

STUDENT PERCEPTION OF THE USE OF A BLENDED-LEARNING MODEL TO IMPROVE GRAMMATICAL COMPETENCE

Technological Ecosystems for Enhancing Multiculturality TEEM'15



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RESEARCH PURPOSE & QUESTIONS

The aim of this quantitative study is to explore students' perceptions of a course offered via a blended educational delivery mode to know the benefits of the technological model implemented in learning English grammar.

RESEARCH QUESTIONS

1. How do students perceive their level of the parts of speech, the kinds of sentences and the aspects related to word formation?
2. How do students enrolled in a blended instructional delivery mode course perceive their educational experience in terms of course satisfaction?
3. How do the e-activities designed improve students' grammatical competence?
4. How do the e-activities help students to be more aware of the rules of English grammar?
5. Does the VLE implemented support independent and collaborative learning?
6. Has the VLE implemented supplied a natural environment for grammar practice?

METHOD

QUANTITATIVE RESEARCH

Quantitative

Ex-post-facto design.

Natural groups.

Descriptive study, survey method, using techniques of
descriptive & inferential analysis.

SAMPLE

Quantitative

143 students

English Morphosyntax

Probability sample.

Cluster sampling.

Relative error 2.5%.

INSTRUMENT

Quantitative

2 Online Questionnaires (Google drive)

Open, closed, multiple choice, and Likert scale -rating questions → halo effect

Internal consistency → Cronbach's alpha, $\alpha=0.858$

External validity → Experts

FIELDWORK

Quantitative

Students filled in the questionnaires during the first and the last week of the first semester of the course.

286 questionnaires.

ORGANIZATION AND ANALYSIS OF DATA

Quantitative

We followed this scheme in the process of quantitative data analysis:

1. We prepared the register coding to process the questionnaires → the data matrix.
2. We introduced the data.
3. We did descriptive and inferential analysis using the SPSS statistical software version 20.

We used Microsoft Office Word to illustrate the results.

RESULTS

English Grammar Contents

We analysed if there were **statistically significant differences** (CI 95%) between **all the items** of the pre-test and post-test that referred to **parts of speech, kinds of sentences and word formation**, and there were **differences** between the mean of **determiners** ($t=-12.091$), **nouns** ($t=-12.808$), **pronouns** ($t=-15.582$), **adjectives** ($t=-12.760$), **adverbs** ($t=-15.016$), **verbs** ($t=-16.201$), **modal verbs** ($t=-18.738$), **phrasal verbs** ($t=-37.651$), **prepositions** ($t=-32.216$), **relative clauses** ($t=-23.971$), **passive voice** ($t=-27.253$), **conditional sentences** ($t=-25.347$), **reported speech** ($t=-27.217$), **adverbial clauses** ($t=-32.126$) and **word formation** ($t=-33.700$).

We **rejected the null hypothesis** and say that there was a relation between the **improvement of students' level of these grammar contents** and the **efficacy of the blended-learning model** designed.

The **mean** of all these items is **higher** in the **post-test** than in the **pre-test**, so we can conclude that the **technological model** implemented is **effective for teaching grammar and improving students' level of English grammar**.

RESULTS

Effectiveness of Forum, Online Glossary, Online Test, Podcast & Videocast

There were **significant differences between** groups in the dependent variables that referred to the **effectiveness of forum** ($p=.000$), **online glossary** ($p=.000$), **online test** ($p=.000$), **podcast** ($p=.000$) and **videocast** ($p=.000$).

Tukey post-hoc test revealed that there were **statistically significant differences** in the effectiveness of forum between the **youngest** (20-24 and 25-29) and the **oldest students** (30-34, 35 or more than 35, $p=.000$, $p=.000$), as well as between the group of **students aged between 25 and 29** and the **oldest students** (30-34, 35 or more than 35, $p=.000$, $p=.000$). However, there were no statistically significant differences between the groups of students aged between 20 and 24, and 25-29 ($p=.518$).

The **youngest students** (20-24 and 25-29) considered that the use of the **forum** was **more effective** ($\bar{x}=4.63$ & $\bar{x}=4.50$) to **improve their level of grammar** than the **oldest students** (30-34, $\bar{x}=3.77$ and 35 or more than 35, $\bar{x}=3.77$).

Similar results were obtained in the dependent variables that refer to the **effectiveness of online glossary , online tests, podcast and videocast** . There were **significant differences** in the **effectiveness of all these technological tools** between the **youngest** (20-24 and 25-29) and the **oldest students** (30-34, 35 or more than 35). However, there were **no significant differences** between the groups of **students aged between 20-24, and 25-29**.

The **youngest students** (20-24 and 25-29) considered that the use of all **these technological tools** was **more effective** (online glossary: 20-24, $\bar{x}=4.69$ and 25-29, $\bar{x}=4.65$, online tests: 20-24, $\bar{x}=4.75$ and 25-29, $\bar{x}=4.61$, podcast: 20-24, $\bar{x}=4.67$ and 25-29, $\bar{x}=4.58$, videocast: 20-24, $\bar{x}=4.79$ and 25-29, $\bar{x}=4.61$) to improve their **level of grammar** than the **oldest age groups** (online glossary: 30-34, $\bar{x}=3.36$ and 35 or more than 35, $\bar{x}=3.44$, online tests: 30-34, $\bar{x}=3.24$ and 35 or more than 35, $\bar{x}=3.35$, podcast: 30-34, $\bar{x}=3.73$ and 35 or more than 35, $\bar{x}=3.55$, videocast: 30-34, $\bar{x}=3.86$ and 35 or more than 35, $\bar{x}=3.64$).

RESULTS

Effectiveness of the E-activities to be more aware of the Rules of English Grammar and Improve Grammatical Competence

There were **statistically significant differences** in the **effectiveness of e-activities to be more aware of the rules of English grammar** between the **youngest** (20-24 and 25-29) and the **oldest students** (30-34, 35 or more than 35). However, there were **no significant differences** between the groups of **students aged between 20-24, and 25-29**.

There were also **statistically significant differences** between the **youngest** (20-24 and 25-29) and the **oldest students** (30-34, 35 or more than 35,) in the **effectiveness of e-activities to improve grammatical competence**. However, there were **no statistically significant differences** between the groups of students aged between 20 and 24, and 25-29 (p=.995).

In both cases the **youngest students** (20-24 and 25-29) agreed with the statement that the **assessment and self-assessment e-activities** were **effective to be more aware of the Rules of English Grammar and improve their Grammatical Competence** (20-24: $\bar{x}=4.17$, $\bar{x}=4.30$ and 25-29: $\bar{x}=4.22$, $\bar{x}=4.27$) than the **oldest age groups** (30-34: $\bar{x}=3.85$, $\bar{x}=3.81$ and 35 or more than 35: $\bar{x}=3.80$, $\bar{x}=3.71$).

RESULTS

The VLE as a Natural Environment to Practice Grammar and Support Collaborative and Individual Learning of English Grammar

There were **statistically significant differences** between the **youngest** (20-24 and 25-29) and **the oldest students** (30-34 and 35 or more than 35) in the dependent variable which referred to the **VLE as a natural environment to practice grammar**, support **collaborative** and **individual learning**. However, there were **no statistically significant differences** between the groups of **students aged between 20-24, and 25-29** ($p=.998$, $p=.921$ and $p=.774$).

The **youngest students** (20-24 and 25-29) considered that the VLE implemented provided useful tools to learn and practice **grammar contents** in a very **natural way**, in **real contexts** with native speakers ($\bar{x}=4.47$ and $\bar{x}=4.46$). They also agreed with the statement that the blended-learning model designed **supported collaborative** ($\bar{x}=4.40$ and $\bar{x}=4.35$) and **independent learning** ($\bar{x}=4.31$ and $\bar{x}=4.41$) of **English Grammar**.

The **oldest age groups** (30-34 and 35 or more than) **neither agree nor disagree** with these statements ($\bar{x}=3.63$, 4.02, 3.72 and $\bar{x}=3.40$, 3.84, 3.82).

RESULTS

Students' self-assessment of their level of English Grammar

Tukey post-hoc test revealed that there were **significant differences** between the **youngest** (20-24 and 25-29) and the **oldest students** (30-34, 35 or more than 35, $p=.000$, $p=.000$). However, there were **no significant differences** between the groups of **students aged between 20-24, and 25-29** ($p=.598$).

There were **differences** between the **mean of students' self-assessment of their level of English grammar** ($t=-13.763$). We reject the null hypothesis and say that there is a **relation between the improvement of students' self- assessment of their level of English grammar and the efficacy of the blended-learning model implemented.**

CONCLUSIONS

Our research emphasizes the **efficacy of the blended-learning model** to improve students' **grammatical competence**.

There are clear evidences of the **students' satisfaction** towards the course, considering that the have had **adequate and innovative activities and resources** to improve all the contents of the subject: **English Morphosyntax**.

Students consider that they have been part of a very **innovative and natural environment** in which they have been exposed to **English grammar contents**, through a great variety of technological media. All these **Social Web tools** are changing the way in which users take part in the **communicative and learning process**. They state that **Web 2.0 philosophy** facilitates the **access to knowledge**, the **communication between individuals** and the **possibility of being a content author**.

Students **learn, practice, and communicate** with all the **protagonists of the teaching-learning process**.

There are also strong evidences of the **effectiveness** of the design proposed and its e-activities **to improve their grammatical competence**. However, it is also emphasized the **necessity of helping the oldest students to improve their digital competence** in order to get an optimal use of technology.

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