

BILINGUALISM AND INTELLECTUAL DEVELOPMENT: IMPLICATIONS FOR SECOND AND FOREIGN LANGUAGE LEARNING

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Abstract

The paper investigated the opinion of language experts on bilingualism and intellectual development: implications for second and foreign language learning. The paper tried to see the implication of bilingualism in children's intellectual development, that is, the influence of speaking two languages and how it impacts on the intellectual development of the children for second and foreign language learning. The paper was of the opinions that very early learners of a second language are likely to develop emotional tie, which supported the work of piaget cognitive development which saw intellectual development in children as passing through four stages (sensory motor stage (0-5years), preoperational stage (5-6 years), concrete operation (7-8 years) and formal operation (8-12 years) (cf. Elom, 2016). Which means that second and foreign language introduced at some much later stage of the child's cognitive development would not be assimilated in the same gradually, sequenced and dialectic manner applicable to the first language. So, age constituted an important factor in the acquisition or learning of languages. The paper recommended that a child learn both first and second languages at the same time in order to master both languages better. Intellectual development has implication for second and foreign language learning. So, bilingualism is "the ability to function in two languages though, not necessarily with equal proficiency. Effective communication would foster healthy interaction

between individuals groups and even countries (like, Nigeria and Francophone countries).

INTRODUCTION

The need for communication cannot be over stressed as the world is virtually turned into a global village, viable communication is of a paramount importance, hence, the need for bilingualism and intellectual development among children.

A child's first language can interfere in his/her learning ability of second and foreign language by improving his competency and proficiency or by retarding the child's proficiency of second foreign language learning ability. Individual bilingualism would be the structure of behavior resulting from the use of languages that influences one another, each having a degree, a function, an alternation and interferences. Bilingualism has been considered in turns as a handicap or a boost to intellectual development, Jakobovits and Lambert (2010). Language learning is always better when a child is still very young than learning a language as a second or foreign language at old, which does not guarantee proficiency and competency due to age.

Bilingualism can be defined as the alternation of two or more languages in an individual or group as a result of contact between different monolingual communities. Individual bilingualism, according to him, would be the structure of behavior resulting from the use of languages that influence one another, each having a degree, a function, an alternation and interferences. Translation, learners have been admitted by Balkan (2003) in the fold of bilinguals.

Balkan (2003), adopting the compound- coordinate distinction earlier made by Ervin and Osgood (2000) adolescent

bilingualism, went on to claim that compound bilingualism was balanced and guaranteed a mental flexibility that could not be achieved with coordinate bilingualism. Balkan, no doubt, based his assertion on the theory of Lambert and Harvelka (2011) which stated that human thought would be conditioned by language, and persons learning a second language during adolescence would not easily develop spontaneous perception habits in this language.

Lambert and Harvelka (2011) established the threshold age of 10 years beyond which any other language learnt by the child make of him a coordinate bilingual.

LITERATURE

Compound bilingualism, (Lambert and Havelka, 2011), would be “additive and “complementary” while coordinate bilingualism would be “subtractive” and “competitive”.

Lambert’s psycho-pedagogical explanation of the compound – coordinate distinction in bilingualism has not been considered as exhaustive by other interested researchers. Jakobovits (2010) felt that some other dimensions should be given to this distinction to enable it explain the problematic interferences that are not only semantic but also lexical, syntactic, phonological, cultural and behavioural. Baetens- Beardsmore (2010) imagined that the extreme example of a compound bilingual would be a translating machine while coordinate bilingual would be a kind of linguistic schizophrenia.

According to piaget as cited in (Elom, 2016), cognitive operations, perceptive as well as constructive, would develop in four broad phases in the case of a monolingual child. The first phase would be the sensory –motor intelligence lasting from birth to 0- 2 years. This would be a kind of intelligence before

language leading to the fixation of ordering and assembling patterns which constitute the sub-structure of future operations of the mind. Beside, this first phase would already streamline reality by building up, in the course of its normal functioning, the great categories of action such as the scheme of permanent object, of space, of time and of causality.

Piaget's second phase of intellectual development would be the semiotic intelligence starting with the debut of language and lasting between the ages of 5-6 years. This phase would be characterized by representation through a symbolic form (Signifier) differentiated from the object of reference (referent) and used for that specific representation alone. The phase would start with differed limitation and evolve through symbolic plays, mental designs and images to verbal evocation with the budding language.

The third phase, commencing about the ages of 7-8 years, would usher in intelligence by concrete operations still dependent on objects. These operations, based on the concepts of conservation and of reversibility by inversion or by reciprocity, would enable the child classify, serialize, correlate and understand double entry tales. Concrete operational intelligence, like the semiotic intelligence preceding it, would be concerned with numbers, space, time causality and chance.

The fourth and final phase of Piaget's theory of intellectual development would be intelligence by propositional operations lasting from the ages of 8-12 to 14/15 years. At this stage, the child would be able reason beyond the concrete and to perceive the same reality in an array of possible forms and transformations. He would be assumed capable of dealing with

hypotheses and reasoning in proportions detached from the concrete and the present.

Looking back at Piaget's theory of intellectual development, we notice that, at the sensory –motor phase the child would already be endowed with some ability to act on his environment by means of what Piaget's has called "assimilatory perception" which may or may not be innate. The constructive ability possessed by the child before the debut of language would be improved upon during the integral development of the child which would be associated with language as from the second (Semiotic) phase.

Let us suppose that Piaget, with his concept of assimilating perception in the first phase is closer to the truth than Pavlov whose perception model, styled associationist by Piaget, presents a unilateral stimulus- response pattern (S - R) where allowing for the constructive actions of the subject or of the organs of perception (S- O - R).

More recently, Ferreior (2008) worked out a correlation table matching levels of cognitive development of the child, determined by tests borrowed from Piaget with different verbal means (adverbs, periphrases, conjugated verbs) developed by the child.

Table 1

Correlation of cognitive level with verbal means employed by the child (according to Ferreiro, 2008).

Age	Cognitive level	Verbal means employed
5-5 ½	Reversibility in the tests of conservation	<ul style="list-style-type: none">• Order of propositions corresponds with that of events

		<ul style="list-style-type: none"> • Correct use of adverbs for past and future.
7- 8 years	Operational	<ul style="list-style-type: none"> • Permutations in linguistic expression that transitivity. • Do not modify the corresponding external realities
9-10 years	Equilibrium of concrete operations	<ul style="list-style-type: none"> • Mastery of verb tenses

DISCUSSION

If we accept Piaget's cognitive development theory together with the results of the above experimental studies which tend to claim that the acquisition of the child's first language is closely linked with his cognitive development, it would then mean that second and foreign languages introduced at some much later stage of the child's cognitive development would not be assimilated in the same gradually sequenced and dialectic manner applicable to the first language. Age would therefore constitute an important factor in the acquisition or learning of languages.

A child who begins to learn a second language about the same time as the first would probably apply his sequenced cognitive capacities equally to the mastery of the two language systems if the modes of contact with both languages are identical. This is, however, hardly the case, given the selective uses of the two languages for the child's various forms and levels of social interaction at home, at school and elsewhere. It is this kind of bilingualism that Osgood would describe as compound and Balkan consider as balanced and assuring a mental flexibility.

This would be the case with children whose exposure to the second language takes place at birth or at kindergarten age.

Children who begin to learn the second language at some much later stage would presumably, lack in their use of the language that emotional response that accompanies the first language. The child would find it difficult to dream, to feel, to think or even to perceive things in this second language, as Jones (2010) would put it. It is also possible that such an emotional handicap in the use of the second language would compel speakers to drift to the first language when discussing very intimate issues or when speaking passionately. What is difficult to say is to what extent these code-switching patterns affect or reflect patterns of cognitive behavior.

The learning of a foreign language at the beginning of the secondary school period when the child is 11-14 years old corresponds with Piaget's final propositional operation phase of the child's cognitive development when the linguistic capacities earlier mentioned have almost been fully rooted. The child's earlier concrete thinking modes have evolved into more abstracts ones. It is understandable that the learning of a new language need at the semiotic phase.

It could be argued that the child of 11-14 years would naturally not indulge in differed limitation, symbolic plays, mental designed and images based solely on the concrete, these have been necessary during the second developmental phase to compensate for the communicative deficiency of a budding first language. Thus, to integrate such retrogressive modes of perception and action into the learning of a foreign language at the age languages are assimilated in much the same "natural"

way as the first language might look like slowing down the intellectual development of the child.

Learning a second or foreign language at the ages of 12- 16, even when it is instrumental, has to be done within a very difficult phase of the individual's personality development- the adolescent period. It is a period of slowed down intellectual development matched with hypersensitivity and emotional instability in which boys and girls grope towards an uncertain future (Jones, 2010).

RECOMMENDATION

1. Children should be encouraged to learn both their first language (mother tongue) and second and foreign language at the same early stage of their intellectual development.
2. To function well in the present society where the entire world is seen as a global village, one needs good mastering of more than one language like English and French.
3. Children should be exposed to other languages at early age for better assimilation and understanding of second and foreign languages.
4. Parents have a role to play in encouraging bilingualism for intellectual development of their children in second and foreign languages.
5. Age is a very significant factor to be considered in learning of second and foreign language, so the earlier the better.

CONCLUSION

In matching the second and foreign language competences demanded of the child with the appropriate cognitive operations

in force, the language models and learning strategies adopted should pay due attention to such socio- cultural, verb- intellectual and personality variables as are attendant on the age and circumstances of learning a new language. How this can be realized is a matter of concrete details addressed to local education planers, language teaching methodologists second and foreign language teachers.

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