MULTIMEDIA RESOURCES AS A FACTOR OF INCREASING STUDENTS' MOTIVATION IN LEARNING FOREIGN LANGUAGES

OS RECURSOS MULTIMÉDIA COMO FATOR DE AUMENTO DA MOTIVAÇÃO DOS ALUNOS NA APRENDIZAGEM DE LÍNGUAS ESTRANGEIRAS

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ABSTRACT

The phenomena of globalisation and the increase in the number of communication tools have led to a significant boom in the use of multimedia resources in foreign language teaching and learning. Since success in learning a foreign language is linked to the assessment of the learning environment and since multimedia resources certainly change the learning environment, the integration of multimedia and ICT tools into teaching and learning should have an impact on motivation and, consequently, on learning success. Furthermore, in the context of pedagogical innovations, learning should be achieved by all participants in the educational relationship. In this sense, this study aims to meet the need to analyse the use of multimedia resources in the context of educational innovation through learning assessment. This paper is a field study. The mixed-methods research is based on the collection and analysis of data from various scientific sources, questionnaires of students studying English at the higher education institution of Ukraine "National University "Zaporizhzhia Polytechnic" and observation of their activity and performance. The purpose of the study is to establish the connection between the use of multimedia resources and increasing students' motivation in learning foreign languages, to test the teachers' perception of the student's role in learning a foreign language in a higher education institution, as well as the learning outcomes achieved by the same subjects after the introduction of a pedagogical innovation using multimedia resources. The results show that the perception of learning, interest, and satisfaction differ depending on the gender of students. The use of multimedia materials in accordance with the teaching-learning method affects the perception of the respective roles between the teacher and the student. Changes in student roles are accompanied by changes in teacher roles. The change in the roles of students is accompanied by some resistance from some of them. The main result achieved by students is related to the development of autonomy and has little to do with learning the subject as such. The research shows that the recommended approach did not lead to a significant improvement in the quality of learning and the level of mastery of the discipline by students compared to their school achievements. However, the results clearly demonstrate the growth of motivation and development of independence among students, their active participation in group work. That is why the introduction of multimedia innovations has a really positive effect on motivation.

Keywords: Globalisation; Teaching; English for Specific Purposes; Autonomy; Motivation.

RESUMO

O fenómeno da globalização e o aumento do número de ferramentas de comunicação conduziram a um aumento significativo da utilização de recursos multimédia no ensino e na aprendizagem de línguas estrangeiras. Uma vez que o sucesso na aprendizagem de uma língua estrangeira está ligado à avaliação do ambiente de aprendizagem e que os recursos multimédia alteram certamente o ambiente de aprendizagem, a integração das ferramentas multimédia e das TIC no ensino e na aprendizagem deverá ter um impacto na motivação e, consequentemente, no sucesso da aprendizagem. Além disso, no contexto das inovações pedagógicas, a aprendizagem deve ser efectuada por todos os participantes na relação educativa. Neste sentido, este estudo pretende dar resposta à necessidade de analisar a utilização de recursos multimédia no contexto da inovação pedagógica através da avaliação das aprendizagens. Este trabalho é um estudo de campo. A investigação de métodos mistos baseia-se na recolha e análise de dados de várias fontes científicas, em questionários a alunos que estudam inglês na instituição de ensino superior da Ucrânia "Universidade Nacional "Zaporizhzhia Polytechnic" e na observação da sua atividade e desempenho. O objetivo do estudo é estabelecer a relação entre a utilização de recursos multimédia e o aumento da motivação dos alunos na aprendizagem de línguas estrangeiras, testar a perceção dos professores sobre o papel do aluno na aprendizagem de uma língua estrangeira numa instituição de ensino superior, bem como os resultados de aprendizagem alcançados pelos mesmos sujeitos após a introdução de uma inovação pedagógica utilizando recursos multimédia. Os resultados mostram que a perceção da aprendizagem, o interesse e a satisfação diferem em função do género dos estudantes. A utilização de materiais multimédia de acordo com o método de ensino-aprendizagem afecta a perceção dos respectivos papéis entre o professor e o aluno. As mudanças nos papéis dos alunos são

acompanhadas por mudanças nos papéis dos professores. A mudança de papéis dos alunos é acompanhada de alguma resistência por parte de alguns deles. O principal resultado alcançado pelos alunos está relacionado com o desenvolvimento da autonomia e tem pouco a ver com a aprendizagem da disciplina propriamente dita. A investigação mostra que a abordagem recomendada não conduziu a uma melhoria significativa da qualidade da aprendizagem e do nível de domínio da disciplina por parte dos alunos, em comparação com os seus resultados escolares. No entanto, os resultados demonstram claramente o aumento da motivação e o desenvolvimento da independência dos alunos, a sua participação ativa no trabalho de grupo. É por isso que a introdução de inovações multimédia tem um efeito realmente positivo na motivação.

Palavras-chave: A globalização; Ensino; Inglês para fins específicos; Autonomia; Motivação.

Introduction

The phenomena of globalisation and increased communication have led to significant changes in the field of foreign language teaching. In view of this, all European countries have increased the number of hours allocated to foreign language learning (Zajda & Majhanovich, 2022). In fact, mastering a foreign language requires about 5000 hours of concentrated time, and about 1200 hours for elementary knowledge (Rome, 2022). Thus, many hours are required to learn a foreign language, and these hours must be productive in order for the average student to make progress and communicate easily in the foreign language. In addition to the number of hours of teaching, the student's environment and motivation should also be taken into account. A number of studies in the field of teaching emphasise the fundamental role of motivation in foreign language learning (Furman et al., 2022). In fact, in a monolingual environment, motivation is the most influential variable in language learning. In terms of motivation, the vast majority of students recognise the value of learning a foreign language. Despite this, not everyone is willing to dedicate the time and energy required to learn a foreign language (Jiao et al., 2022). Part of the problem of academic motivation is the ability to put in sustained effort on tasks that are not attractive or interesting (Sadoughi & Hejazi, 2023). In general, without investment and effort, success comes slowly. Although investment and commitment are essential for successful learning, some studies show that many students put little or no effort into learning a foreign language. In this context, it is necessary to consider an approach to teaching and

motivation that is more relevant to foreign language teaching. More specifically, foreign language teaching will remain a disaster until an attitude of continuous improvement of eclectic methods is adopted and the best that technology has to offer is embraced. The question then arises: how can we motivate students to learn a foreign language and at the same time improve their comprehension? We believe that multimedia resources have a huge potential in education for motivation. In fact, the innovation, improvement, and use of ICT learning tools and multimedia resources are recommended not only because of their positive impact on learning but also because of their ability to stimulate student motivation (Yu et al., 2023). However, student motivation is influenced by strategy rather than the use of software or hardware.

Therefore, the use of multimedia resources in foreign language learning should be part of a pedagogical approach that promotes learning and is not limited to the role of teaching support. Although the current market offers a number of products for teaching and learning foreign languages, the design of many of these products is not based on a pedagogical approach as such (Fathabadi, 2023). From both a pedagogical and didactic point of view, it is not always easy to make an informed choice. In addition, the choice of a particular software package can be associated with significant costs for its acquisition and implementation. On the one hand, although turnkey software is attractive to teachers, it also has its limitations, which are usually revealed as a result of the first experience of using it.

Introducing multimedia resources into the classroom can be a daunting task, especially when customs and traditions mean that such tools have never been used to teach a particular subject in an educational institution.

In line with the context described above, the aim of this paper is to determine, in the context of pedagogical innovation, the effects of an approach using multimedia resources as support for the management of foreign language learning and teaching in higher education. The research question is as follows: What changes does the implementation of a pedagogical innovation using multimedia resources bring? The study aims to answer this question through students' perceptions. The relevance of this experiment is based on several points. On the one hand, the socio-economic

context is conducive to foreign language learning. On the other hand, the experiment will allow to integrate the introduction of multimedia resources and create tools adapted to the target courses. Thus, the methodology of the experiment fits perfectly into the paradigm shift that is currently being promoted in education, namely from a teaching-oriented paradigm to a learning-oriented paradigm.

Theoretical Framework and Literature Review

Teaching success is closely linked to motivation and commitment to learning. From a social-cognitive perspective, motivation is a matter of expectation. People expect success or failure after an action, and they set goals and plan means to achieve what they value (Furman et al., 2022). If the action is meaningful and challenging, interest will be greater. In fact, it is the combined effect of the goal and knowledge of the results of one's activities that will positively influence motivation (Liu & Oga-Baldwin, 2022). According to these authors, certain considerations need to be taken into account when it comes to the goals and objectives of the proposed training. Ideally, tasks should be of medium difficulty, as if they are too easy, they do not arouse interest and do not encourage effort (Yolida & Marpaung, 2023). The clearer and more attainable the goals are, the more they encourage work and the more productive they are (Tsoli, 2023). Intermediate goals allow you to define specific activities and efforts required. Prioritising goals facilitates learning and information transfer. Without effort, success will be slow, even if the person understands the task (Li et al., 2022). In fact, part of the problem with student motivation relates to the ability to put sustained effort into tasks that are not inherently attractive or interesting (Budiarti, 2022). And while learners recognise the value of acquiring a foreign language, not all are willing to dedicate the time and energy required (Macatuno-Nocom, 2022). In fact, it is largely for this reason that the lack of motivation and effort among students should be addressed, as well as to improve their language skills (Mahmoodi & Yousefi, 2022).

Educational innovations, information and communication technologies, and multimedia resources have undoubted potential in education (Kulichenko &

Polyezhayev, 2020). In terms of the relationship between teachers and students, the integration of multimedia resources has a positive impact on the quality of their interaction.

Marszalek et al. (2022) describe the new relationship between teacher and student as "warmer". In terms of student behaviour, multimedia resources, and ICTs "arouse students' interest in specific learning activities and encourage them to devote more time and energy" to the subject (Jamalli, 2023).

Thus, multimedia resources encourage students to concentrate longer while completing tasks (Jalilbayli, 2022). In addition, the use of multimedia resources will increase academic performance if interactivity and pedagogical techniques are applied to their use (Kulichenko et al., 2023).

Thus, the use of multimedia resources focused on learning leads to a change in the role of the student.

On the other hand, with regard to the motivational aspects of using multimedia resources, some argue that motivation is more influenced by the teaching strategy preferred by students than by the use of a particular tool, no matter how new it is (Dong et al., 2022).

Thus, the use of multimedia resources for teaching purposes should be part of a broader pedagogical approach. This implies, in addition to the teacher's appropriation of the tools and associated terminology, the tool of mastery of the preferred pedagogical approach (Riyanti, 2019). Hence, approach appropriation is a potential source of problems when implementing any pedagogical approach using multimedia resources.

Among the disadvantages pointed out by students, Łockiewicz (2019) mentions the lack of experience of teachers in working with this environment and certain difficulties in accessing documents (e.g. limited Internet access). As for the students, the vast majority of them expressed satisfaction with the experience, which indicates their intention to continue using multimedia resources in their foreign language learning. Fandiño et al. (2019) also note profound changes in the roles of teachers and students. In a study of participation and attitudes towards technology use among 636 university students, Zhang et al. (2020) noted that for

certain activities - including the use of multimedia resources - the gender gap seems to be narrowing, suggesting that gender differences decrease with age.

Materials and Methods

Study Design, Setting, and Sample

The proposed research is exploratory, and the evaluation design is quasi-experimental. The preferred methodology is mixed, using both quantitative and qualitative methods. The impact of the use of multimedia resources in terms of perception, learning, and investment is determined by a survey method. The paper also provides a comparative analysis of academic performance in the first and second semesters of study.

Data Collection

The target group of the study was students studying English at the National University of Zaporizhzhia Polytechnic. The sample consists of first-year students from three different groups. These students are first-time learners, using the teaching-learning method based on the integration of multimedia resources developed for this course.

The experiment involved 59 students (47 girls and 12 boys). These students are studying Journalism (Wednesday group, n = 25), Psychology (Thursday group, n = 15), and Tourism (Thursday group, n = 15), and Law (Monday group, n = 19).

Data was collected through a questionnaire at the end of the semester. The questionnaire consisted of 17 questions on a Likert scale and 4 short essay questions.

The students' impressions of the course they took and the last English course they took at school (gymnasiums, colleges) were collected. These questions provided a point of comparison for the students' perception of the experimental method:

Student questionnaire

PART 1: Circle the number that corresponds to your answer.

1. The level of the course you are currently attending: 1) 100 2) 101 3) 102 4) 103

2. Gender: 1) female 2) male

3. In your opinion, the quality of your spoken English is:

1) poor 2) satisfactory 3) average 4) good (or better)

4. How would you rate the quality of your written English?

1) poor 2) satisfactory 3) average 4) good (or better)

5. I believe that I did not learn at school...

1) almost nothing 2) a little 3) quite a lot 4) a lot

6. In my last English lesson, I think I have engaged in learning...

1) almost not 2) a little 3) quite a lot 4) very much

PART 2: Circle the number that corresponds to your answer.

7. Do you think the English course you are currently taking has helped you improve your English?

1) I strongly disagree 2) I somewhat disagree 3) I rather agree 4) I strongly agree

8. How do you think this type of course helped you in your studies?

1) I strongly disagree 2) I somewhat disagree 3) I rather agree 4) I strongly agree

9. Overall, the English course has made you more active in your studies.

1) I strongly disagree 2) I somewhat disagree 3) I rather agree 4) I strongly agree

10. The methods used in this course allowed me to participate in the learning process.

1) I strongly disagree 2) I somewhat disagree 3) I rather agree 4) I strongly agree

11. To what extent do you really work hard in English classes?

1) not very much 2) a little bit 3) quite a lot 4) a lot

12. How much time per week do you usually spend studying English and doing your homework?

1) less than 1 hour 2) from 1 to 2 hours 3) from 2 to 3 hours 4) 3 hours and more

13. How much attention do you usually pay to English classes?

1) not very much 2) a little 3) quite a lot 4) always

PART 3: Circle the number that corresponds to your answer.

14. I believe that the course I have taken this semester has helped me to improve my English...

1) almost no help at all 2) a little bit 3) a lot 4) a lot

15. During my current English course, I feel that I have been involved in what I have learnt...

1) almost not 2) a little 3) quite a lot 4) very much

16. In my current English course, I feel that I have not learnt...

1) almost nothing 2) a little 3) quite a lot 4) a lot

17. Why or why not? Explain your answer.

18. I found the course I took this semester, _____, satisfactory.

1) not at all 2) a little 3) quite a lot 4) a lot

19. Why or why not? Explain your answer.

PART 4:

20. What do you think you have learnt during this English course? What do you think you have improved?

21. As a student, describe your involvement in this English course.

Study Instrument

The method of work was based on the principle of continuous work and activity on the part of the student. It is also based on the importance of feedback to the student throughout the learning sequence and the opportunity for the student to assess his or her own performance at any time.

The method and the tools developed provided in-class practice and individual training in the four language skills covered by the curriculum each week of the course. The method maximised opportunities for teamwork.

The developed tools (texts, exercises, grammar exercises, audio documents, etc.) were used for both learning and teaching. The tools were based on the

following software: the Office suite (Word, Excel, and PowerPoint) and the Entrecroisé software from CCDMD.

Ethical considerations

All necessary ethical considerations were met. The study participants were informed that there was no risk of participation in this study. Participation in the study was also anonymous. A full explanation was provided to all participants, and they were asked to give their voluntary consent before completing the questionnaire.

Results

The experiment was conducted within the framework of a normal workload. In terms of providing multimedia resources, tests, and materials were protected by passwords. Two trainings on the development and use of multimedia tools were held among teachers, and they were provided with the necessary information on the basics of the method in the context of academic motivation and the elements that make it effective.

To conduct the experiment, computer labs were allocated to each of the target groups. During the semester, three hours of weekly English classes, students had access to a computer.

The teaching and learning packages were presented to the students at the first lesson as planned. On the student side, the aim of this study was to assess the impact of the method on motivation to learn, perception of learning, and overall satisfaction with the course. The impact of the method and tools was tested by having students compare certain variables for the current course and the last English course they took. 54.2% of the students surveyed said that the quality of their spoken and written English was "average" or "good".

In general, fewer girls than boys consider the quality of their English to be "average" or "very good". For example, 48.9% of girls consider their spoken English to be at an "average" or "good" level.

English at an "average" or "good" level compared to 75.0% of boys. In terms of written English, 51.0% of girls rated their English as "average" or "good", compared to 66.6% of boys who rated their written English as 'satisfactory' or "good".

A significantly smaller proportion of Journalism students consider the quality of their spoken and written English to be 'average' or 'good' (31.6% and 36.8% respectively) than their Psychology (64.0% and 52.0%), Tourism (64.0% and 52.0%) and Law (66.7% and 80.0%) counterparts.

Commitment to learning was measured by the student's perception of their motivation to learn as assessed by the student (Q15) and a number of items including perceptions of real course work (Q11), attention paid to the course (Q13), and time spent studying and doing homework (Q14) and time allocated to study and do homework in English (Q12).

To begin with, 70.1% of students stated that the course made them active in their learning (Q9). 52.5% also said that the methods used in the course allowed them to invest in their learning (Q10). Table 1 shows the students' perceptions of their participation in the current ESP course:

Table 1 – Perceptions of students' engagement in learning in an English language course by gender

Quantity	15						Quantity		Percentage	
Reid		1	2	3	4	General				
	m	1	8	31	4	47	9	38	19,1	80,9
	f	1	7	4		12	8	4	66,7	33,3
General		2	15	35	7	39	17	42	28,8	71,2

Note: Own development of the authors.

As can be seen in Table 1, the majority of students (71.2%) felt that they were "very" or "very much" involved in the English course, with girls feeling almost 2.5 times more involved than boys. Finally, 75.7% of Level 101 students said they were "quite a bit" or "very much" more engaged in the experimental course than their male counterparts. Compared to students in level 102 who participated in the

experimental course, the percentage of girls who participated in the experimental course increased by (66.7%) and students in level 103 (66.7%) (Table 2).

Table 2 – Perception of students' engagement in the current course, by level of English language proficiency

Quantity 15	15					Quantity		Percentage	
Level	1	2	3	4	General				
100		1			1	1	0	100,0	0,0
101	1	8	24	4	37	9	28	24,3	75,7
102	1	4	8	2	15	5	10	33,3	66,7
103		2	3	1	6	2	4	33,3	66,7
General	2	15	35	7	59	15	42	28,8	71,2

Note: Own development of the authors.

In addition, when asked to what extent they really think they work hard in their English course, 62.7% of students said they work "quite a lot" or "a lot", with girls almost three times as likely as boys to say this (Table 3).

Table 3 – Students' perception of the actual work done in the course, by gender

Quantity 11	11						Quantity		Percentage	
Reid		1	2	3	4	General				
	f		12	27	7	47	13	34	27,7	72,3
	m	1	9	3		12	9	3	75,0	25,0
General		1	21	30	7	59	22	37	37,3	62,7

Note: Own development of the authors.

The majority of students (76.3%) believe that they receive "enough" or "always" attention in English classes, with girls (80.9%) claiming to pay more attention to their language learning than boys (58.3%) (Table 4).

Table 4 – Students' perception of the degree of attention paid in English classes by gender

Quantity 13	13						Quantity		Percentage	
Reid		1	2	3	4	General				
	m	1	8	28	10	47	9	38	19,1	80,9
	f	2	3	6	1	12	5	7	41,7	58,3
General		3	11	34	11	59	14	45	33,7	76,3

Note: Own development of the authors.

Finally, Table 5 shows that 76.3% of students agree that they allocate a maximum of two hours per week to study and complete homework related to their ESP course, with 28.8% saying they allocate less than one hour per week.

Table 5 – Time allocated to homework and study related to the English language course by gender

Quantity 12	12						Quantity		Percentage	
Reid		1	2	3	4	General				
	f	11	22	10	4	47	33	14	72,2	29,0
	m	6	6			12	12	0	100,0	00,0
General		17	28	10	4	59	45	14	76,3	23,7

Note: Own development of the authors.

This situation is even more worrying given that the weight of ESP courses in higher education involves three hours of study and/or work outside of class time per week. Given that the degree of effort invested in extracurricular activities is less than expected, it is likely that this issue could be raised. If the degree of effort expended outside the classroom is less than expected, the adequacy of the requirements and the level of learning objectives may be questioned. In support of this, we note that, according to students, the perception of learning is rather ambiguous. In addition, according to the comments we received, students do not think they have learnt "much" during the course. It can be assumed that students perceive the objectives as too easy because if the learning objectives are not high enough, they do not generate interest, engagement, or effort.

The responses to questions 15 and 6 of the student questionnaire, shown in Tables 6 and 7 respectively, allow us to compare perceived commitment to the English course (71.2%) and commitment to previous school English learning experiences (63.5%).

Table 6 – Perceptions of students' engagement in learning in an English language course by gender

Quantity 15	15						Quantity		Percentage	
Reid		1	2	3	4	General				
	f	1	8	31	7	47	9	38	19,1	80,9
	m	1	7	4		12	8	4	66,7	33,3
General		2	15	35	7	59	17	42	28,8	71,2

Note: Own development of the authors.

Table 7 – Students' perception of engagement in learning during the English language course, by gender

Quantity 15	15						Quantity		Percentage	
Reid		1	2	3	4	General				
	f	1	12	18	10	41	13	28	31,7	68,3
	m		6	5		11	6	5	58,5	45,5
General		1	18	23	10	52	19	33	36,5	63,5

Note: Own development of the authors.

As a result, students generally consider themselves more committed to the course they are currently enrolled in, i.e. the one in which the experiment is taking place. A comparison of the results by gender shows that girls feel more committed to the course they are currently enrolled in than boys, who feel less engaged in their current studies. In fact, the difference in perceived engagement between the current and previous courses is positive for girls (+12.6%), while for boys it is negative (-12.2%).

In short, in terms of commitment, more students say they are committed to learning English than vice versa, although actual effort behaviour (e.g. homework or studying) does not indicate that they are putting in more effort Despite this,

students, especially girls, seem to be more engaged in the course where the multimedia experiment was conducted.

Perception of learning is measured by the perception of ESP learning. Of the students in the experimental course, 59.3% said they 'somewhat agree' or 'strongly agree' when asked whether the English course they are currently taking has helped them to improve their English (Q7). However, only 40.7% of them attributed this improvement to the course (Q14). At the same time, 50.8% believe that the type of course they have taken has helped their learning (Q8). 40.7% of students believe that they have learnt "a lot" or "quite a lot" during the current course. More girls (42.6%) than boys (33.3%) said that they had learnt "quite a lot" or "a lot" during the pilot course.

On the other hand, it is the group of students at the 103 level who claim to have learnt the most (50%). On the one hand, although 40.7% of students believe that they have learnt "quite a lot" or "a lot" during the current course, they believe that they have learnt "quite a lot" or "a lot" 40.7% during this course, and they believe they learnt "less" (34.6%) during their previous English course. Finally, again, compared to the previous English course, a higher proportion of girls said they learnt "quite a lot" or "a lot" during the experimental course (difference +8.5%), while boys said they learnt "quite a lot" or "a lot" during the experimental course (difference +8.5%). boys claimed to have learnt less (difference -1.3%).

Thus, in general, students claim that the experimental course was a greater source of learning than their previous experience. Girls felt that they had learnt more in the experimental course, while boys felt that they had learnt more than in the previous course. In addition, it was the students with the highest level of English proficiency who felt that they had learnt the most in the experimental course.

Discussion

When asked about their satisfaction with the experimental course, 47.4% of students said they were "quite" or "very" satisfied. Among girls, 44.4% were satisfied, and among boys, 58.3%. In a sense, this confirms the findings of the above

authors that boys have a more positive attitude to the use of multimedia resources than girls. The distribution of the results by rating shows that students of the 102nd level (53.3%), followed by students of the 101st level (44.4%), indicated that they were most satisfied with the experimental course. The number of dissatisfied (29 comments) and satisfied (27 comments) was equally divided. According to the survey results, students said they were satisfied with the work of teachers (29 comments).

In particular, students pointed to the following sources of satisfaction: their teachers, the teaching method, the texts, and the amount of vocabulary they learnt related to their field of study. Regarding the course, students say they appreciate that it "unfolds differently from others" and that it is "more interactive". They also say that this method allows them to "progress at their own pace" and "practice speaking more".

Thus, the use of multimedia resources in teaching and learning situations seems to satisfy boys more than girls. These results are in line with those of Chernenko (2021). Satisfaction with the course, however, is not related to the level of learning perceived to have been achieved (Kotsur et al., 2021). Furthermore, although this method achieves its goals of making students more autonomous and allowing them to progress at their own pace, it is clear that they feel they are learning at their own pace not because they have interactive multimedia materials, all the explanations, exercises, etc. in their hands, but because they are learning at their own pace, that the mediation of the teacher is no longer needed (Deda & Kolesnyk, 2019).

In a similar study, Dziabenko and Morze (2019) investigate the use of multimedia resources and their perception by teachers. The authors noted that students are becoming more autonomous, even "independent". This work is consistent with the findings of Goloborodko (2022) that the use of multimedia tools and ICT in education will promote autonomy and responsibility on the part of students in their learning.

In this context, scholars also note the impact of the use of multimedia resources on students' behaviour and motivation. However, according to Bazhenkov

and Shaposhnykova (2021), the importance of this influence of assessment and the relevance of the content or tasks to be completed should, however, be qualified according to the level of foreign language proficiency at which the student is. Although it is not possible to offer an explanation for student behaviour within the limited scope of this study, it is already interesting to see that the experiment led to reflection on the part of students, which is a characteristic quality of professional teaching (Kryvoshein et al., 2022).

It seems that this type of experimentation encourages the verbalisation and even awareness of students' theoretical preferences (Williamson et al., 2020). The use of multimedia is interesting from a professional development perspective, as it encourages teachers to better understand the dynamics of learning and motivation (Kuzminska et al., 2020).

Thus, the study seems to have led to a pronounced motivation on the part of the participants, to the development of reflective practitioners in the same sense as defined by Sanetra and Małodobry (2022). The results of this study can be an interesting tool for self-analysis of pedagogical practice, or even a relevant means of professional development for university teachers.

Finally, it seems that the implementation of multimedia resources in foreign language learning and, consequently, the research would have been of a higher quality if more time had been allocated to preparing the tools, monitoring the implementation, and adapting the approach. The lack of time can be interpreted as affecting the efficiency of resource use.

In this context, certain conditions necessary for the evaluation and implementation of multimedia innovations should be highlighted: time needed for innovation, time needed to complete the various stages related to the planned innovation (allocation, development, and implementation), adequate software, access to the Internet, sufficient computers, qualified and available technicians, time for evaluation or, in other words, for the research itself.

Conclusion

The research question that determined this approach was formulated as follows: What changes does a pedagogical innovation using multimedia resources bring to the reality of the teacher and the student? More specifically, the objectives of the study were to evaluate the pedagogical innovation based on multimedia resources through students' perceptions of the learning outcomes achieved, as well as to establish the role of the student in the teaching-learning process.

The study made it possible to measure the benefits of pedagogical innovation compared to traditional teaching methods, as well as to assess the quality of academic learning achieved by students after its implementation.

The results indicate that the recommended approach did not have a significant positive impact on students' perceptions of the quality of their learning or the level of mastery of the discipline, compared to what was achieved at school. However, the results clearly show an increase in student motivation and the development of autonomy among students, as well as the active involvement of students in teamwork. In this regard, the introduction of multimedia innovations does have a positive effect on motivation.

The study also reveals a difference between girls' and boys' attitudes to the use of multimedia resources.

Thus, it is not so much the technological aspects as the management and organisation of resources that are crucial. The study confirms the importance of taking into account the characteristics, skills, and beliefs of the teachers involved in such an innovation process.

In addition, differences in student attitudes and opinions confirm the need for a learning environment that supports and responds to their diversity.

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