

## The importance of the use of English and French as language of instruction in the teaching of Physics at secondary level rather than native Mauritian Creole Language

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**ABSTRACT:** *The paper is about the language of instruction used in teaching by educators in class, particularly in Physics teaching. The language of learning and teaching (often referred to as 'LOLT', 'medium of instruction' or 'language of instruction') is the language used in the classroom throughout the school day. The paper emphasizes on the importance of using English and French language in teaching rather than the native Mauritian Creole Language. The arguments put forward is that the Physics subject is in English and the students need to be well versed in the writing of Physics through English vocabulary. The students need to be at ease with English language to be able to read the Physics and to answer the examination which is in English language. Creole language has no place in Physics. French vocabulary is not used in Physics but is a support language to help the student understand more complex theories. Mauritians are very familiar with French language and therefore can be used as a support for the teaching of Physics. An Example is during practical sessions, where the student might be having difficulties to understand the English in practice and French can be used as support. During less formal times, the teacher can use French language. English language also provide some standards to the teachings. The paper supports the notion that most of the teaching should be done in English language, being a universally used language and the language in which the students attempt the examination papers.*

**KEYWORDS:** *Physics, language of instruction, English, French*

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### I. INTRODUCTION

**Physics subject at Secondary level:** Physics form part of science. Science is composed of Biology, Chemistry and Physics. Science is compulsory toll grade 9 at the NCE examinations. After Grade 9 the students can choose whether or not to take Physics subject for their Grade 10 and 11 and SC examination. It is no more compulsory. In Mauritius the Examination is led by the Cambridge Assessment International Examinations CAIE. The O Level syllabus is assessed through 3 examinations namely Paper 1 Multiple choice 40 marks, 1 hour weightage of 30 %, Paper 2 theory 1hour 45 minutes 80 marks 50 % and Practical assessment 20 % which is either Paper 3 Practical test , 1hour 30 minutes 40 marks OR Paper 4 Alternative to Practical 1 hour 20 % weightage 40 marks. In Mauritius, it is normal practice to attempt Alternative to practical. All examinations are in English language. Candidates study the following topics: 1 Motion, forces and energy 2 Thermal physics 3 Waves 4 Electricity and magnetism 5 Nuclear physics 6 Space physics. For A level and As level Physics, The assessment is done through Paper 1 Multiple choice 1 hour 15 minutes , 40 marks, Paper 2 As Level Structures 1 hour 15 minutes , 60 marks, Paper 3 Advanced Practical skills 2 hours , 40 marks, Paper 4 A Level Structured Questions 2 hours , 100 marks, Paper 5 Planning, analysis, and evaluation 1 hour 15 minutes, 30 marks. Candidates for Cambridge International A level Physics study the following topics: 1 Physical quantities and units 2 Kinematics 3 Dynamics 4 Forces, density and pressure 5 Work, energy and power 6 Deformation of solids 7 Waves 8 Superposition 9 Electricity 10 D.C. circuits 11 Particle physics 12 Motion in a circle 13 Gravitational fields 14 Temperature 15 Ideal gases 16 Thermodynamics 17 Oscillations 18 Electric fields 19 Capacitance 20 Magnetic fields 21 Alternating currents 22 Quantum physics 23 Nuclear physics 24 Medical physics 25 Astronomy and cosmology. All the papers are in English language.

### II. LITERATURE REVIEW

**Language of instruction:** Stein (2017) argued that the language of learning and teaching (often referred to as 'LOLT', 'medium of instruction' or 'language of instruction') is the language used in the classroom throughout the school day. If the language of instruction is French, for example, this means that the teacher will speak French when teaching mathematics, natural science, and economic and management studies. Learners will be evaluated on their grasp of the subject matter of that particular learning area, rather than the language of

instruction itself. They will be required to complete the assessments in French. They must therefore have a good understanding of the language of instruction, so that they are able to grasp the subject matter of their learning areas. The home language (sometimes referred to as the 'mother tongue') is one of the learning areas included in the school curriculum. This is the language the learner knows best, and is most comfortable reading, writing and speaking. For this reason, the home language taught to the learner at school is often the same as the language the learner speaks at home. The first additional language (referred to as the 'FAL') is a learning area included in the curriculum as a second language for learners. The learner is less fluent in this language than his or her home language, but will reach a stage at which he or she is comfortable to speak, read and write this first additional language. A second additional language (referred to as the 'SAL') is an additional language that forms part of the curriculum, and will be counted as a third language for learners. The introduction of different languages as part of the school curriculum is referred to in government policies as 'additive multilingualism'. What this means is that a learner's skills in his or her home language are developed and strengthened, and then other languages are introduced into the learner's curriculum once this has happened. The reasoning behind this is that the learner will be able to consolidate his or her language and other skills in their home language, and will then easily be able to acquire skills in other languages. For this reason, many experts in education support this approach. This is different from language immersion, which means that the LOLT is different from a learner's home language, and so the learner learns both the language skills and the substance of the learning area at the same time.

### III. DISCUSSION

**English language as language of instruction:** The English language is one of the most geographically widely spoken languages in the world and serves multiple purposes in a rapidly globalizing world. Its wide use extends from politics and economy to technology, science, media and communication. Its mastery opens doors to more information than the mastery of any other language (Crystal, 2003). The importance of English language learning and its usage as a medium of instruction divides opinions. While some prefer using English as a medium of instruction as opposed to the mother tongue, others are suspicious of English language learning from an early age. Contrary to some misconceptions in regards to language learning, children are indeed capable of acquiring two or even several languages at an early childhood, as multiple languages do not compete for "mental space" or confuse children (Lightbown 2008; Crystal 2003). Given an adequate environment for interaction, the developmental path of multiple language acquisition is in fact much like that observed in the acquisition of a single language, with some additional cognitive advantages (Lightbown 2008, 8; Barac & Bialystok 2011; Nicolay & Poncelet 2013). This is, however, conditional to sufficient motivation, exposure, periods of formal study and opportunities for practice (UNESCO 2011b, 18). The benefits of using English as medium of instruction are a better accessibility of English materials as well as existence of better curricula, better job opportunities and career development positive influence in the wider community and wider chances for communication. The Challenges are teacher's lack of proficiency both in English and in teaching in English, lack of parental involvement, loss of the mother tongue of culture and lack of support from government.

### IV. CONCLUSION

Being very fluent and at ease with both French and English, it's normal for me to favour English language as language of teaching and learning and French as a support language. The problem is that despite having the grade of teachers, some teachers cannot handle those languages, they are not at ease in speaking English and French so for these types of teachers, they prefer to use the native Creole Language and in the end the students cannot put their thoughts to paper during examinations.

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