CONCEPT-MAPPING: A PRAGMATIC APPROACH TO TEACHING OF SOCIAL STUDIES FOR CITIZENSHIP EDUCATION IN NIGERIA

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Abstract

Science technology has brought to education many valuable new instruments of learning and teaching of which considerable emphasis is being placed on the importance of the visual approach to teaching. This development has made teachers all over the world to integrate the use of Information and Communication Technology and Concept mapping instructional strategies in an effort to aid and effect studentcentred learning. Several research in education show the efficacy of these new teaching strategies. This paper is an opinion as a contribution towards innovative teaching techniques in Social Studies for Citizenship Education. This paper is devoted to concept-mapping as strategy for effective teaching and learning in Social Studies for Citizenship education. This was done by clarifying the concept of Social Studies, Citizenship Education, Concept mapping, importance of concept mapping, steps in using Concept Mapping in the Social Studies classroom and practical examples of concept maps derived from the Citizenship Education topics domiciled in Social Studies. After a critical review of empirical evidences among scholars it was concluded that, in professional education this method should be used in the subject fields which are either directly connected to natural or exact sciences or the social sciences-Social Studies inclusive. It was also recommended among others that Concept mapping should be adopted with other practical teaching methods in Social Studies in order to achieve the objective of Citizenship Education domiciled in Social Studies.

Keywords: Concept-Mapping, Pragmatic approach, teaching, Social Studies, Citizenship

Introduction

Every society uses education as a relevant instrument for effecting desirable social, economic, political as well as technological changes for societal development. In a bid to achieve the desired changes some subject curricula were infused into the educational system to be taught to learners, Social Studies inclusive which forms the crux of this discussion. The inclusion of Social Studies into the Nigerian school curriculum was part of the general culture and values response to the problem of neglect of social culture and values (Mezieobi, 2013). In similar submission, Okam (2010) and Azikiwe (2012) asserts that, the importance of Social Studies as a subject area has the potentials for inculcating the right attitude and values to study of man and deal with all aspects of man's life in the totality of the environment. This statement means that, the development associated with the National Policy on Education for giving Social Studies a pride of place is the right step in the right direction with citizenship as the backbone of the subject.

A major functionality principle embedded in Social Studies which is expected to influence greatly classroom pedagogy in the subject is based on the perception that this subject area represents an interdisciplinary approach to the study of human beings in groups of interrelationship within both their social and physical environments. This functionality principle emphasizes and

underscores the vital role of Social Studies as an instrument for preparing and mobilizing young learners in school for the purpose of enabling them to cultivate an awareness and understanding that would transform them into citizens with skills, competences, moral values and reasoned judgments to effectively live, interact and interrelate and contribute positively to economic, social, political and cultural development of their societies (Okam 2011).

Citizenship involves people acting together to address issues of common concern to maintain our democratic culture and to improve society. To achieve this goal, Citizenship education teaches knowledge, understanding about politics, the law and the economy and skills to participate effectively and responsibly in public and democratic life. In order to secure the future of a society, citizens must train younger generations in civic engagement and participation. This implies that Citizenship education is that education which provides the background knowledge necessary to create an ongoing stream of new citizens participating and engaging with the creation of a civilized society. Citizenship Education helps students explore questions about democracy, justice, inequality, how we are governed and organised; learn to work together to create solutions that try to address challenges facing neighbourhoods and wider communities and develop political literacy to make a positive contribution to society as informed and responsible citizens.

Considering the importance of Citizenship education within the framework of Social Studies, there is need for innovative teaching approach in order to properly inculcate the content in the learners. Science technology has brought to education many valuable new instruments of learning and teaching of which considerable emphasis is being placed on the importance of the visual approach to teaching. All around the world teachers are becoming more aware of new teaching strategies and tools that can be used in the classroom with initiatives in teaching-learning that integrates the inquiry based learning with Information Communication Technology, Audiovisual interactivity packages, Visual models, and Concept mapping instructional strategies in an effort to aid and effect

student-centred learning. Several research in education show the efficacy of these new teaching strategies (Ariya, 2020). This is paper therefore is devoted to concept-mapping as a new approach for effective teaching and learning in Social Studies for Citizenship Education with the aim of creating awareness to practicing teachers and teachers in training on the new and effective method.

Conceptual Clarifications

Social Studies is also seen as an anthropological study of man because it is an ecological, ethnological, economical, and ethical as well as aesthetic study of man in all ramification to ensure the development of cherishable ethics, values, and attitudes that the society appreciate in man and build in him the capacity to function and contribute positively to self, society and national growth as well as development at any point in time. Social Studies as an integrated field is said to be holistic in nature and dynamic, this suggest that Social Studies encourage the inculcation of smattery knowledge as opposed to the compartmentalized conventional system of knowledge associated to social sciences and humanities and that is the distinct feature of Social Studies from social sciences and humanities. However Social Studies cannot be dissociated from the social science as social sciences serves as a pertinent source for the Social Studies curriculum and cannot be taken for granted. Basically-Social Studies makes it as an obligation to bring all the primary components of all other social science subjects needed for day to day survival of man under an umbrella so as to make for easy knowledge of the environment and easy integration of human into their society.

The Social Studies curriculum as applied in Nigeria is multi disciplinary in nature and aimed at training good citizens in learning domains such as individual and community, power, administration and community directly include citizenship concepts and abilities (Yuceer & Keskin, 2012). This statement justifies why citizenship education should remain as the major part of Social Studies in our schools curriculum. From the foregoing one can conclude that Social Studies is an integrated and multi disciplinary course of study aimed at educating the

youths on Man in his total environment in order to equip them with Values, attitudes, skills and knowledge (VASK) for effective Citizenship using the process of inquiry.

Citizenship education has been considered significant to have the young people gain many abilities and concepts especially like the social participation in the community they live in, knowing their rights and respecting others' rights and being active in political matters as citizens in the globalizing world. Therefore, social and civil competencies, which is one of the eight fundamental competencies of lifelong learning as determined by the Council and European Parliament in 2006, has come to the fore. Encouraging active citizenship has become one of the main goals of the Nigerian educational systems as emphasized in the National Policy on Education. Mokwuonye (2011) defined Citizenship Education as a conscious process of inculcating certain values, habits, skills and attitudes, which the society considers desirable and essential for its survival as a unit and for its development. Omere (2012) added that Citizenship Education entails any organized programme, formal or informal that can make the citizen to become more alive to their responsibilities and obligations to themselves, fellow human beings and the society at large.

In another contribution, Dave (2016) the aim of Citizenship Education is to develop young people into responsible citizens. This implies that Citizenship Education will develop in an individual positive attitudes, values and skills that will enable them to participate actively in society. Citizenship Education, which is the major focus of Social Studies, has been used extensively in Nigeria in shaping the hearts and minds of Nigeria towards value based orientation, reducing ethnocentrism and educating the people on what is required for a stable and enduring democracy. However it is important to note that the impact of Citizenship Education is yet to be felt in Nigeria as a lot needs to be done in that regards.

Metacognitive strategies, as explained by Novak (2005) are strategies that empower the learners to take charge of his/her learning in a highly meaningful fashion. Concept mapping as a metacognitive instructional strategy is based on Ausubel-Novak-Gowin theory of meaningful learning. It relates directly to such theoretical principles as prior knowledge, subsumption, progressive differentiation, cognitive bridging and integrative reconciliation. Concept mapping is based upon a major psychological theory in science education and is designed to help students learn how to learn science. Udeani and Okafor (2016) opined that Concept maps were developed in 1972 in the course of Novak's research program at Cornell where he sought to follow and understand changes in children's knowledge of science and social sciences.

Concept maps are graphical tools for organizing and representing knowledge, they include concepts usually enclosed in circles or boxes of some types, and relationships between concepts indicated by a connecting line linking two concepts. Words on the line, referred to as linking words or phrases and these specify the relationships between the two concepts. Novak and Canas (2006); defined a concept as a perceived regularity in events or objects, or record of events or objects designated by a label. Concept maps are represented in a hierarchical fashion with the most inclusive, most general concepts at the top of the map and the more specific, less general concepts arranged hierarchically in order. In another point of view Rao (2015), sees concept maps as diagrammatic representations which show meaningful relationships between concepts in the form of propositions which are linked together by words, circles, and cross-links. The teaching strategy presents concepts in a hierarchically organized manner. Some studies conducted by scholars like (Arokoyu & Obunwo, 2016; Ogbonna, 2017; Okafor, Abonyi & Ugama, 2018), have opined that concept mapping strategy is a viable educational tool which can help teachers become more effective, fosters curriculum development and promotes students' hands-on activity.

Although research support concept mapping as an effective method of acquiring meaningful learning, not enough steps have been taken to apply it to teaching/learning methods in classrooms. Concept maps serve to clarify links between old and new knowledge and force the learner to externalize those links. Johnson and Otis (2016) suggested that concept mapping should be treated as a very personal learning tool. According to Young (2018), one of the primary goals in the use of concept map is to promote meaningful learning. The principle of a concept map is that it provides a visual means of showing connections and relationships between hierarchies of ideas ranging from the very concrete to the abstract The body of literature supporting concept mapping as a teaching and learning strategy is enormous, although many of the studies focus on the use of concept mapping as a tool to investigate student understanding rather than evaluating its usefulness in facilitating student learning. Kinchin (2018), Kinchinand Hay (2019) discussed value of concept mapping in planning, teaching, revision and assessment, and the attitude of students and teachers towards its use. They described a qualitative approach to analyzing students' concept maps.

Michael (2018) suggested that a concept map taps into a substantially different dimension of learning than conventional classroom assessment techniques. This describes concept maps as an assessment tool to measure one aspect of achievement, the organization of propositional (declarative) knowledge in a domain. Concept maps (used for integrating new knowledge in to previous one) as valuable because they provide the opportunity for individuals to reveal their understanding of conceptual relationships and to adjust and readjust the map as understanding changes. In this direction Okunlola and Wahab (2011)concluded that concept mapping has proved to be a powerful tool in achieving the best out of a design team. From the foregoing one can opine that concept mapping has the potential of making learners to remember information longer and to be able to use it more effectively because the information will be moved into the long-term memory. Studies have shown that students taught by concept mapping strategies performed significantly higher than their counterparts taught by lecture.

Importance of using Concept-Mapping in Teaching Citizenship Content in Social Studies

The use of concept maps in instruction on a specific topic helps to make the instruction "conceptually transparent" to students. Many students have difficulty identifying the important concepts in a text, lecture or other forms of presentation. Part of the problem stems from a pattern of learning that simply requires memorization of information, and no evaluation of the information is required. Such students fail to construct a powerful concept and prepositional frameworks, teaching them to see learning as a blur or myriad facts, dates, names, equations or procedural rules to be memorized. For these students, the subject matter of most disciplines, and especially science, mathematics, and history is a cacophony of information to memorize, and they usually find this boring. Many feel they cannot master knowledge in the field. If concept maps are used in planning instruction and students are required to construct maps as they are learning. previously unsuccessful students can become successful in making sense out of science and any other discipline acquiring by a feeling of control over the subject matter

Other studies show that civic learning using participatory pedagogies like open classrooms, collaborative learning, role play, simulation and concept mapping have more impact on learners' citizenship literacy domiciled in Social Studies. This learning style aids critical citizenship through dialogue, exchange of views and expression to develop dispositions and skills which inspire active community participation. That is, it is vital to de-emphasized classroom teacher-based instructions and stress more learner-activity based instructions which induce critical thinking during classroom learning. Overall, this chapter views the need for eclectic pedagogical styles which entails combining teacher and learner-pedagogies during the classroom civic implementation as discussed here in. Birbili (2016) proposed that if concept maps are to fulfill their potential as a teaching tool, children's need and cognitive abilities need to be taken into consideration.

Concept maps were developed to enhance meaningful learning in science and social sciences. They serve to clarify links between old and new knowledge and force the learner to externalize those links. Concept maps are useful tools to help students learn about their knowledge structure and the process of knowledge construction (Meta knowledge). In this way, concept maps also help students to learn how to learn (Meta learning). Qarareh (2010) outlines the advantages of concept maps to include the following: They can be used as advance organizers to improve learner's achievement (Kommer 2014); Provide teachers with meaningful and practical structured approach; Aid the development of deep meaningful teaching, moving towards critical thinking rather than surface approaches; It allows students to reflect on their own misunderstanding and take ownership of their learning and Organize their thoughts and visualize the relationship between the key concepts in a semantic way that encourages effective citizenship.

In a related development Okunlola and Wahab (2011) asserted that concept mapping is very useful in the teaching and learning process for systematizing and organizing not only the concepts under study, but also the already learned concepts. They believe it is used for building a new system for the measuring of our external world. The approach they concluded if properly adopted will: Promote better retention and understanding of the subject matter, also concept details are easily reconstructed from a map; this reduces the burden on memory and thus reduces memorization errors; It shows the organizational structure of content as a compact source of information. It is a versatile teaching tool that can be used to present and reinforce content or assess its understanding; It supports students in making connection between known information and new information; By creating maps, students clarify their understanding of the topic and integrate new ideas into their thinking and It aids students in summarizing texts and identifying main ideas as well as provide a useful way to assess students understanding of a topic.

To this end, Novak (2008) stressed that the process of concept mapping can reduce the need for rote memory and make learning more meaningful. Johnson and Otis (2016) suggested that concept mapping should be treated as a very personal learning tool. According to whitehead (2008) in Young (2018) one of the primary goals in the use of concept map is to promote meaningful learning. In order for this to occur the following points need to be considered: The learner must have relevant background knowledge, Materials to be learned must be conceptually clear and presented with simple language and examples that will relate to the learner's prior knowledge, the learner must make the choice to learn meaningfully, Students must be motivated to incorporate new meanings into their prior knowledge, rather than just memorizing concept definitions and the creation of concept maps supports the incorporation of new meanings into prior knowledge.

Types of Concept-Mapping

According to Ariya (2020), there are seven kinds of concept map. The most commonly used five kinds of concept maps in Social Studies are briefly explained below with examples:

A **Spider concept map** is a kind of map that is used to investigate and enumerate various aspects of a single theme or topic. It helps student to organize their thoughts. Outwardly radiating sub-themes surround the center of the map. It looks a bit like a spider's web, as its name suggests. The spider concept map is organized by placing the central theme or unifying factor in the center of the map. Outwardly radiating sub-themes surround the center of the map.

The hierarchy concept map, presents information in a descending order of importance. Step by step the student noted down the relevant context in the given boxes/circles. It helps to understand and co-relate the subjects. The hierarchy concept map presents information in a descending order of importance. The

most important information is placed on the top. Distinguishing factors determine the placement of the information.

The flowchart concept map organizes information in a linear format showing relationship between concepts for easy understanding.

The systems concept map organizes information in a format. Includes all data on the map and shows many relationships between the data. it uses critical thinking skills along with problem solving skills. The systems concept map organizes information in a format which is similar to a flowchart with the addition of 'INPUTS' and 'OUTPUTS'.

Multi-dimensional (3D dimensional) concept map describes the flow or state of information or resources which are too complicated for a simple two-dimensional map.

Picture Landscape Concept Map: These maps present information in a landscape format. Information is presented within a format of interlocking geometric shapes. A "telescoping" factor creates compelling visual effects which focus the attention and thought processes of the viewer. This chapter specifically dwells on landscape concept mapping on transportation as illustrated in the pictures below:

Steps in Using Concept Mapping in Social Studies Classroom

To effectively use concept maps in your classroom, the author offer the following recommendations as steps to follow:

Step 1—Select key terms. Scan your curriculum unit and select the most important and critical terms related to the key concepts being taught. Using the terms you have selected, see if you can construct propositions that reflect what students should know and be able to express at the end of the unit. Keep the

concept map manageable by selecting a short list of about 8 to 12 terms.

Step 2—Determine where in the unit or curriculum the maps will be embedded. Concept maps fit best when alternated with the hands-on science or social science activities in a unit. Most often, concept maps are based on the terms that make up the content of a series of investigations. As such, consider inserting a concept mapping activity at key junctures in the unit. Some criteria to keep in mind in identifying these natural joints are: a sub-goal of the unit is achieved and there is a body of knowledge that can be assessed, a critical point in instruction is reached and it is important to know about students' understanding before proceeding and a critical shift in student understanding is expected after a particular series of investigations and feedback to students is crucial to help them improve their understanding and to help inform your instruction.

Step 3—create the activity. For maximum insight into student understanding, design the activity to follow the open-ended construct-a-map style, where students are only provided with the key terms. For students' convenience, you can have them write the Social Studies terms on small sticky notes. This allows students to move and organize their thoughts while creating their rough draft. We also recommend that the activity include an opportunity for students to redraw and revise their maps. For example, in our study students created their rough draft using sticky notes, but then were asked to draw a final version of their concept map without using sticky notes. By redrawing their maps, students are encouraged to continue reflecting on the meaning of the Social Studies terms. You may be surprised at how many students generate additional details as a result of this redrawing step.

Concept Maps of Selected Citizenship Topics in Social Studies

Teaching the topic Democracy in Social Studies can easily be represented thus:

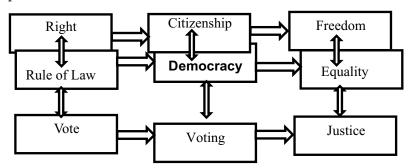


Figure 1: Concept Map on concepts related to Democracy: Researchers' Model, 2021

From the figure above it can be understood that for children, the concept of democracy mostly reminds of itself. But the concepts of liberty, justice, right, vote, rule of law, equality among others all explained what is expected of an effective citizen in a democratic setting. As seen, all these concepts are directly associated with democracy.

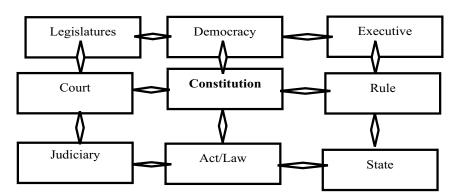


Figure 2: Concept Map on the topic Constitution, researchers' initiative, 2021

Constitution is the fundamental law which specifies a state regime, shows how to use the legislative, executive and judgment powers and states the public rights of the citizens. This concept mostly reminds of the concept of law. Moreover, the constitution is correctly associated with the concepts of court, rule, execution, jurisdiction, democracy, state and legislation.

Conclusion

The analysis of many research works about concept mapping shows that in professional education this method should be used in the subject fields which are either directly connected to natural or exact sciences or the social sciences- Social Studies inclusive. The main idea of using the method as portrayed in this work is as teaching and learning tool, often combined with assessment tool. This is in line with the present reality that today instructors and educators are looking for more active and interactive teaching techniques. At this point, concept map will work better in the field of education and will take another step forward to instructional technique. The important thing is our contribution for the usage of effective teaching technique. With each passing day, the effective use and the effective implementation of concept map will be explored and it will make learning easier for learners in Social Studies by inculcating in them virtues for citizenship.

Suggestions

Based on the conclusion of this study, the following suggestions are deemed necessary:

Concept mapping should be adopted with other practical teaching methods in Social Studies in order to achieve the objective citizenship Education domiciled in Social Studies. Since concept mapping is a new innovation in Social Studies Teaching, there is need for Seminars and workshops for Teachers of Social Studies at the secondary school level in order to acquaint them with necessary skills for using the technique at the classroom level. The new curriculum of Social Studies should capture concept mapping as one of its major techniques for use on daily basis.

References

- Ariya, D. A. (2020). *Concept-mapping in Social Studies education*. A Book Chapter Contibutionat Federal College of Education Pankshin, Published in 2021.
- Arokoyu, J., obunwo, I. (2016), ogbonna, L.K. and Ugama, L.G.(2018). Effects of concept mapping and brainstorming instructional strategies on junior secondary school students'achievementin Social Studies in MubiEducational Zone, Nigeria. *British Journal of Education, Society &Behavioural Science*.18 (2):1-18, 2016, article no.BJESBS.29057.
- Azikiwe, U. (2012). *Comparative studies of enrolment trends by sex in Nigeria education institutions: the case of female education*. A paper presented at the 5th Annual Conference of Nigeria Association for Comparative Education held at UNN. Nsukka 11th 14th July.
- Birbili, M. (2016). Mapping knowledge: *Concept maps in early childhood education*: 8 (2). Early childhood research and practice from Ecrp.Uiuc.Edu/V8n2/Birbili.Html. Retrieved 28th June 2020.
- CanasA. & Novak, J. (2006). *Concept maps, theory, methodology and technology*. Proceeding of the first International Conference on Concept MappingSpain.
- Dave, H. (2016). *Citizenship lesson inadequate* BBC News on Wednesday, 27.
- Hay, D. Adams, I. A & Kinchin, I. (2018). 'Making learning visible: The role of concept mapping in higher education Studies in Higher Education, 33(3), 295-311.
- Johnson, A. & Otis, K. (2016). Concept mapping problem based learning. A cautionary tale chemistry education research and practice 7(2). Pp 84–95. Www.Rsc.Org/.../Johnstone-Otis%20paper%20final.Tcml8-(2)%.Pdf. Retrieved July 26th 2019.
- Kinchin, I. & Hay D. (2019). Sustaining an interest in learning English and increasing the motivation to learning English: An

- *enrichment program*. Retrieved September 29, 2020from http://iteslj.org/Techniques/Hussin-Motivation/
- Kommer, P. A. (2014). Cognitive Support For Learning: Imagining The Unknown, Los Press, England. From Http://Books.Google.Com. (Retrieved November 9, 2018)
- Mezieobi, D. I. (2013). Repositioning Social Studies education in Nigerian tertiary institutions for the attainment of vision 20:2020 in Nigeria. *Nigerian journal of Social Studies*, 15(1), 246-256.
- Michealis, E. (2018). Mapping teaching strategy and secondary students'attitude to Physics In Ibadan, Nigeria. The African Symposium: *An online Journal of the African Educational research network* 119 Vol. 11, No. 2. (Retrieved 28th June 2020).
- Mokwuonye, J. Y. (2011). Effects of cognitive preference and advance verbal organizers on the retention of O'level Physics textual materials. The Nigerian teacher today. 5(1&2), 26-29. Retrieved 18-2-2020.
- Novak, J. D. (2005). The theory underlying concept maps and how to construct them. From Http.//Map/Hmc.Us/Publication/Research/Theorycmaps/Theoryunderlyingconcept maps. Html. Retrieved june, 2019. of Ilorin Press.
- Okam, C. C. (2011). The status of social attitudes and values as a curriculum instrument for promoting national integration through the Nigerian school system. *Nigeria Journal of Social Studies*, 9 (1&2) 1-34.
- Okunlola, D. O., & Wahab, A. O. (2011). Concept mapping approach to the teaching of the characteristics of living things. Being a workshop presentation, at science teachers' association of Nigeria, Stan 12th 18th June 2011. Retrieved: 3rd March, 2019.
- Omere, O. (2012). Enhancing democracy in Nigeria through citizenship education. *Nigeria Journal of Social Studies review* 8(1)33-39

- Qarareh, A. O., (2010). The effect of using concept mapping in teaching on the achievement of fifth graders in science. Stud. Home Comm. Sci., 4(3): 155 160 (2010). Retrieved 26th July 2019 From Www.Krepublishers.Com/..2010.
- Rao, M. P. (2015). Effect of concept mapping in science achievement cognitive skills and attitude. Regional institute of education India. Retrieved On 26th June 2019 From Www.Freepateintsonline.Com/Article/Schoolscience.
- Udean, U. & Okafor, P. U. (2016). The effect of concept mapping instructional strategy on biology achievement of senior secondary school slow learners. *Journal Of Emerging Trends In Educational Research And Policy Studies* (Jet Raps) 3(2):137 142. Retrieved 20/06/2011 from Jeteraps. Scholarlinkresearch.Org.
- Young, E. (2018). Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of School Psychology*. 44, pp. 331-349.
- Yuceer, D.& Keskin, S. (2012). Danimarkave Turk Egitim SistemlerininÝlkogretimDuzeyindeKarsýlastýrýlmasý. Ondokuz May Universitesi EgitimFakultesiDergisi. 2012, 31(1), 325-349.