

Educating the Hand, Head and Heart for Sustainable National Transformation: The Challenge of Students' Large Population in Nigeria Public Universities

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Abstract

Education is a form of learning in which knowledge, skills and values are transferred from one generation to the next through teaching and research. The goal of any form of education is to help the recipient acquire knowledge, skills and values to enable him live a fulfilled and purposeful life. This paper titled 'educating the head, hand and heart for sustainable national transformation: the challenge of large class size in public universities in Nigeria' is a position paper aimed at highlighting the challenges of large students population working against educating the total individuals (students) in universities in Nigeria. In an attempt to do that some concepts were reviewed such as education, head-hand-heart model, importance of head-hand-heart, students' population, state of students' population in Nigerian public universities. Finally the challenges of students' large population on educating the child were highlighted, among which are; poor concentration of students, ineffective teaching and learning, high cost school charges and fees, overuse of singular lecture method and involvement in corrupt practices. To maximally overcome these challenges, strategies on the way forward were proffered such as admitting students based on the stipulated number by National University Commission (NUC), adequate provision of educational resources and adopting proper teaching strategies among others. It was therefore concluded that when the strategies are implemented, educators can effectively teach a large population of students ensuring quality education that will lead to sustainable national transformation.

Key words: Sustainable National Transformation, Education, Head-Hand-Heart and Students' Population.

Introduction

The role of education in advancing societal progress cannot be overemphasized. Educational achievement impacts people's lives and supports global efforts to achieve the Sustainable Developments. Learning contributes to poverty alleviation, improving health and well-being, promoting gender equality and, reducing inequalities and achieving environmental sustainability.

A well-rounded education equips people of all ages to adopt innovative practices that minimize the harmful environmental impacts of their economic activities.

Education is a conscious and deliberate effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for him to have the spiritual strength of religious, self-control, personality, intelligence, noble character, and the skills needed themselves by and the society. According to Osaat, Oputa & Emeribe (2017), education is a form of learning in which knowledge, skills and group of people's habits are transferred from one generation to the next through teaching and research. Education is a purposeful activity aimed at achieving goals like the transmission of knowledge, skills, and character traits of the individuals. When education is able to help the recipient acquire knowledge, skills and character then such education is synonymous to educating the head, the hand and the heart.

According to Front (2022) the head, the hand and the heart is a model which theorises that 3H attributes in combination with Blooms taxonomy will produce effective 21st century teacher. Educating the head, the hand and the heart is holistic approach to learning that aims to develop multiple aspects of an individual's being. No wonder in the universities, it is believed that for the individual to be awarded any certificate such student must have been seen to be worthy in character and in learning.

Unfortunately, most students who have been graduating out from various institutions, have been found wanting in the use of their heads, hands and their hearts in the society in which the institution has sent them back to. Sometimes, the individual may be knowledgeable and yet not able to acquire any skill that can help him become useful to himself graduation. How can one be deemed to have been truly educated if he or she does not have all round development? The Nigerian society today is full of graduates on the streets roaming about in the name of looking white collar job while exhibiting a whole lot of social vices depicting poor character training from the institutions.

A whole lot of factors could contribute to inability to properly educate the learners of these universities graduate, but the authors are of the position that large population of students with attendant challenges could affect the quality education of the students from these institutions. Most institutions are so populated that realizing the goal of education seems to becomes a mirage or impossible. It based on this background the authors have decided to highlight the challenges of educating the total man in the face of large population of students in universities and to proffer solution on the way forward.

Conceptual analysis

The conceptualisation of head-hand-heart model in Education

According to the Concise Oxford Dictionary of English, the term "education" originates from the Latin words *educare*, meaning "to bring up," and *educere*, meaning "to bring forth. The concept of head-hand and heart is a learning strategy that encourages students to engage their head for critical analysis, their heart for emotional reflection and their hands for practical application of what they have learnt (Adams 2023). The model is presented in three parts which are as follow:

- Head: the head represents intellectual development, critical thinking, problem- solving and knowledge acquisition. It is the ability to understand and object, concepts and experiences
- The Hand: the hand represents learning the craft of doing good work and develops physical and practical skills. It involves creativity, innovation and hands on experience
- The heart: this involves exploring what they want to learn and develop their moral questions such as helping other people. Also involves emotional intelligence, empathy, compassion, values and social responsibility.

Apart from being a learning strategy the head-hand-heart is also a theory which suggests that effective learning should engage all three domains which are Head (cognitive), hand (psychomotor) and heart (affective) (Adams, 2023).

Educating the head, hand and heart therefore is a holistic approach to learning that aims to develop the multiple aspects of the individual. It recognizes that education should go beyond mere intellectual development and aim at cultivate a well rounded individual with a sharp mind with practical skills and emotional intelligence.

Importance of the model of educating head-hand-heart in education

According to Adams (2023) the head-hand-heart model in education is of great importance. The following are some of the ways head-hand-heart model is important;

That the model addresses the whole learner: That learners are not just cognitive being but also have emotional and physical dimensions. Applying the model will ensure that learners needs are being met holistically and that they are engaged and motivated to learn.

Promotion of deeper learning and understanding: It promotes deeper learning and understanding and encouraging learners in all three domains and promoting rich learning. When learners are actively engaged in learning process and can relate what they learn to their

own experiences and emotions, they are more likely to retain the information and able to apply it in real life situation.

Catering for different learning styles: The theory helps to cater for different learning styles and preferences and encourages creativity and innovation. Learners are encouraged to think outside the box to explore their emotions and experiences.

In fact, by educating the whole person, this approach prepares the individual to succeed in all aspects of life, make a positive impact in their communities and lead a fulfilling and purposeful life.

The concept of population/students population

Population is the whole number of people or inhabitants in a country or region; the total individuals occupying an area or making up a whole. **Population**, according to Teitelbaum (2024), is the whole number of inhabitants occupying an area (such as a country or the world) and continually being modified by increases (births and immigrations) and losses (deaths and emigrations).

In the same vein, Engelman (2019) as cited in Abodunrin (2021), opined that human population refers to the number of people living in a particular area, from a village to the world as a whole. Similarly, Tarsi (2012) as cited in Abodunrin (2021), defines population as a group of individuals of the same species living and interbreeding within a given area. Tarsi added that members of a population often rely on the same resources, are subject to similar environmental constraints and depend on the availability of other members to persist over time. Since population relies on same resources and face similar environmental constraints, it is logical that development experts study population by understanding how population as whole affects environment and available resources, and how individuals in a population interact with each other.

Students' population therefore is the total number of students who are admitted into and to be educated in a particular university in a country. The population of students in a university is a great asset and very vital if the development of that nation is to be achieved. A country cannot exist and talk of advancement without the human resources of the country in the universities. Without the population of people in a country, education and technological advancement cannot emerge.

The state of students' population in Nigerian Universities

It has been observed that in recent times, there has been large students' population in universities in Nigeria. From an empirical work by Abuta (2018), he found out that most universities are overcrowded and yet have refused to reduce intake. An informal survey by

university world News reveals that the maximum number of students to be admitted as directed by NUC for each department is 50 students, a directive which has been abandoned. Nigerian universities could only accommodate about 30% of the 1.7 million candidates who took the JAMB. Besides, the Federal and state universities admit a greater number thus making it difficult for students to learn.

Using Benue state university as a case, Abutu (2018) found out that over 2000 students crammed into a hall with a 500 capacity while at Nasarawa University the case is no better. A glance at the number of 100-level students shows that the faculty of education has over 3000 students though shared across all six departments are required to congregate in one place to take mandatory general courses.

Oyewusi (2009) had also observed that university education in Nigeria was facing a critical challenge in meeting new demands of the 21st century with the ever increasing population growth. In fact, in the words of Nwogu in Osaat (2012), there is explosive increase and overcrowded classes to the extent that teachers are made to teach between 50-100 students in a class. From the reviews, it is discovered that in as much as students' population is an asset, yet a very large one may not augur well for effective teaching and learning process to strive.

Challenges of educating the head-hand and heart: the place of large population of students in Nigerian Universities

In as much as it is a fact that on a general note there is large population in universities in Nigeria, it is obvious that it cannot be without challenges especially when bringing in the students and their learning to focus. Ordinary one would believe that population of human resources is an asset to the school administration however when it becomes large, it comes with its attendant challenges. The following are some of the observed challenges of educating the totality of the child based on large population of students:

Difficulty of students' concentration: one major challenge of large students' population is the issue of concentration during teaching and learning. According to a student called Victoria Onu, while speaking to university World news as reported by Abutu (2018), 'learning has become difficult as students find it hard to concentrate due to overcrowding'. To her, it is very hard or difficult to hear the lecturers if you cannot get a seat in front of the class during lectures.

To another student, Hembe Moses, while also speaking to the University World News as reported by Abutu (2018), 'the university management has not only increased their school fees but has also admitted so many students that he now stands in and around the lecture halls to receive lectures and during most lectures he barely hears the lecturers'. In this type of

conditions, it would be a mirage for the students to be totally developed. The only teaching method adopted is the lecture method which only encourages cognitive development (head) while the psychomotor (hand) and the affective (heart) suffer.

In fact, Osaat (2012), also found out the following that; students have always been so many and larger than normal classroom, students sit more than required in a seat, students cannot take down note during lectures, students do not have good audio of the lecture, are not comfortable, easily distracted due to poor sitting accommodation etc. All these are as a result of the challenges of large class size on instructional process. In this type of situation, the students cannot receive adequate education required for a good life.

Non availability /Insufficiency of educational facilities: The universities keep admitting more students while the educational facilities and equipment required are in most cases not available and sometimes insufficient and over stretched. As Osaat (2012) observed, many students stand outside the classroom to learn. Lecture halls are usually filled to the brim which makes students too uncomfortable to learn anything. This implies that the facilities are not enough to accommodate the population of students. Most often, equipments such as public address system that will enhance communication are not always made available. In fact, at the various universities in Nigeria, there are cases where a lecture hall that is meant for 100 students will be crowded with more than 200 students with some students outside the lecture hall receiving lecture.

Ineffective teaching and learning: Teaching is all the diverse activities carried out by a more experienced and knowledgeable person in order to assist the learners to learn. For teachers to be effective in carrying out instructional processes depends on a number of factors among which are the employee, the institution, personal effort, equipment and materials with which the teacher is given to work with. In a situation where the institution admits so many students with large class population while the facilities are adequately provided, implies a stressful situation already. Davies (2003) remarked that stress on the part of the teacher could impede productivity by obstructing interactional and loving attributes of the teacher. As Alyssa (2018) rightly posits, a highly populated class cannot encourage effective teaching and learning. High population of students in classrooms can pose a huge challenge to teaching/learning process thus making classroom management cumbersome, and by extension rendering teaching and learning ineffective. Overcrowding of students in a class during teaching and learning can cause a lack of control and at the same time have a negative effect on the students. Students under this condition would be more prone to negative

thoughts such as drug abuse, the creation of gangs among other vices. Infact many students are always passive just sit back and relaxing and do not participate in learning.

In fact, an unconducive learning environment resulting from large population and characterized with insufficient accommodation, seating accommodation, disorganized environment, unstimulating environment, outdated resources etc can lead to distractions on the part of students and can make learning difficult for the students. It can also lead to low motivation and a lack of interest in learning.

High cost of school charges/fees: In Nigeria, the issue of inadequate funding has been a recurrent contest between government and other stakeholders in education. The public universities before now relied mainly on funds from government but have recently been compelled to consider other sources to supplement government provisions due to large population of students. A student, Hembe Moses, while speaking to the University World News as reported by Abutu (2018) explained that the university management has not only increased their school fees but has also admitted so many students. In an attempt to regulate the large population of students, various universities, have come up with high cost of school charges/school fees which has continued to render some students helpless and lose focus of learning. Sometimes, some students are frustrated and in such situation cannot be educated.

Overuse of a singular teaching methodology (Lecture method): Not only does large class size affect learning, but also negatively affects the teacher morale and self-esteem. According to Eze (2013), motivation suffers and classroom methods are restricted to a little more than lecture method, which has shown to be by itself, the poorest of all teaching methods. With overcrowded classrooms new and more dynamic teaching strategies and techniques can be implemented. According to Bradley in Olele and Abraham (2014) the most appropriate method of teaching 21st century skills in various disciplines is through the use of palette of 21st century pedagogy such as professional learning community, collaboration, student centered teaching, project based learning, problem based learning etc.

Corruption in the system: Large population of students leading to ineffective learning can also contribute to corruption in the system. In the process of not being able to move on with each lesson due to discomfort in a large class most often leads to corruption. Corruption here are of different categories ranging from asking fellow students to do some class works, class assignment, class tests and above all involving mercenaries to write examination for them, thereby committing examination malpractice by students and manipulation of unmerited scores.

Mass production of poor quality graduates: As a result of overstretched of educational facilities by the huge number of students, there is tendency that poor quality graduates will be produced by the various educational institutions, especially those schools owned by the governments. Nigeria as a country is not exempted from this fact.

The way forward

To be able to overcome the challenges posed by large population of student in educating the child totally, a whole have to be done. The following therefore are the way forward;

Admission of NUC stipulated no of students

To be able to cut down the large population of students in universities, JAMB in collaboration with universities administration should try as much as possible to keep to the maximum number of students to be admitted by NUC for each undergraduate course per year. When this is done, it will enhance effective teaching and learning as the students will be comfortable and motivated to learn.

Adequate provision of educational facilities

If there should be all round development of the student, there should be the provision of adequate facilities in terms of sufficient school buildings, adequate seating accommodations, workshops, laboratories, school libraries-physical and e-library, educational equipments such as computers, white marker boards, interactive white school facilities, overhead projectors etc. When these facilities are available and used maximally, they would help the not just to develop intellectually but to be able to develop his psychomotor and affective domains.

Adequate provision and capacity building of teachers (lecturers)

To minimize the effect of large population of students leading to ineffective learning, there should be sufficient recruitment of university teachers adequately distributed to variously professional areas. They should also be encouraged to build up themselves and to update obsolete pedagogical skills in the 21st century. Through capacity development programmes the teachers can be ICT complaint to use modern facilities to teach their students. They should be provided with ongoing training support to enhance their skills and stay updated on best practices. Lecturers also should be encouraged to be trained on the various modern teaching method that can lead to reaching and teaching a large population of students ensuring each child receives a quality education. In doing that educating the head, hand and heart will be a reality.

Employing proper teaching strategies

The lecturers should be able to make use of innovative teaching methods that will enhance

the development of the total child. Some of these methods as identified by Olele and Abraham (2014) are;

- Personalized learning: the use of technology and data to tailor instruction to individual needs. According to Benjamin (2019) personalized learning deals customizing the learning experience for each student according to his or her unique skills, abilities, preferences, background and experiences.
- Differentiated instruction: adapting teaching methods to cater for various learning styles, abilities and interests
- Small group instruction; divide students into smaller groups for targeted instruction and better teacher –student ratio
- Collaborative learning: otherwise known as small group used as an umbrella term for various instructional approaches including cooperative learning, team-based learning peer tutoring, project based learning, problem-based learning (Koschmann, 1996), it is learning that encourages peer-to-peer learning and teamwork to foster social skills and shared knowledge
- Teacher assistant: utilize teacher assistants of support staff to assist with instruction, grading and student support.
- Innovative teaching methods: incorporate innovative approaches such as project based learning, flipped classroom and gamification to engage students.

Conclusion

In as much as students' population is an asset to the university administration, it has been observed that when it is too large, it comes with some challenges which fight against the total education of the child. However, to overcome the challenges some steps/strategies have to be taken. It is believed that when such strategies are implemented, the students will learn and their head, hand and heart will be fully educated and developed in the face of large students' population. With this, sustainable national transformation will be achieved.

Suggestions

1. The Joint Matriculation Board (JAMB) and universities administration should try as much as possible to be guided by NUC stipulated number of students to be admitted during admission.
2. The government and universities management should as a matter of fact make provision for adequate educational facilities for teaching and learning.

3. The government should also make provision for employment of adequate number of teaching staff that will be commensurate with teeming students' population.
4. The universities' lecturers should go for capacity buildings that will enable them acquire innovative pedagogical methods that can help teach and reach out to all students in the face large students' population.
5. Universities lecturers should employ proper and innovative teaching strategies other than the orthodox method.

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