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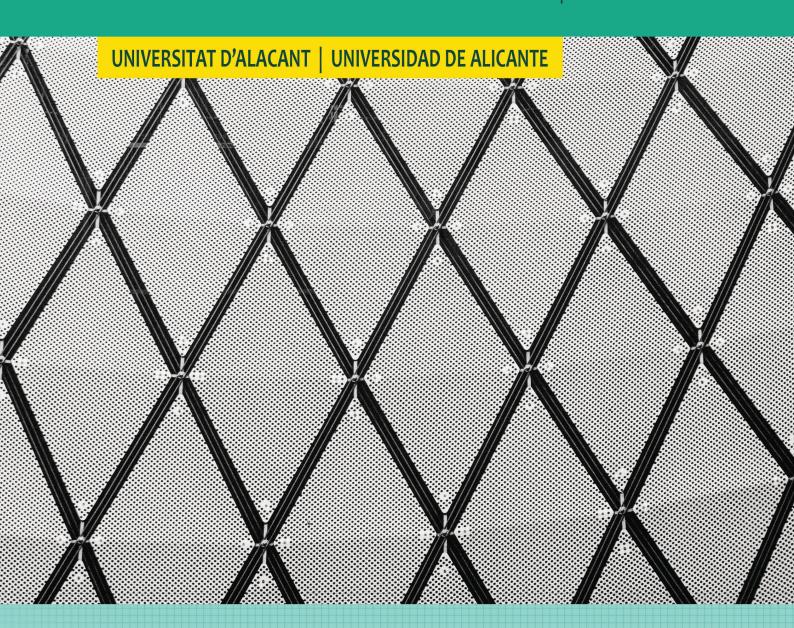
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17. Nearpod as a tool in the implementation of the formative assessment in "English for International Relations I and II"

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ABSTRACT

Following the objectives established in the RED 5527 entitled "Evaluación Formativa y Estrategias de Enseñanza en las Asignaturas de 'Inglés Para Las Relaciones Internacionales' (I Y II)" for the formative evaluation and elaboration of teaching strategies for the courses 'English for International Relations' (I and II), some needs and deficiencies were identified in relation to students' grammatical and lexical competence. In an attempt to tackle those issues, the engaging, intuitive and attractive tool Nearpod was used. Thus, a Nearpod presentation with activities was created. Accordingly, the main objective of this study is to carry out a formative evaluation based on the detection of errors made by students in the first semester of the course by means of the aforementioned lecture enhancing application. The results obtained from 59 respondents after using a Google Forms questionnaire point to the success of those activities in the better understanding of the course contents and skills in general and, more specifically, the grammar points addressed. Nearpod seems to enhance lectures at a higher education level, since most of the participants indicate how they enjoy learning at their own pace and its practicality, and proves how this intervention and activity personalisation improves students' performance through an interactive and attractive presentation.

KEYWORDS: Nearpod, formative evaluation, higher education, educational experience, ESP.

1. INTRODUCTION

A series of different needs and deficiencies were identified in the students of 'English for International Relations II' in relation to various grammatical and lexical points after following the objectives in the RED 5527 entitled "Evaluación Formativa y Estrategias de Enseñanza en las Asignaturas de 'Inglés Para Las Relaciones Internacionales' (I Y II)" for the formative evaluation and the creation of teaching strategies for the subjects of 'English for International Relations' (I and II). These subjects are carried out in the first and second semester of the academic year 2021-2022. In an attempt to solve these grammatical and lexical needs and deficiencies, we resorted to the creation of specific and personalised activities given the success of formative evaluations in higher education identified in previous studies (see Casterad-Zaragoza et al., 2009; Vallés-Rapp et al., 2011; Fraile-Aranda et al., 2013; Hortigüela-Alcalá et al., 2015; Morze et al., 2017; Hidalgo-Apunte, 2021)

The tool selected to amalgamate all the actives and resources is Nearpod. This application created around 2011 (see Burton, 2019) allows us to create presentations with the possibility of inserting different types of activities and web content, while tracking both the students doing the activities in real time, but also those who attend and are present in the classroom and who, for whatever reason, have decided not to carry out those tasks. Among the many positive aspects Nearpod has, McClean and Crowe (2017) highlight its engaging nature, interactive qualities and its simplicity and convenience in use. Wang and Chia (2022) pinpoint its compatibility with many devices (e.g. computers, smartphones and tablets), its easy accessibility (e.g. no account registration or downloading the app is required) and its intuitive design for both lecturers and students. Furthermore, this tool is said to promote active learning in an integrated learning environment (Hakami, 2020). Accordingly, by selecting Nearpod, we follow McClean & Crowe (2017) and move from traditional didactic lectures to more interactive and engaging ones with the idea of contributing to a more active, enjoyable, attractive and interesting teaching-learning experience. Consequently, Nearpod was chosen to facilitate the fulfilment of the formative evaluation activities that have allowed both the diagnosis and the intervention in students' training in order to solve the deficiencies detected. In this way, the students' language skills are assessed and improved, while taking into account the objectives and skills established in the subject.

Thus, the main objective of the present study is to carry out a formative evaluation in the second semester (in 'English for International Relations II') based on the of errors detected in the formative (continuous and final) evaluation in the first semester of the course under analysis ('English for International Relations I'). This formative evaluation allows us to collect detailed and precise information on the grammatical and lexical points which create problems to the students and in which they continue having a high number of mistakes in the second part of the subject. In this way, and with the activities and the application that we propose here, we intervene and focus in a personalised way on the points to be improved by the students through an interactive and attractive presentation tool before the end of the academic year. Therefore, the specific objectives of this study are to present students with a personalised grammar review through a dynamic tool that favours active participation and the

monitoring of said activities. It also contributes to the improvement of the student's knowledge and skills, as well as to the quality of the teaching of the course itself, and, in general, of the degree.

2. METHODOLOGY

With the aforementioned objectives in mind, a two-hour class session was created using Nearpod as a tool to implement the practicum activities created from the formative assessment in the first part of the subject. All of these activities have a podcast session dealing with a current topic related to the subject as the thematic connecting thread. Both the presentation and activities were assessed by the students with a Google Forms questionnaire that followed the activities.

2.1. Context and participants

This study included 59 college students, aged 19-20 years old, enrolled in the second-year course "English for International Relations" within the degree in International Relations during the academic year 2021-2022 at the University of Alicante. More specifically, the participants were 19 males (32.20%) and 40 females (67.80%).

2.2. Instruments

Two instruments were used for this study: (1) Nearpod, that is, the instrument to carry out the activities (e.g. open-ended questions, fill in the gaps, collaborative board, join the pairs and survey), and (2) a Google Forms questionnaire with ten Likert questions to assess this experience. On the one hand, Nearpod is a tool that allows instructors to create "engaging presentations with images, videos, and interactive activities such as polls, open-ended questions, collaborative tasks, and quizzes" (Shehata et al., p. 139). In fact, Mattei and Ennis (2014, p.4) indicate how Nearpod's interactive features include some belonging to a passive learning experience (e.g. slide and video) and others which are active learning tools, such as polls, quizzes, Q&As, the option to draw on the screen or search the Internet. Additionally, more active learning tools were included in the app after recent updates, such as the "game-like" activity *Time to Climb* (Nearpod, 2022). Thus, this instrument enables instructors to condense all the resources and activities tackling the student's needs and deficiencies in one comprehensive presentation. On the other hand, the second instrument, a Likert questionnaire, is intended at assessing both the activities presented as part of the formative assessment and the tool itself.

2.3. Methodology

After the formative assessment carried out in the subject taught in the first semester (English for International Relations I), several mistakes committed by the students were identified (e.g. derivation, preposition use and others). That is, this formative assessment provided us with several

grammar points to be explored with new activities in order to help improve the student's performance. Instead of choosing the traditional path to implement these exercises on paper, we selected a Nearpod presentation and students used their own devices to answer the questions (e.g. smartphones, tablets and/or laptops). This presentation was duplicated to accommodate all the students in the class (i.e. 59), since the free version licence available to all educators only allows for forty students simultaneously in each presentation. The activities created were varied and diverse. The Nearpod presentation included an initial slide with a Spotify link where students were instructed to listen to 18 minutes of the podcast "The Truth of the Matter" hosted by Andrew Schwartz, more specifically, the programme entitled "Social Media and Political Polarization". After that, several activities dealing with this topic and covering grammar points were presented in the form of open-ended questions regarding the topics at hand (e.g. political polarization), virtual cards to match words they could hear in the podcast to their definitions, an interactive fill in the gaps focused on prepositions and a collaborative board where they were requested to give real examples of political polarisation in the media nowadays, especially on Twitter, as shown in Figure 1 and 2. The examples provided by the participants cover different topics, such as the pandemic, the current Ukrainian-Russian conflict, abortion, euthanasia or meat consumption.

Figure 1. Political polarisation examples found on Twitter by the students.

Figure 2. More political polarisation examples found on Twitter by the students.

At the end of the Nearpod presentation, a questionnaire with ten Likert questions, dealing with the use of Nearpod as an interactive tool to carry out these English language activities and also the formative evaluation, was linked. The questionnaire focused on whether (1) the activities introduced through Nearpod helped them improve their understanding of the grammar points included in the presentation and in need of revising; (2) these types of activities enhanced the learning process by making it more attractive, fun, motivating and appealing; or (3) they would like to encounter more activities using Nearpod in the near future, amongst others.

3. RESULTS

The following section presents a summary of the most relevant findings. Figure 3 includes the results for the ten Likert questions presented to the students. These are further developed below.

Figure 3. Summary of the student satisfaction assessment with Nearpod (n= 59 students).

First of all, the students agreed on the fact that activities presented with Nearpod helped them better understand the course contents. Therefore, this formative assessment proves to be successful in the reviewing of the grammar points that the students found troublesome in the first half of the subject (see Table 1).

Table 1. The activities on Nearpod improved the students' understanding of the subject matter or content.

			Q1			
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	4 (21.05%)	11 (57.90%)	4 (21.05%)	19
Females	-	7 (17.50%)	13 (32.50%)	13 (32.50%)	7 (17.50%)	40
Total	-	7 (11.86%)	17 (28.81%)	24 (40.68%)	11 (18.65%)	59

In fact, the majority of students agreed (31; 52.55%) or strongly agreed (21; 35.59%) with the affirmation that these activities helped them improve the grammar points (e.g. derivation, preposition use, and others) covered in those exercises, as shown in Table 2.

Table 2. The activities on Nearpod helped the students revise and improve the grammar points.

| | Q2 | | | | | |
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	-	11 (57.90%)	8 (42.10%)	19
Females	-	-	7 (17.50%)	20 (50%)	13 (32.50%)	40
Total	-	-	7 (11.86%)	31 (52.55%)	21 (35.59%)	59

Regarding the enhancing properties this tool may possess, like being more attractive, fun, motivating and appealing than regular paper activities, males tend to find Nearpod more enhancing with 57.90% strongly agreeing with this affirmation while female students neither agree nor disagree for the most part (19; 47.50%) (see Table 3). This might show the adaptability of females with regard to the different types of presentation of English activities.

Table 3. The activities on Nearpod enhanced the learning process by making it more attractive, fun, motivating and appealing.

| | Q3 | | | | | |
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	4 (21.05%)	4 (21.05%)	11 (57.90%)	19
Females	-	7 (17.50%)	19 (47.50%)	7 (17.50%)	7 (17.50%)	40
Total	-	7 (11.86%)	23 (38.98%)	11 (18.65%)	18 (30.51%)	59

Concerning the tools' practicality, that is, the fact that it is able to amalgamate everything needed in order to carry out the activities (e.g. audio, pictures, webpages, questionnaire and others), both male and female students either agree (42.10% and 32.50%, respectively) or strongly agree (42.10% and 35%, respectively) with its handiness and useful qualities (see Table 4).

Table 4. Practicality of the integrated learning environment.

| | Q4 | | | | | |
	Strongly dis-agree	Dis-agree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	3 (15.80%)	8 (42.10%)	8 (42.10%)	19
Females	-	-	13 (32.50%)	13 (32.50%)	14 (35%)	40
Total	-	-	16 (27.12%)	21 (35.59%)	22 (37.29%)	59

When comparing the activities presented through Nearpod to traditional paper activities in terms of easiness to fulfil said activities, males indicate a stronger predilection for Nearpod than females that, although agreeing for the most part, also find themselves in a neutral position on the matter (see Table 5). This falls in line with the results in Table 3, where females did not find this tool much more amusing or attractive than traditional paper activities.

Table 5. Activities are easier to be fulfilled with Nearpod rather than in the traditional way (on paper).

Q5						
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	4 (21.05%)	4 (21.05%)	11 (57.90%)	19
Females	-	7 (17.50%)	13 (32.50%)	7 (17.50%)	13 (32.50%)	40
Total	-	7 (11.86%)	17 (28.81%)	11 (18.65%)	24 (40.68%)	59

Dealing with the motivation derived from the fulfilment of these activities through Nearpod, the majority of the class either agrees (27; 45.76%) or strongly agrees (15; 25.43%) with the fact that Nearpod enhanced their motivation in class (see Table 6).

Table 6. Nearpod contributes to my motivation on doing activities to improve my English.

Q6						
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	3 (15.80%)	8 (42.10%)	8 (42.10%)	19
Females	-	7 (17.50%)	7 (17.50%)	19 (47.50%)	7 (17.50%)	40
Total	-	7 (11.86%)	10 (16.95%)	27 (45.76%)	15 (25.43%)	59

The liberty given by this application in exercise execution, in other words, the freedom provided by the tool to go back and forth while also having the audio playing, facilitates the learning at one's own pace. More specifically, female students seem to enjoy this feature in particular (28; 70%), as showcased in Table 7.

Table 7. Ability to learn at one's own pace through Nearpod.

Q7						
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	4 (21.05%)	4 (21.05%)	11 (57.90%)	19
Females	-	-	6 (15%)	6 (15%)	28 (70%)	40
Total	-	-	10 (16.95%)	10 (16.95%)	39 (66.10%)	59

When enquired whether or not they learn more the traditional way instead of using Nearpod, 76.27% of the students disagree and 16.95% strongly disagree. Only four students (6.78%) neither agree nor disagree with this statement, as shown in Table 8. These results accentuate the convenient nature of this tool to improve lectures.

Table 8. Participants learn more when they do not use Nearpod.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	4 (21.05%)	11 (57.90%)	4 (21.05%)	-	-	19
Females	6 (15%)	34 (85%)	-	-	-	40
Total	10 (16.95%)	45 (76.27%)	4 (6.78%)	-	-	59

Similarly, the students either disagree (24; 4.68%) or strongly disagree (24; 4.68%) with the affirmation of not finding any difference in the learning process with or without Nearpod (see Table 9). Therefore, these results lead us to consider that this application does make a difference and could complement, enrich and be of great help in the creation and ideation of the curriculum in this subject.

Table 9. There is no difference between learning with/through Nearpod and without it (on paper).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	11 (57.90%)	4 (21.05%)	4 (21.05%)	-	-	19
Females	13 (32.50%)	20 (50%)	-	7 (17.50%)	-	40
Total	24 (40.68%)	24 (40.68%)	4 (6.78%)	7 (11.86%)	-	59

Overall, the students from English for International Relations II would like to encounter more Nearpod activities in the future (see Table 10). Only 27.12% of participants feel undecisive and only seven females (17.50%) out of the entire class (11.86%) would not like to find this app in future classes.

Table 10. Participants' desire to encounter more Nearpod activities in the near future.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Males	-	-	3 (15.80%)	8 (42.10%)	8 (42.10%)	19
Females	-	7 (17.50%)	13 (32.50%)	13 (32.50%)	7 (17.50%)	40
Total	-	7 (11.86%)	16 (27.12%)	21 (35.59%)	15 (25.43%)	59

4. DISCUSSION OF RESULTS AND CONCLUSIONS

The results obtained through the Google Forms questionnaire evidence how almost all the participants (52; 88.14%) improved and revised the grammar points through this formative assessment implemented with Nearpod. This aligns with the results obtained in previous experiences dealing with formative evaluation in higher education (see Casterad-Zaragoza et al., 2009; Vallés-Rapp et al., 2011; Fraile-Aranda et al., 2013; Hortigüela-Alcalá et al., 2015; Morze et al., 2017; Hidalgo-Apunte,

2021). These activities allowed for the revision of the grammar points they were lacking while introduced by means of a real podcast dealing with a topic which is part of the key theoretical concepts of the subject. In addition, these activities helped in the optimal monitoring and the improvement in the grammatical points covered by the students. Consequently, Nearpod has proven to be a valuable tool to (1) increase student motivation, (2) facilitate activity fulfilment, (3) enhance the learning process and (4) introduce a varied range of activities that favour different learning styles. These results regarding enhancing the teaching experience are similar to those obtained by Astarina and Herlinda (2022) and Hakami (2020).

Despite the results, there are also some shortcomings and limitations. Some technical issues related to the tool selected were found and align with those identified by Astarina & Herlinda (2022). Despite the possibility of using several devices to follow the lesson, the Nearpod smartphone layout presents more issues than its computer counterpart. In our case, students were incapable of accessing the final questionnaire with their smartphones and, as a result, it had to be sent by email to those students who were incapable of accessing it through the Nearpod platform on their mobile phones. In addition, our study only takes into account a reduced sample of students and, therefore, our results cannot be extrapolated or generalised, as this is proof of just one class and academic year. Nevertheless, the results obtained with this educational experience, such as the motivating effects derived from using this app, the freedom to learn at their own pace, and the convenience of having everything one can possibly need in the presentation, amongst others, are worth taking into account and could be applied to forthcoming years both in this subject and others in higher education. We encourage other researchers to continue designing engaging lessons and finding new ways of transmitting knowledge while keeping up to date with the latest technology at hand.

5. REFERENCES

Astarina, A. N., & Herlinda, R. (2022). Promoting Active and Interactive Learning in a Higher Education Online Class. *English Journal Literacy Utama, 6*(2), 534-543. https://doi.org/10.33197/ejlutama.vol6.iss2.2022.179

Burton, R. (2019). A review of Nearpod – an interactive tool for student engagement. *Journal of Applied Learning & Teaching, 2*(2), 95-97. https://doi.org/10.37074/jalt.2019.2.2.13

Casterad-Zaragoza, J. Z., Luis-Pascual, J. C., & Manrique-Arribas, J. C. M. (2009). Experiencias de innovación en docencia universitaria: resultados de la aplicación de sistemas de evaluación formativa. *Revista de Docencia Universitaria, 7*(4), 1-33. https://doi.org/10.4995/redu.2009.6232

Fraile-Aranda, A. F., López-Pastor, V. M. L. M., Castejón-Oliva, F. J. C., & Romero, R. (2013). La evaluación formativa en docencia universitaria y el rendimiento académico del alumnado. *Aula Abierta, 41*(2), 23-34. https://reunido.uniovi.es/index.php/AA/issue/view/1040/148

Hakami, M. (2020). Using Nearpod as a Tool to Promote Active Learning in Higher Education in a BYOD Learning Environment. *Journal of Education and Learning, 9*(1), 119-126. https://doi.org/10.5539/jel.v9n1p119

Hidalgo-Apunte, M. E. (2021). Reflexiones acerca de la evaluación formativa en el contexto universitario. *Revista Internacional de Pedagogía e Innovación Educativa, 1*(1), 189-210. https://doi.org/10.51660/ripie.v1i1.32

Hortigüela-Alcalá, D., Abella-García, V., & Pérez-Pueyo, Á. (2015). Percepciones del alumnado sobre la evaluación formativa: Contraste de grupos de inicio y final de carrera. REDU: *Revista de Docencia Universitaria, 13*(3), 13-32. https://doi.org/10.4995/redu.2015.5417

Mattei, M. D., & Ennis, E. (2014). Continuous, Real-Time Assessment of Every Student's Progress in the Flipped Higher Education Classroom Using Nearpod. *Journal of Learning in Higher education*, *10*(1), 1-7.

McClean, S., & Crowe, W. (2017). Making room for interactivity: using the cloud-based audience response system Nearpod to enhance engagement in lectures. *FEMS Microbiology Letters, 364*(6), 1-7. https://doi.org/10.1093/femsle/fnx052

Morze, N., Vember, V., & Varchenko-Trotsenko, L. (2017). Formative and peer assessment in higher education. In E. Smyrnova-Trybulska (Ed.), Effective Development of Teachers' Skills in the Area of ICT, Vol. 9, (pp. 159-179). Katowice-Cieszyn: Studio Noa for University of Silesia.

Nearpod (2022, March 4th). Nearpod updates. https://nearpod.com/blog/nearpod-updates/ [Último acceso 17/07/2022]

Schwartz, A. (2021, September 24th). Social Media and Political Polarization. *The Truth of the Matter*. Center for Strategic and International Studies (CSIS). https://open.spotify.com/episode/5ANArq9yfjJBmzOCAEmbDF?si=574c866c40384c88

Shehata, N., Mitry, C., Shawki, M., & El-Helaly, M. (2020). Incorporating Nearpod in undergraduate financial accounting classes in Egypt. *Accounting Education, 29*(2), 137-152. https://doi.org/10.1080/09639284.2019.1704806

Vallés-Rapp, C., Ureña-Ortín, N., & Ruiz-Lara, E. (2011). La Evaluación Formativa en Docencia Universitaria. Resultados globales de 41 estudios de caso. REDU. *Revista de Docencia Universitaria, 9*(1), 135-158. https://doi.org/10.4995/redu.2011.6184

Wang, J., & Chia, I. (2022). Engaging Students via Nearpod® in Synchronous Online Teaching. *Management Teaching Review, 7*(3) 245–253. https://doi.org/10.1177/2379298120974959