Learner-centered Method of Teaching and Learning in Vocational Education in Naledi Brigade in Gaborone, Southern Africa

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Abstract

Vocational education is critical to any country's economy to produce well-equipped skilled personnel who can add value to the economic growth. It is therefore imperative that learner-centered method is used in teaching and learning to promote the self-development and confidence of learners as well as to produce well-grounded people with lifelong skills which can help them tackle any situation in their lifetime. This study explored learner-centered method of teaching and learning in vocational education. A survey was carried out at Naledi Brigade in Gaborone and the data collected was presented qualitatively in a descriptive way. The population for this study was the ten Bricklaying & Plastering students and their two lecturers and thirty-two Certificate in Accounting and Business Studies (CABS) and their five lecturers making a total population of forty-nine people. The sample frame was done purposively and represented fifty-one per cent (twenty-eight people) of the total population. Thus, the records for ten Bricklaying & Plastering and fifteen CABS students were used to evaluate academic performance when using learner-centered method. Two students from each department were interviewed to identify methods of learning used in vocational education and as well as evaluate academic performance when using learner- centered method. Three lecturers were

also interviewed; two from Bricklaying and Plastering and one from CABS to examine the challenges they face when using learner-centered method as well as determine strategies that can be used to improve the use of learner-centered method. The data collected was analysed in a descriptive manner. The findings established that learner-centered method influences teaching and learning if both teachers and students are motivated to teach and learn. Therefore, it is recommended that learner-centered method should be used for all subjects in vocational institutions. The resources including teacher training, libraries and internet should also be provided to enhance the use of the learner-centered method.

Keywords: Learner-centered method, Teacher-centered method, Vocational education.

Word Count: 304

Introduction

Learners in vocational institutions are regarded as tertiary students and therefore could learn effectively if they learn through learner-centered method. "By its nature, learning is personal experience that is affected by a host of diverse mental, social and environmental factors" (Mutasa & Wills, 1995.p.23). Learner-centered method emphasizes that students should take responsibility for their own learning. Vocational education helps the economy with the development of vocational skills which will be used to provide facilities such as health, education, electricity and water. It is therefore imperative for governments to come up with education policies which would guide the production of quality vocational skills if they want to advance and grow their economies. Several studies reveal that vocational education is effective when learners play a major role in their education. Thus, Calder & McCollum (1998) pointed out that the flexibility of learning in vocational education would equip students with knowledge and skills if students are responsible for their learning. This assertion views students as pioneers of their education and therefore their learning should be made more flexible to encourage them to learn on their own, thus making them responsible. Therefore, with learner-centered method of learning, learners should develop an interest, be committed and passionate in their education. Naledi

Brigade offer courses that equip learners with vocational skills in their different areas of study. Therefore, it would be more effective if students learn through learner-centered method to enhance their knowledge and acquire skills which would suit their future endeavours. Flexible curricula as indicated by Attard *et al.* (2010) would incorporate necessary resources for learning such as libraries, computers and internet that would help students to exercise their own learning and get their anticipated results. Thus, improving quality and lead to the effectiveness of the learner-centered method of learning.

Research Questions
The aim of this study was to explore the learner-centered method on teaching and learning in vocational education and was guided by the following research questions;

1. How do students describe the method used in teaching them?
2. How do students perform academically if they learn through learner-centered method in vocational education?
3. What challenges do teachers face when using learner-centered approach in vocational education?
4. What strategies can be used by teachers to improve the use of learner-centered method of learning in vocational education?

Theoretical Foundations
This research was guided by the humanistic theoretical foundation on education which is of the view that learners could learn more if they are motivated to be passionate about their studies (Rogers & Horrocks, 2010). According to Aloni (2007), the humanistic standpoint states that the individual's unique dignity remains in their creative imagination, critical reason, moral sensitivity, autonomous will and unique personality. Gage & Berliner (1992) adds that; " At the foundation of humanistic teaching is the belief that students have a need for self-actualization and that teachers should build on this need, organizing their classes so that students are put in touch with meaningful events". Therefore, teachers should encourage students to learn on their own to be more confident and competent with their skills. This can only be possible if learners are motivated. Maples

(1970) cited in Khatib, Sarem & Hamidi (2013) adds that "The goal of humanistic education moves beyond cognitive and intellectual education to let in the education of the whole person. It regards personal growth and growth of creativity and to some extent the self-directed learning". Learner-centered method of learning in vocational education should provide a platform for innovation that would help students to develop excitement, willingness, positive attitude towards their learning and therefore, an effective method of learning. This is suitable in vocational education since students would develop life-long skills that could make it easy for them to apply the acquired knowledge and skills to work and be able to address different life situations as they happen. The research is expected to make several contributions towards vocational education.

Literature Review

Methods of Learning in Vocational Education

Vocational education is categorised as higher and adult education where learning could be done effectively through learner-centered. Learner-centered method is where learning is more dependent on the learners. With this method, the teacher guides the students and allows them to do the learning on their own (Petty, 2004). Vocational education includes courses such as bricklaying, carpentry, welding, dressmaking, refrigeration and auto mechanics to mention a few. Business courses can also fall under vocational education if the curriculum is designed in a way that the graduates could use the skills acquired to find jobs and work easily (Mutasa & Wills, 1995). In teacher-centered method teachers act as the central point of learning, teachers look for the information and give it to the learners. This method seemingly sees the learner as an 'empty vessel' which needs to be filled for it to function. The teacher controls every activity of learning while learners receive whatever they are taught and use it to prepare for their assessments (Mutasa & Wills, 1995). Furthermore, Wright (2011) adds that "Students are the center of the educational enterprise, and their cognitive and affective learning experiences should guide all decisions as to what is done and how". In agreement, Hodge (2010) said that students should be pivotal to their learning and therefore should make their decisions on their learning while teachers

guide, support and encourage them to make the right choices. The whole learning process will not be complete if teachers are not part of it to ensure that it is done accordingly, regardless of it being learner-centered.

Academic Performance of Students Learning Through Learner-centered Method in Vocational Education

Learners in vocational education are expected to showcase their knowledge and skills acquired at school when they get into the industry. This could be possible if they had acquired such knowledge and skills properly. With the description of learner-centered method, the learner is a major role player in his or her education and their academic performance would reveal whether the learner is competent or not (UNESCO, 2010). The academic performance of learners learning through learner-centered method would depend mainly on the learners' ability to do what they have been taught. As mentioned before, learners using this approach are driven by their inner force to learn and therefore their academic performance would be expected to reveal that. In vocational education, assessment is done through theory and practical which is a core area and if not passed would imply that the course is failed. The practical assessment is crucial in vocational education in that it prepares the learners to go into the industry (UNESCO, 2011). It is ideal to assess learner-centered students through practical in vocational education as compared to teacher-centered method. Humanistic theorists concur that learning through this method is effective if the learner uses their own interest, ideas, strength and motivation to learn. This makes it easy for the learners to learn and pass since they will put all the effort and commitment towards their learning (Mutasa & Wills,1995).

Challenges Faced by Teachers Using Learner-centered Approach in Vocational Education

Although learner-centered approach is ideal for vocational education as a higher education level, it is not free from challenges especially looking at the nature of the course and the criteria for enrolling students. This on its own creates a complex platform of teaching and learning as teachers have to firstly teach theory, then demonstrate

what was taught and give practical tasks to students for them to learn what they have been taught. Vocational education which in Botswana is commonly known as a 'trades' course, is basically done through demonstration and practical lessons. That is why initial enrolment was on students who could not perform successfully in junior secondary schools because they were mainly challenged by theory and other technical subjects like mathematics and science (UNESCO, 2004). With this nature of their courses, teachers find it difficult to use learner-centered method except during practical lessons where learners still depend on the teachers to guide them on what to do and how to do it, for example, by giving them drafts of plans of certain structures to be done. Lack of resources such as appropriate industrial machines that could be used for demonstration is also a challenge. Basic tools are used and therefore it is still costly to the work industries since they would have to train graduates when they start to work. Teachers may also not be trained to the highest expertise to operate such machines and that could be hindering their progression (For VISION, 2036). ICT usage is another challenge for both teachers and learners.

Strategies that can be used by teachers to improve the use of learner-centered method of learning in vocational education

Learner-centered method could be more influential in teaching and learning in vocational education if all aspects of education are by any means addressed. All learners should be given equal opportunities to learn through learner-centered considering that learner-centered method can only be effective if all necessary resources such as books, computers and the internet are present (For VISION, 2036). It is therefore important that the policy makers ensure that such resources are provided. Barrett *et al*. (2007) indicated that, "An inclusive education is conceived as being learner-centered, rooted in a constructivist understanding of the learning process and drawing on participative or interactive pedagogic strategies". Thus, the vocational education policy should cater for the needs of all learners. If learner-centered is used without the provision of necessary resources like the internet and computers, then only those who can afford will learn whereas those who cannot afford will struggle; hence the learning

imbalance will compromise the learners' future. Joseph & Godstime (2016) are of the view that, "The technical and vocational skills teacher is expected to possess adequate and sufficient practical experience necessary for imparting the skills to the learners through the use of appropriate teaching methods". Killic (2010) adds that "Teachers equipped with these skills will be more successful in learner-centered teaching". Therefore, if teachers are not competent, it would not be possible for them to guide students and even unsure of which method of teaching to use such as demonstration, enquiry, project and assignments (Joseph & Godstime, 2016). Learners as well need to be motivated to learn on their own and take responsibility for their learning (Rogers & Horrocks, 2010). Motivation can boost their self – confidence and enable them to achieve to their highest level as they will direct all their effort and abilities to their learning (Corley 2008). Another important strategy could be to involve teachers in vocational education policy making to encourage them to motivate learners. According to Makunja (2016, p.36), "there is a need to provide more opportunities for their participation during formulation and/or review of the curriculum. Doing so may allow teachers to play their roles effectively in curriculum development, eventually implementation". Therefore, since teachers are needed to guide students to make proper decisions about their own learning, then it is advisable to make them part of policy making so that they help to implement the education policy effectively.

Methodology
Conventionally, there are three main approaches in methodology; quantitative which rely on numeric data, qualitative which majorly uses observational or interview data and mixed methods using both types of data (Hughes, 2016). This research was a qualitative study and will use qualitative data procedures. According to Cohen (2011), qualitative method gives permission to dig deep to come up with quality data analysis and interpretation by using methods such as observations, existing records and interviews.

Qualitative research is different from quantitative research in that; for quantitative research data is analysed after finishing collecting whilst in qualitative research data is analysed throughout the collection

to do necessary probing on the issues, patterns or themes that keeps on emerging. It can also be done at the end of the research when making decisions on the purpose of the study; (Chilisa & Preece, 2005). Quantitative research is advantageous in such a way that it gives the researcher opportunity to choose the sample that represents the population; and to measure and analyse the data in detail to come up with a generalised statistical analysis. On the other hand, it may be accused of bias and subjectivity; the data collected may not be rich and provide the depth to extract the findings. Moreover, it may require a large population study which could be costly (Cohen, 2011). Qualitative research is also useful in that it provides the researcher leeway to plan his or her work, allowing them to collect richer, more in-depth data by probing. Because just a small population is required for data collecting, it is significantly less expensive. On the other hand, qualitative research has the drawback that the researcher must rely on his or her interpretations in order to provide results and is not permitted to make assumptions outside the parameters of the sample. Additionally, it takes time because the researcher must prepare, go over, and wait for the respondent's response before moving on to the next topic (Cohen, 2011).

Research Design
Research design looks at the methods and a procedure used as guidelines to the research to be carried out and provides an overview of how the study will be conducted (Ary, Jacobs & Sorensen, 2010). According to Bryman & Bell (2011), the epistemological position of qualitative research emphasises the understanding of social world where the examination and interpretation of that world can be done by getting information from its participants. Therefore, the study adopted a qualitative research design. Interviews were conducted to four students and three lecturers both from Certificate in Accounting and Business Studies (CABS) and Bricklaying sections. Students' records from both sections were also used to collect data. According to Chilisa and Preece (2005), data techniques that can be used in qualitative research include among others interviews, observations, audio materials and documents. According to Bryman & Bell (2011), interview gives the researcher rich and detailed answers since the

interviewer can depart from the arranged guide questions and ask questions following the answers given by the respondent to probe for more information which can help to come up with a general view of the subject. Therefore, semi-structured was used for data collection in order to allow freedom of respondents while at the same time more information was gathered. Data from documents are a good data collection technique since documents are stable and unobtrusive to examine and help in grounding the study. However, using documents to collect data can have some limitations; secondary data of which the recorder may have omitted some information or not recorded correctly and thus question their accuracy as well as the information readily available which was not prepared for the research under subject and which may not be representative or even incomplete (Ary, Jacobs & Sorensen 2010, p.442-443).

Population and Sampling
Bryman & Bell (2011:176) define population as " The universe of units from which the sample is to be selected" Therefore, the population of this study was the ten Bricklaying & Plastering students and their two lecturers as well as the thirty-two Accounting and Business Studies and their five lecturers. According to Krishnaswamy, Sivakumar & Mathirajan (2011, p.281), population and sample are related terms since the researcher seeks a representative sample from an identified segment of the population. Therefore, for this study, four students, two from each section were interviewed as well as three lecturers, one from the CABS section and two from Bricklaying & Plastering section. Furthermore, records of twenty-five students, fifteen from CABS section and ten from Bricklaying & Plastering section including those interviewed were examined making a total sampling frame of twenty-eight people. Bryman & Bell (2011, p.176) defined sampling frame as "the listing of all units in the population from which the sample will be selected", hence the selected three lecturers and ten students.

Research Instruments and Techniques
Data collection instruments refer to the tools used to collect data such as computer-based interview (Bureau, 2010). Therefore, the data

collection tools for this study were interviews for both lecturers and students in a semi-structured form. Open-ended guiding questions were designed and respondents were given a chance to give their views and opinions on the methods of learning especially learner-centered method, as well as opinions on if learner-centered method could be effective.

Data Presentation and Analysis Procedures

According to Cohen (2011), data is collected and presented in the form of tables and graphs noting the themes of each presentation for the reader to easily interpret and understand. Therefore, data collected through students' records was analysed through tables and charts whereas the interviews was presented descriptively themed according to the responses given. Ary, Jacobs & Sorensen (2010, p.483) in addition indicated that, the core of qualitative analysis includes the identification of categories and themes and their refinement and emphasised the need of coding and the reducing process. Hence, the data presentation and analysis using table, graphs and description.

Presentation and Analysis of Results

This presents the results of the data collected through students' records and interviews. The data collection results were presented in two sections; demographic data and findings from students' records and interviews. The results for students' records were presented using tables and charts which are later explained while the results for interviews were presented using tables in a descriptive manner. Records for twenty-five students from both CABS and Bricklaying & Plastering sections were used to collect data in the form of students ' marks and four students from the same group were interviewed. Three lecturers were also interviewed, one from the CABS section and two from Bricklaying & Plastering section. The sampling frame was chosen purposively. Purposive sampling is sufficient to get the insight and understanding of the topic under study and usually, qualitative researchers use their knowledge and experience to choose the sampling frame which although relatively small but give results which are representative of the entire population (Ary, Jacobs &

Sorensen 2010, p. 428-429). The data collection from each participant, who is a member of the Naledi Brigade in Gaborone, was completed effectively and according to plan. Due to the tight schedule at the year's end, however, scheduling interviews was difficult for both lecturers and students, even if student records were easily accessible.

Demographic Data

The demographic data was collected from students to present the following elements; age- range, gender, education level, and course studied as well and course period. Lecturers also provided their demographic data to present; gender, age-range, education level, period of service and course and subject taught.

Presentation of Students' Demographic Data

Table 1: Interview students' age-range.

Age Range (Years)	Frequency	Percentage (%)
18-25	2	50
26-30	1	25
31 – ABOVE	1	25
Total	**4**	**100**

Table 1 shows that two learners are of 18-25 years, one learner is 26-30 years and one learner is above thirty-one years. The age is distributed across age groups and all are adults. This can contribute positively towards learner-centered teaching and learning as with this method learners are expected to be responsible for their own learning. Seventy-five per cent (75%) of learners' prior education is BGCSE which put them at a better level to understanding. This could even make it easier for lecturers to apply methods of learner-centered which need an element of maturity.

Presentation of Lecturers' Demographic Data

Table 2: Interviewed lecturers' education level

Education level	Frequency	Percentage (%)
Certificate	1	33
Diploma	2	67
Degree	0	0
Masters & above	0	0
Total	**3**	**100**

Table 2 shows that more than fifty per cent (50%) of lecturers have atleast diploma qualification. This can impact the use of learner-centered method in a positive way as they will use their higher level of knowledge to teach students and guide the accordingly. More than fifty per cent of lecturers are above forty-six (46) years of age and have more than sixteen (16) years of work experience. This could impact positively on the use of learner-centered method in terms of the teaching experience that the lecturers have. The above table shows that more than fifty per cent (50%) of lecturers teach practical subjects. This gender imbalance can lead to unequal opportunities in division of duties which may negatively impact on the use of learner-centered method.

Presentation and Analysis of Results from Students' Records to evaluate students' academic performance through learner-centered method in   vocational education
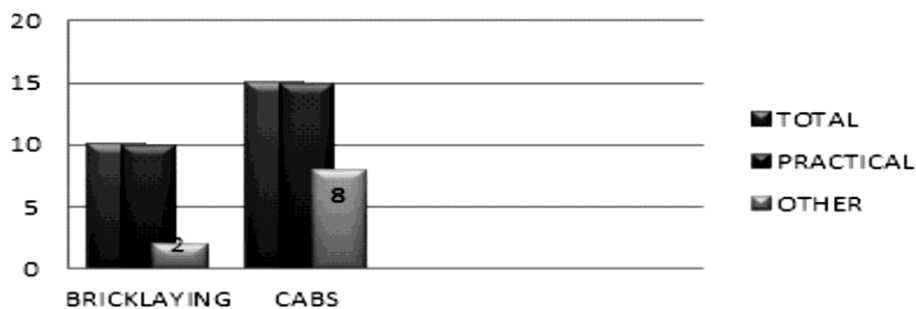

Fig. 1: Student's marks for practical subjects compared to theory subjects

Figure 1 shows that all students who were sampled have scored more than fifty per cent (50%) in practical subjects as compared to their marks in other subjects. This could be due the fact that practical subjects are typical example of teaching and learning through learner-centered where students are engaged to do practical tasks which will reveal their level of understanding and skills gained. Learners who are taught and learn through learner-centered method would be seen by their academic performance if they do it from their inner ability (UNESCO, 2010). Therefore, these results show that learners have

put more effort and commitment towards their learning (Mutasa & Wills, 1995).

Presentation and Analysis of Results from Students' Interview to identify the methods of learning used in vocational education.

Interviewed students describe the learning method that is usually used to teach them as the one in which the teacher plays a major role and control the preaching and learning process, thus, the teacher-centered method. Wright (2011) describes this method of teaching and learning as the traditional method in which the teacher carries out most learning activities while students' efforts are focused on listening and record accordingly. The results reveals that three quarters of students prefer to learn through learner-centered method while only one quarter prefer teacher-centered method. Those who prefer learner-centered method are of the view that the method gives them opportunity to get more information on the subject and can even research the topics to be covered. On the other hand, the one who prefers the teacher-centered method only see time as a limit to study on their own. However, all students including the one who prefers teacher-centered method revealed that they enjoyed learning on their own in the event they were given the opportunity to do so.

to evaluate students' academic performance through learner-centered method in vocational education.

Three quarters of students think they can perform better when they learn using learner-centered method. The various benefits that they anticipate through learner-centered method include owning and understanding material better, learning under less pressure, being able to explore and relate their learning to real life as well as summarising their material to suit their own understanding. These reasons give a true picture that learner-centered method can be influential in teaching and learning in vocational education. According to Mutasa & Wills (1995), learner – centered method makes the student to develop interest towards their learning and put more effort, therefore, students tend to perform better. When asked how they think they can

perform between teacher-centered and learner-centered; one of the respondents' answer was;

"*When preparing my own material using the syllabus because I study when am ready with no pressure. It also help me to explore and relate what is learned with real life.*"

Students gain skills that are life-long since they lead and control their learning which helps them to tackle situations or problems as they come (Calder & McCollum, 1998). On the other hand, the one quarter who think they can perform better when learning through teacher-centered revealed that it is because they struggle with some of the difficult terms. This still subscribes to learner-centered method that, students need teachers to guide and support them on what and how to learn considering their cognitive and affective values to enhance the effectiveness of learner-centered method (Khatib, Sarem & Hamid, 2013).

to examine the challenges teachers face when using learner-centered approach in vocational education.

Table 3:

QUESTION	RESPONSE			
	Participant 1	Participant 2	Participant 3	Participant 4
Are there any benefits or challenges you had and faced from learning on your own?	Yes, because I get more information but the main challenge is the technical terms.	Benefits are that resources are available and after research I can go to confirm with my teacher.	Benefit is that I learn at my own pace and get as much information as I can. Challenge is that some concepts are difficult, need teacher to explain first.	I benefited a lot since I had allowance to think outside the box. The only challenge is defining some terms.

The above table reveals that even though learner-centered is not often used in vocational education, whenever it is used gives positive outcome. All students have benefited in different ways; access to more information and resources, learn at their own comfort and moreover stretched and challenged their thinking and reasoning

capacity. This is a subscription to a humanistic theory which advocates for learners' interests, ideas, strength and motivation for learner-centered method to be effective (Mutasa & Wills ,1995). However, there are some challenges that students faced as well such as technical terms and concepts. That is why a teacher should play that little role of guiding and supporting students for them to learn effectively.

Presentation and Analysis of Results from Lecturer's Interview to identify methods of learning used in vocational education
Table 4

QUESTION	RESPONSE		
	Participant 1	Participant 2	Participant 3
Can you differentiate between learner-centered and teacher-centered methods of learning?	Learner-centered is when students are allowed to teach on their own e.g give them assignment to research on topic which is not yet covered. Teacher-centered is when teacher plays a major role in students learning e.g. preparing notes for them, giving them regular exercises and tests.	Learner-centered is when a learner is given a role by the teacher during learning. A learner leads his/her learning by doing most of the work e.g. group work and presentation.	Teacher-centered is lecturing in short and learner-centered is where 90% of work is done by the learner e.g. practical.
Which method do you prefer most?	Learner-centered – it gives students enough knowledge .Students do not have to wait for the teacher. Avoid being spoon fed by the teacher.	Learner-centered through small group discussion. It provides platform for learners to share views, discuss and agree on possible answers, thus teamwork.	Learner – centered because most of the learners participate.
Which method do you think your students prefer most?	Teacher-centered because some topics are challenging, technical language e.g. tools' names.	Teacher-centered whereby the teacher does most of the work, research, bring notes to class and they do the listing maybe it is because of lack of resources e.g. textbooks.	Teacher-centered because they are lazy to research.

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Table 4 above reveals that lecturers acknowledge that there are different learning methods that can be used to teach and learn. They further differentiated learner-centered method from teacher-centered method as the method where learners are allowed to learn on their own while teacher-centered as a method of teaching and learning in which the teacher plays a major role in students' learning. According to the above table, every lecturer prefers the learner – centered approach over the teacher-centered approach because it encourages students to be independent learners and gives them a forum to express their opinions, fostering a sense of teamwork among the students. Learner-centered allows students to control and be responsible for their learning (Wright, 2011). However, even when learner-centered method is used in teaching and learning in vocational education, it will be imperative that teachers guide and support them to learn effectively. Petty (2004) indicates that learner-centered method allows students to be more independent on their learning but teachers should guide them.

Evaluate students' academic performance through learner-centered method in vocational education.

QUESTION	RESPONSE		
	Participant 1	Participant 2	Participant 3
What is your view regarding learner-centered method?	It makes students think for themselves.	It is good, it can make students to develop self-confidence and problem solving skills.	It is appropriate for our level, learners are adults and should manage to learn on their own.
How do students perform if learner-centered method is used?	They perform better, because they own their learning and only refer to the teacher where they do not understand.	At most my students perform better provided the resources and teaching aids are available.	It is a method which forces students to participate, therefore perform better which reduces remedial lessons.

Table 5 shows that lecturers view learner-centered method as a method of teaching and learning where students think for themselves, develop self-confidence and problem-solving skills and that their

learners are adults, therefore, should be able to control their own learning. However, they also pointed out that this will be only effective if resources needed for teaching and learning are provided. If students perform better, it will mean they have acquired necessary skills and knowledge which they will take to the industry and add value to the economic growth (UNESCO, 2011).

To examine the challenges teachers face when using learner-centered approach in vocational education.

Just like any aspect of life learner-centered method of teaching and learning in vocational education has its own benefits and challenges. The responses revealed that lecturers have seen students benefiting from learning through this method whenever it is used. They mentioned such benefits as students scoring higher marks because they get enough knowledge at their own pace. One response as a benefit of learner-centered was; "*Students grab knowledge more easily than in the 'spoon fed' one. Can even score higher marks in tests*".

There is also an increased level of participation by students since the most role is played by them; this gives them more confidence and make them to be responsible for their learning. Rogers & Horrocks (2010) indicates that learner-centered method depends on the students' motivation which can help them to self- actualize themselves and therefore promote self-development, self-dependence and lifelong learning. On the other hand, lecturers appreciated that learner-centered method can bring some challenges such as technical language or terms that could hinder students to study on their own if difficult for them, lack of resources like textbooks and lack of commitment by some students who will want to be always monitored in order to do their learning.

To determine strategies that teachers can use to improve the use of learner-centered of learning in vocational education.

QUESTION	RESPONSE		
	Participant 1	Participant 2	Participant 3
In your view, what do you think can be done to improve the use of learner-centered method in vocational education?	The best way is to introduce the topic to learners first before allowing them to research/learn on their own so that it could be easy for them to understand.	The best way is to provide resources which are mostly used in this method e.g. internet and library.	Good, when giving students work in groups, students should be encouraged to participate by giving them individual tasks within the group.
In your view, can learner-centered method be effective in vocational education?	Yes, the method is effective because these students are groomed to go to the industry, therefore, they should be ready for any challenge. This method will help them to know how to stand for their own life.	Yes, because it gives students platform to express them and encourage them to out and look for information, this makes that knowledge to stay with them long time.	Since we are in a vocational school where students use their hands and minds, therefore, I think it will be effective.

Lecturers think that learner-centered method of teaching and learning in vocational education can be improved by encouraging students to learn on their own and participate by giving them more work to do on their own and in groups. This will boost the morale of students and increase the level of their confidence. They also suggest that resources such as internet and library should be provided to enhance teaching and learning through this method. According to Wright (2011), teachers, students and other stakeholders should be actively involved in the transition from teacher-centered method to learner-centered method in vocational education. This calls for the attention of vocational education policymakers to strategize such change management to help all role players in vocational education to embrace the change and implement it properly.

Discussion of Findings
Generally, the results on the study reveal that learner-centered method is ideal to influence the teaching and learning in vocational

education. Students' records have shown that students' performance was higher for practical subjects than in theory subjects. This is due to the fact that practicals are learner-centered in their nature and therefore it is not optional for teachers to teach students with learner-centered method. As indicated by Calder & McCollum (1996), the industrial needs keep on changing and therefore imperative to expand vocational education to meet the demands of the workforce. This will not be possible if teachers are lacking skills or have outdated vocational skills because they are the ones to guide and support students through learner-centered method which is an ideal way to carry out this exercise. It is, therefore, necessary for lecturers to be trained with up-to-date skills so that would be confident to teach students and with necessary skills as well including the ICT skills which can enable them to research more and be up-to-date with current changes. These points out to the direction of vocational education policy making which can address the needs of the industry which will in-turn produce skills according to the needs of the society. The study has further found through interviews that resources are inadequate of which the internet is one of them. This posts a major threat to credibility and quality of vocational education which is chasing after addressing the changing industry needs as result of the shift in the world's lifestyle. Up-to-date equipment is also required to train students and equip them with proper up-to-date skills which they will use to contribute to the country's economy and compete with the rest of the world (Case, Fair & Oster, 2014).

Educational Implications of the Study
Learner-centered has become commonly adopted as the world has become more interactive with internationalized communication. Massification of education is no exception, institutions are now offering their programmes in distance learning and this is possible through learner-centered method. Wright (2011) in Student-Centered-Learning in Higher Education found that learner-centered method gives students the opportunity to own and control their learning and teachers just guide the students' decisions on what and how to do. This makes students to be responsible for their learning and helps them to get good marks since they will get knowledge that

they will keep with them for long time. Khatib, Sarem & Hamidi (2013) in Humanistic Education: Concerns, Implications and Applications found that the humanistic theory emphasises that students should be seen as human than as a learner. Teachers should study the cognitive aspects of their students as this can influence their learning practices positively or negatively. Therefore, learner-centered will be more beneficial to both students and lecturers if they are motivated to teach and learn. The other factor that can add value to the teaching and learning through learner-centered is by teachers exposing genuine and real life challenges (Khatib, Sarem & Hamidi , 2013). This will help them to develop problem solving skills which they could use even after their studies. Nevertheless, learner-centered method of teaching and learning can influence teaching and learning in vocational education if all necessary aspects such as resources are made available and vocational education policy strategy is implemented to suit the industrial needs.

Recommendations

Following the discussions and interpretation of results, it is recommended the Naledi Brigade should adopt the following strategies to enhance the learner-centered method of teaching and learning in vocational education;

1. Teachers should use learner-centered method for all the subjects and use real life situations to explain their concepts so that students can understand better. Teachers should also guide, encourage and support students to learn on their own and make the right decisions.
2. Advice the ministry to incorporate learner-centered method in vocational education policy and make it compulsory to use for all subjects as well as do research on the industrial needs and develop curricula that can meet such needs.
3. Lecturers should be trained with up-to-date skills so that would be confident to teach students and with necessary skills, including the ICT skills which can enable them to research more and be up-to-date with current changes.
4. A request for the procurement of necessary up-to-date equipment which is used in the industry for students to cope

easily at work and reduce training expenses for the companies which would help students to be absorbed easily into the industry.

5. The suitable infrastructure such as functional libraries, computer labs, practicals workshops and classrooms should also be provided to enable teachers to use learner-center method of teaching and learning in vocational education.

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