MULTILINGUALISM IN HIGH SCHOOLS: THE ROLE OF METACOGNITION IN ENGLISH LEARNING AND TEACHING FOR BACCALAUREATE STUDENTS

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Abstract

The strategic location of Morocco at the crossroads of Africa and Europe makes the country a complex multilingual and cultural network. Such multilingual diversity is apparent in most of the social spheres and one of its noticeable occurrences is in the high school curriculum. This is where students are compulsory exposed to more than one language (English is a case in point); yet, they often hold negative attitudes towards them since one of the challenges facing English Language Teachers is that of nurturing learners with the capacity for independent analytical thinking and learning strategies. Accordingly, the aim of this paper is to investigate the impact of metacognitive awareness of reading strategies (Global, Support and Problem solving strategies) in enhancing baccalaureate students[1]' proficiency in English at large and in the reading process in particular. The significance of this research stems from the high status English enjoy in multilingual societies on the one hand, its importance as a variable for baccalaureate students' success or failure on the other hand as well as the numerous evidence studies disclose on the benefits of metacognition. The study is coached within the ex post facto research design and the data collection instruments involve questionnaires to students in addition to their grades in English and in reading. The findings display significant correlation between students' metacognitive awareness of the three strategies on the one hand and their performance in reading and in English on the other hand. Secondly, the results also reveal that the relationships between problem solving strategies and students' grades in English and in reading are much more statistically significant.

Keywords: Metacognition; Multilingualism; Multilingual Classrooms; Reading Strategies

INTRODUCTION

The Moroccan educational system is multilingual and multicultural in nature; it encourages the learning of languages from kindergarten schools in the private sector and from 1st grade in public ones. Researchers from a variety of disciplines as well as policy makers are aware of the importance of multilingualism for the growth of the country, as stated by Larouz (2016, p. 231) "multilingualism is considered as the norm rather than the exception in the world today". Yet; the striking question is the extent to which such multilingualism is

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[1] Grade 12

instilled into learners' competence and performance and it is fruitful for the community. In line with these affiliations, baccalaureate students are the most concerned with this policy since they are compulsory exposed to three languages (Arabic, French, and English or Spanish) and they are assessed and evaluated in all of them as variables for their success or failure at this level. However, some students do not always react positively to this experience which may create a sort of threat to their attitudes towards languages in particular and their learning process in general.

MULTILINGUALSIM

Various historical events have shaped the linguistic and cultural repertoire of the country; moving from a monolingual society, speaking just the Amazigh language, when it was under the control of Imazighen[2] (Berbers) prior to 215 BC then changed into a multilingual network with the influx of different civilisations: Romans, Creek, Byzantines, Arabs, French and Spanish among a number of others. Consequently, different languages intersect in Morocco, Amazigh[3] with its three sub-varieties, Arabic, French, Spanish, English, each one of them is pertinent and functional in a specific context that may justify the choice of one language over the other. As Ennaji (1991, p. 7) puts it "The sociolinguistic context is characterized by the presence of [...] national and international languages that enable some Moroccan people to have a mastery over more than one tongue that they may use in their everyday interaction depending on their own specific needs". Multilingualism as a phenomenon is apparent in all the social spheres in Moroccan society; in administrations, in official meetings and even in informal situations. Related to the context of this paper, one of the most apparent existences of multilingualism is in education at large and in high schools more specifically. Since the educational reform starting from 2000, big efforts have been made to improve the quality of the teaching and learning processes in Morocco; languages are part of these reform procedures. However, research on education displays that though languages are taught, in Moroccan schools, at an early stage many learners fail to demonstrate proficiency in them. The same attitude is held towards English. What is noticeable in classrooms is that one of the challenges facing Moroccan high school ELT is that of nurturing learners with the capacity for independent analytical thinking and learning strategies; this is one of the roles of metacognition in disseminating autonomy across domains to have more adaptive cognitive processes and the willingness to take charge of one's own learning. The merits of Metacognition are apparent in different fields and one of them is in the learning of languages.

METACOGNITION

Scholars from various field of research have contended that awareness of cognitive activity is related to successful learning, reading ability and subsequent comprehension (Baker & Brown, 1984; Carrell, 1989; Mokhtari & Perry 2008; Mokhtari & Sheorey & Reichard, 2008). Flavell (1979) first defined the concept of metacognition as "knowledge of beliefs of what factors or variables act or interact in what way to affect the course and outcome of cognitive enterprises" (p. 907). Accordingly, metacognition involves two main aspects: (1) knowledge or awareness of cognitive processes "awareness of knowledge", and (2) executive control over cognitive processes "regulation processes of this knowledge" (Brown, 1987; Jacobs & Paris, 1987; Schraw & Dennison, 1994; Schraw, 1997; Otani & Widner, 2005). Knowledge of cognition or metacognitive knowledge stands for the type of knowledge individuals have about themselves as cognitive beings, their capabilities, and limitations. This knowledge is of three types: declarative, procedural, and conditional (Brown, 1987; Jacobs & Paris, 1987; Kuhn, 2000; Schraw, Crippen, & Hartley, 2006; Schraw & Moshman, 1995). Declarative knowledge refers to factors impacting one's performance, for instance learners' declaration that they are more skilled in reading comprehension than listening comprehension, that they work better when they are under pressure, or that they learn better while listening to music. Procedural knowledge refers to knowledge about how to use strategies effectively in order to facilitate learning. Conditional knowledge is knowledge about when and why to use strategies; it refers to conditions and contexts for using strategies appropriately (Schraw & Dennison, 1994). Regulation of cognition refers to the active monitoring of cognitive processes as they occur through the use of regulatory strategies to optimize cognitive performance (Baker & Brown, 1984; Schraw & Moshman, 1995). Such a regulation of cognition involves different processes or skills such as planning, information management, monitoring, debugging, and

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[2] The indigenous people of Morocco are Imazighen or the Berbers, as different civilizations have referred to them. They spread from the Siwa Oasis on the Egyptian and Lybian frontiers to the Canary Islands in the Atlantic ocean and from the southern coast of the Mediterranean to the northern areas of Mali, Niger and Burkina Faso (El Aissati 2005, p. 60).

[3] The national standardized division of the group of Imazighen in Morocco falls under three subcategories. Imazighen of the North speaking Tarifit and they are referred to as Rifi, those of the High and Anti Atlas speaking Tashelhit and they are known as shluh. The last group entails those dwelling in the middle Atlas and speaking Tamazight and they are referred to as Amazigh.

evaluation of all aspects of control and monitoring skills**.**

Accordingly, at the level of learning, metacognitive knowledge enables the learner to "select, evaluate, revise and abandon cognitive ... strategies in light of their relationships with one another" (Flavell, 1979, p. 908). In terms of reading strategies metacognitive awareness is referred to as "the knowledge of the readers' cognition relative to the reading process and the self control mechanisms they use to monitor and enhance comprehension (Sheorey & Mokhtari, 2001, p. 432). Research on metacognitive awareness and reading strategies reveals that successful readers display a higher degree of metacognitive awareness than their unsuccessful counterparts (Carrell, 1989; Hudson, 1998; Sheorey & Mokhtari, 2001; Zhang et al., 2008). Learners' awareness involves "knowledge of strategies for processing text, the ability to monitor comprehension, and the ability to adjust strategies as needed" (Auerbach and Paxton, 1997, p. 240).

Methods

Statement of the Problem

Why metacognition in reading?

In Morocco, the learning of national and foreign languages has become a must for all the educational grades, especially for baccalaureate students (grade twelve) who are compulsory exposed to three languages: Arabic, French and English. They take a national exam by the end of the year where they have to exhibit their competence and performance as far as languages are concerned; English is part of this assessment which stands as a variable for their success or failure. However, such an experience is, most of the time, evaluated negatively by learners who find difficulties in learning a foreign language. In line with this concern, "there is a generally accepted reality among first and second language reading researchers and practitioners that students who must study in a second or a foreign language are almost always at a disadvantage, particularly in the areas of reading and writing" (Mokhtari, Reichard, 2004, p. 380).The general portrayal of English language learners as ''at-risk'' learners with ''bundles of problems'' especially in the field of reading and writing stimulates my interest in this topic. This assumption has also been confirmed by a personal experience, based on observation and practice, as a former secondary school teacher witnessing learners lugging behind in reading comprehension. In addition, most of the studies dealing with this issue in Morocco focused on higher education neglecting the role of high schools as the basic ground for language learning and teaching.

Research Objectives

The study purports to investigate the possible existing impact of metacognitive awareness of reading strategies on baccalaureate students' proficiency in English at large and in the reading process in particular. The nature of the study is exploratory and no working hypothesis is raised expecting data analysis to reveal significant findings that would be used as hypotheses for future experimental research under the same perspective. Consequently, some of the objectives of this exploratory Research are as follows;

▸ Explore this new topic of metacognition to become more familiar with the field
▸ Develop tentative theories and hypotheses as far as the topic of the study is concerned
▸ Formulate more precise questions that forthcoming research can answer
▸ Determine the feasibility of conducting this study (Yin, 1994)

Participants

For this reason, purposive sampling is opted for in the sense that a school in the region of Rabat Kenitra is selected; there were no selection criteria apart from the variable of availability. Two baccalaureate classes one representing the literary stream and the other the scientific one take part in this study. The final sample totals 68 participants, 26 male students and 42 female students in addition to the participation of two teachers.

Theoretical Design

Given the nature of the objectives of this paper, the study is conducted within an ex post facto research design which aims at studying relations or correlations between existing variables. Kerlinger (1964) defines ex post facto design as the type of research "in which the independent variable(s) have already occurred and in which the researcher starts with the observation of a dependent variable or variables. He then studies the independent variables in retrospect for their possible relations to, and effects on, the dependent variable or variables" (p. 360). Similarly, this study aims to investigate the possible relationship between the independent variables metacognitive awareness of reading strategies and the dependent ones grades in

reading and grades in English. The goal is to collect facts that pave the way for the raising of hypotheses and conduction of experimental research.

Instruments

One of the most pertinent aspects of conducting research is research instrument because the findings depend on its validity and reliability. Therefore, to collect the significant quantitative data for this study the SORS (Survey of Reading Srategies) tool, which was constructed by Mokhtari and Sheorey (2002) as an instrument for the measurement of metacognitive awareness and perceived use of reading strategies for native and non native speakers of English, is used. The SORS instrument is based on the Metacognitive Awareness of Reading Strategies inventory (MARSI) originally constructed by Mokhtari and Reichard (2002) for native speakers of English; so it was deemed unsuitable for ESL and EFL students. For this reason, two main alterations were made to the MARSI to make it fit the ESL and EFL context; firstly redundancy was reduced, secondly some modifications were made at the level of the wording to make them more comprehensible, then the measurement was pilot tested. The significance of the SORS for the present study stems from the fact that such a tool has already been used in an Arab Context with Emirati students by (Wright, 2015), and with a Yemeni group by Al Sohbani (2013) and it has already been translated into Arabic. The Arabic version fits well the context of this research since not all baccalaureate students can make it to complete a questionnaire in the English language. This instrument measures three broad strategies: Global, Problem Solving and Support strategies. Global strategies concern the reading strategies that are intentional and carefully planned techniques used to monitor progress, plan for reading and set reading objectives. Problem solving are reading strategies involving focused measures readers use to understand the text while reading. Support strategies refer to support mechanisms helping the reader to understand the text, use of a dictionary, use of other supports, taking notes, etc.

FINDINGS

Descriptive statistics

The table below presents an overview of how the data of this research look like; it gives a computed detail of the dependent variables grades in English and grades in reading and the independent ones Global strategies, Support Strategies and Problem Solving strategies. Descriptive statistics are mainly used to investigate the mostly used strategy while students read in English. The analysis reveals that baccalaureate students are mostly aware of Global strategies and they assume to use them, their mean is 49.46, followed by Problem Solving 32.74 and finally Support strategies with a mean of 30.76.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
global strategies	68	30	66	32.74	8,045
support strategies	68	12	45	30,76	7,910
problem solving strategies	68	14	40	49,46	5,656
age	68	17	20	18,56	,835
grade in reading	68	2,00	18,00	9,9451	4,39382
grade in english	68	4,00	19,00	10,9412	4,19268
Valid N (listwise)	68				

CORRELATION

The second analysis deals with the question about the possible relationship between students' metacognitive awareness of reading strategies and their grades in reading and in English. The result displays that the more

students are metacognitively aware of reading strategies the higher their grades are in English in general and in reading more specifically. In other words students whose metacognitive awareness of reading strategies is high, outperform those whose metacognitive awareness is low. The level of significance is apparent below < 0.5 for grades in reading and in English.

		global strategies	support strategies	problem solving strategies	grade in reading	grade in english
Correlations						
global strategies	Pearson Correlation	**1**				
	Sig. (2-tailed)					
support strategies	Pearson Correlation	**,518****	**1**			
	Sig. (2-tailed)	**,000**				
problem solving strategies	Pearson Correlation	**,484****	**,543****	**1**		
	Sig. (2-tailed)	**,000**	**,000**			
grade in reading	Pearson Correlation	**,057**	**-,065**	**,240***	**1**	
	Sig. (2-tailed)	**,645**	**,598**	**,049**		**,000**
grade in english	Pearson Correlation	**,080**	**-,054**	**,244***	**,973****	**1**
	Sig. (2-tailed)	**,517**	**,665**	**,045**	**,000**	
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Multiple Regression Analysis

Multiple regression Analysis is run to extract the most effective independent variable (Glob, Sup, Prob) on the dependent variables (Gr in read, Gr in Eng). This analysis allows us to predict an outcome continuous variable (reading grades/English grades) based on multiple independent predictor variables (global strategies, support strategies, problem solving strategies).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,335[a]	,112	,070	4,23633

a. Predictors: (Constant), problem solving strategies, global strategies, support strategies

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,517	3,635		1,243	,218
	global strategies	,009	,078	,017	,120	,905
	support strategies	-,158	,083	-,284	-1,896	,063
	problem solving strategies	,300	,114	,386	2,638	,010

a. Dependent Variable: grade in reading

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,331[a]	,110	,068	4,04787

a. Predictors: (Constant), problem solving strategies, global strategies, support strategies

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,290	3,473		1,523	,133
	global strategies	,023	,075	,044	,304	,762

support strategies	**-,148**	**,079**	**-,280**	**-1,866**	**,067**
problem solving strategies	**,277**	**,109**	**,374**	**2,556**	**,013**

a. Dependent Variable: grade in english

In brief, this model reveals interesting results; the relationships between problem solving strategies and students' grades in English and in reading are statistically significant because the p-values are less than the significance level of 0.05. However, the relationship between global strategies or support strategies and students' grades in English and in reading is not statistically significant at the significance level of 0.05. In other words students who are mostly aware of problem solving strategies outperform those who use them less; their performance and proficiency is judged through their grades in reading and in English based on their final exam.

DISCUSSION

The findings of this research paper are intended to contribute to understandings about EFL in Moroccan high schools, but also to wider debates about EFL generally. For this reason, it is important to locate this research work in the context of other studies done under the same interest. Accordingly, this study reveals that Moroccan proficient baccalaureate students display high metacognitive awareness of reading strategies; this appears to be consistent with prior research, which has shown that good readers, regardless of native language background, do invoke effective reading strategies to solve reading comprehension difficulties (Jimenez et al., 1995, 1996; Sheorey and Mokhtari, 2001). A vast amount of research attributes this to their bi-literate or multi-literate background as Mokhtari, Reichard, 2004 puts it "many biliterate and multi-literate readers, who are proficient English readers, possess a qualitatively "unique fund of strategic knowledge and skills that is invoked when dealing with diverse textual materials" (Mokhtari, Reichard, 2004, pp. 380-381). Jimenez et al. (1995) claim that "that expert biliterate readers make use of what they know in one language in order to make meaning in the second language". Accordingly, the reading skills and strategies multi-literate readers exhibit have been proven to be transferable from one language to another; however, it is difficult to determine to which language or languages (first, second, or third language) such strategies could be attributed. Equally important, the transfer has been shown to occur not only across languages that share a similar script such as English and Spanish (e.g., Jimenez et al., 1996), but also across languages that have different orthographies such as Arabic and French (e.g., Wagner, 1993) or English and Chinese (e.g., Feng and Mokhtari, 1998).

Concerning the second finding which displays that there is a strong significant correlation between students' metacognitive awareness of problem solving strategies and their grades in reading and in English, such a finding confirms prior research too. A study carried out by Al Sohbani (2013) with a group of Yemeni university students using the SORS instrument, found that learners' use of problem solving strategies correlate significantly with marks in reading skills' exams. A number of possible explanations for the high usage of problem solving strategies among EFL and ESL learners are supplied by Block (1992) who suggested that L2 readers generally read more slowly than native speakers, and when faced with reading challenges they stop to repair reading problems. Numerous are the studies that highlight the importance of metacognition and reading strategies for EFL and ESL learners while dealing with a reading comprehension text in particular and learning a second or a foreign language in general; however, the limited scope of this paper does not allow to cite all of them.

IMPLICATIONS

The nature of this study is exploratory; nevertheless, some implications can be drawn given the pertinent role metacognition plays in different fields at large and in education in particular. The first implication invites educators to raise students' awareness of the merits of metacognition and reading strategies in enhancing their language acquisition since a vast amount of research including this one confirms this. Secondly, such metacognitive awareness of reading strategies Global, Support and Problem solving strategies should be explicitly taught to baccalaureate students; they should learn how to be analytical, independent and autonomous. To that end, instructors should, seriously, consider the fact that learners are not tabula rasa; they come to the classroom with a prior background knowledge that teachers should activate to enhance their learning process; accordingly, one should trigger what strategies learners already know while learning a first or a second language as helpful tips to learn a foreign language.

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