current study considered the situation in secondary schools in Kilimanjaro region in the process of implementing learner centred pedagogy in Tanzania.

Another study carried out by Mgina and Lwehabura (2011) in Dodoma Municipal, Tanzania was done to assess the development and status of school library services under the Secondary Education Development Plan (SEDP I). The study

involved 44 secondary schools, 186 teachers, 44 heads of schools, 16 school librarians, one Regional Education Officer, and one Regional Librarian. Data were collected through a survey method using a questionnaire that has both closed and open-ended items, as well as through interviews and observations. The study found that only 36% out of 44 secondary schools had libraries. In the schools with libraries, only 69% of them, had separate buildings for the library, while only seven 44 % had trained librarians. The study concluded that, in the implementation of SEDP I, school library services were generally poor as most schools lacked libraries, or lacked information resources and staff. It was recommended that in order to improve the quality of school library services, the Tanzania government should enforce its regulation requiring every registered school to have a library. This is an indication that many Tanzania schools are still struggling with resources and it might be difficult to implement other strategies as learner centred pedagogy. The current study intended to assess whether or not the new registered secondary schools in Kilimanjaro region have a library or if there are near future plans to equip the schools with libraries which will enhance implementation of LCP.

Achievement of quality teaching might not only need physical resources but also human resources to ensure that the process of learner centred pedagogy is achieved. According to Okumbe (2001), any discussion on quality of human resource in relation to school academic performance must take into account teacher qualifications and recruitment of teachers, on the one hand, and student selection and admission requirements, on the other hand. Teacher quality is the function of teacher education and training qualifications, previous experience, motivation and personal style of the teacher.

A review of research done by DeJaeghere, Chapman and Mulkeen (2006) suggests that there are essentially two paths in responding to the projected shortage of secondary teachers in sub Saharan Africa. One path is to increase the number of trained teachers by expanding existing teacher preparation programs, moving trainees through existing programs faster or giving more emphasis to in-service training options. A second path suggested by the authors is to improve the conditions of service so as to attract back teachers who resigned or who opted for other opportunities and left their profession. Brain drain is one of disturbing factors in education as more qualified professions go abroad and find greener pastures and leaving gaps in the system.

In summary, the study of the resources available in secondary schools for the implementation of learner centred pedagogy is crucial because teaching and learning require adequate resources. However, there is still little research carried out in secondary schools in Kilimanjaro to address the adequacy of resources available

especially in relation to the implementation of learner centred pedagogy. Researches carried out in USA, South Africa and other places in Tanzania cannot adequately explain the situation in public and private secondary schools in Kilimanjaro region.

5. Methodology

5.1 Design

Mixed research method was applied in this study. Specifically this study used Triangulation Design. Triangulation design is a one-phase design in which researchers implement the quantitative and qualitative approaches. The purpose of this design was to obtain different but complementary data on the same research to best understand the research problem. Mixed research method is flexible in collecting data from diverse situations (Cresswell, 2007).

5.2 Target population and sample

This study was targeting heads of schools, teachers and students in secondary schools in Kilimanjaro region. The respondents were sampled from three districts in Kilimanjaro region. The sample comprised six heads of secondary schools selected by purposive sampling technique, 115 teachers selected by stratified sampling, 580 students sampled by stratified sampling and one educational inspector selected purposively.

5.2 Research instruments

This study used questionnaires for teachers and students, interview guides for heads of schools and education inspector. Observation guides and document analysis guides were also used as instruments for data collection.

5.3 Validity and Reliability/Trustworthiness

Validity of the instruments was determined by research experts and reliability of the questionnaire was tested by Cronbach Alpha technique. Cronbach Alpha of 0.79 and 0.87 were obtained from teachers' and students' questionnaires respectively. The questionnaires were reliable because according to Kerlinger (2000) a value of Cronbach Alpha 0.7 is considered to be a cut off for acceptable and unacceptable reliability. Trustworthiness of the qualitative data was ensured by triangulation, member checking and prolonged engagement in the data collection and analysis.

5.4 Data Analysis Procedures

Descriptive and inferential statistics were used for quantitative analysis of data. Summary of data was presented in frequencies, percentages and means. Hypotheses were tested at 0.05 significance for T-test of independence and one way ANOVA. Qualitative data was analysed by transcription of data from the interviews and observations. Coding of data was done accordingly and themes, categories developed and interpretation done according to the context.

6. Findings

The major findings of this study are summarized in the following themes: the adequacy of the resources and facilities for implementation of LCP, government support in implementing LCP, bottlenecks in equipping secondary schools in Kilimanjaro region with adequate resources and facilities for LCP. It concludes with possible ways of equipping secondary schools with adequate resources and facilities for implementation of LCP.

6.1 The Adequacy of Resources and Facilities in Place to Enhance Implementation of Learner Centred Pedagogy in Public and Private Secondary Schools in Kilimanjaro Region

This research question was to assess the perception of teachers and students on the extent to which the schools were equipped with adequate resources to enhance implementation of LCP. Learner centred pedagogy needs various resources which can enhance the process of learning through practical and critical thinking.

To gain a better understanding of the status of resources and facilities available in schools the researcher asked various questions to help in obtaining relevant information to show the adequacy of the resources in relation to LCP. Among the questions which the researcher asked were to rate on the availability of the various resources and facilities in secondary schools. The resources and facilities considered ranged from books, labs, classrooms, libraries, teaching aids, writing materials, offices, teachers, funds, recreation facilities, computers and ICT facilities.

The rating was categorized into five options named mostly adequate (5), adequate (4), average (3), inadequate (2) and not available at all (1). Twelve (12) items were incorporated to enable the researcher to find out mean scores about the resources and facilities available and for the sake of making inferences.

The findings for both students and teachers are summarized as follows:

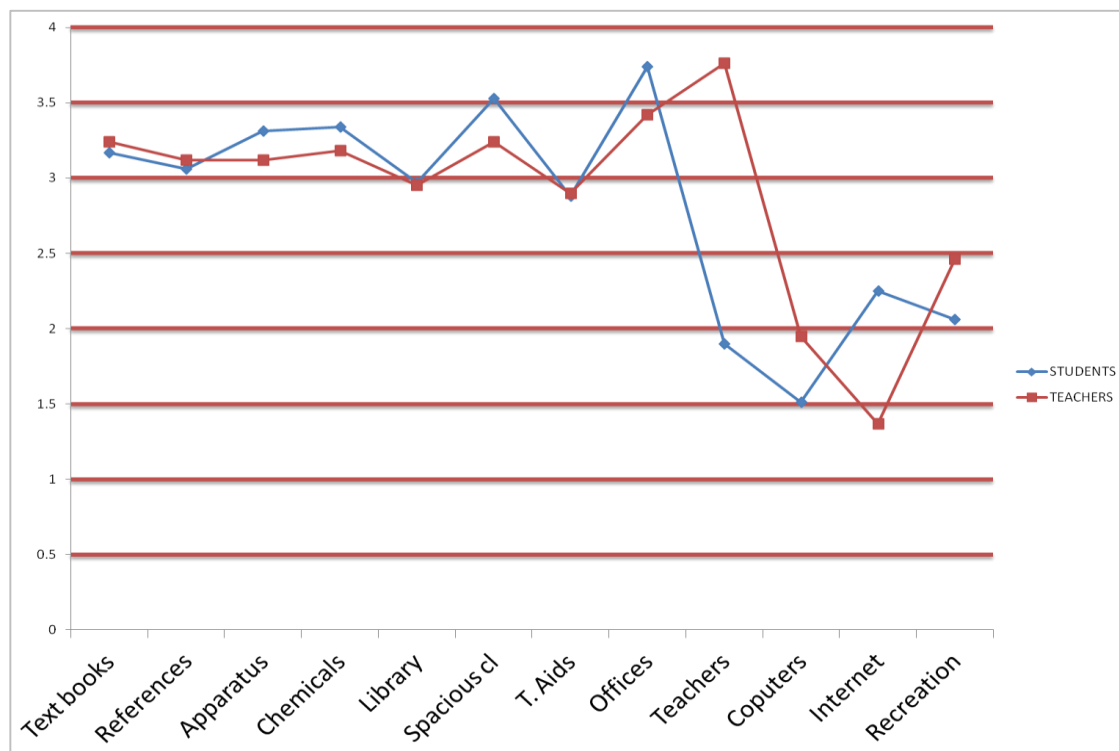


Figure 1: Teachers and Students Rating on Adequacy of Resources for LCP

The findings on Figure 1 indicate that there are some similarities on the trend in which both the teachers and students rated on the resources and facilities adequacy in schools. There are resources which are highly rated by students and teachers such as updated reference and text books, lab equipment and chemicals, spacious classrooms and offices for teachers. On the other hand there were resources and facilities which were lowly rated by both students and teachers such as library, teaching aids, number of teachers, computer facilities, internet connectivity and recreation facilities. During the interview with one head of private secondary school he commented:

Yes, we have enough classrooms but the number of students per class is still big. One class may contain around 55 students. That is a congested classroom and discussion may be a problem. The capacity of classroom is around 30 students, but we force up to 55 students.

(Interview: 25/10/2015)

From the researcher's observations, what teachers considered as spacious classrooms was a very relative. For some teachers in as long as every student can get a desk and a chair was considered to be a spacious classroom. Researcher's interaction with the

classrooms, learners and teachers revealed that in many classrooms, students have a chair and desk, but there was no enough space to allow classroom movements for group discussions or other active participatory strategies which needed space. Some schools also with labs could not accommodate all students at ago, but in groups. This implies that some of the methods recommended for implementation of LCP may not find application in congested classrooms.

This study also sought to find out from the teachers about other resources they consider important for the implementation of learner centred pedagogy which were not on the list. Some of these resources included: audio materials, models, charts, microscopes, video films for teaching, overhead projectors and beamers, laptops for teachers and lab technicians. From the findings above it is clear that there are inadequate resources and facilities in secondary schools to enhance LCP. During the interview with one head of private secondary school the researcher asked as to whether the school had enough resources for the implementation of LCP. The head of school noted:

This is a challenge because we need a lot of books and other materials for students, because LCP demands students to read before the lesson so that they may participate fully. There is also another problem that both teachers and students do not have culture of reading. Only few students prepare for the lessons and this makes LCP to be a challenge

(Interview: 14/10/2015)

6.2 Government Support to Implement LCP

This study also sought to find out whether or not the government supports the schools in the implementation of learner centred pedagogy, especially in relation to provision of resources and facilities. The teachers were to respond by yes or no. The findings indicated that 54% of the teachers confirmed the support received from the government while 46% indicated that they did not get any support. Further analysis indicated that public secondary schools received support known as capitation grants that normally help to cover some of the costs for buying resources in schools while, their counterparts, in private secondary schools do not receive any support as capitation grants. During the interview with one of the heads of private secondary school she noted:

Private schools do not receive capitation grants. The worst thing is that the Government use our data (statistics) to solicit funds from International agencies, but when they receive the funds they do not consider private schools.

(Interview: 20/10/2015)

For public schools, apart from capitation grants, schools receive other resources such as books and sometimes seminar programmes for capacity building. One head of public secondary school when asked whether the government supports schools on the implementation of learner centred approach he argued:

The Government is supporting much the implementation of LCP but they have too many schools. Example when they want to support, they sample some schools to receive support while others are not given support. The Government does very little in supporting the schools because the schools are many and the government resources are not enough.

(Interview: 13/10/2015)

The researcher also found that the support is not given following a known criteria. Sometimes even the way they sample schools which receive special support is not known. What was very evident is that, private secondary schools did not receive the support. One head of private school expressed how they are side-lined in receiving resources for the implementation of learner centered pedagogy:

For the time being nothing is provided but on the matter of Policy, it was the plan of government especially with Secondary Education Development Plan (SEDP) plan to provide support to private schools. But the problem is that there are politics which interface with the plans and so far nothing is given to private schools. Too many schools were established at ago and it was not possible for the government to support these massive schools. If it were to go gradually according the plan, private schools would receive support from the government, but it was not the case.

(Interview: 25/10/2015)

Form the arguments above, it shows that private schools are not supplied with resources to enhance implementation of LCP. It also sounds unethical that the government solicits funds by using the statistics of students in public and private schools but when they receive the funds they deny the private schools. From the Basic national educational statistics the researcher assessed the distribution of capitation grants to public secondary schools.

Table 1 gives the summary of the findings:

Table 1: Amount of Capitation Grant Disbursed to Schools through
Local Government Authorities as 2008/2012

Year	2008/2009	2009/2010	2010/2011	2011/2012
Budgeted	56,269,162,000	80,029,920,000	80,029,920,000	80,029,920,000
Allocated	56,269,162,000	45,559,566,300	23,161,111,184	17,815,002,000
Average CG per pupil (T.Shs)	6,665	5,411	2,769	2,172

Source: BEST (2013)

The findings in Table 1 indicate that there is a drastic fall of the amount of capitation grants given per student from Tshs. 6,665 in 2008 to 2,172 in 2012. With the increment of number of secondary schools and the general increment of number of students enrolled for secondary schools, the government finds itself constrained.

The report indicate that the enrolment of Form 1- 4 increased from 1,711,109 (936,003 boys and 775,106 girls) in 2011 to 1,802,810 (954,961 boys and 847,849 girls) in 2012. This is an increase of 91,701 pupils (5.4%). Similarly, the transition rate from primary to secondary education increased from 52.2% in 2011 to 53.6% in 2012 (BEST, 2012).

Researcher's encounter with schools revealed that some schools have not been able to utilize even the little resources they have for implementation of learner centred pedagogy. The zonal inspector while addressing this issue of resources and facilities for implementation of LCP during the interview said:

Capitation grants are issued to schools, to ensure that schools get books, labs and science rooms with equipment. But believe me in almost every school there are science equipment which would suffice to be used for practical, but the teaching does not depict the presence of the equipment (18/10/2015). Unfortunately in some schools most of the resources received are kept in the office of the head of school without enough justification.

6.3 Hypothesis testing

The researcher was interested to make some comparisons and conclusions/inferences about the rating of adequacy of resources by teachers and students from both private and public secondary schools. The researcher advanced hypotheses which were tested and inferences made at 0.05 significance level.

6.3.1 Null Hypothesis 1

Ho: There is no a significant difference between teachers in public and private secondary schools in Kilimanjaro region on rating resources and facilities adequacy for LCP.

Independent Sample T-Test was carried out and the findings summarized in Table 2.

Table 2: Independent Sample T-Test Output on Rating of Resources Adequacy by Teachers in Public and Private Schools in Kilimanjaro Region

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
mean score on resources available	Equal variances assumed	.014	.906	-9.528	102	.000	-.945	.0992	-1.1422	-.7485
	Equal variances not assumed			-9.525	101.705	.000	-.945	.0993	-1.1422	-.7485

The findings in Table 2 give us the summary of independent T-Test: $t(102) = -9.528$, $P=0.000$. The findings indicate P - value is 0.000. This value is less than 0.05 level of significance. Therefore the Null hypothesis was rejected. That implied that there was a significant difference between teachers' mean scores on rating the resources adequacy for LCP in public and private secondary schools in Kilimanjaro region. Teachers in public schools had lower mean scores 2.3 compared to their counterparts private secondary schools 3.3.

The researcher was also interested to see whether there was any significant difference on how teachers from different area of specializations rate the availability of adequacy of resources for LCP. There is a general belief among teachers that there are some departments which do not need much resources and facilities for teaching and learning.

The following hypothesis was advanced and tested accordingly at 0.05 significance level:

6.3.2 Null Hypothesis 2

Ho: There is no significant difference in mean scores between teachers from different areas of specialization on rating resources adequacy for LCP.

One Way ANOVA test was done to determine whether or not there was significant difference between the groups in areas of specialization.

Table 3: One Way ANOVA Output on Teachers' Rating on the Adequacy of Resources for LCP

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.368	3	1.123	2.446	.068
Within Groups	45.436	99	.459		
Total	48.804	102			

From the findings in table 3 above, the One way ANOVA output was summarized as ANOVA ($F(3,99) = 2.446, P = 0.68$). The findings indicated that P -value was greater than 0.05 significance level. Therefore, the Null hypothesis was not rejected (Fail to reject Null hypothesis). That means there was no statistically significant difference between groups as determined by one way ANOVA. That means teachers didn't differ significantly on the way they rated the adequacy of resources and facilities for the implementation of LCP as categorized by their area of specialization.

6.4 Bottlenecks Related to Resources and Facilities for Implementation of Learner Centred Pedagogy

This study also explored on the bottlenecks towards the implementation of learner centred Pedagogy. From the findings, 86% of the teachers consider resources and facilities as a challenge in the implementation of LCP. This view was also supported by 85% of the students.

Some teachers expressed their concerns related to the school administration that their school provides poor services to them which make them to fail to accomplish their work properly. Some of the services which are not provided adequately include teaching and learning resources, lack of funds to arrange field trips and organizing debates outside school. Other challenges included lack of enough chemicals for practical, lack of laboratories, lack of support by the heads of schools and many others were mentioned. One of the heads of public secondary schools advanced the following when asked about the challenges facing his school:

Yes there are challenges and one of the challenges is lack of enough resources such as books, lab equipment, and environment which is not prepared. Another challenge is based on lack of enough competent teachers. Another challenge is poor economy, low salary and the like. In some of the schools there are double sessions.

(Interview: 21/10/2015)

It was found that while other schools were complaining about the shortage of resources

There were some few schools where resources were not a problem to them in the implementation of learner centred pedagogy. One head of a private secondary school said:

Every semester I do tell the teachers to prepare a list of the resources requirements and they present them to the academic dean. We normally set a budget for buying resources. We buy those resources such as manila cards, writing materials, chemicals, and apparatus and so on. So they have resources, unless someone does not like to use them.

(Interview: 11/10/2015)

Despite the challenges related to resources there is a problem of teachers complaining about the shortage of the resources and they do not make efforts to use even the little resources they have to make a difference. The researcher was moved to know why such a scenario should happen in secondary schools and the inspector added:

Teachers do not take it seriously, they are always in rush and have no time to prepare lessons. You know if you are a good teacher you have to read and prepare well your lessons.

7. Discussion of the Findings

7.1 Adequacy of resources

The findings of this study indicate the inadequacy of resources in secondary schools in Kilimanjaro region. The overall mean score for students was 2.9 to indicate that the resources adequacy was described to be between average and inadequate. The general mean score for teachers was slightly low as to 2.8 concurring with students' rating mean scores between average and inadequate.

From the researcher's observation checklist in classroom and schools in general, there was an indication that many schools lacked facilities such as computers, internet facilities, recreation facilities and inadequate teaching aids. In some schools even the number of teachers was not enough, and that led to overloading of the teachers. Again in some of the schools, there was no clear library apart from small shelves set in teachers' offices or in a small room where students go and borrow some books, but no space for reading in the library. The majority of schools lacked recreation facilities and no time set for sports. This was obvious that some of the schools are built on a small land where they cannot set fields for sports. Recreation and sports are important parts

of learner centred pedagogy where students interact, socialize and rest their minds. This aspect was lacking in many schools both in urban and rural areas and public and private schools.

Moreover, researcher's observation in schools revealed that there was a tendency of accumulating resources which were not put at the disposal of the students and teachers for use. This could be a habit or culture of not doing things differently. In one of the schools the head of school had received new books for science students but they were kept in his office. What the head of school said that they were few in number. The question is, when will they be enough? Yet the books could be made available for students to borrow or to use in groups. These findings agree with the conclusion made by Vavrus and Salema (2013) that this stretching of resources has implications for the methods of teaching that teachers are likely to use when text books are limited and class sizes large. According to their findings teachers frequently used the term spoon feeding to describe the primary methods of instruction because of these resources constrains. When teachers cannot find resources for implementing LCP, they are likely retaining teacher centred approaches.

7.2 Government support of resources for the implementation of LCP

The findings also indicated that the government supports public secondary schools through capitation grants but not private secondary schools. The findings also indicated that the capitation grants decrease as more schools are registered by the government. The decreased capitation grants per student means also decreased capacity to cover resources and facilities which would facilitate LCP. Therefore, from the findings above there is a clear indication that resources are not adequate for the implementation of learner centred approach. The general rating on the adequacy of the resources across various areas of specialization was 2.82 which is between average and inadequate. Many poor schools were still struggling to acquire resources to improve their teaching.

The findings continue to put a challenge to implementers of LCP in a manner similar to Kafumu's (2010) address, during the 3rd Conference on the Practice of Learner-centred Education in Dar es Salaam, Tanzania. According to Kafumu, Learner-centred curriculum needs to have a synergy between all the key educational elements that include: sufficient numbers of well qualified teachers; supported and supervised teachers; adequate classrooms; appropriate teaching and learning materials (quality and quantity); relevant content and an aligned assessment regime.

The findings also concur with the findings of a study carried out by Barrett (2007) who wanted to tackle the question whether quality teaching is achievable in contexts of economic scarcity. The researcher argued that there are lots of teacher

dominant approaches where students play very minimal role in the process of learning on the reason that there are not enough resources for learner centred approaches.

Hypothesis testing to compare teachers in public and private secondary schools indicated that the two groups differ significantly on their perception about the adequacy of resources for the implementation of LCP. Teachers in public schools have lower mean scores 2.3 compared to their counterparts private secondary schools 3.3. This could be true because most of the private schools were well equipped with resources in the process of implementing learner centred pedagogy. From the observation done by the researcher, it was found that, despite the fact that the government does not support private secondary schools, yet private schools were better equipped than public schools.

Moreover another hypothesis to compare various groups of teachers (science, humanities, languages and others) on their perception on adequacy of resources indicated that there was no statistical difference between them. That means there was no enough evidence to support the belief among teachers that, teachers from certain departments do not need intensive resources. Teachers' areas of specialization do not make them to undermine the requirement of resources for implementation of LCP in their respective departments.

This current research therefore advocates that if learner centred pedagogy is to be achieved there is yet a big job to be done by the government to facilitate the implementation of LCP. The researcher agrees with Phurutse (2005) who carried out research in South Africa on learner centred pedagogy. In his findings he argued that success of competence approaches depend on appropriate levels of physical resources and a high degree of commitment from teachers who have been exposed to both the theory and practice of constructivist approaches.

7.3 Bottlenecks in the provision of adequate resources for the implementation of LCP

This study found that there are challenges related to of resources. It is unfortunate that there are cases whereby teachers cover under that umbrella of resources so as to avoid its implementation. Teachers could maximize the little resources available in their schools because there will not be time when resources will be 100% sufficient. A research carried out by Vavrus and Salema (2012) confirms that these material constraints on teaching and learning were often discussed alongside low salaries and the effect of these conditions have on teacher morale and on the exodus of teachers from teaching profession to more lucrative fields. Therefore, the implementation of Learner centered pedagogy cannot be achieved adequately if there are no enough resources to

do so. Moreover, the government has not invested enough on the efforts to implement learner centred pedagogy.

8. Recommendations

The government should assume responsibilities if quality education and the Vision 2025 is to be achieved. Consequently, the government should support schools with resources, such as increased capitation grants and infrastructure such as labs and libraries. Private schools are also providing services to Tanzanians, and so any support to these schools will be highly appreciated. This research recommends that school administrators to improve the learning environment despite the challenges encountered. Improvisation could improve the application of learner centred pedagogy. Let the schools be creative and mobilize the resources available to improve their practices. The schools administration should strive to increase the number of teachers in schools. Both private and public secondary schools need more teachers so that the ratio of teachers–student may be manageable to enhance implementation of LCP. Provision of teaching and learning materials should be considered in the school’s budget or from other sources, such as parents and donors. Teachers should be empowered through seminars and workshops on LCP. Schools should design internal mechanisms to motivate teachers in teaching practices and especially on the application of LCP.

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