

SMES Boom through the Middle Level Manpower: The Role of School Curriculum

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Abstract

This research was conceived in response to the near absence of the middle level technical manpower needed to drive SMEs boom in Nigeria. In the past, Nigeria prided itself of a strong technical manpower who drove factories and industries across the nation in the seventies and eighties. But we lost that and must be reinvented through our school curriculum. In this study the national curriculum was reviewed and found incapable of engendering SMEs boom. It was found out in the study that Nigeria operates the intentional curriculum. That is, a curriculum approved to be implemented across board. However, the approved curriculum has not sufficiently addressed Nigeria's problems. This study called for the review of the National Curriculum to infuse labour education and prioritize middle level technical manpower to accelerate SMEs boom. The study noted that the Middle labour manpower is the most critical workforce segment since they makeup the real field men and women who implement organisation's processes.

Keywords: Curriculum, Development, Education, Middle-level Manpower, Nigeria, SMEs

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I. Introduction

It is settled that the level of a society's development is a function of that society's level of education. And the key components of any education system include the curriculum, the teacher, teaching aids and the student. The curriculum just as a building plan is so central to learning. If a building plan is defective, it becomes very difficult to have a good building from it. Similarly, a curriculum provides the framework or guidelines upon which learning is provided. It spells out the step-by-step learning strategy for a given body of knowledge. It provides the contents and processes of knowledge impartation.

Many experts say that curriculum is derived from the Latin word "currere" meaning "a running course". It then suggests literally that curriculum is a running course leading to the attainment of a set goal. In other words, it is a structured series of learning outcomes. This view sees curriculum in terms of expected results. Olagunju, Adeoye, Ogunsola-Bandele and Adeoye (2010) reiterated Ralph Tyler (1949) position by raising four fundamental questions which a curriculum should answer namely:

- (i) What educational purposes should the child seek to attain?
- (ii) What educational experiences can be provided that are likely to attain these purposes?
- (iii) How can these educational experiences be effectively organized?
- (iv) How can we determine whether these purposes are being attained?

A curriculum is different from a syllabus or scheme of work which are the condensed outline of the main points of a course or subject to be covered within a specified period (usually year by year) and the breakdown of the syllabus into clear and logical instructional units according to the number of lesson periods allotted to a particular topic or subject in the school timetable respectively.

This question begs the answer, who or what should take the blame for Nigeria's backwardness? I doubt if I have the answer. But I think that our curriculum has a bearing on reinventing the middle level manpower and small and medium scale enterprises. The point is that technological objectives of a nation are usually rooted in the educational programmes of the country. Of course, nations differ significantly and they follow different routes to national development. But all nations yearn, at least theoretically, for development.

Nigeria as a secular nation believes in scientific/technological advancements as seen in nations such as Japan, United States of America, Germany, Brazil and China. A nation that cherishes technology, must imbibe technological culture which can either be developed internally, copied, borrowed or stolen (espionage) from other nations. Nigeria's quest for technological transformation and rapid industrialization cannot come through without the essentials of science and technology being rooted in the primary school curriculum as a starting

point. Remember that the primary school age bracket (5 years and 12 years) is the most suitable for acquiring manipulative skills. Manipulative skills are better acquired at a tender age rather than when the nerves are old and cannot easily respond to new conditions (Akaninwor, 2019). To that end, it is apt to examine the types and nature of curriculum with a view to rethinking its contribution to Nigeria's quest for development.

II. Types of Curricula

As early as the late 1970s, Goodlad and associates (1979) were perhaps the first to suggest several key distinctions for curriculum. They determined that there were five different forms of curriculum planning. The ideological curriculum is the ideal curriculum as construed by scholars and teachers -a curriculum of ideas intended to reflect funded knowledge. The formal curriculum is that officially approved by state and local school boards -the sanctioned curriculum that represents society's interests. The perceived curriculum is the curriculum of the mind -what teachers, parents, and others think the curriculum to be. The operational curriculum is the observed curriculum of what actually goes on hour after hour in the classroom. Finally, the experiential curriculum is what the learners actually experience.

Some have itemized curriculum along operational lines to include the recommended curriculum, the written curriculum, the supported curriculum, the taught curriculum, the tested curriculum, and the learned curriculum. Four of these curricula -the written, the supported, the taught, and the tested -are considered components of the intentional curriculum. The intentional curriculum is the set of learnings that the school system consciously intends, in contradistinction to the hidden curriculum, which by and large is not a product of conscious intention.

Nigeria seems to operate the intentional curriculum. There is an approved curriculum by the government though public schools especially hardly follow it closely. Many reasons account for this as addressed elsewhere. In the end, learners are hardly given lessons specified in the curriculum.

III. The National Curriculum

Nigeria has implemented several curricula so far. The 1882 curriculum comprised of reading and writing of the English language, arithmetic, needlework for the female, English history and geography especially of the British Empire. By 1984 the colonial curriculum was reviewed to emphasize the 6,3,3,4, system of education which was derived from the National Policy on Education based on the philosophy of free and democratic society, a just and egalitarian society, united strong and self-reliant nation, a great and dynamic economy and a land of bright and full opportunity for all citizens. In year 2000 the Universal Basic Education (UBE) curriculum was launched. It was part of the United Nations Millennium Development Goals (MDGs) now Sustainable Development Goals (SDGs). Interestingly, that curriculum had to be reviewed and relaunched in 2008 due to its overload (Udofia, 2021).

The new curriculum's philosophy is that every learner who has gone through 9 years of basic education should have acquired appropriate levels of literacy; manipulative, communicative and lifelong skills; ethical, moral and civic values and scientific and reflective thinking (NERDC, 2008). Pupils and students are to offer the following subjects English Studies, one major Nigeria language (Igbo, Yoruba or Hausa), Mathematics, Basic Science, Basic technology, Social studies, Civil Education, Cultural & Creative Arts, Religious Studies (CRS or Is), Physical & Health Education (PHE), French Language and Computer Studies/ICT.

On the surface, this curriculum looks rich. However, it has not solved Nigeria's problem of development through entrepreneurship boom. Why? For one thing, it has not prepared the learner for the world of work. The pupil and student if well taught has acquired sufficient head knowledge but has not acquired work knowledge. That is where the Orientals such as the Koreans, Japanese and Chinese have an edge. A Chinese pupil for instance, does not offer as many subjects as the Nigerian child. He offers only nine subjects -Chinese, Mathematics, Social Studies, Physical Education, Ideology and Morality, Nature, Music, Fine Arts, and Labour Studies. But he studies for longer hours in school and devotes 30% of school period to the study of mathematics, 40% for the study of Chinese language and 10% for labour studies (Fan and Zou, 2020).

Looking at the above closely, the value of the mother tongue to the understanding of science needs no emphasis. And mathematics is the bedrock of science. But curiously, why study labour in school? Chinese Policy document states that this subject cultivates passion among learners regarding labor and production, temper their wills, and improve their abilities to pursue truth and creativity, thereby enhancing their intellects. Pupils and students are also encouraged to produce and shape beautiful works to hone their aesthetic abilities, thus enabling them to experience the values and strengths of life through aesthetics (Fan and Zou, 2020).

In addition, labour education in the new era enhances the spirit of labor, and strengthens the cultivation of practical, hands-on, collaborative, and innovative capabilities (Xinhua News Agency, 2019). Labor is the means through which to develop an individual's morality, increase their wisdom, strengthen their body, cultivate their sense of aesthetics, and enhance their innovativeness (Ministry of Education et al., 2015). Labor education

instills the habit of and passion for labor, while providing the necessary skills (General Office of the State Council of PRC, 2019).

Labour education is not peculiarly oriental. In the United States of America, Science, Technology, Engineering and Mathematics (STEM) education is given primacy. STEM education has developed several implementation approaches, including those related to practical communities activity design, educational experiences, learning spaces and measurements, and sociocultural environments. These spaces ensure that learners of all ages and types are able to enjoy quality STEM learning experiences (The U.S. Department of Education et al., 2016). In the process of implementing labor education, it is necessary to optimize the curriculum structure for comprehensive practical activities and ensure that classes related to labor education do not comprise less than half of the total. The whole idea of labour education is to develop appetite for work, create entrepreneurs and supply middle level manpower to drive small and medium scale enterprises.

Everything begins from the mind. The mind can be nurtured and trained towards entrepreneurship. Nigeria needs a curriculum that challenges the mind. A mindset that is oriented and focused towards creativity will be restless at salary employment. Every level of education must be skill based. In other words, each curriculum (primary, secondary and tertiary) must answer the question, “what skillset will this level of education or body of knowledge give to the learners? How should it be measured? So, the curriculum trains the mind (mindset), impart specific skills (skillset) and allow the industry or the government to support with starter pack (toolset).

This is urgent because the school leavers of today at all levels lack requisite skills for the world of work. Little wonders youth unemployment in Nigeria stands at 52.5% according to the November, 2022 statistics from the National Bureau of Statistics (NBS, 2023). It means that more than half of Nigeria youths have no jobs and 23% of the employed are underemployed. Meanwhile our schools graduate millions every year. They graduate without work skills and life skills. Anyone who employ these graduates must first train them. Why is that the case? Our curriculums concentrate on theory. Courses that are practical based have little or no facility for practicals reminding us of the revitalization of public universities struggle between Academic Staff Union of Universities (ASUU) and the Nigeria government through the years.

IV. Middle Level Manpower

As the name suggests, middle level manpower refers to a group of workers who fall in between those at the top, who use their own initiative and direct the work of others, and those at the bottom who follow instructions and carry out routine jobs. These latter two groups correspond roughly to high-level and low-level manpower, the former normally being considered to require some kind of tertiary education, while the latter may require only a certain minimum education, or even none at all, to carry out their unskilled and semi-skilled tasks. By contrast, middle-level workers frequently both receive orders from above, and direct the work of others. Similarly, the educational requirements for middle-level jobs can vary from a partial primary education upwards, according to the nature of the work and the level of educational development in the country concerned (ECA, 2004). Middle level manpower exists in all organisations. But in this article, emphasis is given to technical middle manpower.

So, middle level technical manpower comprises of men and women that are actively involved in using technical skills and hands-on activities to manufacture products, including support services and supervision. They range from the front-line managers and engineers, first-line supervisors and down to the technicians and operators on the plant floor depending on the organization (*Mgbike, 2014*). These groups of personnel are now facing unprecedented challenges in their efforts and activities to make things happen on daily basis towards the manufacture of products and support services in Nigeria. One aspect of their challenges is the provision and acquisition of the skills, training and education needed for the execution of their daily duties.

Since the middle level manpower is the engine of the industry, our curriculum must be redesigned to meet that need. The present intentional curriculum is a generalist curriculum. It is a maintenance curriculum. In the face of economic downturn, biting unemployment, reduced dependence on fossil fuel and emerging protectionist tendencies occasioned by COVID-19 pandemic, Nigeria must review its curriculum from the elementary level to reflect labour intensity and entrepreneurship. This is the promise of SMEs boom.

V. Small, Medium Enterprises

Small and medium scale enterprises are the engine of development of leading nations. They are the main sources GDPs, employments and innovation of nations. In Poland SMEs contribute 69% to employment, 75% in Denmark, 77% in Germany (*Kubisz, 2010*). They operate in nearly all sectors like manufacturing, construction, trade, hotels and restaurants, transport, storage and communication, agriculture, financial intermediation, real estate, renting and business activities (services) etc.

SMEs operate in an environment. They require skilled labour to survive. And as stated earlier, the level of education of a society is directly proportional to the level of its development. Hence, the Global

Entrepreneurship Monitor (GEM, 2008) reported that potential entrepreneurs lacked the mind-set and the necessary skills to become true entrepreneurs. It was found that 90% of a sample of 1,000 entrepreneurs indicated that SMEs failed owing to a lack of necessary skills. This view is supported by Ismail (2012) who found that business skills and the spirit of work are sorely lacking. Cant and Wiid (2013), indicated that most SMEs in South Africa experienced enormous skill challenges which impact on their ability to pass their second year of trading with failure rates up to 63 %. All these add to the growing literature on the relevance of skill education to SMEs survival.

It should be stressed that SMES contribute massively to job creation and internally generated revenue. This becomes an incentive to the government to aggressively pursue the review of curriculums to emphasize skills acquisition both for job creation and internally generated revenue. No country can meaningfully develop without the SMEs powered by the middle level manpower.

VI. School Curriculum and SMEs Boom in Nigeria

In the last few years, the Federal Government of Nigeria through the National Universities Commission (NUC) has introduced entrepreneurship education into the university curriculum. All students are expected to pass a course in entrepreneurship studies in year two. The programme is domiciled in the General Studies Directorate. So, kudos to the federal government. Is this a part of labour education? Yes. Is it sufficient? Far from it. In the course of writing this paper, we interacted with some students of the University of Uyo. We found out that students are sent randomly for experience. For instance, as part of the entrepreneurial studies students offering English could end up in a barber shop, computer science students may be posted to a fish pond and medical students in a printing press. There is no deliberate effort to ensure that students are sent to acquire skills that at the least relate even remotely to their course of study. Besides, the programme is just one semester and often rushed between lectures and experience.

Interestingly, we had observed ab initio, that labour training should start at the basic education level because pupils have the ability to acquire manipulative skills more than adults. By the time they are adults, they have acquired the skills and discipline to match creativity needed for SMEs boom.

Creativity is the essence of entrepreneurship. Creativity is not a useful or desirable component of entrepreneurship, but it is, in fact, the core feature of this phenomenon. Without creativity, there would not be any entrepreneurship. These may include training for enhancing creativity, overcoming the barriers to becoming creative, critical thinking development, creative thinking and personal attributes (Pretorius et al., 2005). All of these should form part of labour education built into the school curriculums from the elementary level to the university.

The middle level manpower is the engine of entrepreneurship. They are the men and women who turn the wheels, operate machines, build factory lines, repair the engines and monitor lines. These technical skills are acquired through period of learning and experience. The curriculum has to prepare the learners for these tasks on ongoing basis. That is what the Chinese did by the turn of the twenty first century.

The most recent curriculum reform of China is really a fundamental and systematic change. It is based on a framework of policy formed by eight components: purpose and objectives, curriculum structure, curriculum standards, learning and teaching process, development of instructional materials, evaluation systems, teacher preparation and development, and implementation of curriculum reform (MoE, 2001). Nigeria cannot wait to review its curricula.

VII. Conclusion/Recommendations

Nigeria lost its SMEs pride of place of the seventies and eighties and the positive roles they played in employment and GDP. SMEs are critical to the development of nations and play key roles in employment generation and GDP growth. This research has shown clearly that Nigeria cannot develop without corresponding SMEs boom. Nevertheless, SMEs cannot contribute to economic boom if the middle level technical manpower is non deliberately developed and strengthened. For that to happen of course, Nigeria educational curricula must reflect the new thinking about labour education and middle level manpower development. We have found out that educational curriculum just as a building plan, has a direct bearing on the learner's content. A labour and technical intensive curriculum holds the key to SMEs boom in Nigeria as it has proved true in China, Japan, South Korea and USA. SMEs boom have a direct and immediate impact on full employment and GDP growth.

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