

INNOVATIONS IN NIGERIAN EDUCATIONAL SYSTEM: CREATION AND SUSTENANCE OF CULTURE OF INNOVATION

A. G. Ossai, Ph.D
School of Education,
College of Education, Agbor,
Delta State.

And

H. I. Ajudeonu, Ph.D
School of Primary and Early Child Education,
College of Education, Agbor,
Delta State.

Abstract

Innovation is a tool to enhance sustainable development in education and it has been receiving the attention of educators, educationists and researchers across the world. Innovative practices can be seen in the areas of Health, Communication, Agriculture, Governance, Education etc. In organizational context, innovation is viewed as intentionally bringing into existence and practice something new, so as to enhance performance and growth through improvement in efficiency and effectiveness. This paper examined the need to establish a more sustainable culture of innovation in the educational system of Nigeria. It discusses system and of culture of innovation in the schools, innovation as a tool to transform schools, rational for innovation in schools and challenges of innovation in schools. The sustenance innovation includes creating and sustaining the culture of innovation, wholistic approach to innovation, effective goal definition and evidence of innovation failures. Innovations are faced with the challenge of inadequate funding and poor facilities, lack of innovation cultures in schools, inadequate leadership guidance and orientation and poor attitude to research outcomes. It was concluded that school culture of innovation is to enhance and sustain school quality, productivity and efficiency. It requires development for both individual creativity and sustainable innovative environment. It was recommended that schools should create and maintain the culture of innovation, individuals should be master of innovation and leaders should create innovation culture

Keywords: Innovation, Culture, Leadership, Education, Sustenance.

Innovation, according to the United Nations Education Science and Cultural Organization (UNESCO) in Okoye (2012), is a general change that is deliberate and must never be regarded as simple adjustment. Continuing, UNESCO added that innovation refers to any persistent change in the patterns of behavior of members of an identified social system. It is a novel departure from a customary practice that can be sustained for some time which is situational and relevant to a group in time and place, and when widely adopted, it becomes a reform. Innovation is a technique, idea, a practice or an object that is perceived by an individual or others as new (Nwafor, 2007). Innovation is a change in the thought process of doing things or the useful application of inventions and discoveries (McGeown 2011). From these definitions, it implies that when new inventions and discoveries are put in practice, or a successful introduction of a better thing/method, therefore, innovation is also a process that renews or improves something that exists. It is the act of introducing new ideas in order to improve or make an existing one more effective.

From the foregoing, Innovation therefore is an idea that is new to a situation. It is the introduction of new ideas which can take the form of process, programs, products, the means or ends. Innovative practices can be seen in the areas of Health, Communication, Education, Government etc. this paper discussed innovative practice in education.

Innovation in Education according to Nwafor (2007) is a deliberate, systematic, novel, specific and persistent change in the system of a particular society, which is aimed at improving the system or creating a new one, for a more effective and efficient means of attending to the educational needs of the social group, in their social environment. In their opinion, Kirsi and Seppo (1996) stated that Innovation in Education is a creative, new educational innovational policy, a creative way to renew education, a creative solution, a creation of new educational culture, a new opening, and a new idea to overcome some problems in education. Adoption of an innovation in education means to take up or accept an innovation and make use of it in the educational sector.

As in all sectors, innovation will be essential to being about qualitative changes in education as opposed to the quantitative expansion seen so far. These changes are needed to increase efficiency and improve the quality and equity of leaning opportunities. This is necessary because a healthy system should tend towards inventing new procedures, move towards new goals, produce new kinds of products, diversify itself and become more rather than less differentiated over a period of time (Okoye, 2012). Education therefore, should change to meet the changes of the society. The adoption of innovations in education offers the educational institutions the opportunity of making changes or improvement in the educational sector. This is because it is when innovations are widely adopted that the reforms that have always been desired in the educational sector will be achieved. Therefore, any move in

education to accommodate new knowledge, remove obsolete ones and adopt multidisciplinary orientation is likely an innovation in education.

Prioritization of innovation is achievable, if the culture of innovation is sustained in the school system. An innovation is transforming of practice in an organization. A transformation of practice in an organization cannot happen unless the new practice generates more value to the members than the old. Many innovations were preceded or enabled by investors; but many innovations occurred without a significant invention (Denning, 2004). In a culture of innovation, people will have a habit of constantly looking for ways to improve things. The use of technology as the only solution to innovation would not meet challenges of education in this millennium. Giving each child a computer would typically not produce supervision learning without additional changes in the nature of the school teaching, learning and assessment practices (Dynarski et al 2007). Effective change would require a more holistic approach to completely transform the learning experience of the learners. In most countries, school curriculum and instruction are mostly didactic based on subject-based knowledge; transmission and large amount of note learning. This ignores many skills that are increasingly necessary for life and work often fails to engage students. Though schools implement and work accordingly to national standards and other learning requirements but they can also consider more effective teaching and learning strategies and encourage student-centered learning and assessment processes (National Resources Council, 2005).

The purpose of this study is to identify the need to establish a more sustainable culture of innovation. It is to emphasize the need for educational system to create and sustain the culture of innovation, especially in Nigeria. It is to encourage the school administrators to show leadership in innovation. The school system needs to generate new and worthwhile idea, a knowledge in the face of growing of knowledge all over the world. This study therefore examines innovation as a tool to transform education, creating and sustaining culture of innovation and challenges of innovation.

Objectives of Nigerian Educational System

The National Policy on Education (2004) outlines the Nigerian national educational aims and objectives as follows:

- i. The inculcation of the right type of values and attitudes for the survival of the individual and Nigerian society.
- ii. The training of the mind in the understanding of the world.
- iii. The acquisition of appropriate skills and competencies both mental and physical as equipment for the individual to live in and contribute to the development of the society.

Several educational policies and strategies have been put in place to address the implementation of these objectives. These policies and strategies are: the

establishment of unity schools, development of citizenship education curriculum, language education policy, the introduction of social studies curriculum among others.

The question is; to what extent have these objectives been achieved to attain sustainable educational development of the citizens. This is where the need to assess the challenges of innovation in Nigerian educational system becomes imperative.

Rational for Innovation in the Educational System

Innovation is the implementation not just of new ideas, knowledge and practices but also of improved ideas, knowledge and practice (Kostoff 2003). Innovation adds value in the case of education. It can improve learning outcomes and the quality of education provision. For example, changes in the educational system or in teaching methods can help customize the educational process. New trends in personalized learning rely heavily on new ways of organizing schools and the use of information communication technology.

Secondly, education is perceived in most countries as a means of equity and equality. Innovation could help enhance equity in the access to and use of education, as well as equality in learning outcome.

Thirdly, public organizations are often under as much pressure as businesses to improve efficiency, minimize costs and maximize the 'bang for the buck'. Milligan and Albury (2003) argue that there has been a tendency for costs in all public service to rise faster than those in the rest of the economy, and education is no exception. While this could be attributed to cost disease inherent to any public service provision which faces ever-rising labour costs and limited scope for transformative productivity gains, this may also be due to a lack of innovation (Foray and Raffo, 2012). Innovation, then could stimulate more efficient provision of these services.

Finally, education should remain relevant in the face of rapid changes in the society and the national economy (Barrett, 1998). The education sector should therefore introduce the changes it needs to adapt to societal needs. For example, educational systems need to adopt teaching, learning or organizational practices that have been identified as helping to foster skills for innovation (Winner et al, 2013).

Transforming Education through Innovations

The development and transformation of education has been a great challenge in this millennium. National policy on education in Nigeria has adopted education as an instrument for effecting national development. There is no doubt that education is central to the development of the individual and the society in general. There is a tremendous development in technology, which has necessitated constant technological change and innovation. Transforming education in the face of new technological change and innovation is imperative. The challenge for education in this millennium is the need for innovation in creating adaptable approach, which enhance young peoples' lives within the school and their future employment.

Innovation and its manifestation and attempts have been visible in all spheres of education system and practice. Information and communication technology (ICT) in education has brought lots of technological changes and innovations. Innovations in terms of teaching and learning, open distance learning, blended learning, collaboration learning and students centred learning. Computer aided learning not only used as an instructional material but also as a tool and learning facilitator. Technologies are keys to transform the learning environment. Too often technology is 'bolted on' and not integral to enhancing and assessing learning within schools. Schools need access to technology for all students and teachers in order to support learning. Innovation attempts to introduce student-centre, problem based learning and technology-rich learning environment have not succeeded because they collided with existing and sometimes outdated assessment practical's, or because professional development for teachers and besides was underemphasized. Educators are faced with the task of creating an environment that can harness and create the wisdom and intellect of their teachers and staff. The key is to create schools that are built in collaboration which can be assembled to harness their combined talents into innovation. Education is an ever-changing bureaucracy and schools should not only deal with change, they must come to accept and even welcome change. It must be embraced into the culture of the school.

Creation and Sustenance of Culture of Innovation

Innovation process requires a school culture that is dynamic, forward looking and empowered. According to San Francisco and Joss-Bass (2008), one of the elements of successful change is understanding that learning is the work. Culture is the playing field for all innovation projects and activities while innovation is for the sake of creating values of softly vision, the organization must be fertile for the seeds of ideas and solution to grow. Innovative culture could be described as the way members of an organization behave and perform their job in order to invent or create their own experience. It refers to the usual attitude, belief, values and perception of people towards facts, knowledge, ideas for the improvement and creating development of existing situation.

In organizational context, innovation is viewed as intentionally bringing into existence and practice something new, so as to enhance performance and growth through improvement in efficiency and effectiveness. It involves people implementing new ideas and values. The school system has embraced series of variables in which culture of innovation could be made manifest. The innovative culture embraces teaching and learning strategies, pedagogy, instructional resources, technology in teaching and learning, student administration instructional technology, counseling strategies etc.

The fundamental principles of innovation include- challenges, focus, creativity, communication, collaboration, completion and contemplation. The bigger

the challenge and the commitment to it, the more the energy and force of innovation. Denning () identified two kinds of practice contributing to a culture of innovation. One is organizational process management values, rewards, prohibitions, encouragement of new ideas, encouragement of risk taking and the like. The other one is personal practices, without which, it is very hard to get organizational practices to work. The first part of the innovation process is seeing an opportunity. Since humans are creative thinkers and group comprise humans, a culture of innovation needs to motivate the group and individuals to think creatively. At times, if the most viable of those creative ideas are not implemented, the organization may be considered creative but it will not be an innovative organization. Thus to achieve a culture of innovation, an organization needs both creativity and innovation. For its sustenance- if top management do not embrace innovation, they can hardly expect their employees to do so. Trust is identified as one of the most crucial ingredients to a culture of innovation. If people trust management, then colleague and the organization itself, they can be more comfortable about sharing ideas without fear of unpleasant consequences. Employees should constantly be experimenting with new ideas and reporting on result. Employees must have the freedom to make mistakes, the opportunity to learn from them and the means to share what they have learned without fear of consequences. In a culture of innovation, creative ideas are always recognized and rewarded and creative thinkers are challenged to improve their ideas so that they are more likely to become profitable innovators (Jenni 2009).

Circumstances Surrounding Innovation

There are lots of circumstances surrounding innovation, which leaders should take into cognizance.

i. Resistance to change: The most common people react to change is to resist it. This could be in the form of procrastination, argument, rationalize or even sabotage a change initiative simply by ignoring it. All forms of resistance are counterproductive and give power to status-quo on cultural inertia that by its nature persist. The prevailing rational is that the status-quo is broken and needs to be fixed. The leadership is resisting the way it is and in a well meaning way is attempting to fix it. The problem is that these initiatives are rarely effective because everything being done to change something is being resisted. This is how many issues persisted even when there is widespread agreement that something should change.

ii. Coping Strategies: In organization, people may result to coping strategy in innovation. Here, energy expended in resisting is now re-directed to problem solving and designing ways to overcome barriers to accomplishing ones intention. Coping can drive innovation, but only as a reaction to the circumstances, not as an intentional force in creating new circumstances. It is argued that successful coping strategies will often thwart and even undermine attempt at further innovation in a coping context. In fact, the leaders will typically be arguing for and justifying whatever limitation seem to

exist and encouraging work around, or in spite of strategies for getting things done. While this can be positive and produce result, the leader can become a co-conspirator for individual and organizational limitations.

iii. **Mastery in Innovation:** Mastering creating the content for change, the circumstance of distinguishing the rare ability that a few people have demonstrated to invent enjoyably new field on enquiry, these people are creating demand, and new possibilities for people to explore and innovate. To become a master of innovation, a person must know both what is happening as well as what is not happening. The person must be responsible for creating the background or space within which the circumstance appears. Leadership in a context of mastery is often very modest and may seem effortless or so natural as to seem inconsequential at the time leaders who live and work in mastery context are constantly inventing or counting their experience, in this sense, they are always beginners, learning and counting at each moment (Selmen).

Challenges to Innovation in the School System

- * **Environmental Factors:** An environment that is empowering and flexible, welcomes items, tolerates risk, celebrates success, fosters synergy and encourages fun is crucial for innovative practical. Creating such a climate may also be the biggest challenge facing all organizations wanting to be more innovative.
- * **Innovation and Goal Definition:** Innovation requires effective goal definition. This requires that an organization state explicitly what their goals are in terms of understanding to everyone involved in the innovation process. Effective alignment if action to goals should link exploit actions such as ideas and projects to specific goals participation in teams refer to the behaviour of individuals in and of teams, and each individual should have an explicitly allocated responsibility regarding their role in goals and actions and the payment and reward system that link them to goal attainment. Effective monitoring of result requires the monitoring of all goals, actions and teams involved in the innovation process.
- * **Inadequate Leadership Guidance and Innovation:** Leaders as pace setters should take the initiatives in innovations in education. The leaders exercise influence in the organization focus and development. Inadequate guidance and orientation have been a great challenge to development of culture of innovation in schools.
- * **Poor Attitude to Research Outcomes:** Researches carried out in education were not adequately utilized (Akomolafe, 2000). No utilization of research outcomes seems to constitute hindrance to developing culture of innovation. Researchers have made a lot of suggestions and recommendations which were rarely implemented.
- * **Innovation Failures:** Innovation could experience failure. Innovation that fails, are often potentially 'good' ideas but have been rejected or 'shelved' due to budgetary constraints, lack of skills. Organizations can learn how to avoid failure when it is openly discussed and debated. Some innovation failures are due to both internal

and external causes. The external causes are outside its influence of control. Internal causes are internal and ultimately within the control of the organization. Internal causes of failure can be divided into causes associated with the cultural infrastructure and causes associated with the innovation process itself. O'Sullivan, (2002) identified common causes of failure of innovation as: poor leadership, poor organization, poor communication, poor empowerment and poor knowledge management. Likewise common causes of failure within the innovation process in and across organizations can be distilled into five types: poor goal definition, poor alignment of actions to goals, poor participation in teams, poor monitoring of results and poor communication and access to information.

Funding: Funding of education has become a perceptual problem in the educational system. The financial problem has always been on a recurring decimal in all facets of the educational system. The problem of funding has reflected infrastructural facilities and also in innovative attempts in education. Education requires adequate funding to enhance innovative efforts and required resources.

Conclusion

Education system desires innovation in teaching and learning, and assessment practice. The environment that can harness and create wisdom and intellect of the teachers should be created. There is need to create schools that are built in collaboration which can be assembled to harness their combined talents into innovations. There is need for school organization to encourage new practice that generate more value to members, ensure holistic approach to transform learning experience of learners, and leaders should live up to their responsibility in setting the pace for innovation. There is need for innovation to be a continuous process built into culture of successful organization. School culture of innovation is to enhance and sustain; school quality, productivity and efficiency. Innovation requires development not only for individual creativity alone but creating a sustainable innovative environment.

Recommendations

Based on the foregoing analysis, the following recommendations are made:

1. The schools should create and maintain the culture of innovation,
2. Leaders should take the lead in creating innovation culture in the school system.
3. Individual should take it upon himself/herself the responsibility of becoming a master of innovation so as to constantly be inventing or creating experience.
4. School authority should develop good attitude to research outcomes, so as to make use of relevant research outcomes to sustain innovation culture.

ISSN
of sub-
ject

References

- Akomolafe, C.O (2000). Utilization of previous and current Research outcomes as a management tool for Educational Development. *Nigeria Journal of Educational Research and Evaluation* (2) 1. 53-56
- Barret, D. (1998). The Paradox process: Creative Business Solutions where you least expect to find them. *New York: AMACOM*
- Berends, M. Penaloza, R.V; Cannata, M, & Goldring, E, (2009), Instructional innovation, school choice and student achievement. Online available at <http://www.Educationaleffectiveness.org>
- Dynarsky M., Agodimi R., Heawised S., Novak T., Carey N. & Campuzano L. (2007). Effectiveness of reading from the first student cohort. Washington DC, US Department of Educating Institute of Education Science.
- Federal Republic of Nigeria (2004) *National policy on Education*. NERDC Press.
- Foray, D. & Ratto, J. (2012). "Business-driven innovation: is it making a difference in education? An analysis of educational patents", OECD Education working papers, No. 84 Paris: OECD publishing.
- Jenni (2009) Organizational Innovation Experts: At your services. *Journal on Creativity, Imagination, Ideas and Innovation in Business*.
- Kastoff, R.N. (2003), "Stimulating Innovation", in I.V. Shavinina (ed), *The International Handbook on Innovation*, Pergamon, pp 388-400.
- Kirsi, J. & Seppo, T. (1996). Educational innovation as identified by some finesse decision makers. A paper presented at the symposium of European identity in vasa.
- Mc Geown, A. (2011). Promoting Geography in your school. *Teaching Geography*, 36(2), 72-73.
- Microsoft (2009) A systems framework for guiding innovative school reform online available at <http://www.microsoft.com/innovativeschools>
- Mulgan, G. & Albury (2003), *Innovation in the public sector, strategy unit*, cabinet office, London. Paris: OECD publishing

Nwafor, O.M. (2007). *Educational innovation process and products*. Onitsha, Nigeria: perfect image

Okoye, F.N. (2012). Influence of school climate on educational innovations in Nsukka education zone of Enugu State, Nigeria. Unpublished M.Ed Dissertation, Department of Educational Foundation.

San Francisco, C.A., Jossey-Bassey (2008), A system framework for guiding innovative school reform. Online available at innovationschoolonline.com

Selman J.(2009) Leadership and Innovation: Relating to circumstances and change. Online available at www.innovation.cc.

Winner, E., Goldstein, T.R. & Uineent-Lanein, S. (2013), Art for Art's sake. The impact of Arts education, Paris: OED publishing.



AFRICAN EDUCATION INDICES

Volume 11 No. 1, June, 2019

ISSN 2276 – 982X