French as the Teaching Language of Life and Earth Sciences in Moroccan School: What’s the Teachers’ Opinion?

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Abstract: The strategic vision for the recent reform in Morocco included the diversification of teaching languages by teaching scientific subjects in French. This starts in pilot’s class teaching scientific subjects in the French language. In this context, the language for teaching Life and Earth Sciences (LES) was changed from Arabic to French. This linguistic change in teaching LES aims to make the learner able to communicate in French in addition to Arabic, and to put an end to the linguistic problem that currently exists when entering universities, that teach these subjects in the French language. In this survey we interested to teachers’ opinions in order to get acquainted with their opinions in teaching Life and Earth Sciences in French for the middle school, and collecting suggestions and solutions to overcome the problem observed in classrooms. We used a questionnaire as an investigative tool for data collection distributed to life and earth sciences’ teachers of middle school. The findings of this research shows that teaching this subject in French forms an obstacle to academic achievement, and classroom interaction, whether in the rural or urban areas. This is due to reasons related to the poor language level of students, the absence of teacher continuous training in teaching the subject in French, and the weakness of the means adopted to make this change in the language of instruction. Among the solutions that have been proposed and used to overcome this educational phenomenon is the preparation of a support plan that includes a program consisting of activities targeting the communicative aspect for learners in French, as well as other activities aimed at providing the learner with skills such as analysis, description, observation and conclusion, while translating scientific words from French into Arabic.

Keywords: Life and earth sciences, Opinions, French language, Middle school

Introduction

The strategic vision for the recent reform in Morocco included the diversification of teaching languages by teaching scientific subjects in French. This starts with the Secondary Education in the near term, and the Preparatory Education in the medium term by creating international departments teaching scientific subjects in the French language. In this context, the language for teaching Life and Earth Science was changed from Arabic to French.

This linguistic change in teaching Life and Earth Science aims to make the learner able to communicate in French in addition to Arabic, and to put an end to the linguistic problem that currently exists when entering universities that teach these subjects in the French language.

However, the current reality is contrary to this, keeping in mind that recent studies and research have confirmed the existence of a problem and an obstacle in the way the learner acquired French; a significant weakness has been recorded in the methods this language is taught.

This leads us to raise a set of inquiries including:
Is changing the language of teaching of Life and Earth Science successful for teaching this subject compared to the old system (adopting the Arabic language)? Did this negatively affect class interaction and academic achievement?

To what extent is it possible to teach the subject of Life and Earth Science in French to provide the learner with the skills and competencies aimed at teaching the subject of Life and Earth Science?

The aim of the research is to survey professors about the teaching Life and Earth Science in French.

- What are teachers' opinions regarding the teaching LES in French language?

Assumptions:

The research problem is the low level of classroom interaction and academic success in the teaching of life and earth sciences in French.
- Reasons for French.
- Because of the poor composition of teachers.
- Reasons for the methods adopted.

Research objectives:

- Propose solutions and means to succeed in the teaching of life and earth sciences in French at the secondary level.
- To create an environment conducive to classroom interaction.
- To create appropriate conditions and assist in the teaching of life and earth sciences in French at the secondary school level.
- Develop the learner's language and communication skills by teaching life and earth sciences in French.

Theoretical Framework

The First Axis: Theoretical Foundations of Life and Earth Sciences Education

Strategic Vision of the Reform 2015-2030

The strategic vision of the reform of the Moroccan school, prepared by the Supreme Council of Education, Composition and Scientific Research, was based on the broad participation of all actors, stakeholders and partners, with the aim of "creating a new school of equity and equal opportunity"; establishing quality; and working for individual integration and social development. »

At the level of engineering and general construction of the strategic vision: The document includes: 23 cranes for the change, 134 paras, and about 1000 supplies. The language used in the document is also discreet, eloquent and easy to read. In addition, the vision consists of Export: Contexts, references, vision time, objectives, reviews, ingredients and goals for the future School, and four chapters: Distributed among the cranes of change, addressing issues of equity, quality, individual integration, community advancement, effective leadership and new change management.

In terms of approaches and approaches taken: The strategic vision is part of the diagnostic, and planning analytical thinking, using a multidimensional approach, and levels, based on extrapolation from the past and built by the present and the future.

In addition, it adopts a global, horizontal and multifaceted (short, medium and long-term) strategic approach that identifies major educational issues, defines general approaches and proposes possible solutions, without addressing the details and investigations that remain the responsibility of the procedural and operational reflection assigned to the sectors in charge of implementing educational policies.

With regard to the process of boldness, the vision stressed the need to adopt the logic of gradualism, flexibility and openness to possible adaptations and exceptions in the light of the results of completed evaluations and
emergency updates, and to define the time horizon from 2015 to 2030, taking into account duration: short term (3 years), medium term (6 years) and long term (6 years) are more than 6 years.

Among the most important contents of the strategic vision are the acquisition of languages, knowledge and skills, values and digital technologies, so that

The strategic report of the Supreme Council for Education, Training and Scientific Research (SECI) declares the adoption of French in Moroccan schools, calling for the four compulsory languages, Arabic, Tamazight, French and English. The strategic vision of the reform to diversify language teaching was achieved with the gradual introduction of language rotation as a mechanism to improve language proficiency through teaching, in some French language materials, starting with short-term secondary education. The French language was adopted in place of Arabic as the language of instruction for scientific subjects, which initially included preparatory secondary education, and is currently applied, to secondary education.

Ministerial Notes

The Ministry of National Education, Higher Education, Scientific Research and Vocational Training of the International Course Project is a French option, through which it seeks to diversify the educational offer and increase the level of language proficiency and quality of learning for students, according to the reference Note No. 17-806 of June 28, 2017, on the theme of launching an international course experience with the preparatory secondary course.

The above ministerial note invites the directors and directors of the regional academies of education and training to open an international bilingual course in the secondary school according to the most important determinations which are:

- This international course is open from the first year of my installation starting from the 2017-2018 school season.

- This course opens in the intermediate institutions of the organization whenever the demand is available and the possibilities are allowed.

- This course includes the teaching of scientific material in French.

Second Axis: Classroom Interactions

The learning process is a process of constant, reciprocal and investing communication and interaction between the teacher and his students, on the one hand, and between students, on the other, and requires the teacher to acquire certain pedagogical skills, as the lack of these skills makes it difficult to achieve the educational objectives. Perhaps the most important of these skills is "classroom interaction".

Definition of Classroom Interaction

There are several definitions of classroom interaction, some of which are as follows:

- All behavioral actions in the verbal (speech) or non-verbal (gestures) note to create a mental and psychological learner for better learning.

- They are opinions, activities and dialogues that take place in the classroom in an orderly and focused manner to increase learner motivation and develop a genuine desire to learn.

- Communicate ideas, activities or emotions from one person to another and from one group to another.

- Are all the words, actions, movements, signals and others that the teacher and students do to communicate in order to exchange ideas and feelings?

- Types of speech commonly used in a chapter.
The interaction of the teacher with his/her students is important in the learning process, so the style and quality of this interaction determines the effectiveness of the learning situation. Classroom interaction of communication patterns between the parties in the learning process has an important and influential role in the performance and behavior patterns of learners. It is the means of teaching and learning, the way in which teamwork evolves between classrooms, generates a sense of belonging to the school and its system, and the way in which the teacher learns about the needs and tendencies of the learners. It is therefore the way to create relationships in which the teacher and the learner understand the learning objectives, understand the strategies to achieve them, in fact communicate the essence of classroom activities, and a tool if the teacher has one to facilitate his tasks, improve his student's level of collection and build his personality. Positive classroom interaction is the foundation of learning.

A teacher who does not master the techniques of communication and interaction in the classroom is difficult to succeed in his or her educational tasks. The results of many studies have emphasized the need for the teacher to master these skills and other studies have confirmed that the teacher's teaching behavior generally affects the learner's behavioral patterns, requiring attention to the process of analyzing verbal reactions and monitoring the teacher's behavior while teaching and objectively recognizing its generality and gender. Teacher-student interaction is the foundation of the educational situation, as it leads not only to the achievement of the educational objectives of the lesson, but also leads to different cultural and social models for the student, both of the teacher and the students, as education is a social process.

The model of teacher-student interaction is influenced by the social and psychological atmosphere in the classroom, which in turn affects the student's effectiveness and thus increases his/her academic success and ability to achieve educational goals.

The results of numerous studies have confirmed the importance of classroom interaction and its role in creating an effective learning environment, and this importance can be integrated by the following points:

- Aiding communication and, exchange of ideas among students which helps develop their thinking.
- Contributes to an effective social and emotional climate.
- Self-adjustment aid.
- Provides opportunities for students to express their knowledge and present their ideas.
- Assists the teacher in developing his or her teaching by providing information on classroom teaching behavior and desired behavioral norms.
- It increases the vitality of the students in the educational situation by freeing them from silence, passivity and withdrawal into a state of decision, discussion and exchange of views on any classroom issue.
- It helps students to develop positive attitudes towards the teacher, towards the subject and even towards their colleagues, where they acquire skills of listening, expression and discussion, the teacher providing their students with security, justice and democracy.
- Raise the level of student achievement and reinforce student learning by explaining things to less able students.

**Classroom Communication Modes**

The behavior of the teacher as a teacher interacts with his students is divided into two main sections:

- Verbal communication and communication through speech.
- Non-verbal communication is done by means of signals, gestures. The teacher should not consider communication as a means of transmitting certain information or skills to the learner only, but rather as an educational skill or task, so that he or she works hard to provide all possible conditions that allow his or her students to learn and master this skill.

Given that verbal behavior is the most dominant behavior in the classroom, it is not surprising that verbal communication is at the heart of the classroom interaction process, and even if verbal communication prevails in the classroom, classroom interaction is not limited to this type of communication. Non-verbal communication contributes greatly to the classroom interaction process, often indicating what the word cannot do, so the teacher should not limit the interaction process to verbal communication. Rather, they should use what they can do in nonverbal communication to make their education more effective.
Bad Communication in Class

What happens if the teacher asks a question and the students do not answer and interact with their teachers? Nothing is known to lower teacher morale more than a teacher's inability to respond to its students. Some students are uncomfortable with tasks that require authentic thinking, others are distressed and unable to respond when they ask a question that requires a high level of thinking, indicating that they do not have enough experience.

The start of a new school year with a new teacher can lead to high levels of stress and anxiety for some students, and this pressure is reflected in their behavior in terms of declining, withdrawing, increasing enrolment, and hesitating to respond (Jabber, 2000).

When students do not respond, do not respond, and do not interact with their teachers, it is likely due to one or more of the following reasons:

- Students may not be fully accustomed to working in activities where many different and appropriate responses are expected. The reason is that their studies, educational programs and the many training exercises they have been trained to do required a correct response and were intensive and, if so, the introduction of an open system, the completed activity may make them confused and worried when they try to understand what the teacher wants from the activity.

Some students try to satisfy the teacher and have learned to give the teacher exactly what he or she wants, and if they do not have indications or signs of correct answers, they will not be able to get the teacher's consent and they need it. Students may not have enough information to be able to carry out certain activities with real insight, and asking students questions beyond their area of experience certainly exposes them to disruptive pressures, and therefore the level of relevance of the reflective activity is an important consideration that must be taken into account.

What is your idea about this? Because they believe from their previous experience that the question the teacher is asking is really: What is the right answer to this question, why? If they are not sure what the teacher wants, they may not be willing to risk giving the wrong answer.

Students may find it difficult to start with questions that are more difficult to understand and require experience in the information process, as well as confidence in the person's ability to take cognitive risks. Students may have given in and feel less thoughtful about their satisfaction with poor nutrition, be highly dependent students, lack self-confidence, understanding and apprehension - use difficult questions to think wisely and rationally, develop thinking skills and encourage analysis of ideas.

Method

- Research sample: The sample includes 35 teachers in middle school who are teaching LES in French language
- Data Collection Instrument: To identify teachers’ opinions, we chose as a tool of investigation a anonymous questionnaire anonymous in Arabic language, elaborated and validated by experts.

Results and Discussion

- Do you support teaching Life and Earth Sciences in French?
Do you support standardizing teaching Life and Earth Science in French?

How is the classroom interaction in the class when teaching Life and Earth Sciences in French?

What is the level of students taught the subject of Life and Earth Sciences in French?
- 69.20% support teaching Life and Earth Science in French.
- 53.80% of teachers do not agree with standardizing teaching Life and Earth Sciences in French.
- Teachers believe that when the subject of LES is taught in French, it leads to poor classroom interaction for learners, as reported by 53.8% of teachers.
- Around 63.60% of teachers believe that teaching the subject of LES in French leads to a deterioration in students' level in this subject. They think that the low level of students in this language leads to their low level in the subject of LES.

Some suggested solutions by the surveyed teachers to overcome poor classroom interaction and academic achievement for learners who study LES in French in middle school:

- Scheduling additional courses for learner support.
- Providing LES textbooks in French.
- Providing continuous training for teachers on teaching the subject in French.
- Including translation of scientific words into the textbook for scientific activity in the Primary Education.
- Reducing the content.

**Conclusion**

By considering the findings of this study, according to the opinions of the questioned teachers, it has been found that teaching the subject of LES in French constitutes an obstacle to academic achievement and class interaction. It has been also revealed that this problem is related to the lack of training on teaching of the subject in French. The solution proposed to solve the problem is to provide training for the benefit of teachers of LES, as well as a supporting plan targeting the communicative skills of the learner. This is reflected in some activities related to French activities; aimed at translating scientific words from French into Arabic; and others aimed at providing the learner with analysis description, observation, and conclusion skills. All this aims to benefit pupils in international class.

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