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Training in Digital and Didactic Competences for Future Foreign Language Teachers: Reflecting on the Learning Process

Formación en competencias digitales y didácticas para futuros profesores de lenguas extranjeras: reflexionando sobre el proceso de aprendizaje

Formació en competències digitals i didàctiques per a futurs professors de llengües estrangeres: reflexionant sobre el procés d'aprenentatge

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ABSTRACT: This study explores the evolution in the self-perceived digital and didactic competences of student-teachers completing a course on "Teaching English as a Foreign Language". The main aim of the research was to assess the impact of the integrated practice of these two competences through the completion of specific tasks. The research method chosen was mixed (quantitative and qualitative), and the self-reflection tools used were the SELFIE (Self-reflection on Effective Learning by Fostering the use of Innovative Educational Technologies) for digital competences and EPOSTL (European Portfolio for Student Teachers of Languages) for didactic competences. A total of 244 student-teachers participated in this innovative proposal during the academic year 2021-22. They had to complete collaborative tasks addressing both competences: pre-task video discussions, lesson planning, and post-task video presentations. They made use of MS Office 365 and Teams for their collaborative work. Results show that their perception of digital competence fluctuates but shows an overall improvement, while their perceived progress in didactic competence is more erratic, with a more positive result in the pre-task and in the task, but not in the post-task. This study contributes to gaining a deeper understanding of digital and didactic competence practice in teacher training, underlining the effectiveness of an integrated approach.

KEYWORDS: digital competence; didactic competence; teacher development; foreign languages

RESUMEN: Este estudio explora la autopercepción de la evolución en competencias digitales y didácticas de los estudiantes-profesores que completan un curso sobre "Enseñanza del inglés como lengua extranjera". El objetivo principal de la investigación ha sido evaluar el impacto de la práctica integrada de estas dos competencias mediante la realización de tareas específicas. El método de investigación elegido fue mixto (cuantitativo y cualitativo) y las herramientas para la autorreflexión fueron el SELFIE (Self-reflection on Effective Learning by Fostering the use of

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Innovative Educational Technologies) para las competencias digitales y el EPOSTL (European Portfolio for Student Teachers of Languages) para las competencias didácticas. Un total de 244 futuros docentes que participaron en el curso 2021-22, tuvieron que completar tareas colaborativas que cubrían ambas competencias: debates sobre vídeos previas a la tarea, planificación de clases y presentaciones en vídeo posteriores a la tarea. Utilizaron MS Office 365 y Teams para su trabajo colaborativo. Los resultados muestran que su percepción de la competencia digital fluctúa, pero muestra una mejora general, mientras que su progreso percibido de la competencia didáctica es más errático, con un resultado más positivo en la tarea previa y en la tarea, pero no en la tarea posterior. Este estudio contribuye a profundizar en la práctica de la competencia digital y didáctica en la formación del profesorado, subrayando la eficacia de aplicar un enfoque integrado.

PALABRAS CLAVE: competencia digital; competencia didáctica; formación del profesorado; lenguas extranjeras

RESUM: Aquest estudi explora l'autopercepció de l'evolució en competències digitals i didàctiques de l'estudiantat-professorat que completa un curs sobre ensenyament de l'anglès com a llengua estrangera. L'objectiu principal de la investigació ha estat avaluar l'impacte de la pràctica integrada d'aquestes dues competències mitjançant la realització de tasques específiques. El mètode d'investigació triat va ser mixt (quantitatiu i qualitatiu) i les eines per a l'autoreflexió van ser el SELFIE (Self-reflection on Effective Learning by Fostering the use of Innovative Educational Technologies), per a les competències digitals, i l'EPOSTL (European Portfolio for Student Teachers of Languages), per a les competències didàctiques. En el curs 2021-22 hi van a participar 244 futurs docents, els quals van haver de dur a terme activitats col·laboratives que cobrien totes dues competències: debats sobre vídeos previs a la tasca, planificació de classes i presentacions en vídeo posteriors a la tasca. Van fer servir MS Office 365 i Teams per al seu treball col·laboratiu. Els resultats mostren que la seua percepció de la competència digital fluctua però també una millora general; mentre que el seu progrés percebut en la competència didàctica és més erràtic, amb un resultat més positiu en el debat previ i en la tasca, però no en la presentació en vídeo posterior. Aquest estudi contribueix a aprofundir en la pràctica de la competència digital i didàctica en la formació del professorat i subratlla l'eficàcia d'un enfocament integrat.

PARAULES CLAU: competència digital; competència didàctica; formació del professorat; llengües estrangeres

Practitioner notes

What is already known about this topic

- It is widely accepted that the digital competence of foreign language teachers and educators in general needs to be enhanced.
- The development of didactic competence is a key part of teacher training, both in initial stages and in further professional development.
- Portfolios such as the SELFIE and EPOSTL are valuable tools to help educators reflect on their teaching practices and their own learning process when involved in training.

What this paper adds

- This paper provides a nuanced understanding of student-teachers' progress in digital and academic competences over the duration of an academic course.
- Student-teachers may overestimate their pre-existing digital competence, but there is an overall improvement in their digital competence through integrated training.
- Student-teachers' evolution in didactic competence does not follow a linear progression, and the choice of tasks to develop this competence is essential. The success of hands-on experiences in lesson planning is highlighted.

Implications for practice and/or policy

- There should be an integrated approach to training both digital and didactic competences in student-teachers, fostering a holistic approach to teacher training.
- Reflective learning and collaboration should be encouraged in initial teacher training.

1. INTRODUCTION AND REVIEW OF THE LITERATURE

Foreign language educators are expected to acquire a set of skills for efficient teaching in the 21st century. Among them, both digital and didactic competences have been considered essential for their formative development, as it is evidenced in several European initiatives. Such is the case of the new digital education action plan (2020-2027) by the European Commission, which aims to encourage the development of the digital competence and an effective and inclusive use of digital technologies in education (Castaño-Muñoz et al., 2021) or the European Language Policy Division (LPD) and the European Centre for Modern Languages (ECML) supporting different educational stakeholders to learn languages more efficiently (Dhiorbháin, 2019). These two competences do not normally converge as joint learning objectives in educational programs, but both have considered necessary to elaborate self-reflective teaching and learning portfolios, hence, equipping future professionals to this aim.

Portfolios can be very useful for teacher training programs and in-service teachers since their main purpose is to encourage reflection in learning and practice. Training and practising reflection in education has become relevant across academic institutions as a way to improve teaching and learning (Zwozdiak-Myers, 2012), and can positively modify teaching practices through a continuous cycle of action where students and teachers are active participants (Dhiorbháin, 2019). According to Huang (2012), portfolios are highly beneficial in foreign language education because they provide a comprehensive view of development over time, encourage introspection and autonomy, and combine instructional, learning, and assessment issues. Haggag (2018) summarises the main objectives of portfolios for language education: their capacity for competence-based reflection, future professional preparation, peers' discussion promotion, self-assessment facilitation, and progress chart visualisation.

The SELFIE (Self-reflection on Effective Learning by Fostering the use of Innovative Educational Technologies) is a portfolio based on the Digital Competence Framework for Educators (DigCompEdu) and offers a "common frame of reference, with a common language and logic" (Redecker, 2017, p.7) for the development of educators' digital competence in Europe. From a didactic perspective, it supports the improvement and construction of the necessary digital pedagogical competences (da Luz & do Espirito Santo, 2023). This portfolio is a conceptual framework developed for teachers, but it can also work at college level and provide pre-service teachers with basic and essential knowledge (Yoon, 2022). Because of its focus on pedagogy over technical issues, it has been rated as a highly suitable tool in the university context and has great rates of global reliability in its different dimensions (Cabero-Almenara et al., 2020).

The DigCompEdu covers educators' professional competences, pedagogic competences, and learners' competences, integrated in six dimensions: 1) professional engagement, 2) digital resources, 3) teaching and learning), 4) assessment, 5) empowering learners, and 6) digital citizenship. They are shown in Figure 1 below.

Several studies have pointed out the need to enhance the digital competence of future educators because they prepare them better for their future real-life experiences (Bergil & Saricoban, 2017; Cabero-Almenara et al., 2020; Sumarni et al., 2023). Specifically in the case of language education, Sumarni et al. (2023) emphasise the need to effectively integrate technology in language instruction making use of dedicated and comprehensive digital education programs. In practice, this is assumed to be smoothly implemented in language teaching programs so both digital and didactic competences can be trained together.

Conveniently, and in line with other educational European initiatives, the Council of Europe has proposed the European Portfolio for Student Teachers of Languages (EPOSTL) to harmonise foreign language instruction and teacher training throughout the continent (Önal & Alagözlü, 2018; Bergil & Sarıçoban, 2018). This initiative acknowledges the importance of reflective learning in teacher education programmes

and provides a tool for students completing their initial teacher education. Besides, the development of this tool comes from the acknowledgment of a growing presence of plurilingualism and pluriculturalism across Europe and the subsequent necessity of qualified and effective foreign language instructors.

The EPOSTL defines fundamental competences, develops didactic competence descriptors linked to foreign language teaching, and embeds them into a portfolio to motivate users to reflect on their knowledge (Newby, 2007). Based on relevant theories of learning and teaching (learner autonomy and reflection, social constructivist approaches, and intercultural awareness, among others.) (Newby, 2007), the EPOSTL focuses on teacher autonomy, reflective practice, and self-assessment, as its main theoretical and conceptual foundations (Ni Dhiorbháin, 2019). This portfolio includes 193 descriptors that represent the set of core competences that language educators should achieve. Main categories include: 1) context; 2) methodology; 3) resources; 4) conducting a lesson; 5) independent learning; and 6) assessment of learning. As can be observed in Figure 2, the core competences include different descriptors that represent

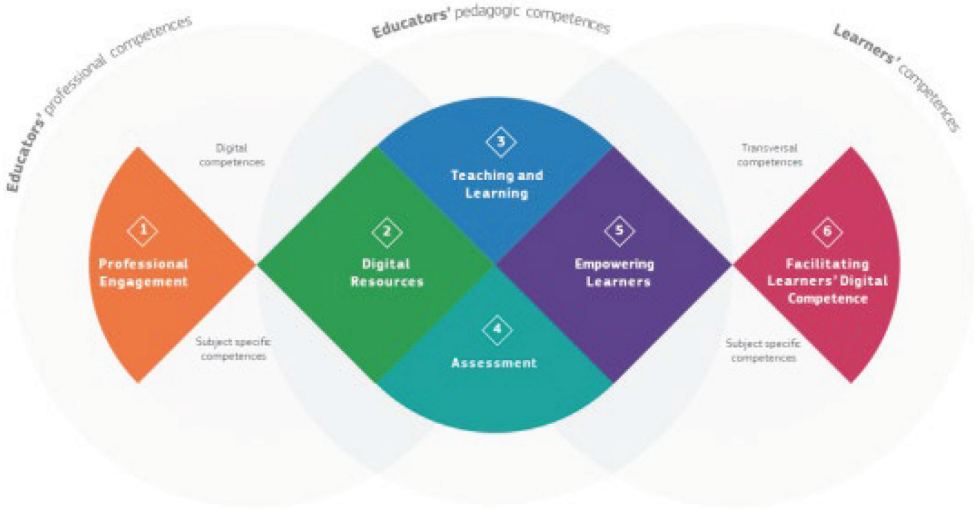

Figure 1. *Digital Competence Framework for Educators (Redecker & Punie, 2017)*

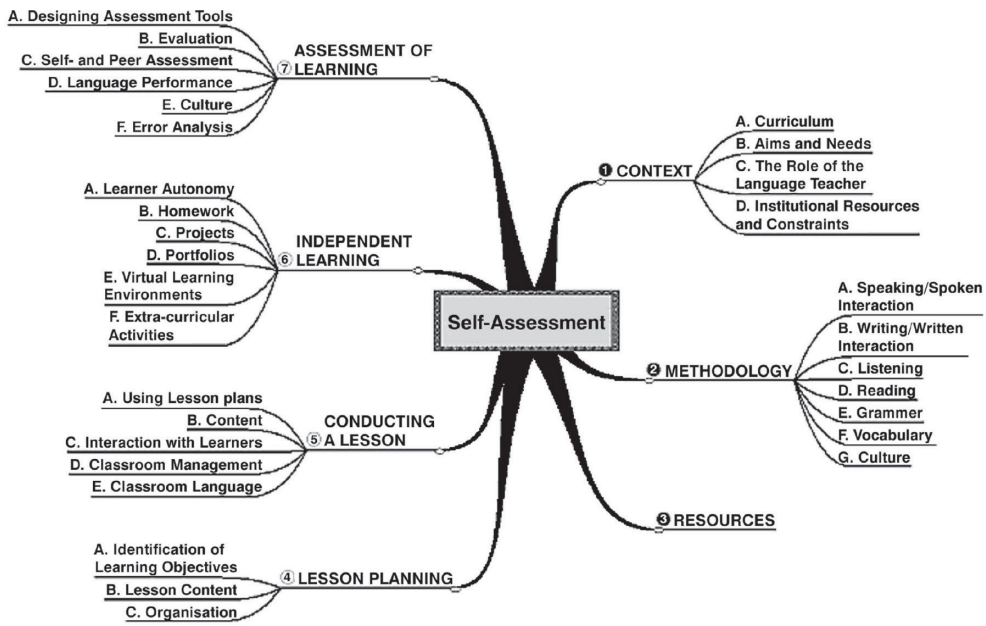

Figure 2. *Categorisation of descriptors in the EPOSTL (Newby et al., 2007)*

subareas in which teachers require knowledge. Castaño-Muñoz et al. (2021) explain that when this portfolio is used by student teachers in training programs, it is not meant to be used as a grading tool, but instead as a process tool.

Given the importance of self-reflection and self-evaluation in learning processes and teaching practices (Castaño-Muñoz et al., 2022), the research project that is the subject of this academic paper has employed two renowned portfolios (SELFIE and EPOSTL) to track language student-teachers' learning progression on these two important competences -digital competence and didactic competence- making them reflect on their own learning. Both instruments have been proven to be current, valid, and reliable (Bergil & Saricoban, 2017; Cabero-Almenara et al., 2020) and need to be adapted to specific contexts of application. The progressive training on digital and didactic competences was proposed in a subject of the degree of English Studies at UNED (Universidad Nacional de Educación a Distancia). The teaching of English as a foreign language was supported using digital technologies, so the two competences were, therefore, practised together and in a complementary manner by the design of specific tasks assessing combined competences of each framework.

The present work aligns with European efforts to provide students with "skills to function effectively in the new cultural and working environment" (Mora-Cantallops et al., 2022. P.7) and proposed to observe the evolution of students' self-perception of learning in a sequential explanatory design (Ivankova et al., 2006). This consisted in a first phase based on quantitative analyses to ascertain the evolution of selected competences taught and applied during the course: 1) digital competences in the areas of professional engagement, digital resources, teaching and learning, and assessment; and 2) didactic competences in the areas of methodology, resources, lesson planning, and assessment of learning. The second phase consisted in a qualitative follow-up analysis by semi-structured interviews carried out with participants. Additionally, potential correlations between the development of student-teachers' digital and didactic competences were calculated to explore their possible existing dependence.

2. MATERIALS AND METHODS

2.1. Context

This proposal was implemented in the subject "Teaching English as a Foreign Language", an optional subject of the first term in the 4th year of the degree in English Studies at UNED. The university employs a distance learning methodology, so digital competence is particularly relevant in this context. However, the teaching team did not assume advanced skills that digital natives may have (Sumarni et al., 2023) since the age range of students is not regularly homogeneous at this institution and previous existing digital skills on students may not have pedagogic foundations. This way, the premise taken was the need to support students in the development of this competence with complementary educational activities using different functionalities of MS Office 365 (Figure 3) (access provided by the university to its students) which, in parallel, addressed basic elements of the didactics in the foreign language.

The implementation took place during the academic year 2021/2022 and a total of 244 students participated in this edition. The course follows a structure that values continuous work during the course; therefore, the distribution of the final mark is calculated assigning 40% of the final grade to the progressive evaluation tasks, and 60% to the final exam. The specific training on both competences is integrated in the former. The structure of the tasks corresponding to the continuous evaluation is distributed as follows: 1) Pre-task: visualisation of didactic videos for the teaching of English as a foreign language and related discussion in the forums; 2) Task: individual or group elaboration of a lesson plan including topic, aims, contents, level, and sequence; and 3) Post-task: video presentation of the lesson plan and peer assessment (see Figure 3).

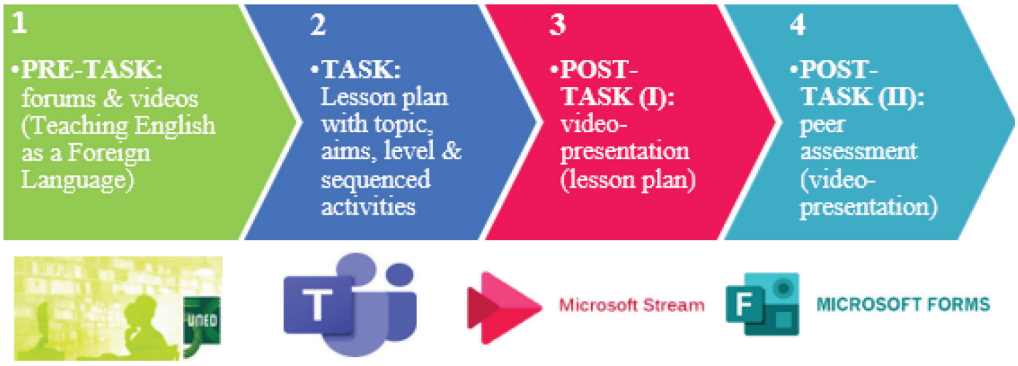

Figure 3. *Phases and digital workspaces*

2.2. Objectives and research questions

The main motivations for this study were to observe the evolution in the students' self-perception of digital and didactic competences and to test the suitability of the design of the proposal. This evolution was examined by the creation of specific tasks focused on both competences, which will be further developed below. The research questions (RQs) stemming from the examination of the progress on the integrated practice of both competences (RQ1-RQ5) and the ones aimed to validate the design of the training programme (RQ6 & RQ7) were:

- RQ1: What are students' overall perceptions of competences development?
- RQ2: What are students' self-perceptions on digital competence development?
- RQ3: What are students' self-perceptions on didactic competence development?
- RQ4: What are students' self-perceptions on individual dimensions development?
- RQ5: Was the proposal useful according to students' feedback?
- RQ6: Were the different tasks from each portfolio significatively related?
- RQ7: Were the various dimensions addressed in each portfolio significatively related in the three tasks?

2.3. Procedure

The design of the digital competence tasks followed the suggestions summarised by Krumskiv (2014) for efficient implementation. First, educational experiences and strategies to enhance students' ability to adopt digital technologies were introduced with the presentation of the tasks and tools to be used. Secondly, active participation was fostered by offering not only theoretical resources, but suitable digital technology-based activities to provide practical experience (tasks), and the opportunity to reflect on their use and evaluate the accomplishments. This was possible because of the distribution of an adapted questionnaire using Likert scale after the execution of each of the three tasks proposed (see Table 1). Thirdly, digital competence-related teaching and learning activities were accompanied by learning environments for peer evaluation and collaboration (task and post-task). Peer evaluation is considered a collaborative dynamic itself (Stančić, 2021), so collaboration was greatly promoted as an efficient way to enhance digital competence training, as suggested by related literature (Krumskiv, 2014; Liu et al., 2015; Reisoğlu & Çebi, 2020). The last recommendation entrusts teachers to provide continuous and productive feedback and offering hands-on opportunities, which was ensured by the very nature of continuous evaluation.

Table 1. *Dimensions of the questionnaire distributed during implementation: adapted from SELFIE & EPOSTL*[1]

Portfolio	Category	Nº Items	Focus	Evaluation
SELFIE	Professional Engagement	2	Networks-virtual communities/ Pedagogical practice	Task & post-task
	Digital Resources	2	Evaluation-selection/adaptation-creation of materials	Task
	Teaching & Learning	2	Incorporation & Planning digital resources / Collaboration	Task
	Assessment	2	Formative-summative/ Critical Analysis	Task & post-task
EPOSTL	Methodology	5	Reading/ Spoken Interaction/ Listening/ Written Interaction / Culture	Task
	Assessment	3	Self and Peer Assessment/ Evaluation/ Design of Assessment Tools	Post-task
	Lesson Planning	2	Lesson Content/ Identification of Learning Objectives	Task
	Resources	1	Evaluation according to age, interest and level	Task
	Context	1	Curriculum	Task

2.4. Data collection and analysis

An adapted questionnaire (see Appendix) was distributed after each of the three tasks, so the expected evolution in learning was observed according to students' self-evaluation of the different elements worked. This evolution was descriptively approached from different angles considering the average ranges obtained from the Likert scale-based responses. First, global self-perception including both digital and didactic competences was calculated after each task execution. Then, the same temporal evolution was calculated for individual competences. Lastly, the evolution in learning was calculated considering grouped categories from each competence: SELFIE: 1) professional engagement; 2) digital resources; 3) teaching & learning; and 4) assessment and EPOSTL: 1) methodology; 2) assessment; 3) lesson planning; and 4) resources. It must be noted that the categories included in the questionnaire perfectly aligned with the tasks proposed, so the self-evaluation corresponded with real assignments. The open-ended questionnaire was focused on getting a qualitative perspective on the suitability and significance of the design to train both competences, and to complement students' evaluation on the implementation.

Additionally, this work aimed to measure the significance of the combined training by calculating the statistical dependence between variables in the three different stages of the implementation. Spearman's Rho (non-normal distribution) correlation coefficients, as well as significance values ($p<0.005$) were calculated by the application of this non-parametric technique (Cohen et al., 2017; Cresswell, 2013). This was intended to understand the relevance of developing digital competence using technological tools and, simultaneously, developing the didactic ones for the tasks proposed which combined both. In this case, the degree of intensity in the association among variables was calculated considering the potential dependence between global grouped variables (SELFIE-EPOSTL), and disaggregated ones. The latter implied calculating potential correlations among individual grouped variables, or thematic categories, from both portfolios. The correlation coefficients were calculated for the three different phases of the implementation to comprehend the suitability of this combination for each of the tasks: pre-task, task, and post-task.

[1] Appendix

3. ANALYSIS AND RESULTS

The first analysis carried out (RQ1) included all the items of the questionnaire distributed online in the three phases of the implementation, in order to provide an overview of the overall evolution during the course. The questionnaires had 30 responses (pre-task), 41 responses (task), and 13 responses (post-task) respectively. It should be noted that the questionnaires were answered on a voluntary basis after each task, which explains the differences in participation between the three tasks. The average ranges of the ratings received in each questionnaire were obtained to equalise the samples. The Likert scale values ranged from 1 to 5, where 1 represented "strongly disagree" and 5 "strongly agree". The correspondence of these nominal values and their interpretation in the form of percentages are shown in Table 2.

The pre-task entailed the visualisation of videos on foreign language teaching & learning and the participation on the forums. The former was mostly receptive and the whole assignment did not introduce any new digital tools. The pre-task made use of the Learning Management System (LMS) employed at the university for their participation in the forums, so they were already accustomed to the tool. Therefore, it can be assumed that the results obtained in the pre-task can practically be taken as the students' initial self-perception on their digital and didactic competence that should serve as a starting point for measuring their evolution throughout the course. Figure 4 depicts the holistic evolution during the subject. Initially, students' overall self-perception of their competences was high (75.3% = good). After the execution of the intermediate task, it increased, and competences rated close to excellent values (78.22%) to finally decrease in an almost unnoticeable manner (78.08%) when completing the cycle with the post-task.

When looking at their digital competence independently (RQ2) (Figure 5), it can be observed that students initially considered to have this competence highly developed with excellent ratings for the pre-task (88%). However, this self-perception drops considerably (79.9%) after carrying out the task, in which students use for the first time new digital tools (MS Teams), in this case, to work collaboratively in the preparation of the lesson plan. Self-perception of digital competence in the post-task returns to excellent values after the post-task (81.7%), although in a more modest way. Didactic competence (RQ3), however, presented different trends (Figure 6). The initial evaluation

Table 2. *Percentages correspondence with nominal values from the scale*

Value and description of the scale	Qualitative interpretation of the scale	Percentages
1. Strongly disagree	Very poor	0% - 20%
2. Disagree	Poor	21% - 40%
3. Neutral	Average	41% - 60%
4. Agree	Good	61% - 80%
5. Strongly disagree	Excellent	81% - 100%

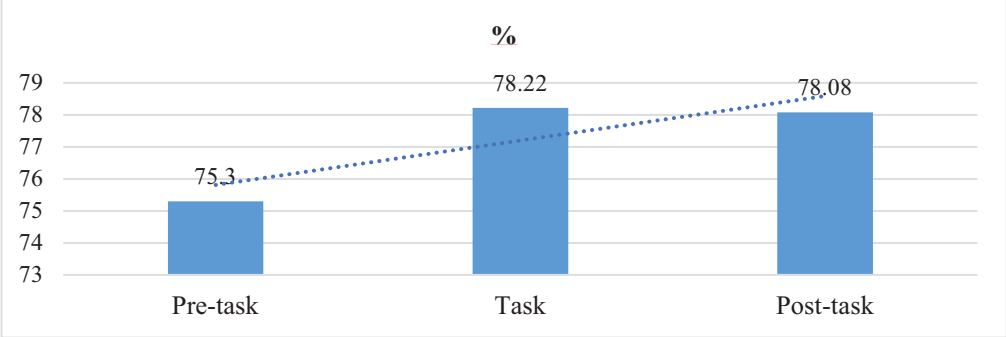

Figure 4. *Overall self-perception of competences (average ranges)*

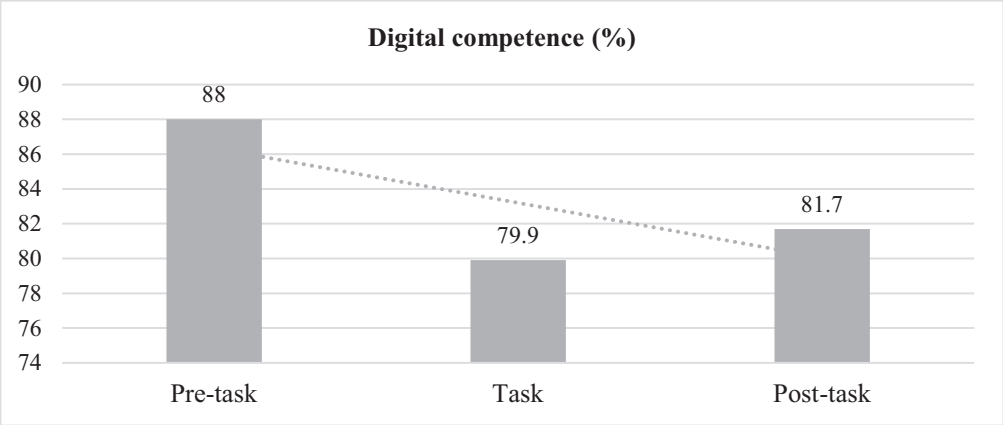

Figure 5. *Self-perception of digital competences (average ranges)*

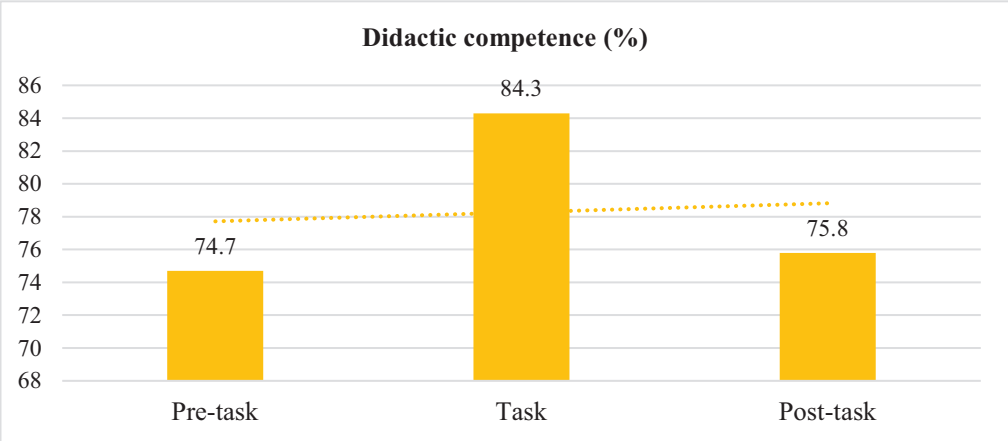

Figure 6. *Self-perception on didactic competence (average ranges)*

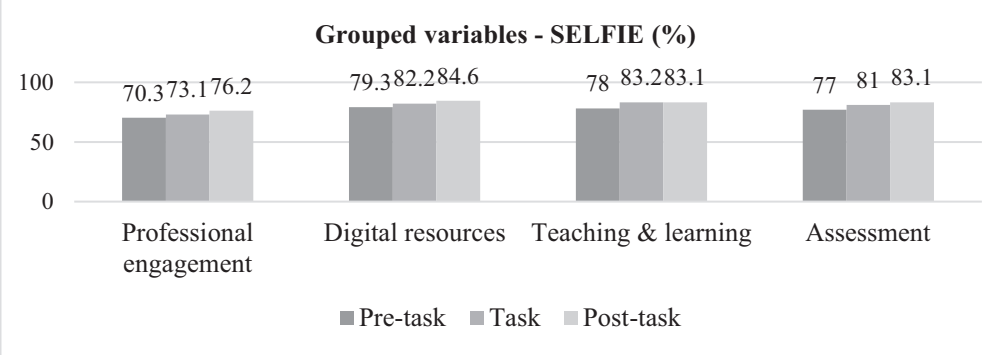

Figure 7. *Self-perception on disaggregated SELFIE variables (average ranges)*

(pre-task) showed a self-perceived efficient management of didactic issues in the foreign language (74.7%). However, it visibly improves when developing the task (84.3%) to practically revert to original values after the post-task (75.8%).

When the variables grouped together on the items belonging to the SELFIE portfolio (Figure 7) are examined in detail (RQ4), it is noticed that there has been a progressive improvement throughout the course in all cases. At the end of the self-evaluation cycle, students considered to have reached optimum levels of development in the skills associated with these specific competences, except for the variable "professional engagement", which, nevertheless, was on the verge of reaching an excellent value (76.2%).

The grouped variables corresponding to the EPOSTL portfolio (RQ4) (Figure 8), unlike in the previous case, showed an irregular evolution. In all cases, students have an excellent initial self-perception (values > 80%), except for the variable "resources". The methodological aspects, as well as the ones regarding to the resources or assessment evolved favourably in all cases from the pre-task to the task, apart from the variable "lesson planning" which fell drastically after the execution of the task (from 82,3% to 60,2%). It is important to note that the latter was the only occasion in which the values fell below the threshold of the description "good". Likewise, "lesson planning" was the only variable that exceeded the initial thresholds (pre-task) since the generalised tendency was a slight decrease from the task to the post-task.

As previously indicated, this first quantitative approach was followed by a series of semi-structured interviews (RQ5). First, the suitability of combining training on both competences was inquired in terms of the balance on their development. This question had a common agreement on the balance achieved by the combination of tasks, although respondent 5 highlighted the fact that this element was dependent on the prior knowledge of each individual student. Besides, respondents evaluated the usefulness of each task according to the objectives of the subject in the development of both competences. 60% of the respondents chose the task or development of a lesson plan as the most useful one, followed by 40% of the responses who selected the post-task. The interview continued by asking whether the perception of their digital and didactic competences had changed after taking the subject. For digital competence, 60% answered they had changed, especially remarking the importance of the transition from theory to practice. For didactic ones, there was common agreement on this same fact.

Respondents also indicated the areas in which they experienced the most progress. In the case of digital competences, they especially appreciated having the opportunity to collaborate in the preparation of the lesson plan. As for their development of didactic competences, they commented on the usefulness of the pre-task and post-task to get a better understanding of different assessment approaches. Finally, there was a question aimed to understand the relevance of self-evaluation on digital and didactic competences for teaching practice. Once again, there was common agreement on the significance of these tools. Students commented that they had stimulated the memory and had forced them to critically think about personal preferences and convictions, as well as to reflect and to better know what to do in different professional situations.

The last analyses included in this work were exploratory and aimed to find potential correlations between the variables studied, that is to calculate the level of change in one variable due to the change in another and understand the relationship and strength between them. Spearman's Rho (non-normal distribution) correlation coefficients, as well as significance values ($p<0.005$) were calculated by the application of

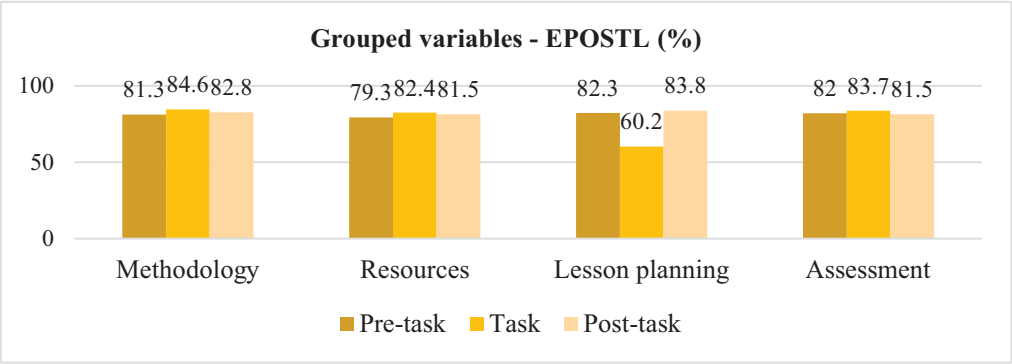

Figure 8. *Self-perception on disaggregated EPOSTL variables (average ranges)*

this non-parametric technique. Looking at both portfolios from a global perspective as used in this implementation (RQ6), they were found to be highly correlated in the pre-task and task (correlation coefficient of 0.596 and 0.586 respectively) (Martínez-Ortega et al., 2009). The combination of digital and didactic practice in the post-task, however, was not significant as can be observed in Table 3.

The following correlation analyses focused on the three stages part of the formative process: pre-task, task, and post-task (RQ7). Just as in the global analyses shown in Table 3, possible correlations between digital and didactic (SELFIE-EPOSTL) competences were calculated, although in this occasion this was done for the grouped variables of each portfolio. Regarding the pre-task (Table 4), "digital resources" (SELFIE) was found to be highly correlated with "methodology" and "lesson planning" (SELFIE) (correlation coefficient of 0.656 and 0.548 respectively). In addition, a high correlation coefficient (0.524) was found between the category "assessment", which was included in both portfolios, although with evident approach-based differences.

Table 5 shows the correlation significance values for the grouped variables of each portfolio found in the task. Once again, "digital resources" proved to be highly related with "methodology" and "resources" (correlation coefficient of 0.564 and 0.517, respectively), and to have a moderate dependence with "assessment" (0.493). Similarly, "teaching & learning" was found to be moderately dependent on "methodology" and "assessment" (0.453 and 0.450 respectively). For the post-task, correlation values were not significant for the variables analysed (Table 6). These results confirmed those obtained in the overall study of the possible dependence between the variables included in both portfolios.

Table 3. *Correlation coefficient between SELFIE & EPOSTL (p-value)*

P-value of Spearman's correlation coefficient between SELFIE-EPOSTL	
Pre-task	**0,001**
Task	**0,001**
Post-task	0,027

Table 4. *P-value of Spearman's correlation coefficient between variables from SELFIE & EPOSTL in the Pre-task*

P-value of Spearman's correlation coefficient (Pre-task)				
	Professional engagement SELFIE	Digital resources SELFIE	Assessment SELFIE	Teaching & learning SELFIE
Methodology EPOSTL	0,034	**0,001**	0,008	0,241
Assessment EPOSTL	0,060	0,047	**0,003**	0,128
Lesson planning EPOSTL	0,007	**0,002**	0,008	0,053
Resources EPOSTL	0,564	0,013	0,019	0,080

Table 5. *P-value of Spearman's correlation coefficient between variables from SELFIE & EPOSTL in the Task*

P-value of Spearman's correlation coefficient (Task)				
	Professional engagement SELFIE	Digital resources SELFIE	Assessment SELFIE	Teaching & learning SELFIE
Methodology EPOSTL	0,088	**0,001**	0,008	**0,003**
Assessment EPOSTL	0,145	**0,001**	0,011	**0,003**
Lesson planning EPOSTL	0,489	0,342	0,956	0,691
Resources EPOSTL	0,108	**0,001**	0,029	0,019

Table 6. *P-value of Spearman's correlation coefficient between variables from SELFIE & EPOSTL in the Post-task*

P-value of Spearman's correlation coefficient (Post-task)				
	Professional engagement SELFIE	Digital resources SELFIE	Assessment SELFIE	Teaching & learning SELFIE
Methodology EPOSTL	0,095	0,022	0,207	0,013
Assessment EPOSTL	0,162	0,118	0,666	0,114
Lesson planning EPOSTL	0,082	0,171	0,594	0,049
Resources EPOSTL	0,056	0,114	0,036	0,047

4. DISCUSSION AND CONCLUSIONS

The current study presents, on the one hand, future language teachers' evolution in their training in digital and didactic competences, through the implementation of a proposal that proposes the integrated practice of both competences. This innovative approach is based on the need for prospective educators to implement technology supported by appropriate pedagogical approaches (Karsli et al., 2023). It also follows trends at European level in which the ability to use technology at professional level is considered a fundamental and transversal subject that should be part of any community education program (Cabero-Almenara et al., 2020). Related literature has highlighted the importance and necessity of developing this competence also for foreign language teaching professionals, whose digital training has been identified to be crucial for an effective integration of technology in language instruction (Sumarni et al., 2023). On the other hand, this study has sought to validate the design presented for the training of both competences in the subject "Teaching English as a Foreign Language" as a suitable learning proposal.

In order to observe progress, two portfolios (SELFIE & EPOSTL) were used as the basis for the creation of a new instrument. These two tools were developed to encourage reflection in teaching practice in the areas of digital skills and didactics and, so far, had been applied separately to this aim. In this case, a new Likert-scale instrument was created, like other studies that have adapted conceptual constructs to fit own didactic and research objectives (Bergil & Saricoban, 2017; Reisoğlu & Çebi, 2020). This dual approach to digital and didactic competences, however, can be considered novel both in terms of the implementation proposal and the research approach. While the DigcompEdu, on which the SELFIE portfolio is based, has been widely studied (Cabero-Almenara et al., 2020; Castaño-Muñoz et al., 2021; da Luz & do Espirito Santo, 2023; Krumskiv, 2014; Yoon, 2022), it is important to keep in mind that research on the EPOSTL has been scarce to date, and the studies available are mostly descriptive (Seitova et al., 2019). Furthermore, the authors are not aware of similar studies in which the unifi ed study of both competences is proposed.

In the overall evaluation of students' progress, there is an increasing trend between the pre-task and the task. The values of the latter remained almost the same after the post-task. Taking these values into account, it can be determined that, in broad terms, the implementation of these activities had a positive effect on the students, as their self-perception of their competences improved over the course. These results are relevant because self-efficacy, here reflected in widespread progress, is a relevant motivational factor that has been shown to influence teaching effectiveness (Bergil & Saricoban, 2017). In addition, reflective practice has been fostered through actions such as the integration of new knowledge into future teaching practice, because of the generation of this new knowledge and the analysis of the actions carried out. Therefore, the general results of the implementation have allowed, in an introductory way, to successfully train competences and apply practices that are considered essential in foreign language teaching (Castaño-Muñoz et al., 2022, Ni Dhiorbháin, 2019).

The progress in digital competence, when analysed independently, showed that the students probably overvalued their digital competence in an initial phase. This perception changed downwards when the task was carried out. In the task, MS Teams was used for the first time as a collaborative tool. It can be interpreted that, after the use of the different applications of this digital tool and because of reflective practice, students realised that they still did not reach the levels of excellence that had been initially assumed. On the other hand, the didactic competence studied individually showed a more cautious self-perception by the students in the pre-task, which is understandable since there is no other subject in the degree that deals with the didactics of foreign language. Self-perception of this competence rose considerably after completion of the task. This is also reasonable since it is here that students have to create a lesson plan where they work on specific pedagogical aspects from a practical perspective, which had a clear effect on their perception after the task was completed.

The results related to the grouped variables from the SELFIE portfolio showed a progress that has a highly positive interpretation in terms of the suitability of the inclusion of the different technological tools proposed. As they were progressively introduced throughout the different tasks, self-perception values increased. This can be considered, therefore, a successful design for prospective teachers' digital competence training, following Krumskiv's (2014) steps to efficiently implement digital education for student-teachers. This included practical experience to design and develop digital technology-based teaching activities, to reflect and evaluate their accomplishments, as well as to provide a learning environment for peer evaluation and collaboration (Krumskiv, 2014; Reisoğlu & Çebi, 2020).

On the other hand, the variables grouped from the EPOSTL portfolio also showed an improving trend from the pre-task to the task for the variables: "methodology", "resources" and "assessment"; although there was a slight decrease in all of them after the post-task. This is coherent with the nature of the tasks, as the intermediate task or "task" especially focused on the didactic aspect, so it is to be expected that there are no significant variations afterwards. For the variable "lesson planning" there was a considerable drop between the pre-task and the task, which may again be due to students' overestimation of their abilities prior to carrying out the development of a lesson plan (task). These values, however, return to the "excellent" range after the completion of the task cycle.

The semi-structured interviews conducted have complemented the interpretation of the detailed results and added more nuanced information to the quantitative study. There was unanimity in the relevance of the combination of competences, although students found the intermediate task especially significant, which was also the one in which they noticed the most progress. This task allowed collaborative work for the elaboration of a lesson plan. This appreciation coincides with the results of other similar experiences where the proposal of collaborative work to train digital competence has been considered fundamental, regardless of students' previous experience (Castaño-Muñoz et al., 2023; Reisoğlu & Çebi, 2020). The structure of the activity served as a role model and theoretical information was combined with the possibility of learning by doing. Although with a slightly lower rating, students also rated positively the possibility of peer evaluation, something that falls within the standards of effective digital competence training (Krumskiv, 2014). The students were able to self-evaluate their competence development through the tools used, thanks to which they were able to determine a positive change in their skills. It can be confirmed that the use of both adapted portfolios played a key role in reflective learning, confirming their usefulness in the university environment and not only in the professional one (Cabero-Almenara et al., 2020) and, at the same time, fostering quality standards in learning and teaching (Haggag, 2018; Salih & Oma, 2022; Zwozdiak-Myers, 2012).

Finally, the combination of digital and didactic task training was adequate from an overall perspective in the pre-task and the task, although it did not have the same statistical significance in the post-task. According to the results, it is clear that both competences were highly correlated for those specific stages, i.e., the positive values found indicated a direct relationship between the activities from both portfolios, for which joint training was proposed. Correlation analysis of the clustered variables reported the combined activities with statistical dependence. As in the general overview, the post-task was not found to be statistically significant. For the pre-task, "digital resources" was highly correlated with "methodology" and "lesson planning", and the "assessment" category in both portfolios had high dependence as well at this stage. For the task, the dependence of "digital resources" additionally affected the variable "resources" in the EPOSTL. Also in the task, "teaching & learning" was found to be dependent on "methodology" and "assessment".

"Digital resources" referred to the identification, evaluation and selection of teaching and learning materials in digital form, the adaptation of materials and the use of software applications to create new materials, so the high correlation found, especially in the task, is coherent with the nature of the task itself, although the effectiveness of watching educational videos and participating in the forums should also be acknowledged. The correlation between "assessment" categories from both portfolios in the pre-task also pointed to efficiency in the design. While in SELFIE the assessment was related to the ability to use digital tools for different types of assessment and the critical evaluation of digital activities, in EPOSTL it was concerned with assessment as a pedagogical tool. It is interesting to find, however, results that propose a suitable and holistic approach to assessment. According to the analysis, both variables are correlated and, therefore, it can be confirmed that the design of the pre-task was efficient for this element. Lastly, "teaching & learning" category from the SELFIE was related to the use of digital technologies to improve collaborative learning and the incorporation of digital devices and resources into the classroom practice. Once again, the correlations found with methodological and assessment elements from the EPSOTL are coherent with the very nature of the task and confirms that the activities proposed at this stage were the most efficient in terms of combining the training on digital and didactic competence.

It is also necessary to point out some limitations to the study. Firstly, since the questionnaires rely on the self-perception of the acquisition of digital and didactic competences, there may be a bias, as participants' perception of their own skills may not coincide fully with objective measurements. Thus, future research should incorporate some external observation to triangulate and validate personal views. Secondly, the sample size and the specificity of distance education may limit the generalisability of the results. And thirdly, the duration of the study can be another limitation, and it would be advisable to undertake a follow-up study to ascertain whether these findings are sustained over the long term.

We can conclude that this study has revealed a valuable insight into student-teachers' self-perception of their training in digital and didactic competences. The research method has allowed a more fine-grained understanding of the progress in these student-teachers' competences over the duration of the course. In terms of their digital competence, as expressed through the SELFIE, it seems that they may have overestimated their initial digital competence, and as they got involved in the task their perception of digital competence fluctuated, but there is a modest overall improvement at the end of the course. As for their didactic competence, measured through the EPOSTL, the most relevant finding is that their self-perceived improvement coincides with the task, which involves one of the quintessential duties of a teacher: planning a lesson. The interviews added a qualitative dimension to the study and showed the relevance of combining digital and di-

dactic competences and the importance of collaborative work in teacher training. The correlation study confirms this line of thought, highlighting the interdependence of digital and didactic competences in the pre-task and task stages. The implication of this finding is that the integrated training in digital and didactic competences is most effective in specific phases of the course, not in the whole of it. Thus, the introduction of well-designed tasks which combine digital and didactic competences can effectively enhance teacher training programmes. Furthermore, the emphasis on collaboration and a hands-on approach, together with reflective practices aligns with current pedagogical trends.

As practical recommendations for course designers and practitioners, we can highlight the following: 1) provide hands-on experiences for collaborative work in which student-teachers use digital tools for language instruction; 2) integrate technology (digital competence) with pedagogy (didactic competence; 3) foster reflective practice encouraging student teachers to critically analyse their teaching methods, and encourage the use of reflective tools such as portfolios; and finally 4) combine theoretical knowledge with the practical application of digital and didactic competence in real-world teaching contexts.

In sum, this study contributes to the well-established body of literature on digital competence in education and encourages scholars to incorporate didactic competence as well, in order to prepare future foreign language teachers with the multi-faceted skills which are required in the 21st century, in modern teaching environments.

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APPENDIX: ITEMS INCLUDED IN THE QUESTIONNAIRE (SELFIE-EPOSTL)

1. I regularly share and receive material through one or more networks or virtual communities for teachers (SELFIE-Professional Engagement)
2. I can select texts appropriate to the needs, interests and language level of the learners (EPOSTL- Methodology-Reading)
3. I can identify, evaluate and select teaching and learning materials while respecting copyright (SELFIE-Digital Resources)
4. I reflect on the pedagogical practice involving ICTs (SELFIE-Professional Engagement)
5. I know how to engage in peer assessment (EPOSTL-Assessment-Self and Peer Assessment)
6. I can identify strengths and areas for improvement in a learners' performance (EPOSTL-Assessment-Evaluation)
7. I can evaluate and select meaningful speaking and interactional activities to encourage learners to express their opinions, identity, culture, etc (EPOSTL-Methodology-Speaking/Spoken Interaction)
8. I can evaluate and select valid assessment procedures (tests, portfolios, self-assessment, etc.) appropriate to learning aims and objectives (EPOSTL-Assessment-Designing Assessment Tools)
9. I can structure lesson plans and/or plan for periods of teaching in a coherent and varied sequence of content (EPOSTL-Lesson Planning-Lesson Content)
10. I can incorporate digital devices and resources into my classroom practice, planning how they will be used (SELFIE-Teaching & Learning)
11. I can understand and integrate content of European documents (e.g. Common European Framework of Reference, European Language Portfolio) as appropriate for my teaching (EPOSTL-Context-Curriculum)
12. I can identify and evaluate a range of coursebooks/materials appropriate for the age, interests and the language level of the learners (EPOSTL-Resources)
13. I can design and select different activities in order to practise and develop different listening strategies (listening for gist, specific information, etc.) (EPOSTL-Methodology-Listening)
14. I can use digital tools for both the formative and summative assessment (SELFIE-Assessment)
15. I can plan specific learning objectives for individual lessons and/or for a period of teaching (EPOSTL-Lesson Planning-Identification of Learning Objectives)
16. I can evaluate and select a range of meaningful writing activities to help learners become aware of and use appropriate language for different text types (letters, stories, reports, etc.) (EPOSTL-Methodology-Writing/Written Interaction)
17. I can adapt material, with permission, and use software applications to create new material (SELFIE-Digital Resources)
18. I can use digital technologies to improve collaborative learning (SELFIE-Teaching & Learning)
19. I can generate, select, and analyse critically my own digital activity (SELFIE-Assessment)
20. I can evaluate and select a variety of texts, source materials and activities which awaken interest in developing knowledge and understanding of own's culture and the other language culture (cultural facts, events, attitudes and identity, etc. (EPOSTL-Methodology-Culture)