

## LANGUAGE OF INSTRUCTION AND LEARNING OUTCOMES: THE STATE OF RESEARCH

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### **Abstract**

The effects of languages of instruction on learning outcomes have bothered linguists and educational psychologists since the inception of formal education. These scholars are determined to identify the language of instruction that enhances learning outcome. The findings of these research works are the focus of this paper, as it tries to relate the findings to some of the problems that confront learners in Nigeria. One major revelation of the exposition is that there is an inextricable relationship between cognitive developments; cognitive functions; academic attainment and the language of school instruction. Based on this some recommendations were made among which is the teaching of English as an additional language rather than its use as a language of instruction in the primary and secondary school levels.

### **Introduction**

The effects of languages of instruction on learning outcomes have bothered scholars, teachers and educators. This issue has led to a harvest of research studies as more countries of the world become bilingual and multilingual, which makes it imperative that foreign tongues would have to be used in teaching and learning especially in cases where indigenous languages are not developed. Scholars and linguists have traced the origin of the spread of bilingualism to factors like colonialism, political instability, migration due to wars and natural disasters and the search for job mobility. They assert that the countries so affected have managed to live peacefully in the past despite their language diversity. But the spread of civilization and growth in science and technology have made it imperative that the major foreign languages must have to be used for education. In addition, countries have realized the importance of education as the instrument for economic, social and political transformation, while individuals view it as a great equalizer, which provides one with unlimited opportunities to excel. This has put a lot of pressure on the education sector in terms of demand, capital and enrolment. Unfortunately, the process quality and quality of output especially in Africa have been sources of disturbance (SAPA 1993; UNESCO 2000; Akinkugbe 1994). In Nigeria in particular, the problem of poor performance and high attrition rate have been the focus of most research works. Literature available on the effects of languages of instruction on learning outcomes have produced

conflicting results, while some scholars are of the view that maternal language has proven advantages which goes beyond academic success to include cultural, emotional, cognitive and psychological benefits. Others assert that it is difficult to determine the exact degree of importance of maternal language on academic success as other variables, which cannot be fully, controlled influence learners performance. No doubt, these views must have influenced language policy formulation, language engineering and development in many countries. The task of this paper is to explore the myriad of research works on the effects of language of instruction on learning outcomes in and outside Africa and their implication to teaching and learning in Nigeria.

### **Research And Experiments Outside Africa:**

A review of research studies shows that educational psychologists were the first to be interested on the effects of bilingualism or multilingualism on children's scholastic achievement and intellectual functioning. Macnamara (1966) and Yoshioka (1929) discovered through research that bilingualism affects cognitive development and scholastic achievement; especially where the language of school instruction is not the child's mother tongue. They equally found out that bilingual children are intellectually inferior to monolingual children.

Also, Darcy (1963:32) Mitchell (1937:117) carried out studies on the relationship between bilingualism and intelligent quotient and their finding revealed an average of 13.32 point higher I.Q of Mexican children who were tested in Spanish which is their mother tongue than when tested in English. In addition, Macnamara (1965:20) affirmed from her research that bilingual children are slower in reading and comprehension than their monolingual counterparts.

On learners' ability to solve Mathematical problems, Macnamara (1966:72) discovered that bilinguals are less competent in solving Arithmetic problems involving reading, interpreting and reasoning. This, he attributes to the learners' inadequacy in language, where as they could handle with ease arithmetic problems that requires only computation of figures (without reading and reasoning).

Furthermore, the use of another language other than the child's mother tongue has been implicated as one of the factors responsible for some psychological problems, high drop out and stop-out rate among learners. Green (1941), Alatis (1970), Haugen (1953), identified that alternate use of two languages in teaching and learning involves "a certain personality adjustment", consequently, it interferes with balance personality development and this leads to emotional instability and maladjustment problems. The learning condition is so complex because the child goes through a lot of stress in trying to maintain a dual personality as he battles to use the two languages.

Also, Macmamara (1953:57) in her research on the effects of the use of other languages other than the child's mother tongue opined that when Hiligayon was used in teaching, learners were happier, relaxed, understood more, were regular to school unlike when English was used, despite the fact that much care was taken to make for a smooth transition from learning in the mother tongue to learning in English. Some recent research findings affirm and reinforce previous research findings for example, in 1978 the University of Bradford in Great Britain, observed the effects of a yearly bilingual programme on five-year-old native Indians. The subjects were divided into two groups – tagged experimental and control groups while the control group used only English as the medium of the instruction the experimental group used both English and Punjabi. When their performance was compared, it was discovered that the control group scored much lower than the experimental group. Also, Klein's (1994) research reinforced, the above findings, in his studies among Italian Speaking children.

In the United States of America, the flaw of the immersion theory for immigrants' children triggered off a comprehensive longitudinal studies from 1981 through 1991 of bilingual-education programme at the Centre for Minority Education and Research of the University of California. The main aim of the research was to find out which language of instruction will bring Spanish-speaking students on a par (in performance) in Language arts and mathematics with their native English-speaking classmates. The study/research examined the effects of these three programmes:

1. English Immersion – a situation where almost all teaching is done English.
2. Early–exist–Bilingual – a situation where the mother tongue is used for not more than forty minutes of instruction daily for about three years.
3. Late–exist–Bilinguals – where learners are taught in their mother tongue for 50 percent of the daily schedule up to grade four. And the findings reveal that:
  - i) The mother tongue of the learner is the most effective language to be used in instruction;
  - ii) The second language can be taught effectively if half the students are taught in that language.
  - iii) Early transition from mother tongue to second language medium does not allow for satisfactory development of the students linguistic and cognitive abilities; and
  - iv) A bilingual/multilingual programme integrated into the regular curriculum gives the best results.



### **Languages Of Instruction And Learning Outcomes: Research Works In Africa:**

Nearer home, research findings abound which reinforce the importance of mother tongue in scholastic achievements. In South Africa, the Threshold Project – a bilingual transition programme in which student's mother tongue was replaced with English in their third year in the primary school – was studied. The study revealed that bilingual programmes where a child has not reached a certain cognitive age is bound to fail (Luckett, 1994). Similarly, the research carried out on the Secondary School Circle in Tanzania demonstrated the superiority of teaching in Swahili rather than in English for effective development of cognitive functions. The research showed that students' answers to questions asked in English are often vague, incoherent, and irrelevant, implying either poor understanding of the questions or inability to use language effectively in giving correct and coherent answers. Whereas, when similar questions were asked in Swahili their responses to them were not only articulate, coherent but also relevant (Mluma, 1978).

Another pointer to the positive correlation between the use of mother tongue in instruction and academic achievement is the Mali experiment. This study set out to evaluate the cognitive benefits for students taught in French. The findings revealed that 48% of learners in the experimental schools taught in the mother tongue of the learners completed their studies without repeating a single class or year while those in the control schools (taught in French) had only 7% of the students completing their studies without repeating a class or year – the implication is that 93% of learners in the control schools repeated classes and this was attributed to language problems.

In Nigeria, some research studies have been carried out and similar revelation have been made. The most ambitious was the six-year-Ife-Primary-School Project which revealed that subjects in the experimental schools scored higher than those in the control schools in all the subjects. It equally identified that they had less learning anxiety, and participated more effectively in the teaching-learning process. However, Ogu (1992) doubted the apparent excellent performance of the experimental schools of the Ife-six-year-Primary- Project and opined that rather than the mother tongue medium he would rather think that the intensive training given to the experimental schools was responsible for the purported excellent results. Despite this scepticism, Fafunwa (1989) asserted that it was the fear of the unknown that has actually prevented us from using our local languages in teaching all school subjects but English. He reiterated that the goal of "inculcating permanent literacy and numeracy and the ability to communicate effectively (FME 1998) as well as inculcating in the child the spirit of inquiry and critical thinking can only be realized in a mother tongue medium. Supporting the above assertion, Okonkwo (1986), (1989), (1992) said that every child's personal, social, and

educational development is tied to his growing competency in using language to meet his needs. And since development of word power and thought process are inextricably tied to his academic achievement as well as an indicator of the child's intellectual ability. The implication is that a child that is handicapped linguistically will not only be inhibited but will be incapacitated in any academic work.

**Implications Of The Above Findings To The Nigeria Educational System  
Viz-A-Viz The Medium Of Instruction And Learning Outcomes:**

A review of the language policy in Nigeria since the inception of formal education in 1843 indicates that even the colonial government was aware of the relevance of the mother tongue medium on learning outcomes, and a bird's-eye view of language policies confirms that. The 1930 Memorandum, for instance, called for the use of local languages in the education of the natives and to make this possible the colonial government established a bureau that undertook the translation of text-books for use in the primary school from English to Igbo, Yoruba, Hausa and Efik. In 1943 another memorandum was issued on the importance of the use of the child's mother tongue in instruction for effective development, especially at the early stages of school life, (Fafunwa, 1974, 1989, 1994). Of equal importance is the Jos Conference of 1952 which re-emphasized the importance of mother tongue in education. The Banjo Report of 1961 was quite critical of the English Language medium, as it was incriminated as one of the factors responsible for poor learning outcomes in schools in the Western Region. Finally, there is no doubt that Nigeria must have taken cognizance of these research findings, experiments, commission reports and memoranda and having gone through the experience of the civil war, she realized the importance of fostering unity through the effective development and use of its indigenous languages. It has also identified language as an important instrument in the education and all round development of the Nigerian child, (FME 1998).

Be that as it may, it would seem that the policy ended with the written document as there is no sincere commitment to enforce the effective implementation of the language provisions of the Policy. Moreover, the poor academic harvest we make today in our educational system will not be a surprise to all well informed Nigerians if we relate the academic performance of our learners to research findings reviewed in this paper. The review of students' performance in Dada (1987) and Akinkugbe (1994) drives home the message on the need for a rethinking and a full implementation of a language policy that will augur well for every Nigerian child and the nation in general. In addition, Awoniyi in Dada (1987) identified some of the problems learners face. Among them are:

- 1) poor linguistic development – (in L1 & L2;)
- 2) interference;
- 3) struggling to understand the language of instruction;
- 4) struggling to use the language not yet understood to learn other subjects (Fafunwa, 1989), and
- 5) Lack of culture-based text for proper interpretation and understanding of English—because language is culture bound (Ezer, 1992)—consequently, the learner confounded by too many language difficulties plods through his textbook and makes little or no academic progress, (Awoniyi, 1989). This is clearly seen in the harvest of failures in the SSCE examination, increase in examination malpractice and holiganism that are today the bane of our educational institutions.

Another interesting development that is high-lighted in Awoniyi's analysis is that a good percentage of the students who wrote the SSCE for the years in question did not only fail English but equally failed Nigerian Languages. We should note that the Nigerian Language in question were their mother tongue which one would have expected them to excel in. This confirms the research findings on the adverse effects of introducing a foreign tongue before the learner reaches a certain cognitive level, as doing so will make him neither competent in his mother tongue nor in the target language (Ezer, 1992). It also confirms the adverse effect of intensive exposure to a foreign tongue (English) – a situation where English is taught as a subject and used as the language of school instruction – demands great cognitive effort from the learners, (Hurch, 1987; Macedo, 1991).

In the light of the above, there is need for a serious re-thinking as the condition may not have improved since 1989, more especially given the worsening economic situation and hardship which have made it extremely difficult for parents to provide enough learning materials as well as pay school fees on time, coupled with the incessant strike that characterize our academic calendar.

### **Recommendation**

In the light of the above discussion, the paper makes the following suggestion which it hopes if implemented would minimize learners learning problems and enhance their academic attainment.

1. This paper suggests that the mother tongue policy similar to the Tanzanian example be tried out in Nigerians. This if implemented would enable the Nigerian learner to use his first language as the language of school instruction through out his primary education. This no doubt will give him enough time to develop competence in his/her first language; facilitate the development of a balance personality;



- enhance cognitive function; lead to emotional stability and facilitate academic attainment.
2. In alternative to the above, the multilingual policy provisions of the *National Policy on Education* for the pre-primary and the first three years in the primary school be strictly implemented. This will enable many Nigerian children from minority language groups, whose languages are still in the oral stage to learn in their first language in these fundamental stages of their education. This would also make it mandatory for the federal government to develop these languages for them to be used as media of instruction in schools. Unlike what obtains today where English or the Language of the immediate environment is used in place of these minority languages (like Engeni, Alissa and Biseni) in Ijaw speaking areas of Rivers State, for example.
  3. English should be taught as an additional language for international and inter-ethnic communication. It is the conviction of this paper that if English is demystified by teaching and learning it as an additional language, the unwholesome competition it now runs with indigenous languages will be reduced. More so, learners will be more motivated to learn the two as revealed in the University of California findings and in Macedo (1991). Judd (1980) in Emenyonu (1982) opines that English as an additional language is a situation in which learners learn English after they had learnt a primary language.
  4. The Federal Government should endeavour to honour her pledge of funding the development of many more Nigerian Languages without which the objectives of education in the country may not be fully realized. They should take a queue from the way countries like India, Sri Lanka, Tanzania; Ethiopia handled their language development and language policies.
  5. The Federal Government should retrain teachers in the primary school level in order to make them efficient and proficient in using the indigenous languages in teaching other subjects. This is because many of them are not competent in it, despite the fact that it is their mother tongue, to use it in teaching other subjects. Also, it will obviate the linguistic difficulties that the teachers themselves might have with explaining new concepts to pupils.

In conclusion, this paper asserts that multiplicity of languages in Nigeria should not be a hindrance to effective and efficient manpower development. and like many other countries with similar problems, English should be taught as a school subject from primary through secondary school and used as a medium of instruction only at the tertiary level. Alternatively, it could be made an optional medium of instruction in the secondary educational level – a situation where we have English medium schools and indigenous

language medium schools. If countries like India, Canada and Tanzania amongst others could pursue formal education in their mother tongue, there is no reason Nigeria cannot do so. What is needed is the courage, and guts to take off.

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