The Role of GSP in Developing Critical Thinking Skills in Students in Nigerian Universities

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Abstract – The ability to objectively analyse and assess issues in order to form a judgement is indeed one of the goals of education anywhere in the world. Unfortunately, the results from different aptitude tests from employers in Nigeria show that Nigerian university leavers lack the capacity to deal with the nuances of a dynamic world. This study examines how GSP – Communication in English in particular – can be used to inculcate critical thinking skills into students in tertiary institutions in Nigeria. It also explores the various aspects of critical thinking skills, especially, as they relate to the undergraduate in Nigeria. The recommendations from the paper are valuable to academics in Nigeria who wish to develop and/or improve the critical thinking capacity of their students.

Keywords: critical thinking, GSP, university leavers, education, problem solving

1. INTRODUCTION

Every lesson is unique. The content(s) of the lesson, the time of delivery, the composition of the audience (the learners), the physical environment for the lesson, and even the person(s) delivering the lesson are among the few factors that contribute to the uniqueness of any lesson. The General Studies Program (GSP) is not an exception. However, there is something unique about every lecture or class: the ability to influence the thinking/behaviour of the learner (the receiver). Producing learners that are critical and analytical is the sole goal of every modern educational enterprise. The big question then is how many analytical and critical learners have Nigerian higher institutions been able to produce with the current teacher-centred method of teaching in practice in many (if not all) of them? In a good number of these institutions, GSP lessons are handled with levity, from both the instructors and students. The teachers do not prepare themselves for what is to be delivered before coming to the class, and so are the learners not prepared for learning in a typical GSP class. To both, GSP is just an academic toga to be worn and discarded and forgotten at the appropriate time.

Research has shown that every course/subject is capable of instilling critical thinking into learners depending on the expressed objectives and the approach or pedagogical dimension taken by the teacher (see Cottrell, 2005; Willingham, 2007; Moon, 2008; Learning Development, Plymouth University, 2010). Therefore, every aspect of GSP can be handled to inculcate critical thinking into students. There are two broad benefits of this: 1) students may no longer see GSP courses as academic fillers, and 2) GSP courses will contribute in honing the thinking ability of learners. What is presented below is Covenant University's experience in Communication in English and Study Skills I and II. In Covenant University, Communication in English (which is an aspect of GSP) is taught with the aim of stimulating and harnessing learners' interests towards the contents of Communication in English and making them become critical and analytical in their thinking. This will enable them evaluate

skillfully and be in control of the decisions they make within and outside school. Therefore, the objectives of this paper are to a) review definition of critical thinking by researchers b) explore the history and objective of GSP in Nigeria, and c) presents ways to use Communication in English to inculcate critical thinking.

2. HISTORY OF GSP COURSES IN NIGERIAN UNIVERSITIES

According to Nweke and Nwoye (2016, p.1), ''education is the act of methodical development or training of the mind, capabilities or character by means of instruction or study.'' Formal education can be traced back to the impact of European Missionaries around 1842; when education was subsumed under evangelical outreaches by white missionaries. This resulted in the establishment of early mission schools by the Methodist Church of Scotland, the Church Missionary Society (CMS) and the Roman Catholic Church. It is the efforts of these missionaries that cumulated into the establishment of higher education in Nigeria.

A general consensus among scholars holds that higher education, in its broadest definition, refers to post-secondary education where a degree, diploma, or certificate is awarded at the end of study (Amadi, Adeyemi, Ogundiran & Awe, N.D). The proceedings of the meeting of Experts at the second African Union (AU) meeting stipulates that higher education includes all post- secondary education, including universities, polytechnics and technical colleges, teachers training institutions, institute for medical training and agriculture and allied fields, distance education centres, and research centres and institutes, with the vision of broadening to include other forms of post-secondary education (NPE, 2004). The National Policy on Education also sees higher education as the education given after secondary education in universities, colleges of education, polytechnics, monotechnics, including those institutions offering corresponding course (NPE, 2004). From all the foregoing views on what higher education is, it can be deduced that higher education covers every formal schooling done after secondary school.

Thus, the category of students that qualify to be admitted into higher or tertiary institutions are those who have been sifted and judged to have attained a considerable level of mental maturity, haven passed certain entry examination requirements. Majority of students in this category are usually from 18 years and above, and are required to spend between four to eight years in the institution.

Every nation places so much hope on graduates of higher institutions because it is expected that while in training, they must have acquired and been equipped mentally, emotionally, and socially with all the skills they need to contribute immensely to the socio-economic development of the nation. In other words, the social and economic progress of a nation depends largely on the application of the knowledge gained by students in higher institutions. Therefore, the evolution of manpower and transmission of knowledge and skill that propel a nation to socio-economic progression and sustainability rests on the oars of higher institutions.

However, for the above implication to be actualised, a graduate of any higher institution must be one who has been educated all-round, and is versatile in all fields of human endeavour. It is for this reason that the National University Commission (NUC), through the approval of a minimal standard for academic activities launched the General Studies Programme (GSP) in the University Curricula. According to Nweke and Nwoye (2016), this

was done in order to satisfy the longings for students in Nigerian Universities to be well grounded and, perhaps well rounded as well, in interdisciplinary studies so as to compare conveniently with their peers in universities in other parts of the world. In addition, GSP was introduced in order to provide students with the all-round skill needed to contribute effectively in the society. Added to these aims, different universities in Nigeria have their individual objective(s) for GSP. For instance, the University of Ibadan aims to open students up to a course of liberal education by which they can grow and broaden the knowledge of their social, cultural and natural environment (Amadi, et al). For the University of Ilorin, the objectives of the programme are: a). to better the language and communication skills of all students and to assist them build enough fitness in the use of English as an instrument for their now and would be occupation. b). to aid students to grow and develop the knowledge of their social, cultural and physical milieu which automatically will equip them to operate actively in their society. c). to socialize the Nigerian students to cultivate acceptable behaviours, attitudes, patriotism, nationalism and value the status of the constitution as well as create the awareness in students about the roles and obligations of Government at all levels

With the inclusion of GSP to the programmes offered by students in the university, it is believed that graduates would leave the university, better equipped to contribute in their societies. However, it must also be that subjects in the GSP programme must enable students to acquire the skills necessary to achieve its goals. One of such skills is critical thinking, the ability to independently make decisive judgement on any issue.

3. OBJECTIVES OF GSP COURSES IN NIGERIA

General Studies Programs (GSP) are very common in Nigerian Universities. They were established with the aim of getting students acquainted with general knowledge of subjects outside their field of study and area of specialization that are considered essential to the total education of the student. The Nigerian University Commission (NUC) termed it General Studies Program (GSP), and was made compulsory for all university students in Nigeria. Some of the courses in GSP include: Use of English I; Use of English II; Use of Library Studies, Natural Science I; African Humanities; Philosophy and Logic; Social Science I; Social Science II; Nigerian Peoples and Cultures; Peace and Conflict Studies, Introduction to Entrepreneurship I; and Introduction to Entrepreneurship II. These courses are systematically spread across the different levels of study in university education. However, certain categories of students are not required to take some of the GSP courses that are closely linked to their field of study because it is expected that such areas would be fully covered in the student's department. For instance, science students are not expected to take Natural Science, while social science students are not expected to take Social Science I and II.

In the study, the objectives of GSP are examined under two broad categories, as general objectives and as specific objectives. The general objectives pertain to the broad reasons for which GSP was established; while the specific objectives are the aims for which each course was included in the program.

3.1. General Objectives

The GSP program was established with the following aims and objectives:

i. to inculcate general knowledge of subjects out the students' field of study in the student in order to enable their versatility in all fields even if it at the introductory level;

ii. to provide a platform for inter-disciplinary interaction among students and lecturers in the university;

iii. to create a general awareness of what fellow students in other fields in the university study so as to help them appreciate their individual uniqueness.

Particularly, the General Studies Programme aims at helping students build necessary and enough competence in the use of English language as an instrument for their studies and effective way of communication in society and in their would be employment/enterprise. Equally, it will empower them to gather a body of situational relevant awareness beyond their individual areas of specialization for a better and successful living.

3.2. Specific Objectives

The specific objectives take cognisance of the goals each course is set to achieve. This will be looked at under each GSP course as follows:

i. Communication Skills in English I

The course is set to teach students the basic skills that they need to have to be able to communicate effectively in English language. Rudimentary skills in communication such as reading, listening, learning, note-taking and so on are learnt.

ii. Use of English II

This is a follow up on Communication Skills in English I, which is also known in some universities as Use of English I. it is set to teach functional skills in English language such as letter writing, phonetics and proper articulation of sounds and intonation of English. Unlike Use of English I which focuses on communication and basic skills, Use of English II teaches more practical skill applications in using the language.

iii. Use of Library Studies

The course teaches students how to use the library, from searching for books on the shelves, using catalogues, using library books and reference materials, referencing consulted materials during research, sections of the library, types of libraries to the general purpose of the library.

iv. Natural Science

This course is for students that are outside the Sciences and Engineering Faculties. It is for those in Arts, Humanities and Social Sciences. It is to acquaint students with the rudiments of basic and integrated science that they should know. It exposes them to the basics of elementary Physics, Chemistry and Biology.

v. African Humanities, Philosophy and Logic

This course is taken at the second year in the university. It exposes students to African humanities and philosophy as well as the fundamentals of Philosophy and

Logic. This is a key GSP course as it helps students to think philosophically and analyse situations logically and critically, helping them to identify fallacious statements and ideas. It is also a major course in national development because it exposes students to African humanities and the importance of preserving the African and Nigerian cultures.

vi. Introduction to Social Sciences

The course is for non-social science students in the university, included in order to teach students more about what their social science counterparts are doing in the university. Students learn the rudiments of Economics, Geography, Philosophy, Psychology, Religion, Mass Communication, Public Administration, Political Science, etc. Issues on Gender discrimination and Feminism are also discussed in this course.

vii. History of Nigerian Peoples and Cultures

As the name implies, this course teaches students about Nigerian history, peoples and cultures. It exposes the students to the fights and struggles of past National heroes.

viii.   Peace and Conflict Studies

It exposes students to the nature of peace and conflict at individual, group and community, national and international or global levels.

ix. Introduction to Entrepreneurship

The course introduces the concept of entrepreneurship at various forms, teaching how to generate a business idea, evaluate it and turn it into a viable opportunity. It also introduces students to problem solving skills and how to turn societal challenges to money-making ventures.

x. Business Plan and Management

This is a continuation of Introduction to Entrepreneurship. It is also called Introduction to Entrepreneurship II in some universities, and it teaches students how to write a business plan and proposal as well as the major fundamentals in starting and running a business successfully.

4. GENERATING CRITICAL THINKING VIA GSP

The Partnership for 21st Century Skills has identified critical thinking as one of several learning and innovation skills necessary to prepare students for post-secondary education and the workforce. In addition, the newly created Common Core State Standards reflect critical thinking as a cross-disciplinary skill vital for college and employment (Lai, 2011).

The philosophical approach to critical thinking which focuses on the hypothetical critical thinker defines critical thinking as thinking of a particular quality – essentially good thinking that meets specified criteria or standards of adequacy and accuracy (Bailin, 2002). Other definitions of the subject within this school of thought follows as: "the propensity and skill to engage in an activity with reflective skepticism" (McPeck, 1981, p. 8); "reflective and reasonable thinking that is focused on deciding what to believe or do" (Ennis, 1985, p. 45); "skilful, responsible thinking that facilitates good judgment because it 1) relies upon criteria,

2) is self-correcting, and 3) is sensitive to context" (Lipman, 1988, p. 39); "purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based" (Facione, 1990, p. 3); "disciplined, self-directed thinking that exemplifies the perfections of thinking appropriate to a particular mode or domain of thought" (Paul, 1992, p. 9); thinking that is goal-directed and purposive, "thinking aimed at forming a judgment," where the thinking itself meets standards of adequacy and accuracy (Bailin et al., 1999, p. 287); and "judging in a reflective way what to do or what to believe" (Facione, 2000, p. 61).

Although some stakeholders are of the opinion that critical thinking should be taught separately as a course in the nation's higher institutions, lesson presentations in other subjects should be designed to enable students engage in proper cognitive analysis, conceptual inquiry and logical thinking. All these are geared towards description, analysis, synthesis and appraisal/evaluation of concepts and/or principles.

In their study, Tamim and Zhang (2008) discovered four approaches to developing critical thinking in higher institutions in Canada. These are: general approach, infusion approach, immersion approach and mixed approach. However, the study did not specify particular classroom activities that will enhance critical thinking. The practicality of these skills is what the current study is set to foreground. Lessons should be designed to develop students' values rather than facts and concepts.

Communication in English is a university-wide course in Covenant University. The topics are shared among teachers. So, a teacher may teach in the programme once or twice in a semester. Consequently, this makes it easy for the teacher to prepare for the course/topic very well, hence the course is used to experiment teaching of critical thinking.

1: Identify a topic/argument/concept/idea

Teacher helps learners identify the argument. Understanding the argument/concept is essential to critical thinking. Before learners are expected to be critical and analytical in their thinking, they must acquire the necessary domain-specific knowledge of the idea/concept. This is perhaps the domain of the teacher in stimulating critical thinking. Sound thinking is dependent upon sound argument, and this, in turn, depends on sound understanding of the concepts. Learners may not be able to evaluate, appraise, probe, investigate, dissect, account for, or explore any concept or argument they do not understand. Argument(s) can be made known through summaries, explanations and introduction that teachers provide. Learners (even experts) will lack focus or be reluctant to critique when they encounter unfamiliar argument(s).
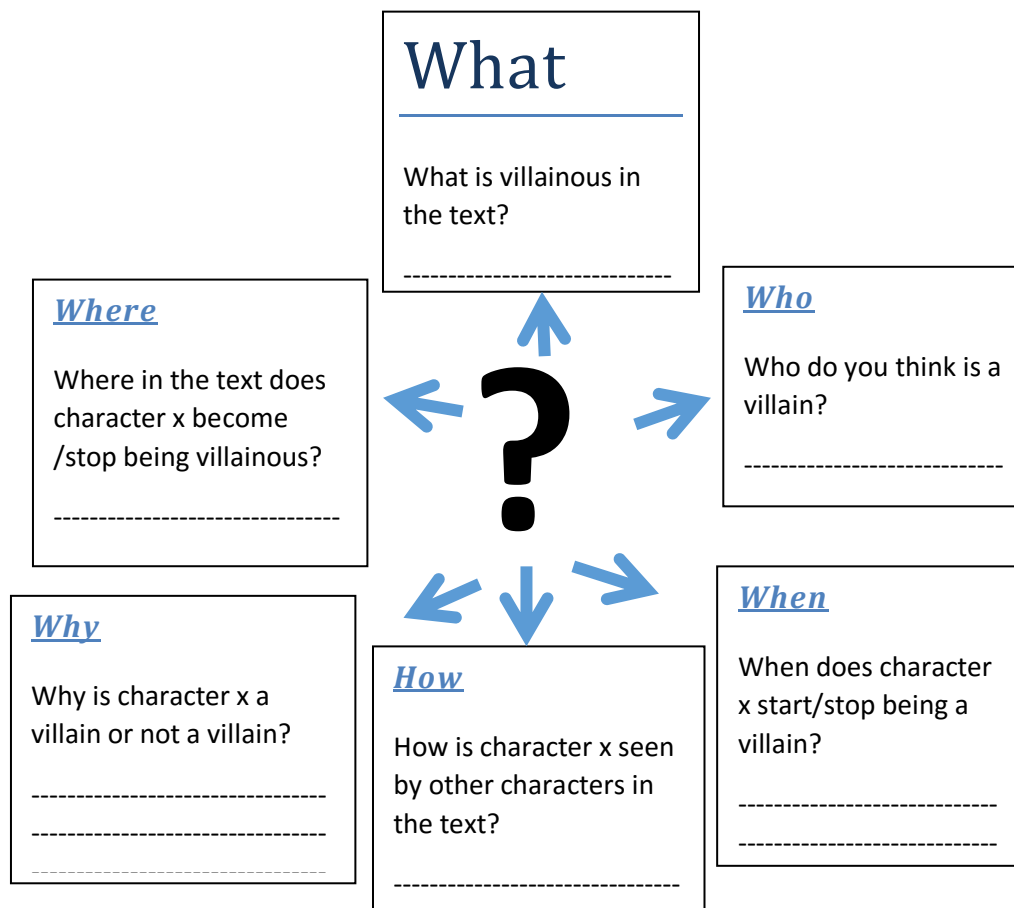
In addition to the above ways of making an argument known to learners, an instructor may decide to exercise many other discretionary approaches, among which includes making new topics available to learners before meeting in the next class. The essence of releasing the topic/concept to students beforehand is to enable them make independent research around the topic/concept before coming to class. This will help them build their background experience/knowledge of the concept/topic being discussed, and, thus, hone their analytical reasoning.

2: Building a descriptive background of topic/concept/idea

After introducing the topic, the next stage should be to help learners build a descriptive background of the topic/concept/idea. This is usually done by directing learners to answer

questions that have to do with ***what***, ***when***, ***where*** and ***who***. These questions set the tone to familiarise learners with the concept/idea being taught. They (the questions) help to introduce the topic and create the needed descriptive background knowledge required for effective cognitive processing of the issue at hand. Similarly, the ***how-*** and ***why***-questions are also employed to migrate learners' descriptive thinking process to analytical and evaluative thinking.

In order to make the questions interesting and thought-provoking, they can be couched in a concept map as in Figure 1 below. The presence of the concept map in the lesson will attract and sustain learners' interest on the one hand, and tease their mental capacity to lure them into answering the questions on the other hand. As a guide, the questions must be simple enough to cultivate their interest and hard enough to get them thinking. Therefore, the questions must not have foreordained solutions. It is important to note that the objective(s) of the lesson, the composition of the class, and the topic significantly determine the nature of the questions asked. If the instructor decides to employ a concept map, provision should be made in the map (in the form of boxes) in which the students answer the questions (example is provided in Figure 1; the questions are quintessential of the authors' experience in the literature component of Communication in English in Covenant University, Ota).

What

What is villainous in the text?

Where

Where in the text does character x become /stop being villainous?

Who

Who do you think is a villain?

Why

Why is character x a villain or not a villain?

How

How is character x seen by other characters in the text?

When

When does character x start/stop being a villain?

Figure 1: **The Big Question Map (Adapted from: Uba, Oteiku & Eniayekan, 2016, p.115)**

In addition to *wh*-questions, instructors should establish question bank. Unlike the *wh*-questions that are usually triggered by the teacher/instructor, questions in a question bank are contributed by the learners, and are applied to arguments, theories, concepts, and ideas in the

course of the lesson. This can be done through discussions in the general class or group sessions. These questions can be directed to both the teacher and the learners. These will encourage them to explore and sustain their view of the *new* aspects of any argument/concept, rather than accepting them as *given*. What this means is that during the questioning session (i.e. the question bank), learners ask questions that will introduce or reveal to them another dimension of the concept being discussed in class. Therefore, the instructor should guide them so as not to repeat the *wh*-questions already treated or being discussed. However, where a *wh*-question is repeated, it should be done to provide further elucidation.

3: Launch the critical questions

The *what if* and *so-what* questions are to engage learners into expressing, discussing and taking more specific actions and justifying their opinions. This set of questions is the more advanced form of the *wh*-question format. The *what if* question, for instance, normally seeks to address **what will result/happen if…** or **what does it matter if…**; this question enables learners to consider the implications of a particular action, even when such result or insinuation is not overtly mentioned or discussed during the lesson. Again, it is capable of launching students into a more evaluative point in their thinking, thereby making them predictive and forecasting.

On the other hand, *so what* questions really set the pace for evaluation by making learners contemplate about meaning or significance (or even value) of an argument/concept/idea. It is vital that instructors do not construct the *so what* question to express disregard or contempt. There are many ways to phrase the so what question: 1) How does this enhance/enrich students' understanding? 2) What are the consequences/effects/implications of this claim, or 3) What is important/significant about the assertion/statement/claim?

Both questions help students identify and discuss implication(s), differentiate factors in any given situation, and form and justify their own opinion(s). In other words, they open up students' mental horizon for specific actions geared towards problem-solving.

These kinds of questions are essential in teaching critical thinking since they involve a tenacious effort to examine or deliberate on belief(s), values or any form of knowledge in the light of the evidence that support it. To successfully inculcate critical thinking skill, learners must go beyond memorisation of what is being taught to them in classrooms. This is where the *what if* and *so what* questions triangulate in critical and analytical thinking.

No doubt, constructing what if and so what questions can be challenging, here are examples of such question from formal and informal letter writing lesson:

i. What will happen if a manager decides to write a personal letter on the company's letter head?

ii. What is the significance of knowing the differences between informal letter and formal letter to human being?

4: Do not assume your students are helpless

Rather, see them as entities capable of doing things themselves. In other words, do not be in a rush to assist them. This is not to subliminally suggest that learning should be made difficult. However, for a successful critical thinking skill to take place in learners, student-centred pedagogical orientation must be emphasised, rather than the usual commit-to-

memory-based approaches. In communication-in-English class, for example, instructors throw back questions to students. This does not mean that teachers should not answer students' questions. Most questions students ask are often questions of which answers they can easily supply. In communication-in-English, instructors quickly determine questions students can answer, rephrase them and put them back to them to attempt. Instructors do not rush to answer students' questions; doing so will make them lazy and non-critical in their reasoning. One advantage of allowing learners solve their problems by themselves is that their self-esteem is enhanced; in turn, this influences their ability to reason independently. If teachers must produce learners who are capable of evaluating and solving problems independently, they should be taught how to make independent decisions; hence, teachers should not assume they are helpless.

5: Engage students in mind mapping

Another interesting strategy for inculcating critical thinking skill is through constructive brainstorming or mind mapping. Teachers should always bear in mind that classroom presentations or activities should be such that discourage students from recalling or restating what has been taught to them in class (i.e. rote learning). One of the ways to avoid this is to engage students in innovative thinking prior to teaching. As simple as this sounds, it may be exigent in a classroom of young people if not properly planned.

A teacher can begin by giving students a task to ruminate about. The task should be directly or indirectly related to the topic at hand. For example, if the previous class treated *types of sentence by function* and the present topic *is types of sentence by structure*, learners may be asked thus:

a. From what we did in the last lesson, what do you think we are about doing now?

Again, for a new topic such as formal and informal letters, a teacher may ask:

b. Tell me three features of an informal letter.

Asking them such question is not pushy or forceful on the part of the teacher, given that something related to the topic had been presented to learners in their lower/previous education levels. First, their response(s) will enable the teacher measure their background knowledge, and, second, learners will be prepared for self-learning right from the beginning of the class. There is the need to encourage a mind mapping ethos in a class to harness the attention of learners and set them in motion for analytical and critical responses in the course of teaching.

6: Diversify your teaching approach

Perhaps, this is the most important of all the strategies. The 21st century is not the era when teachers will arm themselves with an approach and pass knowledge to learners based on the dictates of the approach. Studies show that eclecticism is the best strategy to handle the teaching of critical thinking (see Sunday, 2012; Thomas and Nelson, 2010; Abrami, Bernard, Borokhovski, Wade, Surkes, Tamin & Zhang, 2008). Topics differ in contents and objectives, classroom composition is usually dynamic, and the time of lecture delivery varies significantly; teachers should, therefore, equip themselves with many strategies and be ready to switch from one approach to another.

The authors' experience shows that students become interested and focused when they are asked to compare and/or contrast arguments or categorise ideas or establish associations and/or relations among concepts. It is also observed that they become more innovative when

they are engaged in group activities. It is vital to note here that authors' experience reveals that students contribute more to group activities when they feel they are in the right group. Therefore, grouping should be systematically handled. Research indicates that learners' meta-cognition is enhanced through the use of concept maps. These comprise graphics in the form of charts, pictures, diagrams, symbols, computer illustrations and images etc. used to clarify ideas/concepts/arguments (Alshatti, 2012; Sam & Rajam, 2013; Uba, Oteiku & Abiodun-Eniayekan, 2016). A good example of concept map is the Big Question Map in Figure 1 above.

There are many ways of designing and constructing concept maps to capture the attention of students and at the same time engage their meta-cognitive ability for constructive higher-order thinking. Some of them are:

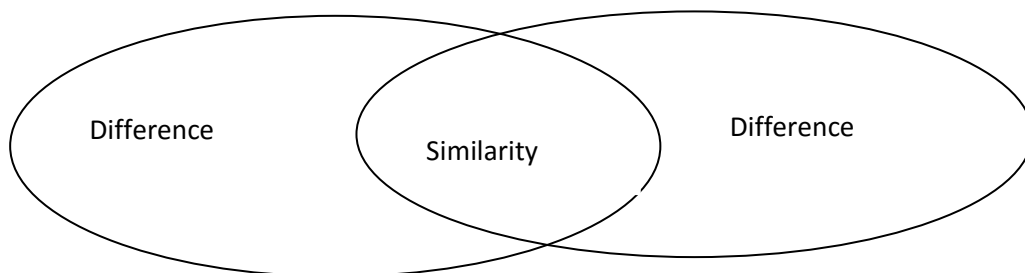a. The Venn diagram: used to show relationship between two or more concepts/ideas.

Fig. 2 Venn diagram

Students can be asked to fill in the differences or similarity slot under the guidance of the teacher.

b. Discussion map: used to control discussion in classrooms. It can be used at the beginning, in the middle or at the end of the lesson. Figure 3 below is a typical discussion map.
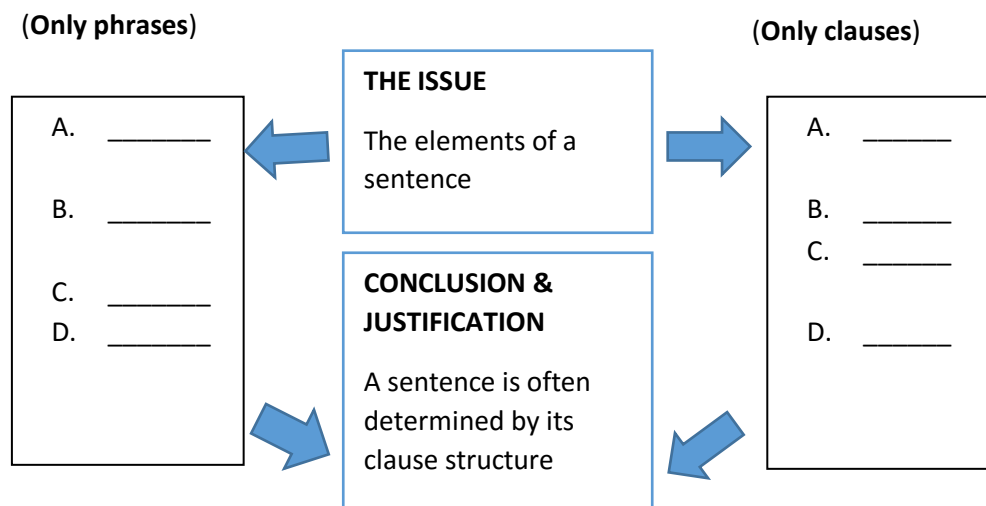

Figure 3: A Discussion Map (Slightly adapted from Uba, *et al.,* 2016)

These are just examples, instructors should construct their own concept maps based on the contents, objective, and composition of the class they are handling.

5. CONCLUSION AND RECOMMENDATIONS

A crucial skill every learner in the tertiary institution needs to succeed in life is the ability to think critically. It is, therefore, the responsibility of teachers to arm their learners with this all-important life-wide skill. Although research indicates that 'people begin developing critical thinking competencies at a very young age' (Lai, 2011, p.1), all learners (including those in tertiary institutions) can be taught to think critically. Whether we see critical thinking as analysing claims or evidence (Halpen, 1998; Paul, 1992), making inferences involving deductive/inductive reasoning (Paul, 1992; Willingham, 2007), the ability to evaluate (Case, 2005), or the aptitude and skill to solve problems and make thoughtful decisions (Ennis, 1985; Willingham, 2007), it is a skill that can be taught and learned. It is expected of teachers to 'employ classroom strategies that produce active rather than passive learners, given the demands of the global economy, which apparently needs active, creative, and critical workers who are life-long and life-wide learners' (Mason, 2008, p.5).

To this end, it is recommended that:
   a. Strategies that enhance critical thinking should be introduced while teaching any GSP course;
   b. Instructors should vary their strategies according to the contents and objectives when teaching GSP;
   c. Concept maps should be explored and incorporated in the teaching of GSP. This will introduce novelty in the classroom, consequent upon which learners' attention will be captured and their interests harnessed for higher-order thinking.

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