

May 30, 2008

RESEARCH ARTICLE

Linguistic Competence in English and Exposure Factors

Marisol Mota

Universidad Autónoma de Aguascalientes (UAA), México

MA in Educational Research (National Postgraduate Roll, PNP)

Council for Science and Technology (CONACyT-México)

This study examines Linguistic Competence in English Language (LCE) as a general indicator of Communicative Competence. A test and a questionnaire were administered to 1838 undergraduate freshmen from five major institutes of higher education in Aguascalientes, México. The results of the test are analysed in their association with main features of previous educational studies, as well as with students' exposure to language in and outside formal education. This research replies the one carried out by González, Vivaldo y Castillo (2004). The results obtained for the case of Aguascalientes are higher than those reported by these authors in relation to Mexico City. Although, both cases point out an unacceptable situation: majority of freshmen do not satisfy a basic level of LCE. The type of previous institutions was identified as the main factor associated with LCE: Students who attended public schools observe disadvantages in comparison to students who accomplished previous levels at private schools. As there is a pattern of continuity in the type of schools, the students who enrolled in a private higher education institute got significant CLE scores than those who attended a public one. The results show that English language teaching and learning—not only in public schools but also in private ones—requires urgently dealing with aspects of quality, more than those related to quantity.

KEY WORDS: [ENGLISH AS A FOREIGN LANGUAGE] [TESTING AND EVALUATION OF FOREIGN LANGUAGE] [LANGUAGE EXPOSURE] [LINGUISTIC COMPETENCE] [HIGHER EDUCATION]

Corresponding author: Marisol Mota; e-mail: colleagues@correo.uaa.mx

English is recognized as a “global language” (Crystal, 1997); its status as the main international language to a great extent responds to the globalization process, which sets on the centre the communication among individuals belonging to various and distinctive cultures in order to achieve a broad range of goals. In Mexico, as many countries around the world, English is the foreign language mainly offered in educational institutes of all levels. Being this, there is special need in knowing achievement levels in learning English as foreign language, thus to be aware of challenges and possibilities to face successfully the demands of a competitive, changing and interactive world.

In México, the demand for English command is present along with relevant exposure opportunities to this language: the study of English is a compulsory subject in basic and subsequent levels of formal education, the specialised services in English represent a huge market in almost every Mexican locality; also there is a great variety of resources in daily life that allows almost everyone to get familiar with this language. In the Mexican context, who starts higher studies has had a remarkable opportunity of exposure to English language: almost 500 instructional hours, doing regular activities in daily life, specially based on mass media contents, and an important probability of non-formal education in this language.

Objective

The twofold objective of this research was to determine the level of linguistic competence in English (LCE) as a foreign language of freshmen students, from five major higher institutes (located in Aguascalientes, México) and, to identify the educational and exposure factors associated to such level.

Method

To measure the LCE it was applied a modified version of the *Nelson English Language Test*,¹ previously validated by González, Vivaldo y Castillo (2004). A questionnaire was also administered to recollect information about students’ profiles, covering aspects of education, socio-familiar conditions, and formal/non-formal exposure to English as foreign language. Descriptive and correlation analysis are applied to data obtained.

The instruments were administrated to a random sample of 1838 subjects, at 95 per cent confidence-level and five per cent of precision, according to the main variable, LCE. The subjects of study were entering freshmen, academic year 2005-2006, at five major local institutes of higher education (two public and three private).

Results

Linguistic Competence of undergraduate freshmen

As a first analysis, a comparison was made between the CLE scores in the study here reported (correspondent to students located in Aguascalientes, México) and the ones obtained in the research carried out by González, Vivaldo y Castillo (2004) in Mexico City. The aggregate results showed by the students in Aguascalientes are higher (6.4 per cent) than their counterparts in México City (40.42 per cent of correct answers vs. 34.05, respectively). This difference is statistically significant ($F = 16.038$, $p < .000$). Despite this, evidently both cases represent results far below the minimum required to be assessed as “passed” (60 per cent), in terms of common Mexican grading system.

CLE-Previous education

The type of previous education was identified as the main factor associated to LCE. Subjects’ previous education (primary, secondary, and high school) may correspond to private or public modality. It was considered four groups: “entirely public”, when the subject studied the three previous stages at public schools—so none at a private one; “predominantly public”, when he or she studied two stages at a public school and one at private one; “less public”, when the subject attended a public institution during only one stage and the rest at a private one; “not public” corresponds to the case when the student’s previous education was totally at private institutions.

CLE results are statistically different among these four groups ($F = 183.884$, $df = 3$, $p < .000$). The *Duncan’s* test ordered the groups according to decreasing amount of public education, which means an increase in the amount of private education (Table 1).

Table 1 Duncan’s Test, CLE by previous education profile

Duncan^{a,b}

Previous Education Profile	N	Subset for alpha = .05			
		1	2	3	4
Entirely public	913	34.68			
Predominantly public	386		38.06		
Less public	172			44.54	
Not public	345				56.38
Sig.		1.00	1.00	1.00	1.00

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 322.621.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

As the amount of public education decreases (which in correspondence means an increase in private type), mean of CLE rises; significant variations are observed per each level of previous studies (elementary, secondary and high school).

LCE- Exposure to English language

LCE results were analysed in their association with different kinds of exposure to English: formal exposure: defined as the mean hours a week of instruction in formal education during primary, secondary and high school. Non-formal exposure: refers to mean hours a week of instruction at a specialised English institute, as extra education or reinforcement to the English language learning. Socio-familiar exposure: defined as the total number of common practices of interaction with the English language in everyday life.

LCE-Formal exposure. The analysis of association between CLE and formal exposure to English language relates each level of previous education: primary, secondary and high school (see Tables 2 to 4).

Table 2 CLE means by elementary school instructional hours²

Duncan^{a,b}

Hours per week Primary education	N	Subset for alpha = .05				
		1	2	3	4	5
None	1257	35.48				
Up to 3	180		42.10			
Above 3 to 6	271			52.43		
Above 6 to 9	52			56.28		
Above 9 to 15	36				64.19	
Above 15	27					70.95
Sig.		1.00	1.00	.14	1.00	1.00

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 63.771.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

As *Duncan's* test shows (Table 2), as range of exposure rises, statistically significant higher means in CLE are obtained ($F = 118.778$, $df = 5$, $p < .000$). In relation to exposure in secondary education, see table below.

Table 3 Duncan's test, CLE by instructional hours per week in secondary education²Duncan^{a,b}

Hours per week Secondary education	N	Subset for alpha = .05		
		1	2	3
Up to 3	1440	36.49		
Above 3 to 6	288		53.02	
Above 6 to 9	48			61.85
Above 9 to 15	30			62.76
Above 15	10			67.34
Sig.		1.00	1.00	.17

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 31.579.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

What was observed for primary education (Table 2) is much less clear for secondary education (Table 3). Differentiation among ranges of hours of exposure to English during secondary education is statistically significant ($F = 123.836$, $df = 4$, $p < .000$). Nonetheless, according to separation produced by the *Duncan's* test, when amount of exposure increases above nine hours, not significant differences are observed in CLE. This pattern is as well identified in relation to high school (see Table 4).

Table 4 Duncan's test, CLE by instructional hours per week in high school²Duncan^{a,b}

Hours per week High education	N	Subset for alpha = .05			
		1	2	3	4
Up to 3	1297	36.47			
Above 3 to 6	412		46.91		
Above 6 to 9	54			59.69	
Above 9 to 15	35			64.11	64.11
Above 15	15				67.29
Sig.		1.00	1.00	.19	.34

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 42.752.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Differentiation among ranges of hours of exposure to English language during high school is statistically significant ($F = 92.392$, $df = 4$, $p < .000$). Even so, when time is added to nine hours a week, results obtained in CLE are not clearly higher.

It can be said that time of instruction (formal exposure) during primary education has a significant effect in CLE results during primary education. This is not clear for upper educational levels; where exposure to English above nine hours did not produce significant higher CLE results.

LCE-Non-formal exposure. The cases of freshmen who studied English at a specialised institute represent 26.8 per cent; in counterpart 73.2 per cent only received instruction in this language through formal education. Independently of the period of studies, freshmen who had the opportunity to study English as non-formal education showed higher performance, in comparison to those who did not (46.68 versus 38.26, respectively). This difference is statistically significant ($F = 91.531$, $df = 1$, $p < .000$). The predominant situation of non-formal education in English language corresponds to those cases that exposed to English for up to one year (which represent 71 per cent of the corresponding group). Results for this predominant category are showed in Table 5.

Table 5 Duncan's test, CLE by hours of non-formal instruction in English, for up to one year courses²

Duncan^{a,b}

Hours per week for up to one year	N	Subset for alpha = .05	
		1	2
Up to 3	135	39.22	
Above 3 to 6	133	42.69	
Above 6 to 9	35	46.74	
Above 9 to 15	10	47.97	
Above 15	24		57.23
Sig.		.06	1.00

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 32.283.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Exposure to English language in non-formal education showed a significant effect on higher CLE; but as data allowed the analysis, no significant improvement on CLE was observed until an exposure equivalent to 15 hours or more.

Informal exposure. Socio-familiar exposure was defined as the common practices of interaction with English in the everyday life of freshmen. A total number of fifteen practices³ were analysed in their association to CLE. Table below shows *Duncan's* differentiation among ranges of practices.

Table 6 Duncan's test, CLE by number of informal activities²Duncan^{a,b}

Number of activities	N	Subset for alpha = .05			
		1	2	3	4
None	64	29.64			
1-3	446	32.93			
4-6	572		40.04		
7-9	452			46.38	
10-12	135				53.62
13-15	15				58.75
Sig.		.24	1.00	1.00	.07

Means for groups in homogeneous subsets are displayed.

a Uses Harmonic Mean Sample Size = 62.564.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

As it is showed in Table 6, informal activities of interaction with English language have a significant positive effect on LCE when the number of practices is above four.

Correlations: CLE-Exposure factors

As final part, it was applied an analysis using *Pearson's* correlation coefficient between CLE and types of exposure to the language. Formal exposure is higher correlated with LCE than non-formal or informal exposure. Highest correlations were found between CLE and hours of formal study of English, especially at elementary education ($r = .494, p < .000$). In second place was identified informal exposure; and in the third one was found exposure to English language in specialised institutes.

Conclusion

The observed levels con LCE point out a poor command of English language in terms of communicative competence (Cazden, 1996; Henning & Cascallar, 1992; Hoffman, 1992; Melles, 1997; Nakamura, 1997; Nedashkivska, 2004). The general low performance of undergraduate freshmen in linguistic and syntactic aspects tells about serious difficulties in establishing successful social interactions that necessarily require appropriateness in relation to agents, roles, and specific cultural contexts.

Public education is at disadvantage in relation to private education; nonetheless, not even the results showed by freshmen who studied at private institutions, are too unacceptable, since they are

in general bellow the minimum of 60 per cent of correct answers. LCE presents a statistically significant association with informal and non-formal exposure to the language, spheres that are mainly defined by economic, social and cultural capital, expected to be higher on those families that can afford to pay non-public education. The study presented talks about an important limitation for Mexican students, of taking advantage of personal, work, and socio-cultural opportunities in the process of globalisation.

Notes

- 1 Modified version of *Nelson English Language Test* (NELT) was developed by a team, members of ANUIES, headed by González, Vivalado y Castillo (2004). Integrates 64 items ordered in increasing grade of difficulty, so that it identifies three different levels of LCE: elementary, medium and advanced.
- 2 *D'Agostino Omnibus* normality test was applied to CLE scores obtained by the corresponding groups of students who exposed to English language “above 15” hours a week during primary education, secondary education, and high school; as well as the CLE performance of the corresponding groups of students who exposed to the language through non-formal education for “6-9” and “above 15” hours a week, for up to one year. Same test was passed by the CLE results showed by the group of freshmen who does “13-15” informal activities of exposure to English Language.
- 3 Questionnaire, previously piloted, interrogated about 19 everyday activities. The analysis of their association with CLE is applied only to 15, those that were statistically significant at $p < 0.05$. They were: Interpersonal communication: Chatting to family members, friends, co-workers, classmates or teachers. Mediated communication (Internet): Chatting to family members, friends, classmates or teachers. Autonomous learning: use of book-based courses (not included text-books), video-based courses, audio-based courses. Entertainment: listening to music, watching TV programmes, reading non-academic materials.

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