The Philosophy of Liberating Geography Teaching and Learning through Dialogue by Incorporation of Competence-based Approach in Institutions of Higher Learning

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Abstract
Background: Reforms and transformations in education are informed by the evolving changes that take place in societies and world over. Philosophies of education are a quest for improving the way teaching and learning takes place. The study is tethered on the out-come based Education (OBE) of Geography, informed by realism, idealism and pragmatism. Methods: Ethnographic method of collecting data is used and this method was relevant in that the researcher would be among the respondents for a long time interacting, living with them while collecting the data. Ethnography basically depends on observation and in-depth semi-structured interviews. Results and Discussion: Views and perceptions of students and that of the lecturer were captured verbatim. It was established that breaking away from the traditional way of Geography teaching may not be easy as some respondents could not see the value of outcome based teaching and learning in institutions of higher learning but among some of the student population, it was found that they appreciated to be involved in what they learn as they wanted their voices to be heard. Conclusion: The traditional system of teaching and learning suggests schooling as a step-by-step journey from first year to final year. Each stage is clearly defined in terms of period of programme study. This is managed through a scheduled daily timetable. The traditionalist teaching revolves around WHEN and HOW students learn. The OBE paradigm shifts attention to WHAT and WHETHER students learn. Recommendation: Teachers at institutions of higher learning are recommended to incorporate competence based approach in their teaching of Geography topics such as Map Reading and Interpretation. Competence based teaching is grounded on the philosophies of realism, pragmatism and idealism.

Key words: Philosophy, Liberating, Geography Teaching, Learning, Outcomes-based, Competence Based

Background of the Study
Competence based learning is an influential model today and was crafted by William Spady and his colleagues at the High Success Network that promote OBE in institutions in the
The concept paradigm means a world view, the way we see and believe in a way, is to describe the way we think about and the way we act in the world. Our education paradigm includes how we, as a society, think about Geography teaching, the rules we adopt for map reading and the way we go about in the locating positions on a topographic map and the desire is to continually improve the way teaching and learning takes place.

The philosophy that underspin’s the study is idealism and realism. Societies experience social injustices and institutions of learning are part of larger community on which the fairness or unfairness find itself getting into institutions. This was evident during the colonial times where segregate policies were observed in institutions, schools for whites, subjects for the elite and teachers were the soul originators of knowledge. It was assumed that learners are like a blank slate, (Freire, 1970, & Brunner, 1999). The critical theory of Society (Higgs and Smith, 2015:867), “...claims that human societies are essentially pathological, and its adherents claim that, to understand this pathology, we need to understand its causes fully. These causes are to be found in a society’s ideology, religion, economics, culture and language. The critical theory hold that human societies is characterized by pawns like in a game of chess, with rules which are skewed and favor the elite members of society. This theory claims that power structures do not only affect the economic and social sectors, but the education of geography is also affected. As a result, the outcome based education is an attempt to break the chains of dominion and serve learners with education on a level plain field by according all learners opportunities to develop to their full potential in map reading, interpretation, and other Geography concepts that transgress the social stratum, hence the idea is to liberate the learning of geography by relying on realism and idealism.

Critical theory is a philosophy of cynicism and disillusionment. It seeks to make students conscious of what is being done to them by the society. Once they are made conscious of this, students work to emancipate themselves and others. As far as map reading and interpretation is concerned, it is significant to note that Horkheimer, (1895-1973) wanted to break down the barriers between academic disciplines partly because he believed that academics needed to work together to develop a comprehensive theory of social reality using realism and Idealistic philosophies. Implication to the teaching of map reading in geography is that of setting free the education dimension by bringing in the paradigm of outcome based learning in institutions of learning.

**Problem Statement**

The teaching of map reading, and map interpretation has been a challenge to both teachers and Geography students. For the teachers the challenge emanates from their back ground in map work which makes them lack in effective teaching. This challenge is passed on from generation to generation such that most Geography students would say the most difficult part of the Geography syllabus is map reading. Because of the conceived challenges in teaching and mastering of map reading skills, has necessitated this study which explores ways of improving the mastery of competencies in map reading techniques in institutions of higher learning by exploring the competences based approach.
The significance of the study

The significance of the study is that it will benefit Geography educators and students by showing how some philosophies of education would help in the teaching and learning of the subject. Education in institutions of higher learning suffers from narration in the classroom and the dominant method of instruction being the talking method which treats students as objects who need to be told what to do. Students are voiceless, and they seem not to contribute to their own learning. Lack of learner participation is what is happening in institutions and does not prepare them fully for life after completing their programs. They get used to being told what to do and not contributing to the transformation and reforms that may be good for the 21st Century students. While this problem affects most institutions of higher learning, this study seeks to explore ways of engaging students through dialogue by incorporating competence based approach in institutions of higher learning and shed light on methods of teaching influenced by realism and idealism philosophies. The idea is to liberate learning by dialoguing in curriculum development and structuring the instructional content.

The Philosophical framework of the study

The philosophies of education that informed the study are, Idealism, and Realism. Idealism hold that ideas are the only true reality. The things worth knowing and this is because ideas are generated in the mind and should be translated into thoughts and practice. In the teaching of map reading, Socratic method of teaching can be used (the question and answer method). When this method is used, it challenges learners to think and translate their thoughts into actions. Leaners ask but the teacher is not an answering machine, instead of providing the answer would through a question back to the learners so that at the end they come up with the answer themselves. The entire process enables learners to think.

The other philosophy is Pragmatism, and this holds that the universe is dynamic and evolving (Dewey, 1997). Things change, and nothing is permanent. If I teach map reading today can I teach it in the same way tomorrow? So, change is a result of experience and that experience would enable one to realize that to realize educational goals, the teacher responds to many changes existing in the classroom. The learners change every year in a class, the teaching methods ought to change because of the new students who have come in. The traditionalist and perennialist teachers cannot embrace change, they hold that, ‘this is the way we use to do things and it must be done the same way.’ There is only one way of teaching map reading and this closes out new ideas and new innovations in the class room.

The second one is realism. Here reality exist and it is independent from human mind. We are in a world of physical objects with dimensions that can be measured. Reality is what we see. This is what is to be studied. Realism would want teachers to appeal to the five receptor senses of the learner. Allow them to touch, observe, experiment, measure and make use of real objects that exist in the surrounding.

Research Questions

1. What is the impact of competences-based teaching in acquisition of field sketching, observation and recording skills?
2. To what extent are learners equipped with the knowledge, and skills for vegetation mapping?
3. How does the philosophy of learning to learn through competences-based teaching of field techniques effective?
4. How can dialogue between learners and facilitators in Geography teaching impact in teaching and learning?

Methodology

Ethnographic method of collecting data is used and this method was relevant in that the researcher would be among the respondents for a long time interacting, and living with them while collecting the data. Ethnography basically depend on observation and in-depth semi-structured interview methods. The researcher will spend most of his time with students and lectures, taking part in all their teaching and learning activities in and outside the class while collecting data. Ethnography is an old method of generating data and was first used by sailors during the great voyages in the sea, for example, Herodotus (1952) and it was also used by Marcopolo, (Beatrice Potter-Webb, 1858-1943). It can be said that ethnography method contributed in the generation of data during that time and can still be used here and now. The other scholar who used the same method was Bronislaw Malinowski (1884-1942) and was said to be the first to have used ethnography method. The other researchers who used ethnography are Merriam, (2009) and Creswell, (2014). While the founding scholars of ethnography are old, the method has stood the taste of time and the researcher found it relevant if an in-depth study of an issue is to be done with accuracy. Ethnography was used as it allows the collection of both qualitative and quantitative data.

Literature Review

The thinktanks of the past showed great wisdom and this is demonstrated by Plutarch (AD46-AD129), who said, “The mind is not a vessel that needs filling, but wood that needs igniting.” In every learner that we teach a spark should be ignited to start the burning and how can that be done is a question that can be answered by the outcome based learning where the voiceless can regain their voices and take charge of their own learning. The philosophies such as idealism by Socrates in Higgs and Smith, (2015) and realism (Aristotle) can inform the way teaching takes place. The traditional system of teaching worked yesterday but today’s generations are different so by adopting a new way of doing things would enable learners to show case their expertise and skills. “Education is not the learning of facts, but the training of the mind to think,” Albert Einstein (1879- 1955) in which is more suitable when the four Cs (Collaboration, communication, critical thinking and creativity) are put into practice Activities that can liberate learning are: that a manual can be created where self-paced computer tutorials, video related to the unit being taught, experiments conducted, hands-on and mind on simulation related to the unit being studied. Such activities are known to have the power of allowing students to link past knowledge with the current knowledge. It also allows learners to apply what they have learnt to really life situations.
Project assignment can be given to learners, they work on their own and expected to present and the teacher can listen to the thinking of students and respond to questions generated by the students. When all this happen, the teacher may think that he/she is losing power, becoming less important which is a paradox of the teacher power. Infect, the role of the teacher become more important as the students enjoy in their day to day activities. Teachers love for the learner, genuine decisional love that puts the learner first and motivates. Love committed to the wellbeing of others and the 6th C which is caring. This implies getting the attention of the learner, motivating and inspiring them. Student engagement changes the face of education in institutions of higher learning.

Scholastic underachievement is mainly a school problem. There are four main factors within institutions which contribute towards underachievement, it is because in some societies, social and cultural demands may conflict seriously with the ability and need to attain high achievement. For instance, a fear of success may be developed in girls in a society that still believes that the position of a woman is subordinate to that of man and this kills the individual learner’s self-concept.

Some saw its relevance in technical colleges not in pure academic arena. The findings were that respondents had mixed views, but literature seems to indicate that outcome based philosophy has relevance in higher education, (Freire, 1970, & Brunner, 1999) especially where Freire advocated for dialogue in teaching and Brunner was for the learner centered approach which is an aspect of outcome based teaching and learning. Teachers who express negative expectations usually find that these expectations are fulfilled. Children with poor self-concept perceive the teacher’s expectations of failure as a confirmation of their own poor self-evaluation. (Not all gifted children will respond to negative attitudes with poor achievements, however, some seeing these as a special challenge requiring additional effort.

**Idealism and Realism can be used to Liberate Learning**

It must do with the great benefits that education offers to individuals by transforming human society.

1. Programs on line
2. Courses can be customized to students’ needs
3. They can get constant feedback on how well they are doing

Learning should not be confined to the four walls of a classroom and must loaded with live activities so that they get to realize that the outdoor activities link well with what they find in the school syllabus. The traditionalist teacher cannot embrace change in the class activities. These are individuals who teach the text book by asking students to read from the book in class, not innovative and does much of the talking during the lesson. In a traditional model, teaching is standardized.

Idealism and realism calls for the teaching of Geography to be customized to all students regardless of whether there are slow learners, average, fast learners etc. An advanced approach to student learning, calls for a paradigm shift of student teaching and learning. “The intervention aims to help children become more willing and able to question, reason, construct
arguments and collaborate with others," (Gorard, Siddiqui and See, 2017:1) The first time in modern history we have seen technology used in enhancing productivity in Geography teaching. There is no doughty that in history technology has been driving the economy and has not been used in education a shift could lead to massive productivity in Geography education. Blending Hi-tech with the traditional ways of teaching as well as incorporating dialogue which is one of the pillars of democracy may lead to effective and efficiency modalities of preparing students for the 21st century and beyond.

Methods
Observation was the major method used in generating data and was complimented by interviews. Interviews were scheduled and a follow up to those missed interviews was done. The findings from interviews were triangulated with the findings from the data generated through observation. Triangulations enabled the researcher to counter on the weakness of each of the methods used there by increasing the credibility and credibility of the findings. While conducting interviews, the researcher purposively selected the respondents. Purposive sampling was used because the target population were students studying for BSc Geography and Education and those reading for BEd majoring in Geography. Purposive sampling enabled the researcher to collect data from a specified cohort of students and lecturers.

Population of the study
The population of the study consisted of fifteen (15) Geography students and five (5) Geography and Environmental Science teachers. Semi-statured/structured interviews were conducted, and observations made. Among the student population there were ten male students against five females. The teachers side consisted of three (3) female and two males. It was observed that the in-depth semi structure interviews enabled the researcher to generate qualitative data which required the establishment of themes before analysis.

Findings
Theme: Field sketching, observation and recording
Interviews were conducted and according to Respondent 1: competences-based is a valuable technique of teaching which requires facilitators who are flexible in the classroom and involves the learners. The other Respondent 2: indicated that rigid teacher adheres to a planned schedule which allows very little or no flexibility for those who differ in speed or learning styles, such as the intellectually gifted who learn fast, and the creativity gifted who think differently and frequently ask questions.

Because of rigidity, the teacher does not consider the slow learners as the idea is to move with the fast learners and complete he syllabus. The system would be examination driven in that the race is to drill learners for the examination. There is little or consideration of competences that students can be able to use outside the institution. In such situations learners do not benefit much because at the end of the day the syllabus coverage is what matters with little learning going on.
One lecturer pointed that: It is essential for Geography student to have skills in field sketching, accurate observation as well as in recording geographic data. This is because anyone who would want to join the field of earth science is expected to demonstrate excellence in field sketching, making accurate observations and accurate data capturing.

Lack of leaner involvement lead to students exhibiting a variety of behaviour that contribute to under achievement, behaviour such as poor handwriting, not following the teacher’s directions, not doing their homework, or aggressiveness. The learner’s aim in displaying such behaviour is to draw the facilitators’ attention. By using teaching methods informed by realism and idealism, learners can be actively involved in class activities, their voices could be heard and that makes them master the techniques and skills that would make them function outside school activities.

The other Respondent said: A rigid, formal and inflexible/complex curriculum, characterized by teaching methods and techniques that do not meet and allow students in exercising/exerting their autonomy or develop their initiative, may contribute to reinforcing or exacerbating under-achievement behaviour. Such a system suppresses the voices of the students. In other words, students are to be seen not to be head as they are deemed they do not know anything which contradicts the theory of idealism and realism.

Respondent 4: said students are often anxious to question, criticize, discuss and learn beyond the levels that are appropriate for most students in the class, but unfortunately the regular geography curriculum does not provide opportunities for this. As a result, we find the school curriculum boring and we seek stimulation outside the curriculum and concluded school is dull and boring.

Respondent 5: When teachers express negative expectations from students they usually find that these expectations are fulfilled. Students with poor self-concept perceive the teacher’s expectations of failure as a confirmation of their own poor self-evaluation. Negativity among teachers can be that some teachers can tell learners that Map Reading is difficulty and this scares learners. It must however be noted that all gifted learners respond to negative attitudes with poor performance, however, some seeing these as a special challenge requiring additional effort it motivates them to work extra hard.

Theme: Vegetation Mapping and use of quadrant survey

Respondent 1: I have observed that in a class where competitive evaluation and competition is heavily stressed, students who do not have clear sense or their own competence perceive daily that they are not measuring up to the standards of excellence expected of the class. They therefore adopt a defensive mechanism. The current geography education system we find yourself in is too competitive such that it does not recognize skills and competences one has.

Respondent 2: Students are different from each other in the way in which they cope with geography problems. As a result, they manifest various personality characteristics, some of which may result in underachievement. The education system lacks in attending to such issues so to correct them by being rigid in the teaching. At times, the very teachers had challenges in
vegetation mapping and they are expected to teach what they never understood during their time. Some may have content but lack in methodology of teaching geography.

**Respondent 3:** A student said a self-concept of a learner is like the self-reflected in a looking glass which is shaped by all the positive and negative reflections received from meaningful individuals in the learner’s environment (Butler-Por, 1987:18). The teacher came into our class and ordered us to take out our textbooks and read, ‘the River Systems.’ One would have expected the teacher to have taken them out to a near-by river so they could observe and interact with nature for effective learning to take place. Teachers who are not innovative contribute to poor performance in the subject.

**Another respondent said:** Learners who have internalized mostly negative responses from the people who are most important to them, form low self-concepts and consequently under-achieve. Some teachers openly say you cannot do this, it is difficult. At times, they would say not you may be someone can manage; thus, negativity contribute to under achievement by students. Students underachieve despite having a healthy self-concept if their parents have a high opinion of them but do not value the school or have a negative attitude towards school activities. “Locus control” was perceived by Rotter as a motivational factor, and is a relevance to understanding the behaviour of the underachiever, (Buttler-Por, 1987:20).

We talk of the internal locus of control when learners believe that what happens to them is the result of their own behaviour and is under their control. While the external locus of control, on the other hand, is seen to be operative when learners attribute all that happens to them to chance, bad luck and other factors that they are unable to control. This is a common characteristic of many underachievers. While the desire to achieve success is present in every student, in some learners have a possibility of failure is perceived as so great a threat, that they are prevented from attempting to cope with learning experiences even though these are within their cognitive ability. The inability to reconcile conflicting desires and fears usually lead to underachievement and say how does the philosophy of learning to learn through competences-based teaching of field work in Geography be effectively realized?

**Theme: Methods of teaching informed by idealism and realism**

**Idealist lecturer** is active in students learning. The idealist lecturer does not come to class and ask students to open text books and turn to page so and so to read. The idealist lecturer is not going to ask students to take notes from the board. The idealist lecturer is going to make students do things, as a result they become active learners. Through probing, and questioning, students are encouraged to discuss, analyze, synthesize and apply what they learnt into the real-world situation. Through active learning, learners would develop field sketching skills, observe for a purpose and record environmental parameters accurately.

Through a dialectic approach by initiating guided conversations in class, getting the views of learners, thus, evaluating if they understood the concepts for the day and making sure they got it before the lecturer moves on. Lecturing method when properly used particularly when imbedded in a dialectic approach can yield good outcomes. The approach encourages students to work in groups at times individually on research projects. In real-life situations are
strongly connected to socialization in the process of learning and that is more important than individualization.

In realism, the methods of instruction include lecture, the Socratic method of teaching which involves the asking of questions that can be by the lecturer or students. Such questions are not answered by the lecturer but rather tactfully throws them back to the learners to ponder. This allows learners to critically think and come up with answers.

Inductive and scientific reasoning. Inductive draws from experience the learners and lecturer bring to class and deductive (scientific reasoning) as a way of ensuring mastery of skills. The blending of the two would lead to impact teaching of geography skills.

Competency-based assessments as a way of ensuring students learnt what they are being taught. Such lecturers believe in giving quizzes, exercises as a follow-up to class activities. For the realist lecturers, this is the way to measure educational attainment which can inform possible changes as need arises. There is emphasize on critical reasoning aided by observation and experimenting. Stressing precision and accuracy in measuring distance between two pints on a topography map and in writing. The realist teacher provides for those experiences for learners to be involved in class activities. Precision and accuracy can be useful in the world of work. The demand for accuracy and precision, enables the students to look back at their work to realize what the real-world need

Theme: Need for dialogue

It was found that knowledge transformation and skills was not enough, students need to be engaged we need to engage students. Deep transformed life long process of reflection, critical thinking and problem solving and applying their learning across disciplined and connect what happens in the classroom and what happens outside classroom. It was found that engaging students in the process of learning and in the process of collaborating. The other respondent pointed that teachers may be afraid that when engaging students, the class may lose control. That is a positive response if the activities are not well planned.

Discussion

It is important for teachers to be inspired by the different philosophies of education in their teaching. Methods of instruction that inspire students such as research based techniques of teaching, dialogue and positive relationship between the teacher and the learner go a long way in improving the way learning impact on their day to day activities. Other techniques that can be used are centered on making choices.
It was suggested that the model that can be used involves 5Cs:

<table>
<thead>
<tr>
<th>Choice</th>
<th>Description</th>
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<tbody>
<tr>
<td>Choice</td>
<td><em>We are wired for free will.</em> Human beings are social animals as such democratic processes open the making of choices.</td>
</tr>
<tr>
<td>Collaboration</td>
<td><em>We are wired to be social creativeness.</em> In a social setting, there is interaction and collaboration and in the process, that enables learning new ways of doing things. Bringing collaboration into the classroom is the greatest way of learning with impact.</td>
</tr>
<tr>
<td>Communication</td>
<td><em>We are wired to be social creative.</em> The tool that enables sharing if ideas (idealism) and reality (realism). These philosophies are essential when teaching and communication takes the center stage.</td>
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<tr>
<td>Critical thinking</td>
<td><em>Problem solving-this cultivate and inculcates the lifelong skills</em></td>
</tr>
<tr>
<td>Creative</td>
<td><em>An unequally human pleasure</em></td>
</tr>
</tbody>
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The Five Cs are supposed to characterize what happens in a classroom and is depicted on the diagram below which show collaboration, communication, critical thinking, creativity as well as in making choices by ancient hunters.

The scenario of stone age hunters

Hunting such a big animal called for creativity skills, critical thinking, collaboration and communication. This can be applied in our classroom when learners are engaged in learning activities. And the result is achievement through sharing ideas and techniques.

A classroom based on five Cs requires a shift illustrated below:

Teacher centered approach
Learner centered approach

The model opens opportunities not nearly teach, couch, mentor, to nature and inspire learners enables them to apply what they have learnt in their near future. If such a model is adopted in our classrooms, we would see more meaningful learning of geography concepts taking place in and outside classrooms.

Summary, Recommendations and Conclusion

As a lecturer, the use of the three (3) philosophies in class activities would be most interesting because students would develop creativity which is translated into reality. More with time, if this is the way, we use to teach a concept, is it still relevant to continue doing that. Does our old way of doing things still valid, because the universe is dynamic and is always evolving? Things change, and change is a result of experience as the cohort of students change. Therefore, curriculum should also change and even the methods of teaching change too in response to emerging issues in education and societal changes. Idealism, reality and pragmatism if used properly enables the teacher to involve the five receptor senses, to hear the student voices and have learning activities loaded with learner involvement activities. This would enable the learners to learn by doing and demonstrate what they are capable of.

The understanding Philosophy of education in teacher preparation is important as the different philosophies transforms the way teaching is done in our classrooms. The different philosophies underpin and inform the different strategies and methods of teaching we put in place. The crafting of curriculum is also influenced by the understanding of philosophy. Outcomes-based strategies are also a philosophical paradigm shift that is so powerful in liberating learning as evidenced by democratic principles. Above all the emphasis on acquisition of knowledge, skills and competencies are fundamental for the world of work because the corporate world is interested in geography graduate who is well informed in the three faculties. The use of the philosophies as well as the outcomes-based approach values the involvement of all stakeholders in developing a curriculum as well as in teaching so that the product is an individual with skills, knowledge and competencies endorsed by the world of work.

Teachers of Geography and Environmental science should use the three philosophies and others in their teaching. The class activities would be most interactive with the physical world, collaborative among the students as well as the lectures and above all use of outcome based teaching and assessment would enable learners to acquire geographic knowledge, skills and competencies most valuable for today, tomorrow and future considering that the world is evolving and ever changing. Such skills embrace the dynamic nature of the existence of mankind. “Our conclusion is that, for those wishing to improve attainment outcomes in the short term, an emphasis on developing reasoning is promising, especially for the poorest students, but perhaps not the most effective way forward,” (Gorard, Siddiqui and See, 2017:1). Outcomes-based education of geography can be informed by philosophies such as pragmatism, realism and idealism.
Acknowledgement

I acknowledge the free will of Geography students and lectures from various institutions of higher learning who willingly took part in this study by contribution their views, observations and perceptions on the teaching and learning of geography. Their contribution enlightened on their understanding and the value of different philosophies of education in the teaching of Geography today and tomorrow. It is also hoped that the paper will be of value of teachers in different subjects as the philosophy of realism, pragmatism as well as idealism are not subject bound as they should be applied across the teaching of various subjects in the education arena.

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