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Teaching English as a Foreign / International Language

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Integrating 360-degree videos in a Greek EFL classroom:
Action research with young learners exploring their motivation in
speaking

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Patras, Greece, February 2023

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Abstract

The advent of Information and Communication Technologies (ICT) in the 21st century has mandated the need for new literacies, including multi-literacy and digital literacy, essential to the technologically advanced modern era. Therefore, the field of English language teaching (ELT) was highly affected after the integration of computer-assisted language learning (CALL) in teaching as well as other state-of-the-art educational tools. A technological tool that is gaining attention in educational communities lately is the 360-degree video, which offers almost realistic experience to learners, especially when watched on head mounted displays (HMDs).

In the present dissertation, the researcher aims to investigate the effect of 360-degree videos on learners' motivation in participating in speaking tasks. More specifically, three important factors that affect motivation are examined, namely the learners' involvement, attitudes and self-efficacy. For the purpose of the study, the researcher conducted action research with a group of pre-intermediate Greek learners, who demonstrate weaknesses in the speaking skill. The research included four speaking lessons integrating the use of 360-degree videos, combined with stimulating speaking tasks. All sessions took place at the language school where the researcher works, in Veria, northern Greece, and were video recorded. Hence, the research data was obtained from the session recordings as well as from the participants' feedback after each session and at the end of the research.

After analysing the research data, the usefulness of supplementing lessons with 360-degree videos was confirmed. It was concluded that this type of video could prove valuable in increasing learners' motivation in the learning process. To be more precise, the results of the research showed that the three parameters that were examined, namely their involvement in speaking tasks, their self-efficacy and their attitudes towards the lessons, were affected in a positive way. Lastly, the research results were juxtaposed against previous relevant research confirming the potential of 360-degree in EFL teaching.

Keywords

technology in education, 360-degree videos, virtual reality, speaking tasks, motivation

Η ένταξη βίντεο 360-μοιρών σε μια ελληνική τάξη εκμάθησης της αγγλικής ως ξένης γλώσσας: Έρευνα δράσης με νεαρούς μαθητές, που εξετάζει την παρώθησή τους όσον αφορά στον προφορικό λόγο

Σοφία Συμεωνίδου

Περίληψη

Η εμφάνιση των Τεχνολογιών Πληροφοριών και Επικοινωνιών (ΤΠΕ) στον 21ο αιώνα επέβαλε την ανάγκη για νέους γραμματισμούς, συμπεριλαμβανομένου του πολυγραμματισμού και του ψηφιακού γραμματισμού, απαραίτητοι για την τεχνολογικά προηγμένη εποχή του σήμερα. Ως εκ τούτου, ο τομέας της διδασκαλίας της αγγλικής γλώσσας επηρεάστηκε σε μεγάλο βαθμό από την ενσωμάτωση του ηλεκτρονικού υπολογιστή καθώς και άλλων υπερσύγχρονων εκπαιδευτικών εργαλείων στη διδασκαλία. Ένα τεχνολογικό εργαλείο που κερδίζει την προσοχή στις εκπαιδευτικές κοινότητες το τελευταίο διάστημα είναι τα βίντεο 360 μοιρών, τα οποία προσφέρουν σχεδόν ρεαλιστική εμπειρία στους μαθητές, ειδικά όταν το παρακολουθούν με τη χρήση μάσκας εικονικής πραγματικότητας (HMDs).

Στην παρούσα διπλωματική εργασία, ο ερευνητής στοχεύει να διερευνήσει την επίδραση των βίντεο 360 μοιρών όσον αφορά την παρότρυνση των μαθητών να συμμετέχουν σε δραστηριότητες παραγωγής προφορικού λόγου. Πιο συγκεκριμένα, εξετάζονται τρεις σημαντικοί παράγοντες που επηρεάζουν τα κίνητρα των μαθητών: η συμμετοχή τους, η στάση τους και η αντίληψή τους όσον αφορά τις ικανότητες τους. Για τον σκοπό της έρευνας, διεξάχθηκε έρευνα δράσης με μια τάξη Ελλήνων μαθητών, οι οποίοι παρουσιάζουν αδυναμίες στον προφορικό λόγο. Η έρευνα περιελάμβανε τέσσερα μαθήματα που ενσωματώνουν τη χρήση βίντεο 360 μοιρών, σε συνδυασμό με επικοινωνιακές δραστηριότητες παραγωγής προφορικού λόγου. Όλα τα μαθήματα πραγματοποιήθηκαν στη Βέροια, στο κέντρο ξένων γλωσσών όπου εργάζεται η ερευνητήτρια, και βιντεοσκοπήθηκαν. Συνεπώς, τα ερευνητικά δεδομένα προέκυψαν τόσο

από τις βιντεοσκοπήσεις όσο από τις απαντήσεις των συμμετεχόντων μετά από κάθε μάθημα αλλά και στο τέλος της έρευνας.

Με την ανάλυση των δεδομένων της έρευνας, επιβεβαιώθηκε η σπουδαιότητα της συμπερίληψης βίντεο 360 μοιρών στα μαθήματα. Συνεπώς, τα βίντεο αυτής της κατηγορίας μπορούν να αποδειχθούν πολύτιμα για την ενίσχυση της παρότρυνσης των μαθητών στη μαθησιακή διαδικασία. Για την ακρίβεια, τα αποτελέσματα της έρευνας έδειξαν ότι οι τρεις παράμετροι που εξετάστηκαν επηρεάστηκαν θετικά. Εν κατακλείδι, τα αποτελέσματα της έρευνας αντιπαραβάλλονται με προηγούμενες παρόμοιες έρευνες που επιβεβαιώνουν τη δυναμική των βίντεο 360 μοιρών στη διδασκαλία της Αγγλικής Γλώσσας.

Λέξεις - Κλειδιά

τεχνολογία στην εκπαίδευση, βίντεο 360 μοιρών, εικονική πραγματικότητα, δραστηριότητες παραγωγής προφορικού λόγου, παρώθηση

Table of Contents

Acknowledgements	iv
Abstract	v
Περίληψη.....	vi
Table of Contents	viii
List of Figures	x
List of Tables.....	xi
List of Abbreviations & Acronyms.....	xii
Introduction	1
1. Literature Review	4
Introduction	4
1.1 Teaching English to young learners	4
1.1.1 Theories of language development	4
1.1.2 Theoretical approaches for language teaching	4
1.1.3 Teaching the speaking skill to young learners	5
1.2 CALL in ELT	7
1.2.1 The value of CALL in the language classroom of the 21 st century	7
1.3 Implementing videos in ELT	7
1.3.1 The benefits of videos as a teaching tool	7
1.3.2 Criteria for selecting video materials	9
1.3.3 The use of videos in the language classroom.....	10
1.4 360-degree videos	11
1.4.1 The concept of 360-degree video	11
1.4.2 The implementation of 360-degree videos in educational settings.....	12
1.5 The concept of motivation in ELT	13
1.5.1 Motivation in the language learning process	13
1.5.2 The value of motivation in language learning.....	14
1.5.3 Factors affecting motivation in language learning.....	15
Conclusion.....	16
2. Research methodology	17
Introduction	17
2.1 Research questions	17
2.2 Research strategy	18
2.2.1 Philosophical worldview of the study	18
2.2.2 Type of design and strategies of inquiry	18
2.3 Research method	19
2.4 Procedures of action research.....	20
2.4.1 Overview of the research cycles	20
2.4.2. Cycle 1: Pilot lesson.....	22
2.4.3 Cycles 2-5: Outline of the speaking lessons	23
2.5 Sampling method and the participants of the research.....	25
2.6 Research site.....	26
2.7 Data collecting instruments.....	26
2.7.1 Needs analysis questionnaire	27
2.7.2 Focus group discussions.....	28
2.7.3 Post-session questionnaires.....	29
2.7.4 Observation checklist.....	30

2.7.5 Post-research questionnaire.....	30
2.8 Method of analysis	31
2.9 Ethical considerations	31
Conclusion.....	32
3. Results and discussion.....	33
Introduction.....	33
3.1 Results of the data collection tools.....	33
3.1.1 Needs analysis questionnaire	33
3.1.2 Focus group discussion responses.....	36
3.1.3 Cycle 2	36
3.1.4 Cycle 3	38
3.1.5 Cycle 4	39
3.1.6 Cycle 5	41
3.1.7 Post-research questionnaire results	42
3.1.8 Post-research focus group discussion results	43
3.2 Discussion	43
3.2.1 Learners' involvement in speaking	43
3.2.2 Learners' self-efficacy in speaking	45
3.2.3 Learners' attitudes toward English learning	46
3.3 Answers to the research questions	46
Conclusion.....	48
4. A critical overview of the research	49
4.1 Significance of the research and its implications for EFL	49
4.2 Relevance of the research to similar studies	50
4.3 Limitations of the research.....	51
4.4 Suggestions for further research.....	51
References.....	52
Appendix A: Lesson plans & worksheets	60
Appendix B: Information and consent forms.....	78
Appendix C: Needs analysis questionnaire.....	82
Appendix D: Focus group questions (Cycle 1).....	90
Appendix E: Post-session questionnaire	91
Appendix F: Observation checklist.....	96
Appendix G: Post-research questionnaire	97
Appendix H: Post-research focus group questions	102
Appendix I: Needs analysis questionnaire answers	103
Appendix J: Focus group responses (Cycle 1).....	104
Appendix K: Post-session questionnaires results.....	105
Appendix L: Observation checklist results	106
Appendix M: Post-research questionnaires results	107
Appendix N: Post-research focus group responses (Cycle 5).....	108

List of Figures

Figure 1: Cardboard devices for smartphones	12
Figure 2: HMD, Oculus Go.....	12
Figure 3: Visual representation of the research cycles.....	21
Figure 4: Flowchart of the process of a speaking lesson within a cycle	24
Figure 5: Participants' answers on items 7, 8 and 9.....	34
Figure 6: Participants' answers on item 13	34
Figure 7: Participants' answers on item 14	35
Figure 8: Participants' answers on item 23	36

List of Tables

Table 1: Questions to be answered before a video-based lesson	9
Table 2: Overview of the five-cycle action research	22
Table 3: Overview of the research data sources.....	27
Table 4: Participants' answers on item 22	35
Table 5: Frida's and Chris' answers before and after the speaking sessions	42
Table 6: The participants' answers on item 11 of the post-research questionnaire	43

List of Abbreviations & Acronyms

CALL	Computer-Assisted Language Learning
CEFR	Common European Framework of Reference for languages
CLT	Communicative Language Teaching
EFL	English as a Foreign Language
ELT	English Language Teaching
HMD	Head-Mounted Display
L1	First Language
L2	Second Language
VR	Virtual Reality

Introduction

Learning a foreign or a second language (L2) is regarded a complicated and demanding process since it entails acquiring vocabulary and grammar structures as well as developing certain skills, including communication skills. However, according to Krashen (1982), acquiring an L2 involves a subconscious process, similar to the process young children undergo when they acquire their first language (L1). Krashen's theory of L2 acquisition consists of five hypotheses, one of which is the 'affective filter hypothesis'. In an attempt to explain how some factors affect L2 acquisition, a number of 'affective variables' were introduced; namely motivation, self-confidence and anxiety (ibid.).

Admittedly, motivation is considered the key to success when referring to language learning. Various scholars have elaborated on the prominence of motivation and have concluded that without a degree of motivation it is quite difficult for language learners to attain knowledge. According to Dörnyei (1998, p. 117) "it provides the primary impetus to initiate L2 learning and later the driving force to sustain the long and often tedious learning process". In the rapidly evolving era we live, teachers who wish to contribute to affecting their learners' motivation, constantly seek ways to keep up-to-date with the technological advancements and approach learners utilising tools that their learners are familiar with and which they highly appreciate. Undoubtedly, the presence of technology in the 21st century has prompted novel teaching pedagogies implementing a learner-centred approach, where the focus of learning has shifted from grammar and vocabulary to communicative applications.

It is generally acknowledged that videos are an integral part of the 21st century classroom. Videos are regarded an invaluable teaching tool as they present both communicative and cultural content, which demonstrate the way a language is used (Sherman, 2003). Several scholars have also hinted at the significance of the videos in language learning focusing on the opportunities they provide for the development of the listening and speaking skills (Goldstein & Driver, 2015; Tomalin, 1990). Nevertheless, apart from their significant contribution to language learning, emphasis has also been placed on the role videos play in learners' motivation, as they attract their interest urging them to participate actively in the process of learning (Lonergan, 1985).

A relatively recent kind of video that is gaining attention in educational communities is the 360-degree video. 360-degree videos are defined as "ultra high

resolution spherical videos, which contain an omnidirectional view of the scene” (Corbillon, Simon, Devlic & Chakareski, 2017). Quite a few scholars have pinpointed the potential this technology has as it allows learners to immerse into virtual environments and subsequently, fosters language learning, affecting both receptive and productive skills. Nonetheless, a limited number of studies have investigated on how 360-degree videos affect learners’ motivation. From the existing literature, studies have indicated that the integration of 360-degree videos in education and particularly in ELT, has affected learners in a positive way.

In the present dissertation, the researcher, who is also the teacher of an EFL class with young learners, has observed that they demonstrate weaknesses in the speaking skill, being hesitant in participating in communicative speaking activities. Their involvement in speaking tasks is quite passive with evident low level of communicative competence. Furthermore, the researcher-teacher has identified that the particular group of learners lack motivation, have negative attitudes towards speaking English and low self-efficacy.

Considering the aforementioned situation, the researcher selected to conduct active research, consisting of four cycles, integrating the use of 360-degree videos along with meaningful speaking tasks. The purpose of the study is to examine whether the implementation of 360-degree video affects learners’ motivation and to what extent the learners’ involvement in the process of learning is affected. Additionally, the researcher intends to inquire into the extent to which the development of self-efficacy is fostered by using this type of videos.

The dissertation is organised in four chapters. The first chapter provides the theoretical background and literature review of the subject matter that the research concerns, concluding to the research questions. In particular, emphasis is placed on the broader context of the research, the outer circle, namely, young learners’ characteristics, the speaking skill, Computer-Assisted Language Learning (CALL) and videos in ELT. Subsequently, the literature review focuses on the inner circle of the research, accentuating 360-degree videos, providing details on the distinction between the latter and the field of virtual reality (VR) and the concept of motivation in EFL.

The second chapter introduces the research methodology followed in the present action research, describing thoroughly the research design, the methodological considerations, the research participants, the method analysis and the data collection tools. In the third chapter, the results of the study are presented and analysed, followed by a

discussion and the answers to the main question as well as the three research sub-questions. Ultimately, the final chapter of the dissertation highlights the significance of the research, referring to the implications of the research results, which are juxtaposed with the results of similar studies. Research limitations along with suggestions for further research are demonstrated, as well.

1. Literature Review

Introduction

This chapter presents painstakingly theoretical approaches regarding ELT to young learners, and particularly teaching the speaking skill, as well as CALL and educational videos in ELT. Then, a thorough description of 360-degree videos is provided followed by the theoretical assumptions on the role of motivation in an EFL classroom.

1.1 Teaching English to young learners

1.1.1 Theories of language development

During the 20th century, language learning was the focal point of psychologists, linguists and philosophers, and several languages were proposed for language development, among which behaviourism, cognitivism and interactionism. Skinner (1957), the most prominent advocate of the behaviourist theory, supports that language learning is achieved through repetition, imitation and reward. At the other end of the spectrum, Chomsky (1959) was a representative proponent of cognitivism, supporting that languages are learnt thanks to some innate biological mechanisms, rendering humans able to “absorb” even the most complicated language structures without much difficulty. Interactionism demonstrates that languages are acquired through interaction with other interlocutors (Long, 1983).

1.1.2 Theoretical approaches for language teaching

Based on the aforementioned theories, principal approaches were introduced in an attempt to inspect second and foreign language acquisition. One of the most influential theories is Krashen’s Monitor Model (1982) regarding SL acquisition. Krashen (1982) differentiates between language learning and language acquisition, arguing that the former entails a conscious process through diligent studying whereas the latter is the corollary of directly being exposed to a language and subconsciously mastering it. Given his assumption, he highlights that teachers should concentrate on acquisition, and hence they should assist learners in picking up the language naturally. However, what has highly affected EFL teachers is Krashen’s Affective Filter Hypothesis emphasising that for acquisition to be achieved, learners’ psychological state constitutes a decisive factor stressing the

significance of learners' high levels of motivation and interest (ibid.). In other words, the acquisition process may be inhibited if learners' feel bored, stressed, or simply when they are not keen on the target language.

Considering learners' motivation of paramount importance, scholars developed the Communication Approach or Communicative Language Teaching (CLT), disapproving preceding methods, such as the Grammar-Translation Method, the Direct Method and the Audiolingual Method, which were established based on memorisation of language patterns (Yule, 1985). To the contrary, the principal axis of the Communicative Approach is communicative competency, which is achieved by engaging learners to motivating, meaningful and realistic tasks, and as a matter of fact, by connecting the language classroom with the outside world (Richards & Rogers, 2001). Therefore, proponents of CLT place emphasis merely on meaning rather than on form and structure, adopting a learner-centred teaching methodology, where the syllabus is constructed based upon the specific learners' language needs. As a result, the speaking sessions included in this research are based on the Communicative Approach (Appendix A).

Another critical feature in learner-centred teaching methodology is needs analysis, which is a means for gathering the most crucial data concerning learners and provides the teacher with a holistic view of the learners' needs (Hyland, 2006). Based on this data, and with a view to fulfilling each learner's expectations, the language course is organised, incorporating material and content relevant to each learner's needs, wants, learning styles, interests, motivations and lacks (Kantaridou & Kaltsiou, 2018). In particular, the teaching materials should reflect the learners' needs in order to facilitate and promote communicative language use (Richards & Rogers, 2001). Therefore, in the present research, a needs analysis was conducted before developing the intervention speaking sessions (Appendix C).

1.1.3 Teaching the speaking skill to young learners

Teaching the speaking skill in ELT is considered a quite challenging task, especially when teaching speaking to young learners. Before the 1980s, teachers asked learners to repeat after them, respond to drills or memorise dialogues. They mainly focused on learners' achieving grammatical and phonological accuracy through form-focused tasks. As West (2000) pinpoints, such speaking activities follow the 'speaking to learn' type of practice,

where the learners speak with a view to learning specific elements of the language; hence, speaking is used as a ‘means’. However, as soon as the Communication Approach was introduced, the nature of teaching the speaking skill transformed (Richards, 1990). Speaking is seen as the ‘end’, and tasks present real-life context, promoting fluency and genuine oral communication rather than proper use of vocabulary and grammar (West, 2000).

Johnson (1982 a, 1982b) proposes five principles in an attempt to assist teachers evaluate or design communicative and purposeful speaking tasks. The first principle Johnson (1982 a) introduces is ‘the information transfer principle’, according to which the message transferred from one learner should be transformed by the other into a different form, like a grid or a chart (ibid.). The second principle is the ‘the information gap principle’, which represents real-life communication between interlocutors exchanging information in order to collect necessary data and bridge any gaps each one may have. The next Johnson’s principle is ‘the jigsaw principle’, which, as the name denotes, refers to interacting in order to gather useful information and complete a jigsaw. The fourth principle is ‘the task dependency principle’, which proves ‘how each task exploits and builds on the one that has gone before’ (Nunan, 2004, p.35), referring to the extent to which each step in a task depends on the following one. The last principle, ‘the correction for content principle’, concerns assessing one’s language production in terms of communicative effectiveness in the task.

In a similar vein, Nation (1989) proposes five features in communicative speaking activities, which are of utmost significance. The first feature is ‘roles’ according to which, each learner is assigned to play a role, hence motivation is enhanced thanks to the new identity they possess. The second feature is ‘outcomes’, which is the purpose of the task. Nation (1989) hints at the importance of specified and clear outcomes as this way, learners participate in the task more willingly. The third feature is ‘procedures’, referring to the steps a speaking activity includes. As Nation (1989) illustrates, when a speaking activity follows a procedure, learners participate actively and the time of interacting increases. Another feature by Nation is ‘split information’ equivalent to the information gap principle by Johnson. When separate information is provided to each learner, students find a worthy reason to communicate, and it is significant for each learner to comprehend what their interlocutors say (ibid.). The last feature is ‘challenges’, which highly motivate learners as they can turn a task into a game. For instance, when adding time or quantity

limitation, competition and memory, learners are stimulated and participation is enhanced. Therefore, the researcher of the present study developed the speaking tasks included in the lessons based on the above principles by both Johnson and Nation (Appendix A).

1.2 CALL in ELT

1.2.1 The value of CALL in the language classroom of the 21st century

Apart from the evolution in approaches and methodologies concerning teaching a foreign language, the advent of technologies and new media brought about changes in instructional practices and strategies (Papaefthymiou-Lytra, 2014). Computer-Assisted Language Learning (CALL), namely language learning using a computer, has been used in educational contexts for several years. Present CALL is constantly evolving following the requirements of the modern era and the needs of contemporary learners implementing the use of multimedia (Alexander et al., 2019). As Peachey (2019) emphasises, thanks to new technologies the language class is provided with tools that foster collaboration, creativity, sharing and socialisation. Learners can work together while sharing real knowledge, and they feel motivated forming positive attitudes towards the language. Additionally, according to Kourtis-Kazoullis and Vlachos (2014), new technologies are characterised as a ‘cognitive partner’, reinforcing 21st century skills and especially, the ‘7 Cs’ Trilling and Fadel (2009) categorise; critical thinking and problem solving, creativity and innovation, collaboration, teamwork and leadership, communication, cross-cultural understanding, computing and career.

1.3 Implementing videos in ELT

1.3.1 The benefits of videos as a teaching tool

The use of videos as a teaching tool in the language classroom of the 21st century is ubiquitous. The integration of videos in the lesson has proved highly motivational enhancing learners’ listening and speaking skills (Goldstein & Driver, 2015). The basic classification of videos is scripted and off-air video material; the former refers to materials designed for non-native speakers of the language representing a particular CEFR level, whereas the latter includes all the material intended for native speaker viewers (Vlachos,

Karagianni & Kourtis-Kazoullis, 2020). Off-air videos use natural language, following a regular speed and genuine accents (ibid.). In the speaking sessions of the present study, off-air videos were implemented (Appendix A).

Several scholars, such as Allan (1985), Berk (2009) and Willis (1983), to name but a few, have hinted at the plentiful benefits of videos, be it scripted or off-air videos. As Allan (1985) explains, the video has the power to bring ‘slices of life’ into the classroom, providing meaning to a verbal message through visual aid. Moreover, apart from verbal input and utterances, viewers are presented with paralinguistic and cultural elements, such as gestures and facial expressions, and have the opportunity to compare them with the ones in their own country (Harmer, 2007). Additionally, the combination of sound and image can highly contribute to comprehension and memory (Anastasiadou, 2020; Wagner, 2007).

Apart from complementing the process of teaching and learning a foreign language in terms of comprehension and memorisation, videos affect oral skills in the language classroom. Crawford (2000, p.25) delineates the video, stressing the fact that it constitutes ‘a rich source of linguistic and cultural input’ as well as ‘a stimulus for student output’. Furthermore, a video is considered a stimulus to communication since it can offer the sparking of ideas and in-class debate (Godwin-Jones, 2012). Apparently, when teachers make proper selection of videos considering their learners’ interests and needs, students are urged to get involved in the lesson, and especially participate in speaking tasks.

The effects of in-class videos on learners’ psychology and motivation have also been widely investigated. Brewster, Ellis and Girard (2004) explain that learners are affected psychologically, displaying positive attitudes towards the language and high motivation levels thanks to the diversity the video-based lesson offers. According to Lonergan (1985), when learners are presented with an interesting video, not only do they feel motivated but they also possess a feeling of success in learning. A piece of research conducted by Rammal (2006) highlights the invaluable effect of using videos as it confirmed that their integration leads to a mixture of pedagogic instruction with fun. In a similar vein, Vlachos, Karagianni and Kourtis-Kazoullis (2020) are concerned with the impact of videos in the language classroom, supporting that learners associate technology with entertainment, hence their motivation increases.

1.3.2 Criteria for selecting video materials

More often than not, publishing houses accompany textbooks with abundant video material, such as grammar videos and educational documentary videos. Nonetheless, language teachers sometimes need to develop their own lesson plans using authentic video material. According to Canning-Wilson (2000), language teachers should first seek the educational purpose of integrating a video in the classroom, as well as respond to several crucial questions before teaching the video-based lesson. Table 1 illustrates the questions introduced by Canning-Wilson (2000), upon which the present study was based before the video-based speaking sessions were developed.

Table 1: Questions to be answered before a video-based lesson

-
- How will the language learner benefit from the use of video in the classroom?
 - How will the visual component enhance the auditory component?
 - Who will select the video? Is it the class, the teacher or the curriculum developers?
 - Who decides which language should be exploited from the video? Is it the class, teacher or curriculum developers?
 - How do you plan to exploit the 1-10 minute segment of the video? What are the alternative methods of exploiting the clip for further reinforcement in the classroom?
 - Whose responsibility is it to select key vocabulary and structures from the video?
 - Who decides how many times the video is played?
 - How can students and teachers develop academic listening and conversational listening activities based on the video?
 - How is the video used in a classroom context?
 - How does video support the curriculum?
 - Can the comprehension of the video be measured without visual support?
 - Can the comprehension of the video be measured without auditory support?
 - How will you assess the comprehension of the video by the language learners?
 - How practical is the video to improve a learner's academic listening and/or conversational listening skills?
 - What is the educational purpose for showing the video? How will you later assess its effectiveness with the learners' ability to comprehend information?
-

Several other salient parameters were taken into consideration before selecting the videos of the speaking sessions. According to Goldstein and Driver (2015), the focus of the video should align with the learners' interests and preferences in order to boost their motivation. Additionally, content appropriacy along with the level of maturity necessary to comprehend the messages denoted should also be carefully examined (Gallacher, 2019). Equally significant is the language level criterion, according to which the language included in the video should be compared to the corresponding language level of the

particular class, since it highly affects comprehensibility, and hence motivation. The technical features of a video, such the quality of the sound, the image clarity and the video length, should also be assessed (Arcario, 1992). According to Tomalin (1986), a video integrated in a language lesson should not exceed five minutes since it can lead to incomprehension and learners may lose their interest (ibid). Short video extracts are highly recommended so that enough time for the accompanying activities remains in a 45-minute-long lesson.

1.3.3 The use of videos in the language classroom

Yelakov (2014) and Hill (2019), among other scholars, suggest the pre-, while-, post-viewing teaching framework for a successful video-based language lesson as these stages facilitate natural language acquisition. In the pre-viewing stage, teachers should arouse learners' interest and prepare them for the activities that follow by activating their background knowledge and content schemata (Yelakov, 2014). Brainstorming, warm-up questions and vocabulary practice are some suggestions to promote comprehension beforehand during the pre-viewing stage (ibid.). According to Cameron (2001), teachers should introduce learners to vocabulary before the actual viewing of the video, so that they are more confident and well prepared for the stages that follow.

In the while-viewing stage, the actual viewing of the video takes place, and learners are engaged in activities, which focus on specific aspects of the video, participating in information collection activities (Yelakov, 2014). At the same time, during this stage, the teacher observes learners' reactions while watching the video and finds out whether they enjoy the viewing or whether they face any difficulties (ibid.). In the post-viewing stage, learners are encouraged to discuss their views regarding the topic and content of the video they watched (Vlachos et al., 2020). During this stage, there are also tasks that relate the topic and content of the video with the learners' personal experiences (ibid.).

Tomalin (1990) recommends ten viewing techniques in order to guide teachers on how to implement a video-based lesson effectively; silent viewing, freeze frame, role play, behaviour study, prediction, thinking and feeling, sound only, watchers and listeners, telling the story and culture comparison. In a similar vein, Allan (1985) suggests two other ways, namely viewing straight through and viewing in sections. The jumbling sequences

technique is also recommended as an active viewing (Stempleski & Tomalin, 1990). All of the aforementioned techniques reinforce learner's imagination and creative thinking and promote their active involvement in the process of learning. The researcher of the present study developed the intervention video-based speaking session following the pre-, while-, post-viewing teaching framework, implementing several of the above-mentioned viewing techniques (Appendix A).

1.4 360-degree videos

1.4.1 The concept of 360-degree video

360-degree videos, also called immersive spherical videos, are considered a promising educational tool in educational environments thanks to their interactive and immersive nature (Pirker & Dengel, 2021). 360-degree videos enable viewers to look in any direction they prefer while watching a video as the videos are recorded in an “omnidirectional” form (Snelson & Hsu, 2019). Viewers can watch real scenarios, objects and places, and experience situations, which give them the feeling of presence. In some cases, viewers may experience situations that will never have to opportunity to live, such as a trip to a faraway destination (Ahmad, Mohd Adnan, Yusof, Mohd Kamal, & Kamal, 2019). According to Slater (2018), the feeling of presence that a viewer experiences can be defined as a sense of being in a place but you are aware of not being there. On the contrary, the notion of immersiveness is defined as “the subjective impression that one is participating in a comprehensive, realistic experience” (Dede, 2009, p. 66).

Viewers can watch 360-degree videos on their laptops or desktops and navigate by clicking navigation buttons. Although this type of video can be viewed in multiple devices, for a fully immersive and more engaging experience, viewers can use their smartphones or HMDs to watch them. As it is shown in Figure 1, in the case of smartphones, viewers insert them in a device made from cardboard, consisting of two lenses. The cardboard is worn like a mask, and the viewers can move their heads up and down, right and left, and the images they watch move in synchrony. In like manner, in order to maximise the potentials of a 360-degree video, HMDs are recommended as they can track viewers' head movement and, in turn, viewers are presented with the part of the video that corresponds to the viewing direction of the user (Fokides & Arvaniti, 2020). Therefore, viewers are provided with multisensory modalities, including auditory, visual

and kinaesthetic, feeling present in a virtual environment (Lau, Lee & He, 2018). Figure 2 illustrates an HMD, in particular an Oculus Go headset, which was used in the empirical part of the present research.



Figure 1: Cardboard devices for smartphones



Figure 2: HMD, Oculus Go

There are several available applications online, which provide 360-degree videos free of charge. For instance, YouTube is a platform with numerous channels that display 360-degree videos either for entertainment or for teaching and learning purposes (Ahmad et al., 2019). Viewers have the opportunity to go on virtual tours all over the world, visit famous museums, historical sites, well-known buildings and squares and explore faraway countries from a first-person perspective. Therefore, the researcher used YouTube as a source for selecting the 360-degree videos for the speaking sessions of the research (Appendix A).

1.4.2 The implementation of 360-degree videos in educational settings

Since the technologies that support 360-degree videos are becoming more and more affordable, the field of 360-degree video is emerging in several educational domains. Educators try to integrate this innovative technological tool with major pedagogical practice in the classroom context. For instance, educators use 360-degree videos in

environmental education, health sciences, biology and engineering among others (Fokides & Arvaniti, 2020). Language teachers have also started to apply 360-degree videos in the process of language learning; however, not many language teachers opt for integrating this tool in the classroom being reluctant or intimidated (Bonner & Reinders, 2018).

Most research that has been conducted in the educational settings so far report encouraging and promising results (Fredricks et al., 2004; Hew, 2016; Roorda et al., 2011; Wang & Fredricks, 2014). Participants demonstrate positive feelings when they refer to the integration of this technological tool in lessons (Lampropoulos, Barkoukis, Burden, Anastasiadis, 2021). The learning process is enriched and learners are observed to express anticipation, active engagement, joy and most importantly motivation while using it in their lesson. Therefore, this technological tool has the potential to provide a new dimension to the realm of education, and especially in language learning, leading to positive attitudes, as presented in more detail in section 4.2.

1.5 The concept of motivation in ELT

1.5.1 Motivation in the language learning process

According to Dörnyei (2001), learning an L2 is a complex process in which motivation plays a pivotal role. Motivation is delineated as the desire to achieve a goal, maintaining a positive attitude throughout the process while putting effort in achieving it (Gardner, 2010). When learners feel motivated, the learning process is facilitated as they demonstrate desire and positive attitudes while exerting effort in achieving their goals (Dörnyei, 2006). On the contrary, learners who lack motivation express negative attitudes and are likely to miss their long-term goals (ibid.).

Dörnyei (1998) classifies motivation as intrinsic and extrinsic. Intrinsic motivation is closely related to an individual's identity, and concerns one's own desire to learn a language finding enjoyment in completing a task and having a feeling of competence (ibid.). On the other hand, extrinsic motivation derives from outside an individual. Extrinsic purposes of learning a language may be finding a job, getting good grades, receiving rewards or even parental pressure (ibid.). In a similar vein, Gardner (1985) distinguishes between two orientations towards language learning, namely learning for integrative purposes and instrumental purposes. Integrative purposes are linked to an individual's willingness to learn a language because of his/her favourable attitude towards

the culture where the target language is spoken, wishing to join this community (ibid.). In contrast, instrumental orientation is related to extrinsic factors or benefits, such as access to higher education, passing an examination and getting a better job (ibid.).

1.5.2 The value of motivation in language learning

A number of researchers conclude that learners with intrinsic motivation are more likely to succeed in language learning. Nonetheless, a combination of intrinsic and extrinsic motivation affects a learner's total motivation, thus both kinds of motivation are of utmost importance. Motivation is a key factor to learners' in-class engagement. According to Fredricks, Blumenfeld and Paris (2004), engagement is delineated as being actively involved in a lesson in all three levels; cognitive, emotional and behavioural. Being engaged promotes acquiring language strategies and new knowledge while giving learners the chance to expand their way of thinking (Turner & Patrick, 2004). Spolsky (1990) also supports that motivated learners are likely to learn the target language more quickly compared to less motivated ones.

Together with engagement, motivation seems to be connected to the enhanced learning outcomes of all learners, leading to achieving higher academic outcomes throughout a learner's life (Woolfolk & Margetts, 2007; Zyngier, 2008; Ryan & Deci, 2009). For young learners, motivation may guarantee long-term learning success and general proficiency level (Gardner, 2010). What is more, motivated learners seem to persevere and maintain L2 skills even after the learning process ends (ibid.).

Therefore, taking into consideration the tremendous positive outcomes motivation induces, educators are in charge of taking all the prerequisite steps in order to investigate their learners' true motives and delve deeply into their motivational orientations. Language teachers should cater for their learners' motivation, both intrinsic and extrinsic, and find ways in helping them maintain or even increase motivation. When all the necessary data regarding their learners' profile is obtained, teachers can design motivational lesson plans, devise meaningful material or even integrate innovative means, including educational technology, to increase their students' interest and assist them in achieving their goals. Considering the above, the researcher carried out a needs analysis (Appendix C) for perceiving the learners' motives, and therefore designed meaningful material (Appendix A).

1.5.3 Factors affecting motivation in language learning

With a view to enhancing learners' motivation, language teachers need to be aware of the factors that may affect it. In particular, intrinsic motivation depends upon five factors; curiosity, self-efficacy, attitude towards learning, need and competence (Firth, 1997). Small (1997) stresses the significance of intrinsic motivation pointing out that intrinsically motivated learners demonstrate intellectual curiosity, constantly seeking knowledge even beyond classroom. As Littlejohn (2001) highlights only a few learners have intrinsic motivation, so teachers try to find ways in helping them maintain or even increase it. Noels (2009) supports that lack of motivation can be generated when learners underestimate their own abilities or when they have to participate in activities that are not linked to their needs (ibid.).

Extrinsic motivation increases or decreases depending on the influence by others, interaction with others, the learning context and the broader environment (Williams & Burden, 1997). Harmer (1991) places emphasis on four critical factors regarding motivation, namely, physical condition in the class, the teaching methodology, the language teacher and finally, the success in learning. To illustrate these factors, an overcrowded class with an unpleasant, smelly classroom, as well as a teaching methodology that does not align with the learners' profile and needs, is highly probable that it results in learners' demotivation. Additionally, an unfriendly teacher as well as too demanding or too manageable activities with a low level of challenge may affect learners' motivation in a negative way. In a similar manner, Kikuchi (2009) reports five factors that may lead to demotivation; more specifically, unsupportive teachers, the grammar-translation method, curriculum that focuses on tests, tasks that involve memorisation and obsolete textbooks (ibid.).

Oxford and Shearin (1994) have painstakingly scrutinised twelve theories and models regarding motivation, concluding that six factors influence language-learning motivation:

- Attitudes, namely sentiments towards the target language, the speakers and culture of the target language
- Self-efficacy, namely one's beliefs in their capabilities concerning how well they can perform
- Goals, which have to be clearly set and stated considering the reasons for learning

- Involvement, namely the extent to which the learner participates consciously and actively in the learning process
- Environmental support, referring to both teacher's and peer's attitudes towards a learner
- Personal attributes, such as previous learning experience, age, sex and aptitude.

Conclusion

The first chapter outlined the theoretical background of the present research, providing a close examination of the outer and inner circle of the study. Considering the aforementioned literature review, the researcher of the present study formed the main research question and sub-questions, and decided upon the research methodology, presented in the subsequent chapter.

2. Research methodology

Introduction

Chapter 2 introduces the research questions the researcher seeks to answer. Additionally, the research strategy and research method followed in the particular study is described thoroughly. Each cycle of the action research is also illustrated and presented, followed by a detailed description of the participants of the study and the research setting. Finally, yet importantly, the chapter ends with the presentation of the data collection tools, the method of analysis and the ethical considerations that were taken into account.

2.1 Research questions

Considering the literature review as presented in Chapter 1, the researcher formed the research questions. In particular, the research by Dolgunsöz, Yildirim and Yildirim (2018) suggested further research regarding the effects of 360-degree videos on young EFL learners' speaking skill. As a result, in order to fill in this gap, the researcher formed the following main question:

What is the effect of 360-degree videos experienced by means of HMDs on motivating Greek EFL young learners in speaking?

In order to answer the main question, three related aspects are also examined; more precisely:

- 1) To what extent are young learners involved in the speaking tasks after the use of 360-degree videos?
- 2) To what extent does the use of 360-degree videos enhance young learners' self-efficacy?
- 3) How does the use of 360-degree videos affect young learners' attitude towards English learning?

In order to answer the above questions, the researcher collected behavioural and attitudinal data related to the participants of the study. The answers to these questions are provided in section 3.3 after having completed all five cycles of the action research and analysing the research data. The data is based on the researcher's observation of the participants' behaviour and responses on questionnaires and focus group discussions.

2.2 Research strategy

2.2.1 Philosophical worldview of the study

According to Creswell (2008, p.6), the term worldview is defined as “a general orientation about the world and the nature of research that a researcher holds.” The constructivism philosophical worldview constitutes a perspective that encourages people to form their own perceptions of the world according to their own experiences (ibid.). This worldview is based on the principle that experience highly affects people’s knowledge (Creswell, 2003). Researchers supporting the constructivist worldview seek to find out subjective meanings of the participants’ experiences, and focus on the participants’ views of the case being studied (Creswell, 2008). The present research adopted the constructivist philosophical worldview, since the researcher-teacher attempts to make sense and interpret the participants-students’ meanings throughout the research. Particularly, the researcher acquires knowledge on the participants’ beliefs through reflection and experimentation, which are promoted by exposing participants to a series of speaking lessons.

2.2.2 Type of design and strategies of inquiry

The worldviews held by researchers usually determine the type of design in their research, namely qualitative, quantitative, or mixed methods approach (Creswell, 2008). Constructivism is a perspective linked to qualitative research (ibid.). According to Damaskinidis (2017), qualitative approach offers more scope to perceive participants’ viewpoints of the subject being examined. The focus is foremost on collecting attitudinal, behavioural and non-numerical data, which is analysed and interpreted by non-statistical methods (Dornyei, 2007). Kalender (2007) emphasises that in a research of qualitative type of design, which adopts the constructivism philosophical worldview, the instrumentation administered is through observation, interviews and visual data analysis. Conversely, the quantitative approach collects numeric data, with the intent of generalising through statistical analysis and interpretation (Creswell, 2008).

In the present research, the qualitative type of design is followed giving the researcher the advantage of delving into the participants’ realities. Additionally, since the sample of the present research is small, three participants in effect, the qualitative type of design is recommended (Katsilis et al., 2020). In this perspective, the researcher is able to

collect detailed data and construct meanings by observing the participants in their natural settings, in which case is the classroom (Adom, Yeboah, & Ankrah, 2016).

With respect to the strategies of inquiry also called approaches to inquiry (Creswell, 2003), researchers-inquirers in qualitative type of design “generate or inductively develop a theory or pattern of meaning” (Creswell, 2008, p.8). The most fundamental attribute in a qualitative type of design is flexibility (Mason, 2002). The researcher is flexible in carrying out interviews or questionnaires asking open-ended questions, encouraging participants to express their feelings, perspectives and views (Adom et al., 2016). Consequently, the researcher of the present study possesses the freedom to generate questions aiming at eliciting answers and discover the real viewpoints of the participants.

2.3 Research method

Taking the above into consideration, the method of action research was opted for this research. Action research is a widely implemented method in educational contexts (McIntosh, 2010) and is regarded as the most suitable method for qualitative educational studies (Cirocki & Arceusz, 2016). Furthermore, action research can be conducted by someone who can be actively involved in the study, aiming at improving practice when a problem is identified (Kemmis, McTaggart & Nixon, 2014; Sagor, 2005), which is the case in the particular context. To illustrate this point, the researcher-teacher has observed that some of her learners demonstrate weaknesses in the speaking skill, being hesitant in participating in speaking activities. Hence, the researcher-teacher decided to take some action by conducting the present study in order to examine the extent to which the implementation of 360-degree videos affects their motivation. In other words, the researcher owns a dual role, namely that of the practitioner and evaluator, planning and implementing an intervention first, and then, evaluating “the success of the intervention in solving the identified problem” (Cohen, Manion & Morrision, 2007, p. 307). Being actively involved in the study, the researcher is given the opportunity to bring about improvement by focusing on practical issues and better understanding their practices (McNiff & Whitehead, 2002).

2.4 Procedures of action research

Concerning the procedures of action research, a series of spiral-like cycles, each one affecting the other, take place (Koshy, Koshy & Waterman, 2010). Each cycle entails the following significant steps: planning, acting, observing, reflecting on results and replanning in order to foster understanding and improvement (Kemmis, McTaggart & Nixon, 2014). Therefore, a key concept in action research is reflection on the part of researchers, because it is the final step in each cycle and “the turning point that enables researchers to make the proper diagnosis and redesign the series of steps involved (Damaskinidis, 2017, p. 1229). Based on Elliott’s (1991) and O’Leary’s (2017) recommendations, at least three cycles should be conducted in action research. In the present study, five cycles are conducted, including a pilot lesson.

2.4.1 Overview of the research cycles

As depicted in Figure 3, the present action research includes five cycles. All five cycles follow the stages of planning, acting, observing and reflecting. The first cycle includes the research design, the needs analysis questionnaire and focus group discussion interview, as well as the piloting of the speaking lesson. The cycles that follow, namely Cycles 2-5, include the four intervention speaking sessions.

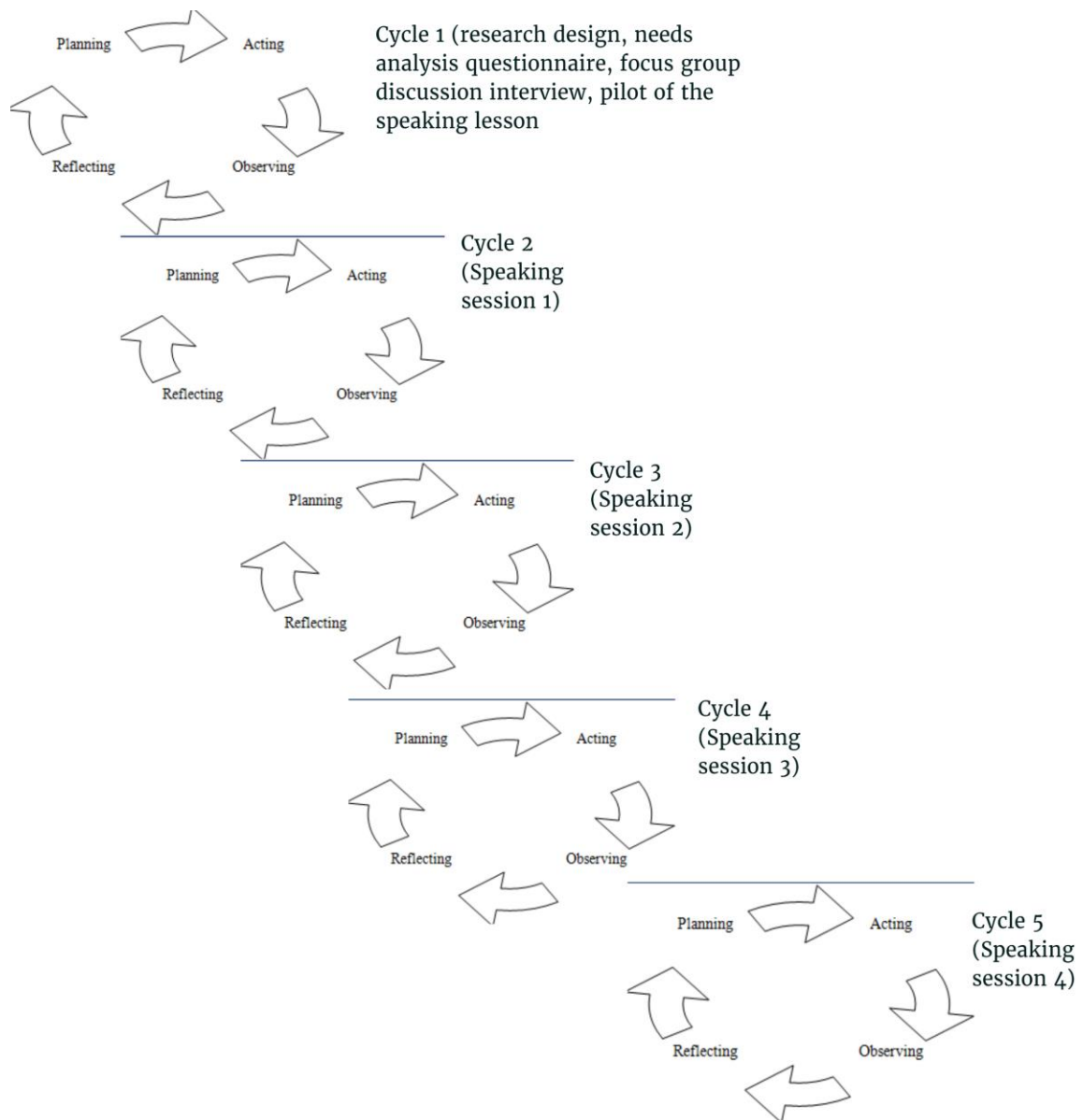


Figure 3: Visual representation of the research cycles

In Table 2, a detailed overview of the cycles is presented. The first column presents the cycles; the second one presents the stages while the third one describes the procedures involved in each stage, given a tag that denotes the cycle number and step number. Each cycle is further described in sections 2.4.2 and 2.4.3.

Table 2: Overview of the five-cycle action research

Cycle	Stage	Description
1 [Pilot lesson]	Planning	<ul style="list-style-type: none"> ▪ C1.1 Design of the study ▪ C1.2 Needs analysis questionnaire and focus group discussion interview ▪ C1.3 Development of the pilot lesson
	Acting	<ul style="list-style-type: none"> ▪ C1.4 Implementation of the pilot lesson
	Observing	<ul style="list-style-type: none"> ▪ C1.5 Footage analysis and completion of the observation checklist on the day after the session ▪ C1.6 Data analysis of all the data collection tools (observation checklist, needs analysis questionnaire and focus group discussion interview)
	Reflecting	<ul style="list-style-type: none"> ▪ C1.7 Reflection and conclusions based on the collected data
2-4 [Three speaking sessions]	Planning	<ul style="list-style-type: none"> ▪ C2-4.1 Development of the intervention speaking session based on the reflection stage of the previous cycle
	Acting	<ul style="list-style-type: none"> ▪ C2-4.2 Implementation of the speaking session ▪ C2-4.3 Post-session feedback questionnaire upon session completion
	Observing	<ul style="list-style-type: none"> ▪ C2-4.4 Footage analysis and completion of the observation checklist on the day after the session ▪ C2-4.5 Data analysis of all the data collection tools (observation checklist and post-session feedback questionnaire)
	Reflecting	<ul style="list-style-type: none"> ▪ C2-4.6 Reflection and conclusions based on the collected data
5 [Fourth speaking session]	Planning	<ul style="list-style-type: none"> ▪ C5.1 Development of the intervention speaking session based on the reflection stage of the previous cycle
	Acting	<ul style="list-style-type: none"> ▪ C5.2 Implementation of the speaking session ▪ C5.3 Post-session feedback questionnaire upon session completion ▪ C5.4 Post-research feedback questionnaire and focus group discussion interview, two days after speaking session
	Observing	<ul style="list-style-type: none"> ▪ C5.5 Footage analysis and completion of the observation checklist on the day after the session ▪ C5.6 Data analysis of all the data collection tools (observation checklist, post-session feedback questionnaire, post-research feedback questionnaire and focus group discussion interview)
	Reflecting	<ul style="list-style-type: none"> ▪ C5.7 Research findings and conclusions

2.4.2. Cycle 1: Pilot lesson

As illustrated in Table 2, the pilot study included the research design, which involved a set of critical decisions including the aims and purposes of the research, the research methodology, the instrumentation, the data analysis, any ethical issues, as well as the validity and reliability of the research (Cohen et al., 2007). Additionally, in the first step of the first cycle, the researcher created the needs analysis questionnaire (Appendix C) and designed the questions upon which the focus group discussion was based (Appendix D). The learners were requested to complete the needs analysis questionnaire online and then, the focus group discussion took place in the classroom. Both tools were of utmost significance since they provided the researcher with valuable input in order to proceed to

the development of the pilot session. According to Richards (2001), needs analysis allow the teacher to discover the learners' needs, preferences and interests and as result, prepare a suitable syllabus.

The pilot session was conducted with the same group of participants as in the study. As Holloway (1997) highlights, piloting the lesson is fundamental in action research as it provides the researcher will a holistic view of the participants' reception of the lesson. In order to avoid the possibility of bias, the 360-degree video and the tasks included in the pilot lesson were different from the lessons that followed. During the pilot session, special emphasis was also drawn on the application of HMDs, focusing on any discomfort the participants might face while watching the video. In addition, the researcher paid attention on any difficulties the participants faced regarded the length and quality of the video as well as the tasks of the lesson, and made necessary modifications for the following sessions.

2.4.3 Cycles 2-5: Outline of the speaking lessons

Concerning Cycles 2 to 5, four speaking lessons were conducted along with all the other stages a typical cycle includes. The sessions did not take place during the regular sessions of the specific class but on different days, which were defined by the participants and their parents, the language school owner and the researcher. Each speaking session lasted 45 minutes, and one lesson was conducted per week. This way, the researcher had adequate time to process the necessary stages of each cycle, and prepare the following speaking session based on the reflections and conclusions of the previous cycle. As in the pilot study, during the typical speaking lessons, the researcher focused on any difficulties the participants faced with a view to making adjustments and lead to improvement.

Regarding the teaching framework of the speaking lessons, the pre-, while-, post-viewing teaching framework was adopted. In general, the pre-viewing stage of the speaking sessions included warm-up questions in order to activate the learners' content schemata, as well as an activity that introduced lexis relevant to the lesson's topic through the aid of images. In the while-viewing stage, the learners watched the selected 360-degree video using HMDs and had to complete a comprehension task. The task could either be completed while watching the video, pausing the viewing, or at the end of the video. In the last stage, the post-viewing stage, the learners participated in the main speaking task,

which was closely related to the while-viewing stage, satisfying the task dependency principle, according to which a task is connected to the previous one. The speaking task of each lesson was a group presentation, a role-play or picture description. Throughout the lessons, the researcher-teacher coordinated and facilitated the lessons, intervening when necessary. Thus, a learner-centred approach was followed, emphasising learners' autonomy in the process of learning.

After each session, the participants were requested to complete the post-session questionnaire (Appendix E) using the computers of the classroom, as the questionnaires were developed on Google forms. The day after the session, the researcher watched the session's footage and completed the observation checklist (Appendix F). Then, based on the post-session questionnaire data and the observation checklist results, the researcher drew conclusions, which together with the needs analysis questionnaire results, facilitated the design and planning of the next cycle. Figure 4 depicts the process followed in each of the Cycles 2 to 5.

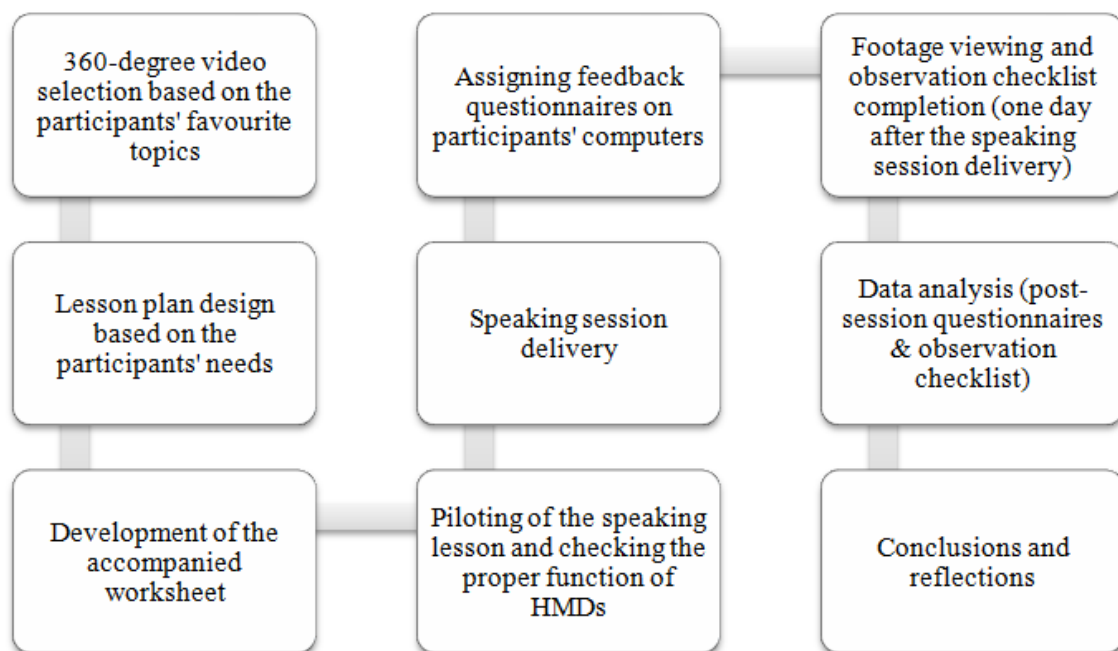


Figure 4: Flowchart of the process of a speaking lesson within a cycle

At the end of the last cycle, namely the fifth, the researcher conducted a post-research questionnaire (Appendix G), again through Google forms, two days after the last speaking session delivery. For the triangulation of the data, a focus group discussion

concerning the participants' overall impressions followed (Appendix H). Having collected all the required data, the researcher analysed it and obtained the research results, which are discussed in Chapter 3.

2.5 Sampling method and the participants of the research

As far as the sampling method of the research is concerned, non-probability sampling was employed. Non-probability sampling does not represent the wider population, but it rather seeks to represent a specific section of the wider population (Katsillis et al., 2020). It is actually the researcher who selects the sample so as to fit the research needs (Cohen et al., 2007). Non-probability sampling is also esteemed ideal for small-scale research, such as a group of two or three students (ibid.), which is the case in the particular research, since three participants took part in the study.

Among the sampling techniques, a combination of purposive and convenience sampling was involved. To be more precise, in purposive sampling, the sample is chosen to serve a specific purpose and it seems to possess “the particular characteristics being sought” (Cohen et al., 2007, p. 115). As it has already been mentioned, the present research purpose was to find out to what extent learners' motivation is affected by the use of 360-degree videos. For this reason, in order to meet the study needs, the researcher-teacher intentionally asked three of her students, who seemed to be demotivated in the speaking skill, to participate in the research. At the same time, convenience sampling was also involved as it relies on sample that happens to be easily accessible to the researcher (Rahi, 2017). Convenience sampling is especially popular with a classroom-based action research, where the researcher-teacher conducts a study with their own students (Gall, Gall & Borg, 2007). Although this technique is not preferable, since the sample may demonstrate bias or skewness, it can still provide rich data (Dörnyei, 2007).

Concerning the participants of the research, they constitute a naturally occurring group, particularly, an EFL class at a private language school in Veria, Greece. They are three 13-year-old Greek learners, two boys and one girl, with Greek as their mother tongue. With respect to their reference level according to CEFR (Council of Europe, 2020), they belong to ‘Waystage’, pre-intermediate, A2 level. This is the third year of their learning English and the researcher has been their teacher since their first year. As a result, the participants are familiar with each other, and the researcher has the advantage of being

aware of their weaknesses and strengths. All three participants demonstrate a good competence level in English in all language skills, and particularly in literacy skills, namely reading and writing. For anonymity purposes, the participants were asked to select a pseudonym, which would be the same every time they completed a questionnaire. The selected pseudonyms are Frida, Chris and Johnny, and from now on, they are used when reference is made to them.

2.6 Research site

All speaking sessions as well as the conduction of the questionnaires and discussions took place at the private language school the researcher works at. Before the empirical part of the study, the researcher asked the school owner for permission and provided her with details of the research, including the stages it entails. The classroom where the sessions were delivered was technologically equipped with state-of-the-art computers and wireless internet connection, which was necessary for the participants' viewing the 360-degree videos. As far as the HMDs are concerned, the language school is not equipped with them. Therefore, the researcher had to borrow three HMDs, particularly three Oculus-Go headsets, from a publishing house located in Veria. The researcher is also an employer of the particular company, and for the purposes of the research, she borrowed the headsets for a month, which was the duration of the empirical part of the study.

2.7 Data collecting instruments

The instrumentation applied in a constructivist philosophical paradigm following qualitative type of design is mainly through interviews or discussions, observation and document reviews (Kalender, 2007). Nonetheless, in case the researcher needs to capture the specificity of a particular situation, especially in a site-specific case study, "then qualitative, less structured, word-based and open-ended questionnaires" may also be applied (Cohen, et al., 2007, p. 321). In other words, a variety of tools can be implemented depending on the aims of the research (Goodwin & Goodwin, 1996).

Therefore, in the current research, the researcher applied several data collection tools in order to collect qualitative data, which serve the aim of the research and assist in answering the research questions. Additionally, the implementation of more than one data

collection tools promotes triangulation, which increases credibility of the results and secures validity (Creswell, 2014).

All data was collected in five sessions, which were conducted between November and December 2022. The data collected can be grouped into two separate categories, namely the one derived from the participants and the one from the researcher. All data collection tools that required the participants' responses were carried out in their mother tongue, namely Greek, in order to ensure their comprehension and eliminate misunderstanding (Griffie, 2012). Similarly, in order to prevent misunderstanding and provide clarifications when necessary, the tools that required the participants' responses were conducted in the presence of the researcher. Table 3 demonstrates an overview of the data sources of the present research.

Table 3: Overview of the research data sources

Cycle	Participant-driven data	Researcher-driven data
1 [Pilot lesson]	<ul style="list-style-type: none"> ▪ Needs analysis questionnaire answers ▪ Focus group discussion answers ▪ Pilot lesson feedback ▪ Post-session questionnaire feedback 	<ul style="list-style-type: none"> ▪ Needs analysis questionnaire questions ▪ Focus group discussion questions ▪ Pilot lesson design and delivery ▪ Post-session questionnaire questions
2-4 [Three speaking sessions]	<ul style="list-style-type: none"> ▪ Lesson video recording with participants' behaviour during the lesson ▪ Post-session questionnaire feedback 	<ul style="list-style-type: none"> ▪ Speaking lesson design and delivery ▪ Completion of the observation checklist based on the recorded lesson ▪ Post-session questionnaire questions
5 [Fourth speaking session]	<ul style="list-style-type: none"> ▪ Lesson video recording with participants' behaviour during the lesson ▪ Post-session questionnaire feedback ▪ Post-research questionnaire feedback ▪ Post-research focus group discussion answers 	<ul style="list-style-type: none"> ▪ Speaking lesson design and delivery ▪ Completion of the observation checklist based on the recorded lesson ▪ Post-session questionnaire questions ▪ Post-research questionnaire questions ▪ Post-research focus group discussion questions

2.7.1 Needs analysis questionnaire

In the first cycle of the research, a needs analysis questionnaire was carried out. Needs analysis is a fundamental practice in teaching, which provides the educators with significant information in order to identify the objective and subjective needs of their learners, and hence perceive a holistic view of the (Davies, 2006). With respect to the particular needs analysis questionnaire (Appendix C), the researcher carefully designed it using Google forms, organising it in four basic sections; namely background information,

attitudes towards English language learning, language needs in speaking and preferences and interests. Twenty-three items were employed in total, including different types of questions, such as multiple-choice form questions, yes, no, not sure questions and five-point Likert scales, giving the option of “other” in some items, and as a result, allowing the participants to provide their own answers (items 3, 4, 5, 10, 11, 12, 13, 16). This way, the researcher was able to gain salient information, upon which the speaking lessons were developed.

Before the first section of the questionnaire, a brief introduction is given, with a view to highlighting the significance of the learners’ active participation as well as providing guidelines for its completion. Considering Dörnyei’s (2003) principles on constructing questionnaires, the wording of each item was meticulously edited, avoiding double-barrelled questions or loaded and ambiguous words. Additionally, explicit instructions were provided on each item to allow effective understanding. In order to refine the questionnaire and ensure that it did not include any problematic items, it was piloted prior to conducting it, distributed to the researcher’s colleagues. Ultimately, regarding the overall layout, legible clear font was used, and the length of the questionnaire was taken into consideration, keeping it short in order to encourage participants to complete every item consciously.

2.7.2 Focus group discussions

Focus groups are considered a kind of group interview, which relies on the interaction within the group who discuss a topic imposed by the researcher, and they yield qualitative data, focusing mainly on collective opinions and attitudes (Cohen et al., 2007). Focus group discussions are widely used with individuals who have shared experiences, such as students in the same class (Adom et al., 2016). Moreover, they are considered “useful to triangulate with more traditional forms of interviewing, questionnaire, observation etc” (ibid., p. 377). Therefore, two focus group discussions were conducted in order to triangulate the needs analysis questionnaire results, as well as the post-research results (Appendix D and H respectively).

In both discussions of the current research, some questions were prepared beforehand enabling the researcher to initiate the discussions, making follow-up questions based on the participants’ responses. The first focus group discussion took place during the pilot study, after the conduction of the needs analysis questionnaire, whereas the

second one was carried out at the end of the fifth cycle, after conducting the post-research questionnaire. Both focus group interviews were recorded using the transcribe option of online Office Word, facilitating the researcher in the transcription of their responses. The researcher's intention throughout the discussions was to create a friendly atmosphere and make participants feel comfortable enough to share their views.

2.7.3 Post-session questionnaires

Attempting to yield data regarding each of the four sessions conducted, post-session questionnaires were distributed to each participant on Google Forms. More particularly, at the end of each session, the same questionnaire (Appendix E) was sent to each participant's email aiming to gather feedback. The post-session questionnaire includes twelve items in total, all of which are in English providing Greek translation as well. Items 1 to 8 are of Likert scale type; items 9 and 10 are of multiple-choice type, providing the option of "other", in order to allow the participant to express anything else they would like to complete. Finally, the last two items, items 11 and 12, include open-ended questions, inviting participants comment on what they would like to change in the session and how they would describe the session, hence allowing space for them to demonstrate their views and feelings on the lesson. According to Cohen et al. (2007, p.330), responses on open-ended questions may "contain the 'gems' of information that otherwise might not be caught in the questionnaire".

All items included aimed at encouraging participants express their viewpoints, likes and dislikes, regarding the lesson in general (items 1, 9, 10, 11, 12), the tasks of the lesson (items 2 and 6), the 360-degree video (item 3) as well as their feelings and involvement in the lesson (items 5, 7 and 8). The items were designed with great diligence so that they provide the researcher with prominent data, necessary not only for answering the research questions but also for assisting the researcher reflect on any problematic areas and tackle them for the following session. The post-session questionnaire also includes a short introduction, giving guidelines to the participants as well as thanking them for their participation. As in the needs analysis questionnaire, the participants are requested to complete their pseudonym before answering the questions in order for the researcher to be able to pinpoint and analyse each participant's responses individually.

2.7.4 Observation checklist

Aiming to triangulate the data obtained from the post-session questionnaire and maintain the validity of the research, the researcher video recorded each session, and then completed an observation checklist (Appendix F). The completion of the observation checklist took place one day after each session. This practice allowed the researcher to make observations without being distracted during the sessions, being able to scrutinise each participant's behaviour.

The observation checklist was designed by the researcher based on three significant axes; namely the participants' involvement, self-efficacy and attitudes. Each statement of the observation checklist was developed considering nonverbal communication. According to Miller (2005b), nonverbal communication includes signs, cues, signals, physical activities, facial expressions and gestures, among others. To be more precise, the statements of the checklist include cues of motivation, such as keeping an eye contact and nodding, raising hands to participate, smiling and using interjections of excitement (Barry, Bodenhamer & O'Brien, 2011). Eight statements were developed altogether, and the researcher had to tick whether each participant demonstrated the described behaviour.

2.7.5 Post-research questionnaire

Two days after the completion of the fourth speaking session, the participants answered the post-research questionnaire (Appendix G). The results of this questionnaire allowed the researcher to make comparisons between the participants' viewpoints before and after the conduction of the intervention speaking sessions, as well as between the participants' feedback after each separate session and their overall impressions.

As with the post-session questionnaire, the post-research questionnaire was developed taking into consideration the research questions and was distributed to each participant on Google Forms. It includes eleven items in total, all of which are in English providing Greek translation. Items 1 to 8 are of Likert scale type; items 9 and 10 are of multiple-choice type, and the last item, item 11, is an open-ended question, encouraging participants provide their overall feelings regarding all sessions. All items aim at collecting feedback concerning the participants' opinions about the speaking sessions (items 1 and 11), the 360-degree videos (items 2, 9 and 10), their involvement in the

sessions (item 3), their self-efficacy (items 4 and 5) and attitudes towards English learning (items 6, 7 and 8). Before the items, a short introduction is presented, providing guidelines to the participants as well as thanking them for their participation in the research.

2.8 Method of analysis

After the completion of the fifth cycle of the action research and having gathered all the necessary data, the researcher proceeded to the data analysis. According to McKay (2006), qualitative research follows the principles of thematic analysis involving narrative description. Since the present research is of qualitative type of design (Section 2.2.2), the data was classified and analysed thematically, presented in a narrative descriptive form. Throughout the empirical part of the research, the researcher used a diary to write down the main outlines of the subject under investigation, intending to handle the huge amounts of data by developing themes, in order to be able to move from description to interpretation and explanation. As Braun and Clarke (2012) highlight, thematic analysis fosters interpreting data and conceiving experiences and behaviours emerging from various data types. For the conduction of thematic analysis, all data was interpreted inductively, including the researchers' own thoughts.

2.9 Ethical considerations

One of the most significant principles of a research is ethical considerations, including protection of the participants (Bell & Bryman, 2007). Therefore, in the present research, as the participants were minors, the researcher designed a detailed participant information form (Appendix B) in order to provide the participants' parents or guardians with every important aspect of the research, highlighting their voluntary participation, privacy protection and confidentiality as well as the potentials of harm. Additionally, an informed consent form was designed in order for the the participants' parents or guardians to allow their children participate in the research. Both the information form and the informed consent form were in Greek since all participants' parents are Greek. Also, for anonymity purposes, the participants were asked to use pseudonyms when answering questionnaires. Finally, in order to protect the participants' privacy, the collected data was exclusively processed by the researcher and was discarded upon the study completion.

Conclusion

Chapter 2 introduced the core of the research, demonstrating the research questions and analysing the methodological approach and process of the research. The findings of the research along with a discussion will be presented in the following chapter.

3. Results and discussion

Introduction

The present chapter provides the presentation of the collected data derived from both participant-driven and researcher-driven tools. Then, a discussion on the major findings follows, leading to answering the research questions.

3.1 Results of the data collection tools

3.1.1 Needs analysis questionnaire

As it was mentioned in Chapter 2, the needs analysis questionnaire was conducted during Cycle 1 of the research. The results of the needs analysis (Appendix I) contributed to the development of the four speaking sessions in terms of topic, video selection and tasks, as well as they assisted in the researcher's perceiving to what extent the participants' answers were affected as compared with the data collected in Cycle 5, namely the final stage of the research.

Concerning the first section of the needs analysis questionnaire, which refers to the participants' background information (items 1-4), it appears that there is uniformity in their responses, as all three participants are of the same age (13 years old), origin (Greece) and have the same mother tongue (Greek). Frida is the only female participant, while Chris and Johnny are the male learners.

With respect to the results of section B, which examines the participants' attitudes to English language learning, Frida and Johnny demonstrate instrumental orientation for learning English, as their purpose is to pass an examination, whereas Chris demonstrates integrative orientation, since he is learning English in order to be able to communicate when travelling abroad (item 5). Additionally, as for the purposes they need English for (item 6), oral interaction was unanimously selected, whilst Frida also added written expression, and Chris and Johnny added listening comprehension. Furthermore, as it is depicted in Figure 5, all three participants disagreed with the statements on items 7 and 8. More specifically, none of them feels motivated to learn English (item 7) and they support that learning English is not easy (item 8). Chris is the only participant who finds English learning boring whereas Frida and Johnny do not agree with this statement (item 9).

To what extent do you agree with the following statements? (Σε ποιο βαθμό συμφωνείς με τις παρακάτω προτάσεις;)



Figure 5: Participants' answers on items 7, 8 and 9

Moving on to the results of section C, which is about the participants' language needs, Frida and Johnny feel embarrassed when they speak English in class whilst Chris does not know how to express himself (item 10), and all of them find it hard to express themselves (item 12). As for their wants in speaking (item 11), all participants wish to feel more confident, while they believe they speak English better when they like the topic under discussion (item 13), with Frida adding the factor of familiarity with the discussion topic, as it is shown in Figure 6.

13. When do you think you speak English better? (Πότε πιστεύεις ότι μιλάς καλύτερα Αγγλικά;)

3 απαντήσεις

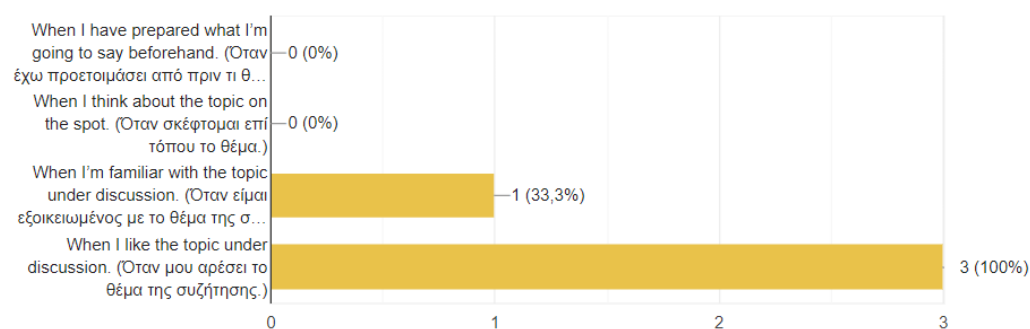


Figure 6: Participants' answers on item 13

In the final section of the needs analysis questionnaire, section D, the participants' preferences and interests are investigated. Concerning their views about videos, and more particularly whether they like the integration of videos in the lessons, Figure 7 depicts that Frida and Johnny do, while Chris is not sure about it. In addition, all three of them understand the topic of the lesson better when they watch a video, they prefer watching documentaries and travelling videos (item 16), and when it comes to English-speaking videos, they prefer watching them with Greek subtitles (item 17). Regarding their familiarity with 360-degree videos, only Chris has watched 360-degree videos and has used HMD (items 18 and 19).

14. Do you like it when videos are included in the lesson? (Σου αρέσει όταν περιλαμβάνονται βίντεο στο μάθημα;)

3 απαντήσεις

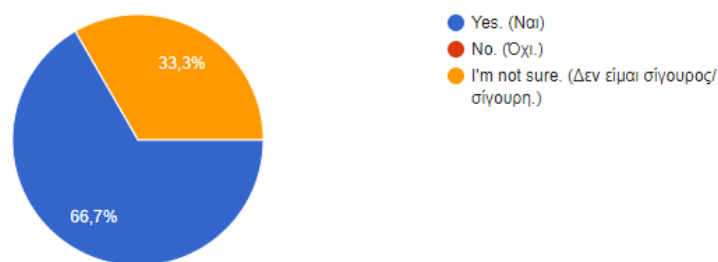


Figure 7: Participants' answers on item 14

As far as their preferences in speaking are concerned, none of them wants to be corrected while speaking (item 21), Chris and Johnny enjoy working with a partner or in small groups whereas Frida apart from working in small groups she also likes working as a whole class (item 20). As for the types of speaking activities they regard important, their views are presented in Table 4.

Table 4: Participants' answers on item 22

Item	Frida	Chris	Johnny
22. How important are the following activities for you?			
In-class discussion	Very important	Fairly important	Important
Role -play	Fairly important	Important	Important
Describing pictures	Important	Important	Important
Problem-solution	Fairly important	Fairly important	Fairly important

Finally, as it is illustrated in Figure 8, travelling is the most popular topic they consider interesting; Chris and Johnny also like animals, whilst Frida also enjoys art.

23. Are you interested in the following topics? (Σε ενδιαφέρουν τα παρακάτω θέματα;)
3 απαντήσεις

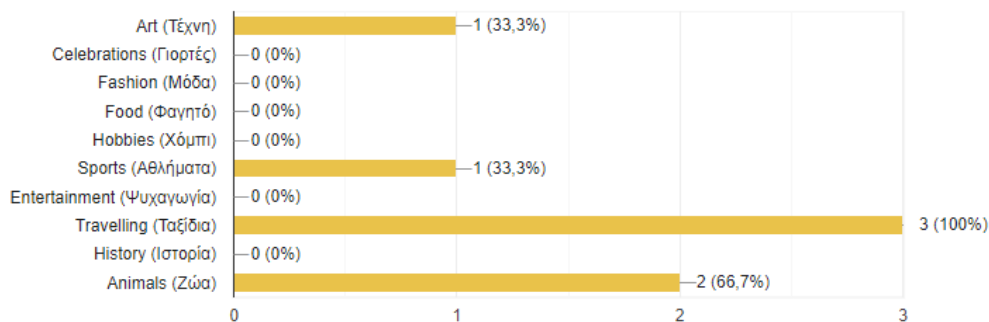


Figure 8: Participants' answers on item 23

3.1.2 Focus group discussion responses

In order to triangulate the needs analysis results, a focus group discussion took place in a rather convivial and intimate atmosphere. The most substantial parts of the focus group discussion were translated from Greek into English, following non-verbatim transcription, eliminating unnecessary utterances (Appendix J). According to Frida's responses, it became clear that she finds English learning hard due to grammar rules. Similarly, Chris agreed with Frida stating that he is tired of grammar theory, while Johnny finds it hard to learn vocabulary. As far as the speaking skill is concerned, none of the participants appears to have a positive attitude towards this skill, with Frida and Chris explaining that they find it hard because they cannot find the appropriate words to express themselves whilst Johnny stated that the difficulty he faces is his fear of making mistakes while speaking. Finally, it became evident that Frida and Johnny enjoy the integration of videos in lesson whereas Chris appeared neutral to it, not being certain of their benefits.

3.1.3 Cycle 2

During Cycle 2, the first session took place followed by the conduction of the post-session questionnaire and the observation checklist completion. The first lesson (Appendix A) was entitled "Travelling to New York City!", and involved the topic of travelling, which was

the most preferred option according to the needs analysis results (Figure 8). The lesson's objectives were acquiring and practising new vocabulary related to travelling, promoting speaking in a real-life situation and developing peer collaboration.

The pre-viewing stage included two tasks, a warm-up speaking task (task 1) aiming at activating background knowledge and content schemata through pictures while raising interest in the topic, and a vocabulary exercise (task 2), which aimed at introducing relevant lexis for the tasks that followed. The while-viewing stage involved the integration of the 360-degree video with the use of the HMDs and a task with open-ended questions related to the video (task 3), aiming at promoting gathering information and watching for specific information. The video was a travelling video about New York City, and it was selected based on the participants' preferences (Appendix B, item 16). During this stage, the participants were given the choice of completing the task either while watching the video or at the end of it. In the post-viewing stage, which included the main speaking task (task 4), the participants had to prepare a group presentation, describing their experience of their trip to New York City to a friend, recommending must-see places. The participants were provided with useful tips regarding their presentation, as well as a box with a list of possible places they could include in their presentation in order for the process to be facilitated.

At this point, it should be mentioned that, before the viewing of the video, the researcher was very cautious with the implementation of HMDs, giving explicit instructions of how participants should use the headsets and requesting them to let her know in case they felt any inconvenience. Additionally, the researcher-teacher assisted them in adjusting the straps as necessary, making sure they fit comfortably and do not apply too much pressure on the participants' faces and heads.

Based on the post-session questionnaire feedback (Appendix K), all participants found the lesson interesting (item 1), liked the tasks of the lesson (item 2), and the 360-degree video (item 3). They all agreed that they participated willingly in the tasks (item 4) and they felt comfortable during the lesson (item 5). Frida and Johnny agreed that they felt embarrassed to express themselves (item 7), but they did not find the tasks difficult as opposed to Chris who agreed with that statement (item 6). Furthermore, nobody was bored throughout the lesson (item 8), and unanimously agreed that everything was satisfying (item 10) not wanting to change anything in the lesson (item 11). Finally, they provided positive comments on their overall perception of the lesson (item 12).

According to the observation checklist results (Appendix L), the researcher noticed the participants' persistent attention and enthusiasm, especially during the while-viewing stage as everyone was smiling gently while exploring the video with curiosity, using interjections of excitement. They all listened carefully to the teacher's instructions keeping eye contact, nodding and raising their hands to participate, without demonstrating any signs of boredom. Nonetheless, the researcher observed Frida and Johnny being hesitant to express themselves mainly during the post-viewing stage, often preferring to utter Greek words in place of English ones. The teacher had to encourage them to cooperate in order to prepare the presentation; hence, she reflected that more guidance and assistance should be provided in the following cycle.

3.1.4 Cycle 3

During Cycle 3, the second speaking session was conducted (Appendix A). The title of the lesson was "Diving with underwater creatures!" and it aimed at acquiring new vocabulary related to sea animals, promoting speaking in groups and developing peer collaboration while practising the Past Simple and sequencing events. The topic of the lesson and the type of video were selected based on the participants' preferences as concluded from the needs analysis results (Appendix I, items 16, 23). The 360-degree video was a documentary, which presented the experience of diving and meeting several sea species.

The pre-viewing stage included a warm-up speaking task (task 1) aiming at activating background knowledge and content schemata through pictures while raising interest in the topic and introducing relevant lexis for the tasks that followed. In the while-viewing stage, the viewing of the video took place with the use of the HMDs followed by a gap filling task related to the video (task 2), aiming at promoting gathering information and watching for specific information. The video was separated in three parts, one for each participant, and each participant had to complete the corresponding task based on what they watched. As in speaking session one, the participants were given the choice of completing the task either while watching the video or at the end of it.

The post-viewing stage included the main speaking task which consisted of two subtasks (tasks 3a and 3b), which were designed based on the speaking principles by Johnson (Section 1.1.3). First, each participant had to present the part of the video they had watched in the while-viewing stage to their classmate, and once all the participants had collected the necessary information from their partners, they had to collaborate to give

a jigsaw presentation of their diving experience. In other words, each participant had to present their classmate's part based on the notes they kept in task 3a. To facilitate the process, the participants' were provided with tips and linking words.

According to the post-session questionnaire results (Appendix K), everyone was interested in the lesson (item 1), the tasks (item 2) and the 360-degree video (item 3). However, Johnny was the only one who did not participated willingly in the tasks (item 4), founding them difficult (item 6) and feeling embarrassed to express himself (item 7). The only thing he enjoyed in the lesson was the 360-degree video (items 9 and 12), whereas Frida and Chris enjoyed everything.

As per the observation checklist results (Appendix L), the researcher noticed the participants' interest to the lesson, as well as their enjoyment while watching the 360-degree video. Nonetheless, the researcher observed Johnny's difficulty regarding the tasks, noticing that he seemed confused, avoiding raising hands. More specifically, Johnny demonstrated difficulty in presenting his part in tasks 3a and 3b, being hesitant to express himself and experiment with the language. More often than not, he paused while speaking trying to think the correct form of a verb in the Past Simple. Therefore, the researcher had to intervene in order to encourage him. Frida also appeared reluctant to experiment with the language, though, she was willing to participate and cooperate. On the contrary, Chris was eager to participate in the tasks and experiment with the language discounting grammar and syntax mistakes.

3.1.5 Cycle 4

The third speaking session took place in Cycle 4 and included a lesson with the title "Visiting an art gallery!" (Appendix A). The lesson objectives were acquiring and practising vocabulary related to art as well as developing the ability to describe pictures using the Present Continuous. The topic of the lesson and the video were in accordance to Frida's preferences as stated in the needs analysis results (Appendix I, item 23). The 360-degree video was an animated simulation of an art museum, which presented various paintings by important artists. As far as the main speaking task is concerned, the type of activity chosen was based on all three participants' views about describing pictures (Appendix I, item 22).

The lesson was divided in three stages, namely the pre-, while- and post-viewing stages. The first task included a warm-up speaking activity, encouraging participants to

look at three popular paintings and express their opinions about them. At this point, it should be mentioned that the participants were familiar with artists of Renaissance, as they had attended a reading lesson of that topic in one of their previous classes. The main objective of task 1 was to activate the participants' content schemata through images, while raising interest in the topic of the lesson. Task 2 presented a vocabulary activity, inviting participants to match target words with their definitions, aiming at introducing relevant lexis.

The while-viewing stage followed, with the viewing of the 360-degree video as well as the completion of task 3, where participants had to complete seven fact files of some painting using information from the video. Thus, task 3 promoted information gathering and watching for specific information. Finally, in the post-viewing stage, the participants took part in task 4, practising describing pictures. More specifically, the participants were asked to give a detailed description of their favourite painting they saw in the video, as well as use information from task 3, and their classmates had to guess the title of the painting. The participants were also encouraged to talk about the feelings they got when they looked at the painting using the adjectives given. The task was based on two of Johnson's principles, namely task dependency principle and correction for content principle (Section 1.1.3).

Based on the participants' feedback (Appendix K), it is evident that Frida enjoyed the lesson the most (items 1, 2, 3) stating that she participated willingly in the lesson's tasks (item 4), she felt relaxed throughout the lesson (item 5) and enjoyed the 360-degree video (item 3). Similarly, Chris and Johnny found the lesson interesting, however they did not like the topic (item 10), and they expressed moderate viewpoints regarding their overall impressions of the lesson (item 12).

The observation checklist results (Appendix L) were in line with the participants' answers in the corresponding post-session questionnaire. To be more precise, the researcher observed that all three participants seemed interested in the lesson, with Frida demonstrating the most interest. It was the first time Frida was observed to feel free to express herself without hesitating to experiment with the language. To the contrary, Johnny was quite reluctant to speak, looking uncomfortable at times.

3.1.6 Cycle 5

The final speaking session included a lesson with the title “Dubai, Washington or Barcelona?” (Appendix A), and aimed at acquiring and practising vocabulary related to sightseeing, promoting speaking in a role-play and developing the ability to present an itinerary using the Present Simple. The topic of the lesson and the video were in accordance to all participants’ preferences based on the needs analysis results (Appendix I, item 23). The lesson included three different 360-degree travelling videos, presenting three different places as it is denoted from the title. As far as the main speaking task is concerned, the type of activity chosen was based on all three participants’ views about role-play (Appendix I, item 22).

In the pre-viewing stage of the lesson, the learners were engaged in a warm-up speaking task (task 1), answering questions that aimed at activating their background knowledge and content schemata through pictures, whereas in task 2, they had to label the pictures given with the words from the box, being introduced to relevant lexis. In the while-viewing stage, each participant was assigned with a different 360-degree video to watch, and then they had to complete task 3, which included open-ended questions regarding the video each one watched. Lastly, in task 4, during the post-viewing stage, the learners were requested to pretend that they were travel agents while the teacher was a customer-traveller, and they had to prepare an itinerary for a three-day trip to the place each one watched during the while-viewing stage and persuade the customer choose their travel agency. The role-play included a challenge as the travel agent that would manage to persuade the customer would be the winner. Hence, the task was designed according to Johnson’s principles, challenge and correction for content principle, aiming at arousing a sense of achievement.

The post-session questionnaire feedback demonstrated positive results as far as the participants’ views about the lesson are concerned. Uniformity appeared in all of their answers, finding the lesson interesting (item 1), enjoying and participating willingly in the tasks (item 4) and not wanting to change anything in the lesson (item 11). Nobody found the tasks difficult (item 6) and all participants commented they really liked the lesson (item 12).

According to the observation checklist results (Appendix L), everyone seemed to be interested in the lesson in general, as well as in the videos and tasks. After watching the footage of the session, the researcher concluded that the post-viewing stage was quite

intriguing to the learners, observing improvement in Johnny’s hesitant attitude regarding his experimenting with language. More specifically, all three participants were eager to speak and present their destination in the best possible way, neglecting grammar or syntax mistakes.

3.1.7 Post-research questionnaire results

Two days after the conduction of the fifth speaking session, the participants answered the post-research questionnaire. According to the results (Appendix M), all participants unanimously agreed they found the lesson interesting (item 1) and enjoyed the 360-degree videos (item 2). As per items 3 to 5, everyone agreed to them; they enjoyed participating in the speaking tasks, they think the lessons helped them improve their speaking skills and believe in their abilities. Moreover, items 6, 7 and 8 are similar to items 7, 8 and 9 in the needs analysis questionnaire (Appendix I) and are presented in comparison in order to mark the differences regarding the participants’ attitudes towards English language learning. Indeed, differences were noticed in Frida’s and Chris’ answers, whereas Johnny’s remained the same. The differences in Frida’s and Chris’ answers are demonstrated in Table 5.

Table 5: Frida’s and Chris’ answers before and after the speaking sessions

Item	Needs analysis	Post-research questionnaire	Needs analysis	Post-research questionnaire
	Frida		Chris	
7. I feel motivated to learn English.	Disagree	Agree	Disagree	Agree
8. I think learning English is easy.	Disagree	Agree	Disagree	Agree
9. I find English learning boring.	Disagree	Disagree	Agree	Disagree

Regarding item 9, Frida and Chris support that the 360-degree videos affected their motivation in terms of attitude towards the language, their engagement with the tasks and self-efficacy, whilst Johnny supported that they only made the lessons more interesting. Ultimately, all of the participants would like 360-degree videos to be included in their future lessons (item 10), while they expressed positive feelings about the sessions as shown in Table 6.

Table 6: The participants' answers on item 11 of the post-research questionnaire

Item 11	Frida	Chris	Johnny
Please describe how feel about the lessons in a few words	I enjoyed all the lessons. I am very excited about the videos and I'd love to participate in such lessons again in the future.	I felt nice in all the lessons. I enjoyed all the 360-degree videos and lessons.	It was a nice experience. I liked the lessons but sometimes the tasks were difficult.

3.1.8 Post-research focus group discussion results

During the post-research focus group discussion, the researcher asked the participants about their overall evaluation of the sessions, receiving optimistic comments (Appendix N). All of them agreed that the integration of the 360-degree video affected them positively. More particularly, Frida mentioned that thanks to their integration, she wanted to participate in the tasks more actively, Chris supported that the lessons made him love English learning, whilst Johnny claimed that he felt more motivated. Additionally, everyone would like to keep using 360-degree videos in their lessons. Finally, concerning their favourite lesson, Frida's preferred session was "Visiting an art gallery", while Chris' was "Visiting New York City" and Johnny's was "Diving with underwater creatures".

3.2 Discussion

3.2.1 Learners' involvement in speaking

As per Cycle 2, in the first speaking session, an overall enthusiasm was observed since that was the second time the participants were exposed to a 360-degree video. Nonetheless, during the pre-viewing stage, all the participants were reluctant and shy, answering the warm-up questions in one word and without justifying their answers. When the use of HMDs took place a swift in their rather unwilling mood was observed. Chris' enthusiasm while watching the video was evident, being observed to use phrases that showed his excitement due to the immersiveness and presence he felt. Similarly, Johnny and Frida, who were not familiar with 360-degree videos and HMDs (Appendix I, items 18 and 19), were smiling and expressed enthusiasm during the while-viewing stage. Their performance in task 3 of the while-viewing stage was rather poor possibly due to their focus on the video in general and not on watching to find specific information. Frida was the one to give the most correct answers. Notwithstanding, they all were eager to answer them, guessing the answers (Appendix K, item 4). Finally, in the post-viewing stage, Chris was noticed to be facing difficulties in comprehending the main speaking task, which

resulted in asking the teacher several queries. This is possibly the reason why he found the tasks difficult (Appendix K, item 6) as opposed to the other participants. His involvement though was impressive once he understood the point of the task. On the contrary, Frida and Johnny participated in the task needing encouragement and assistance from the teacher to keep them talking (Appendix L, item 7).

In Cycle 3, all participants expressed their positive feelings for the lesson. Their involvement in the tasks was evident not only in the while- and post-viewing stage, but in the pre-viewing stage as well. Their enthusiasm was manifest while watching the video (Appendix L, item 3), and their performance in the task of this stage was improved as opposed to the previous session, possible because they had less information to handle as the video lasted less than the video in the first session. In this session, all were eager to participate in the tasks, especially in the main speaking task (Appendix K, item 4). However, the post-viewing speaking tasks, though they were supposed to last about twenty minutes, they lasted more, due to the fact that the participants were not familiar with the jigsaw presentation and they needed more time in order to understand what each of them had to do. This difficulty caused extensive pauses, nonetheless, once each one was sure what they had to present, they all were eager to present their part. Johnny was the only one who needed encouragement from the teacher though (Appendix L, item 7).

In the session of Cycle 4, everyone felt nice, but Frida was the one who enjoyed it the most possibly due to her preference for art (Appendix I, item 23). Although Chris and Johnny did not express their preference for art, they participated in all tasks of the lesson. However, for the first time, Johnny seemed not to be enjoying the 360-degree video (Appendix L, item 3) possibly because he stated he did not like the topic (Appendix K, item 10). Their eagerness to participate was especially evident in task 3 (Appendix A, lesson 3), where they had to complete some fact files. In the main speaking task, where they had to describe their favourite painting and let their classmates make guesses, the learners participated willingly, though Johnny needed again some boost from the teacher.

The last session was both very interesting to the participants and the tasks could be easily understood, hence no one found them difficult (Appendix K, item 6). All participants were eager to participate and answer the researcher's question raising hands in all tasks (Appendix L, item 4). Though their performance was not examined in this research, the researcher observed improvement especially in the while-watching stage, noticing that the learners paid more attention to watching for specific information. Finally,

in the main speaking task, the researcher observed their passion and enthusiasm to play their roles, possibly due to the challenge included in the task, namely to persuade the teacher-customer to choose their destination. Ultimately, it is worth mentioning that Johnny did not need the researcher's encouragement to participate (Appendix L, item 7).

3.2.2 Learners' self-efficacy in speaking

The learners' self-efficacy was challenging throughout the empirical part of the research. As it was obvious from the needs analysis (Appendix I) and the focus group discussion (Appendix J) at the beginning of the research in Cycle 1, the participants faced difficulties in the speaking skills, supporting they wanted to feel more confident when they speak and finding it hard to express themselves. Johnny in particular, shared the view that he was afraid that he might say something wrong, whereas Frida claimed that she felt embarrassed about her abilities, especially in cases where she cannot find the proper words while speaking. In a similar vein, Chris explained that the difficulties in the speaking skills made him think that he was not so good and hence lead to boredom.

In the first session, Cycle 2, Frida and Johnny felt embarrassed to express themselves (Appendix K, item 7) and that was something the researcher also observed (Appendix L, item 8), noticing their hesitation to experimenting with the language. More specifically, in the post-viewing stage of the session, when they had to present their part, both Frida and Johnny paused several times to think of what they wanted to tell next, trying to correct themselves when they realised they made a mistake and using Greek words in place of English ones. However, Chris seemed to believe in his abilities while speaking, expressing himself freely even if several grammatical and syntax mistakes were made.

Frida and Johnny maintained the same hesitating behaviour during the second session, while in the third session improvement was noticed in Frida's responses. To be more precise, she was observed to express herself without pausing to think what she wanted to say, ignoring the mistakes she made while using the Present Continuous to describe her favourite painting. One possible explanation for this shift is her preference to the topic as well as the fact that she became familiar with the use of 360-degree videos and the lessons. In the last session, all of the participants felt free to express themselves (Appendix K, item 7). In particular, Johnny participated in the main speaking task showing self-confidence while presenting the itinerary of his destination, although he

failed to use the Present Simple correctly. Finally, based on the post-research questionnaire results, all participants unanimously stated that the speaking sessions helped them improve their speaking skills (Appendix M, item 4) as well as believe in their abilities (Appendix M, item 5).

3.2.3 Learners' attitudes toward English learning

In Cycle 1, the needs analysis and focus group discussion helped obtain the participants' attitudes towards English learning. All three participants thought learning English was not easy (Appendix I, item 8), while Chris also supported he found English learning boring. One of the main reasons for having this attitude towards English learning was the grammar rules as he explained in the focus group discussion (Appendix J). Based on the researcher's observations and the post-session questionnaire answers, no one felt bored during the lessons (Appendix K, item 8). Additionally, according to the post-research questionnaire results, everyone agreed that they find English less boring after the speaking sessions (Appendix M, item 8). Finally, yet importantly, in the post-research focus group discussion (Appendix N), all three participants stated that the use of the 360-degree videos made them more positive towards English since lessons became interesting. Chris claimed that the integration of 360-degree videos in the lessons made him want to come to the lessons, while everyone agreed they would like to keep using them in their future lessons. In particular, Chris shared the view that thanks to the 360-degree videos, the lessons are not boring any more whilst Johnny claimed that he finally felt more motivated in learning English due to the 360-degree videos.

3.3 Answers to the research questions

Based on the discussion presented in section 3.2, the three subquestions can be answered in the present section.

1) To what extent are young learners involved in the speaking tasks after the use of 360-degree videos?

It appears that the integration of 360-degree video affected the participants' involvement in the speaking tasks. All of them demonstrated willingness to participate from the very first session. Despite the fact that Johnny did not maintain this behaviour during session 3, which was much affected by the topic of the lesson, his willingness to participate was

obvious in the final session again. What's more, in the post-research questionnaire, all of them stated that they enjoyed participating in the speaking tasks of the lessons, and in the post-research focus group discussion, they expressed the belief that thanks to the 360-degree videos, they wanted to participate in the tasks. Hence, it can be concluded that regarding the learners' participation in the speaking tasks after the use of 360-degree videos the data demonstrated positive results.

2) To what extent does the use of 360-degree videos enhance young learners' self-efficacy?

Comparing and contrasting the participants' viewpoints regarding their beliefs in their own abilities in Cycle 1 as opposed to their beliefs in Cycle 5, it can be concluded that the integration of the 360-degree video affected their self-efficacy in a positive manner. All of them supported that the speaking sessions helped them believe in their abilities. Chris demonstrated positive self-efficacy from the very first session maintaining his passion to experiment with the language in all of the rest lessons. Though Frida and Johnny's self-efficacy did not seem to be affected in the first two sessions, gradual improvement was evident towards the last sessions.

3) How does the use of 360-degree videos affect young learners' attitude towards English learning?

Based on the comparison between the participants' initial attitude as expressed in Cycle 1 and their attitude as expressed in Cycle 5, it is clear that their attitude was much affected in a positive way. Although at the beginning, they thought English learning is a rather difficult and boring process, they express an antithetical view in the last cycle of the research. Indeed, their views were that the integration of the 360-degree videos enhanced their motivation and transformed the opinion they had about English learning.

Having answered the three subquestions, the main question of the research can be answered.

What is the effect of 360-degree videos experienced by means of HMDs on motivating Greek EFL young learners in speaking?

As it was elaborated in the answers of the subquestions, the integration of 360-degree videos is beneficial regarding the participants' involvement in the speaking tasks, their

self-efficacy and their attitude towards English learning. Therefore, since these three aspects constitute substantial parameters of one's motivation in learning, it can be concluded that 360-degree videos positively affect learners' motivation in the speaking skill. Nonetheless, it should be mentioned that the participants' positive feedback and high motivation was much affected by the careful selection of the videos, the topics and tasks included in the lessons, which were based on their interests and preferences.

Conclusion

This chapter provided a broad picture of the findings based on the collected research data. A discussion followed, demonstrating a critical analysis and reflection. In the subsequent chapter of the research, a critical overview of the research will be provided, including the significance of the study, its relevance to the results of similar studies, the limitations of the research along with suggestions for further research.

4. A critical overview of the research

In the final chapter of the research, the significance of the study along with its implications for foreign language teaching is presented, as well as its relevance to the results of similar studies. Finally, the limitations of the research and suggestions for further research are mentioned.

4.1 Significance of the research and its implications for EFL

Although a great number of studies are devoted to the implementation of videos in ELT, limited research has been conducted over the integration of 360-degree videos in language learning. The present dissertation attempted to shed light and investigate to what extent the use of 360-degree videos affects young learners' motivation in the speaking skill. According to the results and discussion presented in Chapter 3, the usefulness of supplementing lessons with 360-degree videos was confirmed, proving that this relatively new tool is valuable in the learning process, motivating learners who feel less motivated and less confident in speaking English.

Apart from the optimistic implications the research generated with respect to assisting demotivated learners, the positive research results prove valuable for other practitioners as well. To illustrate this point, the present research can inspire other language teachers exploit the potentials of new technologies by involving 360-degree videos in their classes. Living in the era of technology, educators should experiment with new educational tools and transform traditional language teaching into an effective multimedia experience.

Overall, in view of the findings, it is highly recommended that EFL teachers incorporate 360-degree videos in their teaching practices and adjust their lessons according to the trends and demands of the contemporary technological era. Designing stimulating lessons plans accompanied by meaningful tasks and integrating new innovative technologies in class is of utmost significance since it proves a successful combination in order to boost learners' motivation, and therefore, facilitate the language learning process.

4.2 Relevance of the research to similar studies

The results of the present research are juxtaposed to the results of similar studies, though they do not examine the effect of 360-degree videos in ELT but in education in general. Rupp, Odette, Kozachuk, Michaelis, Smither and McConnell (2019) conducted a study investigating the effect of 360-degree videos in learning. The research was conducted with university students, concluding that more immersive devices, like HMDs, had a positive impact on students, yielding better learning performances. Additionally, the research highlighted that after the use of 360-degree videos, the participants' interest in learning content increased. However, it is emphasised that the experiences the videos provide may affect learners' retention. Overall, the results of this research are in line with the present research as far as learners' interest is concerned, but no signs for affecting learners' retention were observed.

Snelson and Hsu (2019) conducted a scoping review of the emerging research, examining a sample of 12 articles about the application of 360-degree videos in education. Several studies reported that 360-degree videos promote learners' enjoyment through the immersive experiences they offer, but the results regarding the learning performance were mixed. More specifically, among the positive effects of 360-degree videos were the high levels of engagement, interest and enjoyment. However, several studies found no positive perceptions of educational 360-degree videos reporting several minor problems in concentration, motion sickness and physical discomfort. In the present research, no such problems were observed, possibly due to the careful selection of the length of the videos. On the contrary, the benefits reported by Snelson and Hsu (2019) are in alignment with the results of the present research.

Di Natale, Repetto, Riva and Villani (2020) examined the effects of 360-degree videos on foreign language learning. The research was conducted with high-school students reporting positive results, concluding that language learning is facilitated on the proviso that the learners possess a positive attitude towards technology and providing the videos are meaningful to the learners. Likewise, in the present research, the positive results were affected by the types and topics of the videos, which were in alignment with the participants' interests and preferences.

Ultimately, a research was conducted by Dolgunsöz, Yildirim and Yildirim (2018), investigating the use of 360-degree videos and virtual reality (VR) with respect to its

effect on EFL writing performance. The data revealed that the use of VR did not affect learners' performance in the writing skills, but the participants demonstrated positive attitudes towards the integration of VR in their lessons considering VR a motivating and enjoyable educational means. The participants' viewpoints come in accordance with the views of the participants in the present study, who expressed a positive stance on the use of 360-degree videos in their lessons.

4.3 Limitations of the research

The present action research was conducted with a limited number of participants. Although the class, which the participants belong to, consists of six learners, only three of them consent to participate in the study. Therefore, this number of participants does not allow the researcher to draw general conclusions that could be applied to a wider context of learners. A larger sample is required in order to draw valid generalised conclusions. In addition, the empirical part of the research lasted for a short period, namely five weeks, and the whole research had to be completed within less than 16 weeks. The time available was quite restricted, hence the researcher did not have adequate time to analyse the data painstakingly.

4.4 Suggestions for further research

Considering the above limitations, it would be useful to examine the effect of 360-degree videos in speaking motivation on a broader scale, regarding the sample included and the number of cycles applied. Additionally, fruitful results would be provided in a research that would compare learners' motivation in speaking with the use of 2D videos as opposed to the use of 360-degree videos. Ultimately, insightful conclusions would be drawn conducting a study that would examine the effects of the integration of 360-degree videos in an EFL class as far as learners' performance is concerned.

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Appendix A: Lesson plans & worksheets

The lesson plans presented follow the pre-, while-, post-viewing teaching framework. In the pre-viewing stage, the learners are invited to respond to some warm-up questions in order to activate their content schemata, as well as they are introduced to lexis relevant to the lessons topic. In the while-viewing stage, the learners watch the selected 360-degree video using the HMDs whilst doing a task about comprehension. In the post-viewing stage, the learners are asked to participate in a speaking after having watched that the video.

General information that apply to all lesson plans

Class competency level: A2 (pre-intermediate)

Class profile: two male and one female learner, 13 years old, monolingual, no learning difficulties, low self-esteem, low motivation towards learning English

Lesson aims:

- enhancing integration in speaking tasks
- enhancing self-esteem and self-efficacy
- foster motivation towards learning English

Skills: speaking

Time: 45 minutes

Materials used: a prepared task sheet for the learners, Oculus Go headsets with Internet connection

*T = Teacher

L = Learner

Lesson Plan 1: Travelling to New York City!

Lesson objectives: acquiring and practising new vocabulary related to travelling, promoting speaking in a real-life situation, developing peer collaboration

Link for the 360-degree video: <https://www.youtube.com/watch?v=swkwXOLMF5I>

	Task	Procedure	Objectives	Interaction	Time
Pre-viewing stage	1	T draws Ls' attention to the pictures of the task and invites them to answer the warm-up questions.	To activate background knowledge and content schemata through pictures. To raise interest in the topic.	Ls T as coordinator	5 min.
	2	Ls label the pictures with the words given in the box. T provides them with feedback.	To introduce relevant lexis for the tasks that follow.	Ls T as coordinator	5 min.
While-viewing stage	3	T distributes Oculus Go headsets to Ls and explains that in case they feel any inconvenience they have to inform him/her. Then, T assists them in adjusting the straps as necessary, making sure they fit comfortably and do not apply too much pressure on their faces and heads. Ls watch the 360-degree video and complete task 3. They can either complete it while watching the video, pausing it, or at the end of it. Ls are informed that they are able to watch and explore the video at their own pace, taking breaks when they feel so. When Ls complete watching, Ls present their answers to the task and T praises them for each correct response.	To promote gathering information and note taking. To watch for specific information. To increase motivation.	Ls T as facilitator	20 min.
Post-viewing stage	4	T explains the task giving the context. T encourages Ls to watch part of the video and take notes that will be used in their presentation. He/She allows Ls a few minutes to prepare their presentation following the information and tips provided in the box. Ls give their presentation taking it in turns.	To practise speaking skills providing context for meaningful oral interaction. To give a group presentation. To promote collaboration so as to give a presentation.	Ls T as coordinator	15 min.

Worksheet 1

Travelling to New York City!

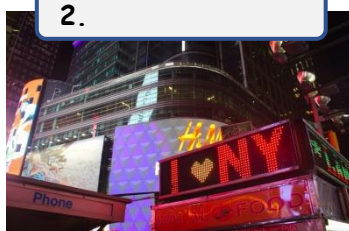
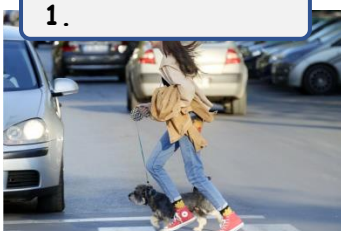
1. Look at the following pictures and answer the questions.

- Do you recognise this city? What do you know about it?
- Would you like to visit this city? Why? / Why not?



2. Label the pictures with the words from the box.

skyscrapers pedestrian suspension bridge
street square LED signs



1.

2.

3.

4.

5.

6.

3. Watch the 360-degree video on the headset and answer the questions.

1. How many people visit New York City every year?

2. How many people live in Manhattan?

3. Which is the fifth highest building in New York City?

4. When was the Brooklyn Bridge built?

5. Which place in New York City is also called "the crossroads of the world"?

6. How many pedestrians pass through the Times Square daily?



4. Work in a group of three. Imagine that you have just returned from your trip to New York City and a friend of yours wants to visit this city. Which places would you recommend him/her visiting? Share your experience by giving a short presentation. Make sure your presentation includes at least 6 of the must-see places given in the box.

Must-see Places in New York

- ✓ Empire State Building
- ✓ Times Square
- ✓ Central Park
- ✓ The New York Stock Exchange
- ✓ Brooklyn Bridge
- ✓ Freedom Tower
- ✓ Manhattan



✓ Make sure each of you presents 2 must-see places.

- ✓ Decide on the organisation of the presentation (who starts first and who finishes the presentation).
- ✓ Pay attention to the other members of your group while they are speaking.
- ✓ When you give your presentation stay calm and speak clearly.



Image Sources: *pixabay.com, freepik.com*

Lesson Plan 2: Diving with underwater creatures!

Lesson objectives: acquiring and practising new vocabulary related to sea animals, promoting speaking in groups, developing peer collaboration, practising the Past Simple, practising sequencing using linking words

Link for the 360-degree video: <https://www.youtube.com/watch?v=eKumVFvGHFA>

	Task	Procedure	Objectives	Interaction	Time
Pre-viewing stage	1	T draws Ls' attention to the pictures of the task and invites them to answer the warm-up questions.	To activate background knowledge and content schemata through pictures. To raise interest in the topic. To introduce relevant lexis for the tasks that follow.	Ls T as coordinator	5 min.
While-viewing stage	2	T distributes Oculus Go headsets to Ls and explains that in case they feel any inconvenience they have to inform him/her. Then, T assists them in adjusting the straps as necessary, making sure they fit comfortably and do not apply too much pressure on their faces and heads. T informs Ls that each one of them watch a different part of the same video. Each headset is set beforehand on the particular part Ls have to watch (Student A, 00:00-3:30, Student B 3:30-7:00, Student C 7:00-10:30). Ls watch the corresponding part of the 360-degree video and complete task 2 which is different for each L. They can either complete it while watching the video, pausing it, or at the end of it. Ls are informed that they are able to watch and explore the video at their own pace, taking breaks when they feel so. When Ls complete watching, Ls present their answers to the task and T praises them for each correct response.	To promote gathering information and note taking. To watch for specific information. To increase motivation.	Ls T as facilitator	20 min.

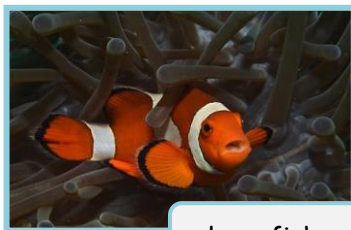
Post-viewing stage	3a	T explains the task giving instructions. Each L presents their experience to their partner based on what they watched as well as using the information from task 2. Their partners keep notes.	To practise speaking skills. To relate task 2 with task 3 (<i>task dependency principle</i>). To develop a sense of responsibility for their discourse (<i>correction for content principle</i>). To promote gathering and keeping information (<i>information transfer principle and information gap principle</i>).	L-L T as coordinator	10 min.
	3b	T explains the task giving instructions the context. Ls cooperate in order to prepare a jigsaw presentation. Each L has to narrate what they have experienced and then, they organise their presentation. T encourages Ls to watch parts of the video and take notes that will be used in their presentation. Ls give their presentation starting with the sentence providing and taking it in turns.	To practise speaking skills providing context for meaningful oral interaction. To give a jigsaw presentation (<i>jigsaw principle</i>). To promote collaboration so as to give a presentation.	Ls T as coordinator	10 min.

Worksheet 2

Diving with underwater creatures!

1. Look at the following pictures and answer the questions.

- Do you recognise any of these sea species? Which ones do you find fascinating? Why?
- Do any of these species live in your country?
- Have you ever tried snorkelling? If not, would you like to try?



Student A

2. Watch the 360-degree video on the headset and fill in the sentences.

1. Marsa Alam is the ideal place for _____.
2. Marsa Alam is also called the Egyptian _____.
3. One of the most incredible underwater creatures is the _____.
4. The green turtle lives in _____ to protect itself from bad weather.
5. The green turtle feeds on _____ as it gets older.



Student B

2. Watch the 360-degree video on the headset and fill in the sentences.

1. The green turtle is usually accompanied by a _____.
2. The sucker fish protects the green turtle from _____.
3. When the green turtle goes to the bottom to get some food, the sucker fish moves to the top of the _____.
4. _____ are real underwater gardens.
5. It is _____ to take home any piece of coral reef.



Student C

2. Watch the 360-degree video on the headset and fill in the sentences.

1. The stingray protects itself from enemies thanks to its _____.
2. The stingray feeds on molluscs, fish and _____.
3. The waters of Marsa Alam are a unique _____ with plenty of coral and fish species.
4. The butterfly fish has bright _____ stripes and a _____ eyebrow.
5. The butterfly fish is found _____ in the world.

3a. Work in pairs. Each of you has experienced a different part of this diving adventure in Marsa Alam waters. Discuss and share what each of you has seen and keep notes:

- Student A gives information about his/her experience to Student B
- Student B gives information about his/her experience to Student C
- Student C gives information about his/her experience to Student A

- You can use information from task 2 to present your diving experience to your partner.
- Remember to use the **Past Simple** to describe your experience.
- You can mention what happened using linking words to join your ideas:
first, in the beginning, then, after that, at that moment, in the end, finally



3b. Now work as a group and prepare a short presentation of your diving experience. Each student presents his/her partner's part based on his/her notes from task 3a.

Student A presents Student's C part

Student B presents Student's A part

Student C presents Student's B part

Student B starts the presentation beginning with the following sentence:

"Today was an amazing day! We went diving with my friends in Marsa Alam."

Image Sources: *pixabay.com, istockphoto.com*

Lesson Plan 3: Visiting an art gallery!

Lesson objectives: acquiring and practising new vocabulary related to art, promoting speaking, developing the ability to describe pictures using the Present Continuous

Link for the 360-degree video: https://www.youtube.com/watch?v=XX9ss_Mo4QQ

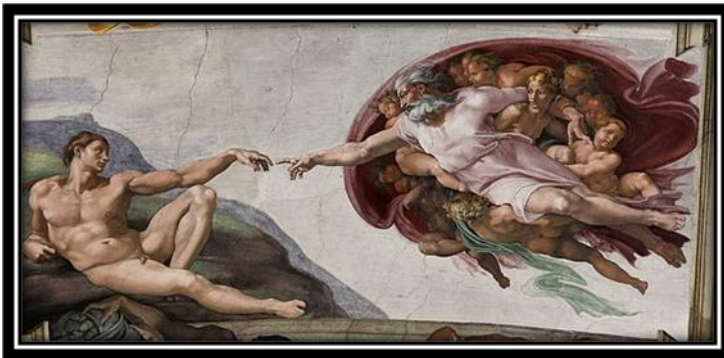
	Task	Procedure	Objectives	Interaction	Time
Pre-viewing stage	1	T draws Ls' attention to the pictures of the task and invites them to answer the warm-up questions.	To activate background knowledge and content schemata through pictures. To raise interest in the topic.	Ls T as coordinator	5 min.
	2	Ls match the words given with their definition. T provides them with feedback.	To introduce relevant lexis for the tasks that follow.	Ls T as coordinator	5 min.
While-viewing stage	3	T distributes Oculus Go headsets to Ls and explains that in case they feel any inconvenience they have to inform him/her. Then, T assists them in adjusting the straps as necessary, making sure they fit comfortably and do not apply too much pressure on their faces and heads. Ls watch the 360-degree video and complete task 3. They can either complete it while watching the video, pausing it, or at the end of it. Ls are informed that they are able to watch and explore the video at their own pace, taking breaks when they feel so. When Ls complete watching, they present their answers to the task and T praises them for each correct response.	To promote gathering information. To watch for specific information. To increase motivation.	Ls T as facilitator	15 min.
Post-viewing stage	4	T explains the task giving instructions and drawing Ls' attention to the boxes. Each L presents their favourite painting giving a detailed description of what it depicts as well as other information from task 3. Ls are also encouraged to talk about the feelings they get when they look at the painting. Their classmates guess the title of the painting and take turns to present their own favourite painting.	To practise describing pictures. To relate task 2 with task 3 (<i>task dependency principle</i>). To develop a sense of responsibility for their discourse (<i>correction for content principle</i>). To practise the Present Continuous.	L T as coordinator	20 min.

Worksheet 3

Visiting an art gallery!

1. Look at the following pictures and answer the questions.

- Do you recognise any of the following paintings? Which one do you find the most impressive? Why?
- Which important Italian artists of Renaissance do you know?
- Have you ever been to an art gallery?



2. Match the words with their definitions (a-e).

1. sketch

2. genre

3. Renaissance

4. canvas

5. portrait

a. the period in Europe during the 14th, 15th and 16th centuries

b. a simple picture that is drawn quickly

c. a strong material used by artists for painting on

d. a painting of a person, usually showing the head and shoulders

e. a category or style of art

3. Watch the 360-degree video on the headset and complete the fact files with the missing information.

Painting: The last supper

Artist: _____
Year of completion: 1495
Place of creation: Milan
Genre: _____

Painting: The Virgin of Rocks

Artist: Leonardo da Vinci
Year of completion: _____
Place of creation: _____
Genre: Religious painting



Painting: Mona Lisa

Artist: _____
Year of completion: 1504
Place of creation: Florence
Genre: _____

Painting: Portrait of an unknown woman

Artist: Leonardo da Vinci
Year of completion: _____
Place of creation: _____
Genre: Portrait



Painting: Head of a girl

Artist: Leonardo da Vinci
Year of completion: _____
Place of creation: Milan
Genre: _____

Painting: The last judgment

Artist: _____
Year of completion: _____
Genre: _____

Painting: Creation of Adam

Artist: _____
Year of completion: _____
Genre: _____

4. Now that you have visited an art gallery, choose the painting you liked the most and describe it to your classmates without telling its title. Also, explain why you liked the painting and how you feel when you look at it. Your classmates guess the painting you are talking about.

- You can watch the 360-degree video again, pause it at the painting you liked the most and keep notes that you can use.
- Remember to use the **Present Continuous** to describe what is happening in the painting.

**Useful vocabulary
to describe feelings**

surprised
pleased
inspired
frustrated
excited
delightful
charmed
wonderful
thoughtful



Image Sources: *wikipedia.com, pixabay.com*

Lesson Plan 4: Dubai, Washington or Barcelona?

Lesson objectives: acquiring and practising new vocabulary related to sightseeing, promoting speaking in a role-play, practising a real-life situation, developing the ability to present an itinerary using the Present Simple

Links for the 360-degree videos:

Student A - https://www.youtube.com/watch?v=ji0xO_171WA

Student B - <https://www.youtube.com/watch?v=3HS97Iesll4>

Student C - <https://www.youtube.com/watch?v=7wNDMd8-9K8>

	Task	Procedure	Objectives	Interaction	Time
Pre-viewing stage	1	T draws Ls' attention to the pictures of the task and invites them to answer the warm-up questions.	To activate background knowledge and content schemata through pictures. To raise interest in the topic.	Ls T as coordinator	5 min.
	2	Ls label the pictures with the words given in the box. T provides them with feedback.	To introduce relevant lexis for the tasks that follow.	Ls T as coordinator	5 min.
While-viewing stage	3	T distributes Oculus Go headsets to Ls and explains that in case they feel any inconvenience they have to inform him/her. Then, T assists them in adjusting the straps as necessary, making sure they fit comfortably and do not apply too much pressure on their faces and heads. T informs Ls that each one of them watches a different video. Each headset is set beforehand with the video each L is to watch. Ls watch the 360-degree videos and complete task 3, which is different for each one. They can either complete it while watching the video, pausing it, or at the end of it. Ls are informed that they are able to watch and explore the video at their own pace, taking breaks when they feel so. When Ls complete watching, they present their answers to the task and T praises them for each correct response.	To promote gathering information and note taking. To watch for specific information. To increase motivation.	Ls T as facilitator	15 min.

Post-viewing stage	4	T explains the task giving the context. T encourages Ls to watch the video again, take notes and complete the itinerary box. They can also use information from task 3. T allows Ls a few minutes to prepare their presentation and then take turns to participate in a role-play, between a travel agent and a customer. After the end of the discussion with all three Ls, the T announces the destination he/she chooses to travel to.	<p>To practise speaking in a role-play.</p> <p>To develop a sense of responsibility for their discourse (<i>correction for content principle</i>).</p> <p>To practise Present Simple.</p> <p>To motivate Ls by including a <i>challenge</i> (persuading the customer).</p> <p>To arouse a sense of achievement.</p>	L-T T as coordinator	20 min.
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Worksheet 4

Dubai, Washington or Barcelona?

1. Look at the following pictures and answer the questions.

- Do you recognise any of the following cities? What do you know about them?
- Which of these cities would you like to visit? Why?
- Why do people use a travel agent to book their trips?



2. Label the pictures with the words from the box.

fountain mosque statue tower temple cathedral



1.



2.



3.



4.



5.



6.

Student A - Dubai

3. Watch the 360-degree video on the headset and answer the questions.

1. What is interesting about Burj Khalifa?

2. What can you find in Dubai Mall?

3. How many worshipers can be accommodated in Jumeirah Mosque?

4. What can visitors do at Safa Park?

5. What is Diera?

6. Why is the Dubai fountain so impressive?



Student B - Washington

3. Watch the 360-degree video on the headset and answer the questions.

1. When was the Capitol building completed?

2. How tall is the Washington monument?

3. Which is the most visited memorial in the USA?

4. Which important figure can visitors see at Lincoln memorial?

5. What's impressive about the library of Congress?

6. How many floors does the White House have?



Student C - Barcelona

3. Watch the 360-degree video on the headset and answer the questions.

1. Where's Catalonia Square?

2. Which famous buildings designed by Gaudi can you see in Barcelona?

3. How many urban parks are there in Barcelona?

4. What is special about church Sagrada Familia?

5. Which park is home to Gaudi's many creations?

6. Where can tourists spend a beautiful night enjoying a show?



4. Imagine that the teacher of the class is a customer who wants to choose a destination for a three-day trip and you are travel agents. Each one of you tries to persuade the customer to choose the destination you are presenting.

First, create the itinerary of the three-day trip to the city you have watched, including the sights a tourist can visit. Then, take turns to present the destination and be ready to answer the questions the customer has. The travel agent who manages to persuade the customer is the winner.

ITINERARY

3-day trip to _____

DAY 1:

DAY 2:

DAY 3:

- You can watch the 360-degree video again, pause it and keep notes that you can use in your itinerary.
- Remember to use the **Present Simple** when you present the itinerary.

Image Sources: *pixabay.com*

Appendix B: Information and consent forms

Participant information form

Dear parents/guardians,

Through this document, I invite your child to take part in my research, which I am to conduct under the title:

“Integrating 360-degree videos in a Greek EFL classroom: Action research with young learners examining their motivation in speaking”

This research constitutes part of my dissertation so as I can complete my postgraduate studies in the Hellenic Open University programme “Teaching English as a Foreign/International Language”. Before you decide whether you allow your child to participate in it, please read the following information carefully:

Description: Four (4) teaching sessions are going to take place, all of which focus on the speaking skill. Each lesson will include the use of 360-degree videos, which will be viewed implementing special technologically advanced devices (head-mounted displays, *Oculus Go*). The lessons will consist of several vocabulary and speaking activities covering a variety of topics, relevant to your child’s interests and preferences.

Purpose: The research aims at examining to what extent the use of 360-degree video in the EFL class affects learners’ motivation to participate in speaking activities.

Procedures: Four (4) forty-five-minute (45’) teaching sessions are going to be conducted at the language school, within four (4) weeks, as well as one (1) more pilot session. In addition, before the pilot lesson, your child will be requested to complete an online questionnaire about their personal details, such as their background information, their attitude towards English, their needs in the speaking skills and their interests and preferences. Moreover, after each session, a questionnaire will be administered to the child aiming to discover their impression on the speaking lesson. Additionally, for the research purposes, I, the researcher of the study, am going to take notes of the child’s participation in the speaking activities. The speaking sessions will be video recorded, so as for me to be able to analyse their motivation and engagement in the activities. Finally, at the end of the

fourth lesson, the child will have to complete a post-research feedback questionnaire and participate in a short group discussion.

Privacy protection and confidentiality: The records of this study will be kept private and your child's confidentiality will be protected. Only I will have access to this data, and all study records with identifiable information will be destroyed upon the final submission of my dissertation to the Hellenic Open University. Additionally, there will be **no** mention to your child with their real name. In any sort of report the researcher(s) might publish, no identifying information will be included.

Health and safety advisory: For your child's safety, if they have any of the following health conditions, participation should not be allowed:

- if they prone to motion of sickness
- if they are under emotional stress or anxiety
- if they have impaired balance
- when they are suffering from cold, flu, headaches, migraines, or earaches

Advantages of participating in the research: Firstly, your child will contribute significantly to the scientific community by taking part in the research. Furthermore, the speaking sessions will be of their own benefit, as they will have the opportunity to attend innovative speaking lessons free of charge and extensively practise their speaking skills.

Disadvantages/Risks of participating in the research: There is no risk or negative consequence stemming from the participation of your child in the research. Nonetheless, Oculus Go, the manufacturer of the device that will be used to deliver the 360-degree videos, point out "some people (about 1 in 4000) may have severe dizziness, seizures, epileptic seizures or blackouts triggered by light flashes or patterns and that this may occur while experiencing virtual reality. Anyone who experiences any of these symptoms should discontinue use and see a doctor." Additionally, the manufacturer recommends taking prolonged and regular breaks while using the VR headset. An example would be removing headset for 10-15 minutes every 30 minutes. It is assured that your child will have to use the device for only 4-10 minutes per session, taking as many breaks as they need. Throughout the process of viewing, I will be present, constantly supervising them.

Obligation to participate: Participating is voluntary and requires your informed consent. Your decision whether or not to have your child participate will not affect your current or future relations with me. If you decide to have your child participate, they are free to skip any question that is asked.

Cost: There is **no** charge, for either you or your child, for participating in this research.

Compensation/Incentives: You or your child will not receive any monetary benefits for participating in this research.

Right to revoke participation: At any time, you may ask to revoke your child's participation, without having to mention any reason.

Information regarding the research conclusions: If you wish, you may have access to the conclusions, after the end of the research.

Contacts and questions: If you have any questions, you are encouraged to contact me, the researcher of the study, Sophia Simeonidou, at +30 6979107988 and/or at *sim.sofi@hotmail.com*

Thank you for your time!

Sophia Simeonidou

BA English Language & Literature, AUTH

Postgraduate Student, HOU

I declare that I have been informed of the above.

Veria, _____

Parent's/Guardian's signature _____

Name and surname _____

Informed consent form

I, the undersigned, _____'s parent/guardian, hereby declare that I have read the participant information form regarding the research Sophia Simeonidou, father's name Savvas, is to conduct. I understand that the study is part of her dissertation in the Hellenic Open University's "Teaching English as a Foreign / International Language" postgraduate programme, under the title "Integrating 360-degree videos in a Greek EFL classroom: Action research with young learners examining their motivation in speaking".

I understand that the participation of the afore-mentioned minor is voluntary.

I understand that the participation may be revoked at any time with no adverse repercussions and the researcher shall destroy any data collected regarding him/her.

I understand that all the privacy data collected will be accessed solely by the afore-mentioned researcher and it will be destroyed upon the dissertation submission.

I understand that, the researcher shall not use the real name of the afore-mentioned minor.

I have read the above information, and I consent to allow the afore-mentioned minor to participate in this research.

Veria, _____

Parent's/Guardian's signature _____

Name and surname _____

Appendix C: Needs analysis questionnaire



Learners' Questionnaire

Dear learners,

The following questionnaire is part of a study regarding your needs in English language learning, so that I get to know you better. The collected data will provide me with invaluable information on your preferences; therefore, I will be able to choose appropriate material in line with your attitudes, wants, beliefs and interests. For this reason, you are kindly requested to answer **ALL** the questions and be **honest** with your answers.

Remember that this is not a test and that there are no right or wrong answers. In addition, for anonymity reason, you are asked to select a pseudonym that will be the same for all the questionnaires that will take place during this research.

Thank you in advance for your time and assistance!

Sophia
Simeonidou,
your English language teacher

Αγαπητοί μαθητές,

Το παρακάτω ερωτηματολόγιο είναι μέρος μιας μελέτης σχετικά με τις ανάγκες σας στην εκμάθηση της αγγλικής γλώσσας, ώστε να σας γνωρίσω καλύτερα. Τα δεδομένα που συλλέγονται θα μου παρέχουν πολύτιμες πληροφορίες σχετικά με τις προτιμήσεις σας. Ως εκ τούτου, θα είμαι σε θέση να επιλέξω κατάλληλο υλικό σύμφωνα με τις απόψεις, τις επιθυμίες, τις πεποιθήσεις και τα ενδιαφέροντά σας. Για τον λόγο αυτό, παρακαλείστε να απαντήσετε σε **ΟΛΕΣ** τις ερωτήσεις και να είστε **ειλικρινείς** με τις απαντήσεις σας.

Να θυμάστε ότι αυτό δεν είναι τεστ και ότι δεν υπάρχουν σωστές ή λάθος απαντήσεις. Επιπλέον, για λόγους ανωνυμίας, καλείστε να επιλέξετε ένα ψευδώνυμο, που θα είναι το ίδιο για όλα τα ερωτηματολόγια που θα πραγματοποιηθούν κατά τη διάρκεια αυτής της έρευνας.

Σας ευχαριστώ εκ των προτέρων για τον χρόνο και τη βοήθειά σας!

Σοφία Συμεωνίδου,
η καθηγήτρια των Αγγλικών σας

Section A | Background information (Γενικές πληροφορίες)

Pseudonym (Ψευδώνυμο)

Η απάντησή σας _____

1. Age (Ηλικία): *

Please select the appropriate choice. (Παρακαλώ διάλεξε την κατάλληλη επιλογή.)

- 12
- 13
- 14
- Over 14 (Πάνω από 14)

2. Gender (Φύλο): *

Please select the appropriate choice. (Παρακαλώ διάλεξε την κατάλληλη επιλογή.)

- Female (Κορίτσι)
- Male (Αγόρι)
- I prefer not to say (Προτιμώ να μην πω)

3. Country of origin (Χώρα καταγωγής): *

Please select the appropriate choice. (Παρακαλώ διάλεξε την κατάλληλη επιλογή.)

- Greece (Ελλάδα)
- Albania (Αλβανία)
- Syria (Συρία)
- Germany (Γερμανία)
- Άλλο: _____

4. Mother tongue (Μητρική γλώσσα): *

Please select one of the following. (Παρακαλώ επέλεξε ένα από τα παρακάτω.)

- Greek (Ελληνικά)
- Albanian (Αλβανικά)
- Syrian (Συριακά)
- German (Γερμανικά)
- Άλλο: _____

Section B | Attitudes towards English language learning (Στάσεις σχετικά με την εκμάθηση της αγγλικής γλώσσας)

5. Why are you learning English? (Γιατί μαθαίνεις Αγγλικά;)*

Please select up to two of the following. (Παρακαλώ επίλεξε έως δύο από τα παρακάτω.)

- So I can work abroad in the future. (Στας να μπορώ να δουλέψω στο εξωτερικό στο μέλλον.)
- So I can study in a university abroad. (Στας να μπορώ να σπουδάσω στο εξωτερικό.)
- So I can pass an examination for English language competence. (Στας να περάσω στις εξετάσεις πιστοποίησης της αγγλικής γλώσσας.)
- Because I enjoy learning foreign languages. (Επειδή μου αρέσει να μαθαίνω ξένες γλώσσες.)
- So I can communicate with foreign people. (Στας να μπορώ να επικοινωνώ με ξένους ανθρώπους.)
- So I can travel around the world. (Στας να μπορώ να ταξιδεύω στον κόσμο.)
- So I can understand films/sitcoms/etc. in English. (Στας να μπορώ να καταλαβαίνω ταινίες/σειρές/κτλ στα Αγγλικά.)
- Άλλο: _____

6. Which of the following purposes do you need English for? (Για ποιον από τους παρακάτω λόγους χρειάζεσαι τα Αγγλικά;)*

Please select up to two of the following. (Παρακαλώ επίλεξε έως δύο από τα παρακάτω.)

- Oral interaction (Προφορική επικοινωνία)
- Written expression (Γραπτό λόγο)
- Listening comprehension (Ακουστική κατανόηση)
- Reading comprehension (Κατανόηση κειμένων)

To what extent do you agree with the following statements? (Σε ποιο βαθμό συμφωνείς με τις παρακάτω προτάσεις;)*

Please select the appropriate choice for each statement. (Παρακαλώ διάλεξε την κατάλληλη επιλογή για κάθε πρόταση.)

	Strongly disagree (Διαφωνώ έντονα)	Disagree (Διαφωνώ)	Agree (Συμφωνώ)	Strongly agree (Συμφωνώ απόλυτα)
7. I feel motivated to learn English. (Νιώθω ενθουσιασμένος που μαθαίνω Αγγλικά.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I think learning English is easy. (Νομίζω πως είναι εύκολο να μάθεις Αγγλικά.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I find English learning boring. (Βρίσκω βαρετή την εκμάθηση της αγγλικής γλώσσας.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section C | Language needs in speaking (Γλωσσικές ανάγκες στον προφορικό λόγο)

10. How do you feel when you speak in English in class? (Πώς νιώθεις όταν μιλάς Αγγλικά στην τάξη;) *

Please select the appropriate choice. (Παρακαλώ διάλεξε την κατάλληλη επιλογή.)

- I enjoy it. (Το απολαμβάνω.)
- I worry that I may say something wrong. (Ανησυχώ μήπως πω κάτι λάθος.)
- I feel embarrassed. (Νιώθω αμήχανα.)
- I don't know how to express myself. (Δεν ξέρω πώς να εκφραστώ.)
- Άλλο: _____

11. What do you wish to improve in the speaking skill? (Τι θέλεις να βελτιώσεις στον προφορικό λόγο;)

Please select as many choices as you want. (Παρακαλώ διάλεξε όσες επιλογές θέλεις.)

- I want to feel more confident when I speak. (Θέλω να νιώθω μεγαλύτερη αυτοπεποίθηση όταν μιλάω.)
- I want to improve my interaction with my interlocutors. (Θέλω να βελτιώσω την αλληλεπίδρασή μου με τους συνομιλητές μου.)
- I want to get involved in speaking more actively. (Θέλω να συμμετέχω πιο ενεργά στην επικοινωνία.)
- I want to enrich my vocabulary. (Θέλω να εμπλουτίσω το λεξιλόγιό μου.)
- I want to improve my pronunciation. (Θέλω να βελτιώσω την προφορά μου.)
- Άλλο: _____

12. What difficulties do you face when you speak? (Ποιες δυσκολίες αντιμετωπίζεις όταν μιλάς;) *

Please select as many choices as you want. (Παρακαλώ διάλεξε όσες επιλογές θέλεις.)

- I find it hard to speak quickly enough. (Δυσκολεύομαι να μιλήσω αρκετά γρήγορα.)
- I find it hard to find the appropriate words. (Δυσκολεύομαι να βρω τις κατάλληλες λέξεις.)
- I find it hard to express my ideas. (Δυσκολεύομαι να εκφράσω τις ιδέες μου.)
- I find it hard to use grammar correctly. (Δυσκολεύομαι να χρησιμοποιήσω σωστά τη γραμματική.)
- I find it hard to pronounce words correctly. (Δυσκολεύομαι να προφέρω σωστά τις λέξεις.)
- I don't face any difficulties.
- Άλλο: _____

13. When do you think you speak English better? (Πότε πιστεύεις ότι μιλάς καλύτερα Αγγλικά;) *

Please select as many choices as you want. (Παρακαλώ διάλεξε όσες επιλογές θέλεις.)

- When I have prepared what I'm going to say beforehand. (Όταν έχω προετοιμάσει από πριν τι θα πω.)
- When I think about the topic on the spot. (Όταν σκέφτομαι επί τόπου το θέμα.)
- When I'm familiar with the topic under discussion. (Όταν είμαι εξοικειωμένος με το θέμα της συζήτησης.)
- When I like the topic under discussion. (Όταν μου αρέσει το θέμα της συζήτησης.)
- Άλλο: _____

Section D | Learners' preferences and interests (Προτιμήσεις και ενδιαφέροντα των μαθητών)

14. Do you like it when videos are included in the lesson? (Σου αρέσει *
όταν περιλαμβάνονται βίντεο στο μάθημα.)
Please select one of the following. (Παρακαλώ επίλεξε ένα από τα παρακάτω.)

- Yes. (Ναι)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος/σίγουρη.)

15. Do you understand the topic of lesson better when you watch a video? *
(Καταλαβαίνεις καλύτερα το θέμα του μαθήματος όταν παρακολουθείς βίντεο.)
Please select one of the following. (Παρακαλώ επίλεξε ένα από τα παρακάτω.)

- Yes. (Ναι)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος/σίγουρη.)

16. Which of the following kinds of videos do you enjoy watching? (Ποιο *
από τα παρακάτω είδη βίντεο σου αρέσει να παρακολουθείς.)
Please select as many as you want. (Παρακαλώ επίλεξε όσα θέλεις.)

- animated videos (βίντεο κινουμένων σχεδίων)
- funny short videos (σύντομα αστεία βίντεο)
- adventure videos (βίντεο με περιπέτεια)
- science-fiction videos (βίντεο επιστημονικής φαντασίας)
- documentaries (ντοκιμαντέρ)
- travelling videos (βίντεο σχετικά με ταξίδια)
- Άλλο: _____

17. How do you prefer watching English-speaking videos? (Πώς προτιμάς *
να παρακολουθείς τα βίντεο που μιλάνε Αγγλικά.)
Please select as many as you want. (Παρακαλώ επίλεξε όσα θέλεις.)

- With English subtitles. (Με αγγλικούς υπότιτλους.)
- With Greek subtitles. (Με ελληνικούς υπότιτλους.)
- Without any subtitles. (Χωρίς υπότιτλους.)
- I don't watch English-speaking videos. (Δεν παρακολουθώ βίντεο στα Αγγλικά.)

18. Have you ever watched 360-degree videos? (Έχεις παρακολουθήσει ποτέ βίντεο 360-μοιρών;) *

Please select one of the following. (Παρακαλώ επίλεξε ένα από τα παρακάτω.)

- Yes. (Ναι)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος/σίγουρη.)

19. Have you ever watched a video wearing a head-mounted display (eg. Oculus Pro or Oculus Go)? (Έχεις παρακολουθήσει ποτέ βίντεο φορώντας

μάσκα εικονικής πραγματικότητας, πχ Oculus Pro ή Oculus Go.)

Please select one of the following. (Παρακαλώ επίλεξε ένα από τα παρακάτω.)

- Yes. (Ναι)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος/σίγουρη.)

20. How do you prefer working in speaking activities? (Πώς προτιμάς να

δουλεύεις σε δραστηριότητες παραγωγής προφορικού λόγου;)

Please select up to two of the following. (Παρακαλώ επίλεξε έως δύο από τα παρακάτω.)

- Individually. (Ατομικά)
- With a partner. (Με έναν συμμαθητή.)
- In small groups. (Σε μικρές ομάδες.)
- As a whole class. (Ολόκληρη η τάξη.)

21. Do you want your mistakes to be corrected while you speak? (Θέλεις *

να διορθωθούν τα λάθη σου ενώ μιλάς;)

Please select one of the following. (Παρακαλώ επίλεξε ένα από τα παρακάτω.)

- Yes. (Ναι)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος/σίγουρη.)

22. How important are the following activities for you? (Πόσο σημαντικές * είναι οι παρακάτω δραστηριότητες για εσένα;)
Please select. (Παρακαλώ επέλεξε.)

	Not important (Καθόλου σημαντική)	Slightly important (Λίγο σημαντική)	Fairly important (Σχεδόν σημαντική)	Important (Σημαντική)	Very important (Πολύ σημαντική)
In-class discussion (Συζήτηση μέσα στην τάξη)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Role-play (Δραστηριότητα με ρόλους)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describing pictures (Περιγραφή εικόνων)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Problem-solution (Δραστηριότητα επίλυσης προβλήματος)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Are you interested in the following topics? (Σε ενδιαφέρουν τα παρακάτω θέματα;) *
Please select as many as you want. (Παρακαλώ επέλεξε όσα θέλεις.)

- Art (Τέχνη)
- Celebrations (Γιορτές)
- Fashion (Μόδα)
- Food (Ψαγητό)
- Hobbies (Χόμπι)
- Sports (Αθλήματα)
- Entertainment (Ψυχαγωγία)
- Travelling (Ταξίδια)
- History (Ιστορία)
- Animals (Ζώα)

THIS IS THE END OF THE QUESTIONNAIRE! (ΤΕΛΟΣ ΕΡΩΤΗΜΑΤΟΛΟΓΙΟΥ!)



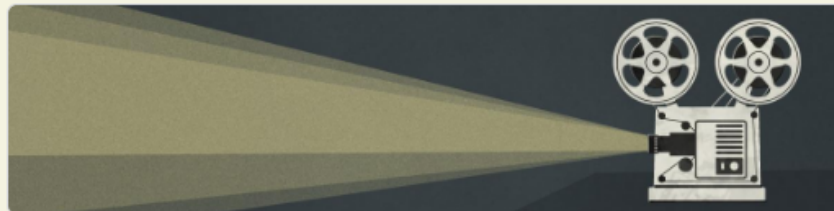
Learners' Questionnaire

Thank you so much for your time! ;)

Appendix D: Focus group questions (Cycle 1)

1. Do you think learning English is difficult? Why? / Why not?
2. What's your opinion about the speaking skill?
3. Do you face any difficulties when you speak?
4. Do you think the use of videos affect the lessons in general?

Appendix E: Post-session questionnaire



Post-session questionnaire

Dear learners,

Please spend some time to complete the following questionnaire, which is about this speaking session. You are kindly requested to answer **ALL** the questions and be **honest** with your answers.

Remember that this is not a test and that there are no right or wrong answers.

Thank you in advance for your time and assistance!

Sophia
Simeonidou,

your English language teacher

Αγαπητοί μαθητές,

Αφιερώστε λίγο χρόνο για να συμπληρώσετε το παρακάτω ερωτηματολόγιο, το οποίο αφορά αυτό το μάθημα. Σας παρακαλώ να απαντήσετε σε **ΟΛΕΣ** τις ερωτήσεις και να είστε **ειλικρινείς** με τις απαντήσεις σας.

Να θυμάστε ότι αυτό δεν είναι τεστ και ότι δεν υπάρχουν σωστές ή λάθος απαντήσεις.

Σας ευχαριστώ εκ των προτέρων για τον χρόνο και τη βοήθειά σας!

Σοφία Συμεωνίδου,
η καθηγήτρια των Αγγλικών σας

Speaking lesson

Pseudonym (Ψευδώνυμο) *

Η απάντησή σας _____

To what extent do you agree with the following statements? (Σε ποιο βαθμό συμφωνείς με τις παρακάτω προτάσεις;) *

Please select the appropriate choice for each statement. (Παρακαλώ διάλεξε την κατάλληλη επιλογή για κάθε πρόταση.)

	Strongly disagree (Διαφωνώ έντονα)	Disagree (Διαφωνώ)	Agree (Συμφωνώ)	Strongly agree (Συμφωνώ απόλυτα)
1. I found the speaking lesson interesting. (Βρήκα αυτό το μάθημα για την παραγωγή προφορικού λόγου ενδιαφέρον.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I liked the tasks of today's lesson. (Μου άρεσαν οι δραστηριότητες του σημερινού μαθήματος.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I enjoyed the 360-degree video I watched today. (Απόλαυσα το βίντεο 360-μοιρών που παρακολούθησα σήμερα.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I participated willingly in today's tasks. (Συμμετείχα πρόθυμα στις δραστηριότητες του σημερινού μαθήματος.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. I felt relaxed and comfortable in today's lesson.
(Ένιωθα χαλαρός και άνετος στο σημερινό μάθημα.)

6. I found the tasks difficult.
(Βρήκα δύσκολες τις δραστηριότητες του σημερινού μαθήματος.)

7. I felt embarrassed to express myself.
(Ένιωθα αμήχανα στο να εκφραστή.)

8. I was bored throughout the lesson.
(Βαριόμουν κατά τη διάρκεια του μαθήματος.)

9. What I liked the most in today's speaking lesson was (Αυτό που μου άρεσε στο σημερινό μάθημα παραγωγής προφορικού λόγου):
Please select as many as you want. (Παρακαλώ επέλεξε όσα θέλεις.)

- the 360-degree video (το βίντεο 360-μοιρών)
- the topic of the lesson (το θέμα του μαθήματος)
- the tasks of the lesson (οι δραστηριότητες του μαθήματος)
- all the above (όλα τα παραπάνω)
- nothing; everything was disappointing (τίποτα, όλα ήταν απογοητευτικά)
- Άλλο: _____

10. What I did not like in today's speaking lesson was (Αυτό που δεν μου άρεσε στο σημερινό μάθημα παραγωγής προφορικού λόγου ήταν): *
Please select as many as you want. (Παρακαλώ επιλέξε όσα θέλεις.)

- the 360-degree video (το βίντεο 360-μοιρών)
- the topic of the lesson (το θέμα του μαθήματος)
- the tasks of the lesson (οι δραστηριότητες του μαθήματος)
- all the above (όλα τα παραπάνω)
- everything was satisfying (όλα ήταν ικανοποιητικά)
- Άλλο: _____

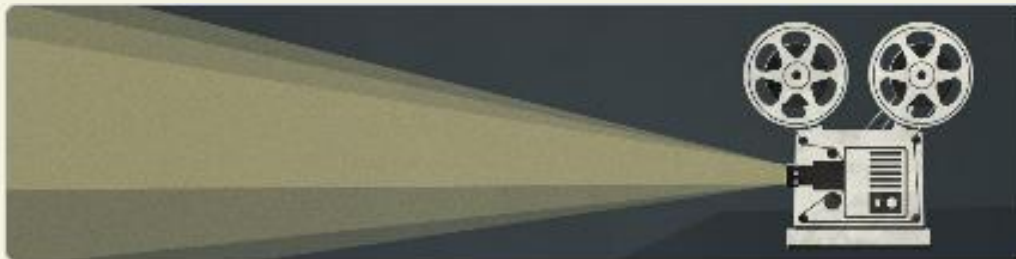
11. If you could change anything in the lesson, what would it be? (Αν μπορούσες να αλλάξεις κάτι στο μάθημα, τι θα ήταν αυτό;) *
Please explain in a few words. (Παρακαλώ περιέγραψε με λίγα λόγια.)

Η απάντησή σας _____

12. How would you describe today's lesson? (Πώς θα περιέγραφες το σημερινό μάθημα;) *
Please explain in a few words. (Παρακαλώ περιέγραψε με λίγα λόγια.)

Η απάντησή σας _____

THIS IS THE END OF THE QUESTIONNAIRE! (ΤΕΛΟΣ ΕΡΩΤΗΜΑΤΟΛΟΓΙΟΥ!)



Post-session questionnaire

Thank you very much for your time and comments!

Appendix F: Observation checklist

Session: _____
Date: _____

Motivation variable	Frida	Chris	Johnny
1. The student seems interested in the lesson (i.e. he is listening to the teacher's instructions carefully, keeping eye contact and nodding).			
2. The student is enjoying the tasks, paying persistent attention to them.			
3. The student seems excited while watching the 360-degree video (moving his/her head to different directions exploring the video with curiosity and/or using interjections of excitement).			
4. The student is eager to participate in the tasks raising his/her hand to speak.			
5. The student seems uncomfortable constantly looking at the clock.			
6. The student shows enthusiasm smiling gently throughout the lesson.			
7. The student cooperates willingly with his/her peers without the teacher encouraging him/her.			
8. The student feels free to express his/her opinion without hesitating to experiment with the language.			

COMMENTS:

Appendix G: Post-research questionnaire



Post-research feedback questionnaire

Dear learners,

Please spend some time to complete the following questionnaire, which is about all our previous speaking sessions. You are kindly requested to answer **ALL** the questions and be **honest** with your answers.

Remember that this is not a test and that there are no right or wrong answers. The questionnaire is anonymous and your answers will be handled with confidentiality.

Thank you very much for your participation in this research. Your assistance is invaluable!

Sophia Simeonidou,
your English language teacher

Αγαπητοί μαθητές,

Αφιερώστε λίγο χρόνο για να συμπληρώσετε το παρακάτω ερωτηματολόγιο, το οποίο αφορά όλα τα προηγούμενα μαθήματά μας. Σας παρακαλώ να απαντήσετε σε **ΟΛΕΣ** τις ερωτήσεις και να είστε **ειλικρινείς** με τις απαντήσεις σας.

Να θυμάστε ότι αυτό δεν είναι τεστ και ότι δεν υπάρχουν σωστές ή λάθος απαντήσεις. Το ερωτηματολόγιο είναι ανώνυμο και οι απαντήσεις σας αντιμετωπίζονται με εμπιστευτικότητα.

Σας ευχαριστώ πολύ για τη συμμετοχή σας σε αυτή την έρευνα. Η βοήθειά σας είναι πολύτιμη!

Σοφία Συμεωνίδου,
η καθηγήτρια των Αγγλικών σας

Pseudonym (Ψευδώνυμο) *

Η απάντησή σας _____

To what extent do you agree with the following statements? (Σε ποιο βαθμό συμφωνείτε με τις παρακάτω προτάσεις:) *

Please select the appropriate choice for each statement. (Παρακαλώ διάλεξε την κατάλληλη επιλογή για κάθε πρόταση.)

	Strongly disagree (Διαφωνώ έντονα)	Disagree (Διαφωνώ)	Agree (Συμφωνώ)	Strongly agree (Συμφωνώ απόλυτα)
1. I found the speaking lessons interesting. (Βρήκα τα μαθήματα για την παραγωγή προφορικού λόγου ενδιαφέροντα.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I enjoyed watching 360-degree videos during the lessons. (Μου άρεσε η παρακολούθηση των βίντεο 360 μοιρών κατά τη διάρκεια των μαθημάτων.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I enjoyed participating in the speaking tasks of the lessons. (Μου άρεσε που συμμετείχα στις προφορικές δραστηριότητες των μαθημάτων.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The speaking sessions helped me improve my speaking skills. (Τα μαθήματα παραγωγής προφορικού λόγου με βοήθησαν να βελτιώσω τις προφορικές μου δεξιότητες.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. The speaking sessions helped me believe in my abilities. (Τα μαθήματα παραγωγής προφορικού λόγου με βοήθησαν να πιστέψω στις ικανότητές μου.)

6. I feel more motivated to learn English after the speaking sessions. (Νιώθω πιο ενθουσιασμένος που μαθαίνω Αγγλικά μετά από τα μαθήματα παραγωγής προφορικού λόγου.)

7. I think learning English is easier after the speaking sessions. (Νομίζω πως είναι πιο εύκολο να μάθεις Αγγλικά μετά τα μαθήματα παραγωγής προφορικού λόγου.)

8. I find English learning less boring after the speaking sessions. (Βρίσκω λιγότερο βαρετή την εκμάθηση της αγγλικής γλώσσας μετά τα μαθήματα παραγωγής προφορικού λόγου.)

9. Generally, the 360-degree videos we watched ... *
(Γενικά, τα βίντεο 360 μοιρών που παρακολουθήσαμε ...)

- made the lessons more interesting. (έκαναν τα μαθήματα πιο ενδιαφέροντα.)
- made me want to participate in the tasks. (με έκαναν να θέλω να συμμετέχω στις δραστηριότητες.)
- helped me believe that learning English is easy. (με βοήθησαν να πιστέψω ότι το να μάθεις Αγγλικά είναι εύκολο.)
- all the above. (όλα τα παραπάνω.)
- none of the above. (κανένα από τα παραπάνω.)

10. Would you like your future speaking lessons to include 360-degree videos? *
(Θα ήθελες τα μελλοντικά μαθήματα παραγωγής προφορικού λόγου να συμπεριλαμβάνουν βίντεο 360 μοιρών;)

- Yes. (Ναι.)
- No. (Όχι.)
- I'm not sure. (Δεν είμαι σίγουρος, -η.)

11. Please describe how feel about the lessons in a few words. (Παρακαλώ περιέγραψε πώς νιώθεις για τα μαθήματα με λίγα λόγια.)

Η απάντησή σας _____

THIS IS THE END OF THE QUESTIONNAIRE (ΤΕΛΟΣ ΕΡΩΤΗΜΑΤΟΛΟΓΙΟΥ)



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Post-research feedback questionnaire

Thank you very much for your time and comments!

Appendix H: Post-research focus group questions

1. Now that we have completed the speaking sessions, I would like you to share your opinions with me. Did you like the speaking lessons? Why? / Why not?
2. Do you think the use of the 360-degree videos affected you in general? If yes, in what ways?
3. Would you like to keep using 360-degree videos in our lessons? Why? / Why not?
4. Which lesson did you like the most?

Appendix I: Needs analysis questionnaire answers

Pseudonym	Frida	Chris	Johnny
1. Age	13	13	13
2. Gender	Female	Male	Male
3. Country of origin	Greece	Greece	Greece
4. Mother tongue	Greek	Greek	Greek
5. Why are you learning English?	So I can pass an examination for English language competence.	So I can travel around the world.	So I can pass an examination for English language competence.
6. Which of the following purposes do you need English for?	Oral interaction; Written expression	Oral interaction; Listening comprehension	Oral interaction Listening comprehension
7. I feel motivated to learn English.	Disagree	Disagree	Disagree
8. I think learning English is easy.	Disagree	Disagree	Disagree
9. I find English learning boring.	Disagree	Agree	Disagree
10. How do you feel when you speak in English in class?	I feel embarrassed.	I don't know how to express myself.	I feel embarrassed.
11. What do you wish to improve in the speaking skill?	I want to feel more confident when I speak.	I want to feel more confident when I speak.; I want to get involved in speaking more actively.	I want to feel more confident when I speak.
12. What difficulties do you face when you speak?	I find it hard to express my ideas.	I find it hard to express my ideas.	I find it hard to speak quickly enough. I find it hard to express my ideas.
13. When do you think you speak English better?	When I'm familiar with the topic under discussion; When I like the topic under discussion.	When I like the topic under discussion.	When I like the topic under discussion.
14. Do you like it when videos are included in the lesson?	Yes.	I'm not sure.	Yes.
15. Do you understand the topic of lesson better when you watch a video?	Yes.	Yes.	Yes.
16. Which of the following kinds of videos do you enjoy watching?	documentaries	documentaries; travelling videos	documentaries; travelling videos
17. How do you prefer watching English-speaking videos?	With Greek subtitles.	With Greek subtitles.	With Greek subtitles.
18. Have you ever watched 360-degree videos?	No.	Yes.	No.
19. Have you ever watched a video wearing a head-mounted display (eg. Oculus Pro or Oculus Go)?	No.	Yes.	No.
20. How do you prefer working in speaking activities?	In small groups; As a whole class	With a partner; In small groups	With a partner; In small groups
21. Do you want your mistakes to be corrected while you speak?	No.	No.	No.
22. How important are the following activities for you?			
In-class discussion Role-play Describing pictures Problem-solution	Very important Fairly important Important Fairly important	Fairly important Important Important Fairly important	Important Important Important Fairly important
23. Are you interested in the following topics?	Art; Travelling	Travelling; Animals	Sports; Travelling; Animals

Appendix J: Focus group responses (Cycle 1)

Focus group questions	Frida	Chris	Johnny
1. Do you think learning English is difficult? Why? / Why not?	“Yes. Sometimes I think it is very hard to learn English, especially when it comes to tenses and all grammar rules.”	“For me, learning English is a little hard because I am tired of grammar theory.”	“I’m not so sure. But I think vocabulary is hard because there are too many words we have to learn.”
2. What’s your opinion about the speaking skill?	“I think it is hard ... I prefer to express myself through writing.”	“I find it boring when I have to participate in speaking tasks.”	“Ok, but in general, I don’t like to speak that much.”
3. Do you face any difficulties when you speak?	“I want to say so many things but I can’t find the words and then I feel embarrassed about my abilities.”	“I find it difficult to participate in speaking because I can’t find the words and I think I am not so good.”	“Most of the times I’m afraid I may say something wrong.”
4. Do you think the use of videos affect the lessons in general?	“Yes. In my opinion, when we watch a video during the lesson, the lesson becomes more interesting.”	“Sometimes the lessons are better with videos, especially when I like the topic. But some other times, I think they are a waste of time.”	“Sure. I love it when we watch videos in class.”

Appendix K: Post-session questionnaires results

Item	Session 1			Session 2			Session 3			Session 4		
	Frida	Chris	Johnny	Frida	Chris	Johnny	Frida	Chris	Johnny	Frida	Chris	Johnny
1. I found the speaking lesson interesting.	Agree	Strongly agree	Strongly agree	Agree	Strongly agree	Agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree
2. I liked the tasks of today's lesson.	Agree	Agree	Agree	Agree	Agree	Agree	Strongly Agree	Agree	Agree	Strongly agree	Strongly agree	Agree
3. I enjoyed the 360-degree video I watched today.	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Strongly agree	Strongly agree
4. I participated willingly in today's tasks.	Agree	Agree	Agree	Agree	Agree	Disagree	Agree	Agree	Agree	Strongly agree	Strongly agree	Agree
5. I felt relaxed and comfortable in today's lesson.	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree	Agree
6. I found the tasks difficult.	Disagree	Agree	Disagree	Strongly disagree	Disagree	Disagree	Disagree	Disagree	Disagree	Disagree	Disagree	Disagree
7. I felt embarrassed to express myself.	Agree	Strongly disagree	Agree	Disagree	Disagree	Agree	Disagree	Disagree	Agree	Disagree	Disagree	Disagree
8. I was bored throughout the lesson.	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Strongly disagree	Disagree	Disagree	Strongly disagree	Strongly disagree	Strongly disagree
9. What I liked the most in today's speaking lesson was	all the above	the 360-degree video; the topic of the lesson	the 360-degree video; the topic of the lesson	all the above	all the above	the 360-degree video	all the above	the 360-degree video; the tasks of the lesson	the 360-degree video; the tasks of the lesson	all the above	all the above	all the above
10. What I did not like in today's speaking lesson was	everything was satisfying	everything was satisfying	everything was satisfying	everything was satisfying	everything was satisfying	everything was satisfying	everything was satisfying	the topic of the lesson	the topic of the lesson	everything was satisfying	everything was satisfying	everything was satisfying
11. If you could change anything in the lesson, what would it be?	I wouldn't change anything.	Nothing.	Nothing.	Nothing.	Nothing.	Nothing.	Nothing.	I would like to see other paintings more modern.	Nothing.	Nothing.	Nothing.	Nothing.
12. How would you describe today's lesson?	I really liked it. It was something different.	Very interesting because it was like I was in New York.	Very nice and entertaining.	It was amazing.	I liked it a lot.	I liked the feeling of diving into the sea.	I liked it a lot.	It was ok	Good.	I really liked it. Very interesting.	Very interesting. I learned nice things about all the cities.	Nice and interesting.

Appendix L: Observation checklist results

Motivation variable	Session 1			Session 2			Session 3			Session 4		
	Frida	Chris	Johnny	Frida	Chris	Johnny	Frida	Chris	Johnny	Frida	Chris	Johnny
1. The student seems interested in the lesson (i.e. he is listening to the teacher's instructions carefully, keeping eye contact and nodding).	√	√	√	√	√	√	√	√	√	√	√	√
2. The student is enjoying the tasks, paying persistent attention to them.	√	√	√	√	√		√	√		√	√	√
3. The student seems excited while watching the 360-degree video (moving his/her head to different directions exploring the video with curiosity and/or using interjections of excitement).	√	√	√	√	√	√	√	√		√	√	√
4. The student is eager to participate in the tasks raising his/her hand to speak.	√	√	√	√	√		√	√	√	√	√	√
5. The student seems uncomfortable constantly looking at the clock.									√			
6. The student shows enthusiasm smiling gently throughout the lesson.	√	√	√	√	√					√	√	√
7. The student cooperates willingly with his/her peers without the teacher encouraging him/her.		√		√	√		√	√		√	√	√
8. The student feels free to express his/her opinion without hesitating to experiment with the language.		√			√		√	√		√	√	√

Appendix M: Post-research questionnaires results

Item	Frida	Chris	Johnny
1. I found the speaking lessons interesting.	Strongly agree	Strongly agree	Agree
2. I enjoyed watching 360-degree videos during the lessons.	Strongly agree	Strongly agree	Strongly agree
3. I enjoyed participating in the speaking tasks of the lessons.	Agree	Agree	Agree
4. The speaking sessions helped me improve my speaking skills.	Agree	Agree	Agree
5. The speaking sessions helped me believe in my abilities.	Agree	Agree	Agree
6. I feel more motivated to learn English after the speaking sessions.	Agree	Strongly agree	Agree
7. I think learning English is easier after the speaking sessions.	Agree	Agree	Disagree
8. I find English learning less boring after the speaking sessions.	Agree	Agree	Agree
9. Generally, the 360-degree videos we watched ...	all the above	all the above	made the lessons more interesting.
10. Would you like your future speaking lessons to include 360-degree videos?	Yes	Yes	Yes
11. Please describe how feel about the lessons in a few words.	I enjoyed all the lessons. I am very excited about the videos and I'd love to participate in such lessons again in the future.	I felt nice in all the lessons. I enjoyed all the 360-degree videos and lessons.	It was a nice experience. I liked the lessons but sometimes the tasks were difficult.

Appendix N: Post-research focus group responses (Cycle 5)

Focus group questions	Frida	Chris	Johnny
1. Now that we have completed the speaking sessions, I would like you to share your opinions with me. Did you like the speaking lessons? Why? / Why not?	“I really loved them.[...] If only we had more lessons of such type.”	“For me, the lessons were very nice, especially when we were watching the videos with the VR masks.”	“I liked all the lessons, but I didn’t quite like the lesson with the art museum. The topic was boring, but the rest were cool.”
2. Do you think the use of the 360-degree videos affected you in general? If yes, in what ways?	“Yes. The videos made me want to participate and helped me improve my skills.”	“Yes. They made me want to come to the lessons happily and love English learning.”	“I believe that thanks to these videos I felt more motivated in learning English.”
3. Would you like to keep using 360-degree videos in our lessons? Why? / Why not?	“Definitely. The 360-degree videos were the best part of the lessons.”	“Yes. I’d love to watch more videos and travel to more places. This way, the lessons are not boring anymore.”	“Absolutely. I’d like to watch similar videos and maybe travel to space with the masks.”
4. Which lesson did you like the most?	Lesson 3, Visiting an art gallery!	Lesson 1, Travelling to New York City!	Lesson 2, Diving with underwater creatures!

Author's Statement:

I hereby expressly declare that, according to the article 8 of Law 1559/1986, this dissertation is solely the product of my personal work, does not infringe any intellectual property, personality and personal data rights of third parties, does not contain works/contributions from third parties for which the permission of the authors/beneficiaries is required, is not the product of partial or total plagiarism, and that the sources used are limited to the literature references alone and meet the rules of scientific citations.