Research Papers in Language Teaching and Learning
Vol. 16, No. 1, March 2026, 60-78
ISSN: 1792-1244
Available online at http://rpltl.eap.gr

Creative and Critical Integration of Artificial Intelligence in EFL Learning

Sophia Kouzouli

The increasing integration of artificial intelligence (AI) in education is reshaping language teaching and creating new conditions for pedagogical innovation while also raising important ethical and educational questions. This paper presents a values-based lesson design for the creative and critical integration of artificial intelligence in English as a Foreign Language education, illustrated through the design and classroom implementation of the lesson "Odyssey 2.0: Values Recharged." AI is conceptualized as a learning resource that supports linguistic development, critical digital literacy, creativity, and ethical awareness through constructivist, experiential, inquiry-based, and reflective learning practices. The lesson design integrates multimodal activities, including digital storytelling, collaborative inquiry, role-play, debate, and creative production, within a learner-centred, values-based educational focus. The paper discusses implications for curriculum design, teacher practice, and formative assessment, while addressing ethical challenges related to bias, dependency, and data protection. Overall, it illustrates how purposeful AI integration, guided by clear pedagogical principles, can enrich EFL learning and support the development of critically aware and socially responsible learners.

Keywords: Artificial Intelligence Pedagogy; EFL Pedagogy; Critical Digital Literacy; Values-Based Learning.

---

1. Introduction

The integration of AI into educational practice constitutes one of the most transformative developments in contemporary pedagogy, as the OECD (2026) highlights the potential of generative AI to transform the quality and effectiveness of learning and education systems. In EFL contexts, Selwyn (2019) calls for critical reflection on how AI-supported technologies reshape educational roles and practices. More recent research shows that such technologies increasingly mediate lesson design, assessment practices, learner engagement, and teacher

roles, contributing to the emergence of dynamic, multimodal language learning environments (Frøsig & Romero, 2024). UNESCO (2021) likewise argues that these developments require sustained reflection and ethical awareness.

From a sociocultural perspective, learning is understood as a socially mediated process in which knowledge emerges through interaction, dialogue, and participation in meaningful activity (Vygotsky, 1978). Within this view, learning is not conceived as the mere acquisition of linguistic forms but as the development of communicative competence through engagement with cultural, social, and cognitive practices. Constructivist learning theory (Bruner, 1996) and experiential learning theory (Kolb, 1984) further emphasize the learner's active role in developing understanding through experience, inquiry, reflection, and collaboration.

Building on these theoretical foundations, the article presents and analyses a pedagogical lesson design that illustrates how artificial intelligence can be meaningfully integrated into EFL learning within a human-centred and values-oriented educational framework. In this context, the paper explores two key pedagogical issues: first, how artificial intelligence can be used in EFL teaching in ways that support linguistic development and creative language use; and, second, how AI-supported learning activities can foster critical digital literacy and reflective engagement with technology.

2. Theoretical Framework

This section draws on insights from contemporary theories of learning, language education, and technology integration, incorporating constructivist and sociocultural perspectives as well as research on AI in language education, critical digital literacy, and values-based pedagogy. From a constructivist and sociocultural perspective, learning is understood as an active, socially situated process in which knowledge is constructed through interaction, dialogue, and participation in meaningful activity (Dewey, 1938; Vygotsky, 1978). From this perspective, communicative competence emerges through learners' engagement in cognitive, social, and cultural practices rather than through the accumulation of isolated linguistic forms. Experiential learning theory emphasizes the process through which understanding is developed via experience, reflection, conceptualization, and experimentation (Kolb, 1984), while inquiry-based learning positions learners as active investigators who construct knowledge through problem-solving and exploration (Hmelo-Silver, 2004). Collaborative learning theories highlight the importance of interaction, shared responsibility, and social negotiation in knowledge construction, principles that underpin effective communicative language teaching (Johnson & Johnson, 2009).

Concerns that AI-supported assistance may lead to cognitive offloading have been raised in recent discussions; however, this position has been challenged in subsequent theoretical and critical work. Potkalitsky (2025) argues that assistance has always been integral to human learning and knowledge construction rather than an external threat to cognition. From this perspective, tools and technologies function as extensions of human thinking within socially and culturally mediated learning processes. This view supports an understanding of AI not as a replacement for human cognition, but as a pedagogical resource whose educational value depends on intentional and reflective instructional use.

The development of critical digital literacy is a central requirement of contemporary language education. Critical digital literacy refers to learners' ability to critically access, interpret, evaluate, and create digital information while recognising the social, ethical, and political implications of digital technologies and algorithmic systems (Gee, 2015; European Commission, 2026). The expansion of digital technologies has contributed to a broader understanding of literacy as a constellation of digital, media, and critical competences (Gee, 2015; Kern, 2015). In AI-enhanced learning environments, learners are required to analyse, evaluate, and create digital content while understanding the ethical, social, and cultural implications of algorithmic systems. Such engagement enables learners to recognize bias and limitations in AI-generated content and to participate actively in knowledge construction (European Commission, 2026).

Recent discussions on artificial intelligence in education and the development of critical digital literacy increasingly emphasise the importance of maintaining a pedagogically guided AI use. Within this perspective, human-centred artificial intelligence in education refers to the development and use of AI systems that support human learning, strengthen teacher professional judgement, and promote learner agency, well-being, and authentic participation in the learning process (Holmes et al., 2019; UNESCO, 2023). Human-centred pedagogy, as reported by Anastasiades et al. (2024), places learners' cognitive, emotional, social, and ethical development at the core of educational practice, prioritizing relationships, inclusivity, and personal growth over technological efficiency. Lazcano-Quintana (2024) argues that values-based education reinforces this orientation by embedding moral, cultural, and civic values into the learning process, fostering learners' understanding of responsibility, perseverance, cooperation, respect, and empathy alongside academic development.

The effective use of artificial intelligence in education requires its contextualised alignment with pedagogical aims and instructional design. In this context, the pedagogical integration of AI can be understood as the intentional alignment of AI tools with learning objectives, instructional strategies, and assessment practices in ways that support meaningful learning processes and sustained cognitive engagement (Mishra & Koehler, 2006; OECD, 2026). The pedagogical integration of AI is further informed by the Technological Pedagogical Content Knowledge (TPACK) model, which conceptualizes effective teaching as the intersection of content knowledge, pedagogical knowledge, and technological knowledge (Mishra & Koehler, 2006). Complementary models such as SAMR (Substitution, Augmentation, Modification, Redefinition) inform the progressive transformation of learning tasks through technology, guiding practice from substitution toward pedagogical redefinition (Puentedura, 2013). Research on pedagogically mediated AI use reinforces the importance of aligning technological innovation with ethical responsibility, transparency, and learner well-being, as emphasised by Holmes et al. (2019) and Luckin (2018).

3. The "Odyssey 2.0: Values Recharged" Pedagogical Lesson Design

The article presents a pedagogical lesson design that illustrates the meaningful use of AI within EFL teaching in a Greek secondary school context, addressing 12-13 years oldd learners whose language proficiency ranges from A2 to B1. The lesson was implemented as a model pedagogical practice intended to illustrate how AI-supported activities can be integrated into EFL teaching. It was developed as a 90-minute teaching sequence, offering a concrete pedagogical illustration of the lesson design in authentic classroom conditions. The lesson was

also designed within the framework of the B2 level of ICT teacher training in Greece, ensuring systematic alignment among pedagogical objectives, technological integration, and curriculum requirements.

The lesson design presupposes a set of linguistic, digital, and cultural prerequisites that support learners' engagement with the tasks. At the linguistic level, learners are expected to have a basic command of English, including familiarity with vocabulary related to the description of people and values, the ability to comprehend and produce simple narrative and descriptive texts, and the capacity to participate in basic dialogue and express opinions. In terms of digital competence, learners are expected to be familiar with the basic use of common digital tools such as Canva, Lumen5, Quizlet, ChatGPT, and Suno, as well as with searching for information online and interpreting digital texts and images. In addition, learners are expected to demonstrate cultural and cognitive readiness, including familiarity with the mythology and historical background of Odysseus, an emerging capacity for critical thinking and for comparing past and present perspectives, and an initial awareness of the role of values in contemporary society.

Language development is set in a meaningful cultural and ethical contextthat adheres to the principles of the CEFR (Council of Europe, 2020), enabling learners to explore identity, heroism, responsibility, and social values while simultaneously strengthening communicative competence, in line with constructivist and sociocultural views of learning. Drawing inspiration from classical narratives of heroism and ethical development, the lesson connects cultural heritage with contemporary social realities through activities such as the exploration of Odysseus' return, the comparison of mythological and modern forms of heroism, and the examination of everyday heroes in local and social contexts. It is pedagogically aligned with thematic units of the official EFL curriculum related to heroes, values, descriptions of people and events, and narrative texts, while also functioning interdisciplinarily through connections with the subjects of Ancient Greek (the Odyssey), Literature, History, Art, and ICT.

At the core of the lesson design lies the principle of pedagogical integration, understood as the alignment of technological tools with clearly articulated learning objectives, instructional methods, assessment practices, and educational values. AI is not introduced as a technological novelty but is integrated as a mediational pedagogical resource that supports cognitive engagement, scaffolds linguistic production, and enhances creativity, differentiation, and inclusion, consistent with the learner-centred AI use in education articulated by OECD (2026). Research on the impact of AI technologies on student learning and performance further underscores the need for balanced integration that prioritises pedagogical values and preserves critical thinking and learner agency, as demonstrated by Vieriu & Petrea (2025) and emphasised in systematic reviews of human-centred AI design by Schmager et al. (2025). AI-supported activities are embedded within coherent instructional sequences that encourage learners to analyse, compare, and generate content, to connect traditional and contemporary conceptions of heroism, and to revise linguistic output through collaborative reflection.

The lesson integrates a wide range of learning activities, including inquiry tasks, language practice, role-play, debate, multimodal text production, digital storytelling, and guided use of AI tools. These activities are intentionally combined to foster active participation, creative expression, and higher-order thinking, while supporting meaningful communication and learner agency throughout the instructional process as suggested by Godwin-Jones (2024).

It is structured around three interrelated dimensions that support holistic learner development. Language development is fostered through authentic communicative practices involving narrative construction, lexical expansion, dialogue, and multimodal expression, supported by AI-enabled resources that provide rich linguistic input and scaffolded practice across multiple semiotic modes (Warschauer & Kern, 2000). Critical and digital competence is cultivated as learners analyse, evaluate, and co-create content using AI tools, developing informed awareness of the affordances and limitations of intelligent systems and strengthening responsible digital agency (Knobel & Lankshear, 2006). For example, during the role-play and debate stations, students use AI-generated suggestions from ChatGPT but are required to evaluate their accuracy and relevance before incorporating them into their arguments, thereby practising critical judgement in AI-supported environments (European Commission, 2026; OECD, 2026). Values and social awareness are integrated through ethical reflection, social responsibility, intercultural understanding, and the exploration of core values such as perseverance, loyalty, empathy, courage, cooperation, and respect, supported by storytelling, role-play, collaborative projects, and reflective dialogue.

The learning environment fostered by the Odyssey 2.0 lesson design is intentionally interactive and learner-centred. Students assume active roles in the construction of knowledge through collaborative inquiry, creative production, debate, and reflection, while the teacher functions as a facilitator who designs learning experiences, guides reflection, and supports learners' cognitive, emotional, and social development (Schön, 1983; Nicol & Macfarlane-Dick, 2006).

4. Learning Objectives and Expected Competence Development

Learning objectives are formulated as expected outcomes that guide learners' engagement with language skills, technology, and values in a coherent and interrelated manner. Therefore, the expected learning outcomes encompass linguistic, digital, cognitive, social, and ethical competences, following an integrated developmental process that can support both academic achievement and the formation of socially responsible individuals.

With regard to linguistic development, learners are expected to enhance both receptive and productive skills in English through engagement with spoken and written texts, including textual and audiovisual material. They are encouraged to comprehend oral and written discourse and to produce simple spoken and written texts using appropriate vocabulary and basic structures. In particular, learners are facilitated to generate short narratives and descriptions related to heroes and values, to transfer simple information from source texts into creative products (such as posters or short digital texts), and to participate in dialogues and role-play activities, expressing ideas and arguments in English at an appropriate level. Through these communicative practices, learners are supported to strengthen fluency, accuracy, and confidence in using English for meaningful interaction, as research on communicative language teaching demonstrates (Warschauer & Kern, 2000).

In relation to technology use and digital literacy, learners are expected to develop the ability to use AI-supported tools for the creation of multimodal texts. They are also assisted to analyse and evaluate content generated with the support of AI and to develop an initial understanding of both the strengths and the limitations of AI in educational and communicative contexts. Furthermore, learners are empowered to collaborate in digital

environments, producing content through group work and shared digital practices, thereby strengthening both technical and collaborative skills.

Cognitive and learning-related outcomes focus on the development of critical thinking and reflective engagement with content. Learners are expected to analyse and compare past and present perspectives, particularly in relation to concepts of heroism and values, and to connect historical and mythological references with contemporary social contexts. Through inquiry-based and creative activities, learners are expected to cultivate problem-solving abilities, to reflect on their learning process, and to develop creativity through interdisciplinary tasks that combine language, culture, and technology.

Social, ethical, and values-based outcomes constitute a central dimension of the lesson. Learners are expected to recognize the importance of social responsibility and ethical awareness in the contemporary world, to reflect on values such as cooperation, responsibility, and respect, and to develop a more informed and balanced stance toward technology. In addition, learners are expected to enhance intercultural awareness and to appreciate the value of cultural heritage, while strengthening their ability to communicate effectively and collaborate with others. Through these experiences, the lesson aims to support learners not only as developing users of English but also as active, reflective, and socially aware participants in an interconnected world.

5. Implementation of the Odyssey 2.0 Lesson: Learning Activities and Tools

The lesson was implemented in a Greek public lower secondary school (Gymnasium). The class consisted of sixteen first-grade Gymnasium students (approximately 12–13 years old) with an overall English proficiency level corresponding to A2 of the Common European Framework of Reference for Languages. It was delivered in an authentic classroom environment as a model lesson by the Education Advisor for EFL teachers and was attended by English language teachers. It lasted for two teaching periods, ninety minutes. The student samples included in the appendices derive from this classroom implementation of the model lesson. It was implemented as a coherent learner-centred sequence that integrates inquiry, collaboration, creative production, and reflection within a technologically enriched environment. The activities were designed to encourage active participation, communication, and reflection, while ensuring that AI tools functioned as pedagogical support for classroom interaction and discussion.

The overall sequencing of activities supported gradual conceptual development, moving from the activation of prior knowledge to collaborative exploration, creative expression, and reflective evaluation. This structure ensured alignment between learning objectives, classroom practices, and assessment, and prepared learners to engage productively with both linguistic content and digital tools.

The lesson was organized into two teaching periods. The first teaching hour introduced learners to the central thematic focus of heroism and values through guided exploration and language-focused activities. Activity 1, “The Return of Odysseus”, activated prior knowledge through brief brainstorming on the concept of a hero, followed by a guided discussion after viewing a short film excerpt depicting Odysseus’ return and his recognition by his dog, Argos. This activity supported comprehension, thematic engagement, and initial identification of values reflected in the narrative.

In Activity 2, “The Journey Timeline”, students worked collaboratively in small groups to reconstruct key events of Odysseus’ journey. Learners worked with short narrative texts adapted from a child-friendly online encyclopedic resource (Kiddle), which were modified to match their language proficiency level using an AI-supported text rewriting tool (Text Rewriter, Magic School; see Appendix A). The adapted texts were presented through the digital tool Canva, and additionally shared as printed cards, and read collaboratively by the groups. Through comparing information across texts and sequencing episodes chronologically, they practiced descriptive language, developed narrative coherence, and engaged in oral interaction in a cooperative learning context.

In Activity 3, “Qualities of a Hero”, learners explored lexical items related to personal qualities and values through guided discussion and structured vocabulary practice, supported by digital flashcards created in Quizlet, which strengthened their understanding of key terms required for subsequent tasks. This activity prepared the ground for Activity 4, “Values Map”, during which learners participated in a digital brainstorming activity using AnswerGarden, contributing words that described the qualities of a hero. As learners submitted their responses, a shared visual representation of ideas was gradually formed, allowing the group to observe recurring values and patterns. Through this process, learners engaged in collaborative reflection on contemporary forms of heroism, enhanced participation and cooperation, and became familiar with the use of digital tools for collective idea generation.

In Activity 5, “Contemporary Heroes in the Neighbourhood”, learners engaged in guided brainstorming on examples of everyday heroism, focusing on figures such as volunteers, firefighters, and activists. This initial phase aimed to encourage reflection on contemporary forms of heroism and to connect abstract values with real-life social contexts. Learners then read a short informational text related to local or community-based heroes, which had been generated using an AI-supported tool (Informational Text, Magic School; see Appendix B). Working in groups, they identified and recorded examples of contemporary heroes, thereby reinforcing reading comprehension, collaborative interaction, and values-based reflection.

The second teaching hour was organized around a learning stations model, enabling participants to engage with the lesson theme through multiple forms of expression and interaction. The stations collectively addressed storytelling, role-play, debate, music creation, and visual representation, offering diverse pathways for exploring contemporary heroism and associated values. This structure supported differentiated participation, collaborative learning, and active language use, while integrating digital and AI-supported tools in meaningful communicative tasks.

The first station, the Storytelling Corner, focused on narrative creation and creative language use. Learners worked collaboratively to produce a short story about a contemporary hero using an AI-supported storytelling tool (Storybird). Examples of student outputs produced during the learning stations are presented in Appendix C. They were guided to consider basic narrative elements, such as character, setting, action, and values, and to incorporate previously introduced vocabulary related to personal qualities. Visual prompts supported idea development, while teacher mediation ensured attention to coherence, clarity, and appropriate language use. At the conclusion of the station work, learners engaged in structured self-reflection and self-assessment using a reflective rubric. The self-assessment focused on language use, vocabulary application, organisation of ideas, collaboration, and the

purposeful use of AI tools during the storytelling process. This final stage encouraged learners to reflect on their learning experience, recognize areas of progress, and identify aspects requiring further improvement, reinforcing metacognitive awareness and responsible engagement with digital technologies.

In the second learning station, Digital Creators, learners worked collaboratively to design and present a short video portraying a contemporary hero. Using the AI-supported video creation tool Lumen5, students transformed ideas into multimodal products by combining images, short texts, and basic narration. Lexical resources previously practiced through Quizlet were deliberately incorporated, ensuring that language use remained aligned with the lesson's linguistic objectives while supporting creative expression.

This station promoted language practice, creative writing, and digital literacy through purposeful technology use. Learners planned content, selected visual elements, and presented their ideas orally, strengthening narrative coherence and collaborative communication, while engaging in brief guided self-reflection on their language use, collaboration, and use of digital tools. Teacher guidance ensured that AI functioned as a supportive tool rather than a substitute for learner agency, maintaining pedagogical coherence and meaningful engagement with both language and values.

In the third learning station, learners engaged in short role-play activities centred on the theme of everyday heroism. Working collaboratively, students created and performed brief scenes in which a hero helps someone in danger, using three to four spoken sentences per role. A chatbot tool (ChatGPT) was used selectively to support idea generation and scenario development, while the primary emphasis remained on oral interaction, communicative clarity, and the meaningful use of English in context. Following the role-play, learners completed a structured self-assessment rubric focusing on language use, contribution to group work, use of the AI tool, and engagement during the activity. This reflective process supported learners' awareness of their communicative performance, collaboration, and learning strategies, reinforcing formative assessment and metacognitive reflection as integral components of the learning process.

In the fourth learning station, learners participated in a structured debate focusing on the question of heroism in contemporary society. Students were divided into two groups and discussed whether Odysseus or a modern local hero is more relevant today, drawing on values, social contribution, and their role in contemporary society. A chatbot tool (ChatGPT) was used selectively by each group to support the formulation of one argument, while the debate emphasized spoken interaction, justification of opinions, and respectful dialogue in English.

Following the debate, learners completed a self-assessment rubric addressing their participation in discussion, quality of argumentation, use of the AI tool, collaboration within the group, and respect for differing viewpoints. This reflective activity supported learners' awareness of their communicative strategies, critical thinking, and interactional skills, reinforcing formative assessment and reflective learning as integral elements of the instructional process. In the end, learners engaged in guided reflection through an exit ticket activity. They were invited to articulate one new insight gained about heroes or values, identify the learning station they found most engaging, and consider how one of the values discussed could be applied in their everyday lives. This reflective process supported personal

meaning-making, encouraged transfer of learning beyond the classroom, and fostered awareness of values such as perseverance, courage, and responsibility.

Assessment was implemented through a combination of systematic observation, analytic rubrics, and a short digital quiz. Rubrics were used both for self-assessment and teacher assessment, focusing on language use, collaboration, engagement with AI tools, and quality of produced work. A sample of the student self-assessment rubric and reflective feedback is provided in Appendix D. This multimodal approach emphasized formative feedback and learner reflection, ensuring alignment among learning objectives, learning activities, and evaluation practices.

6. Role of Artificial Intelligence in Language Learning

Artificial intelligence is used as a mediating pedagogical resource that supports language development, creative expression, and critical engagement. Its role is explicitly framed within a human-centred educational logic, in which pedagogical intentionality, ethical awareness, and learner agency guide all technological use, as emphasized in UNESCO's (2023) guidance on learner-centred approaches to generative AI in education.

At the linguistic level, AI-supported tools function as scaffolding mechanisms that assist learners in exploring vocabulary, sentence structure, and stylistic alternatives. They facilitate experimentation, revision, and reflection, allowing learners to test hypotheses about language use and refine their output through guided interaction. Teacher mediation remains central in this process, as educators support learners in evaluating AI-generated suggestions, making contextually appropriate choices, and developing pragmatic awareness. In this way, AI supports linguistic reflection rather than replacing cognitive effort or pedagogical judgment (Warschauer & Kern, 2000).

Beyond linguistic support, AI can contribute to multimodal meaning-making. Multimodal meaning-making, as Kress (2010) demonstrates in his theory of multimodal communication, refers to the construction and communication of meaning through the interaction of multiple semiotic modes, such as language, image, sound, and visual design. Through the integration of text, image, sound, and visual design, learners engage in creative composition that accommodates diverse learning styles and expressive preferences. For instance, in the "Digital Creators" station, students produce short videos portraying contemporary heroes using Lumen5, combining images, captions, and narration to communicate values such as courage or cooperation through multimodal storytelling (Kress, 2010; OECD, 2026). This multimodal engagement strengthens learner motivation and confidence, encouraging productive risk-taking and experimentation, as research on digital language learning environments has shown (Warschauer & Kern, 2000), while maintaining alignment with curricular goals.

A central pedagogical objective of the Odyssey 2.0 model is the cultivation of critical engagement with AI-generated content. Learners are encouraged to question accuracy, relevance, and potential bias, developing awareness of the limitations of algorithmic systems. Ethical considerations, such as authorship, are embedded within instructional practice, ensuring that technological engagement remains aligned with educational values and social responsibility.

Finally, AI contributes to a reconfiguration of classroom roles. Learners assume increased responsibility for decision-making, collaboration, and knowledge construction, while teachers function as learning designers and mentors who facilitate inquiry and reflection. Thus, AI amplifies human interaction, creativity, and pedagogical purpose.

7. Discussion: Pedagogical Value and Design Insights

The Odyssey 2.0: Values Recharged lesson design illustrates one possible approach to integrating AI in ways that may enrich EFL pedagogy within a human-centred and values-oriented pedagogical perspective. AI serves as a pedagogical resource that supports clearly articulated pedagogical intent, learning objectives, and ethical considerations, aligning technology use with broader educational purposes (Biesta, 2015). To support dissemination and pedagogical reuse, the learning design has also been represented as a Learning Activity Management System (LAMS) sequence and shared through the LAMS Community repository.

A key pedagogical feature of the lesson is the attempt to position the language classroom as an active space for inquiry, collaboration, and creative production. Through multimodal tasks, collaborative problem-solving, and reflective dialogue, learners engage with language in ways that encourage participation and meaning-making. Research suggests that such participatory learning environments have been shown to enhance learner motivation and cognitive engagement (Hattie, 2009; Voogt et al., 2013). In this lesson, the learning-stations model was used to organise activities such as multimodal storytelling, collaborative discussion, and digital content creation, allowing learners to approach language use through multiple modes and perspectives.

Within this design, AI tools can function as mediating resources that provide linguistic suggestions, creative prompts, and opportunities for multimodal expression. At the same time, teacher mediation remains central in supporting interpretation, revision, and critical evaluation of AI-generated content. Learners are encouraged to examine AI-generated outputs, assess their clarity and appropriateness, and reflect on their limitations, thereby maintaining an active and reflective stance toward technology use. They should consider their clarity and relevance, and reflect on their potential limitations. In this sense, the design aims to provide insights for the pedagogically guided use of AI in classroom practice and to position it as a resource that can stimulate questioning, evaluation, and discussion.

The lesson design also highlights potential shifts in classroom roles that are increasingly discussed in the literature on technology-supported learning. Teachers assume the role of learning designers and facilitators who orchestrate inquiry, support reflection, and maintain pedagogical coherence, while learners take greater responsibility for decision-making, collaboration, and knowledge construction. These dynamics resonate with discussions of classroom agency in technology-mediated learning environments, as described by Vedder-Weiss (2025). Such a redistribution of agency may contribute to the development of learning environments in which technology supports interaction, creativity, and ethical awareness, as emphasised by Holmes et al. (2019) in their discussion of pedagogically guided uses of AI in education.

Additionally, this example connects with emerging perspectives that encourage educational practices to engage constructively with the presence of AI in learning environments. As Fitzpatrick (2026) argues, educational engagement with AI should be grounded in

fundamental pedagogical questions concerning educational purpose and value. By embedding AI use within narratives of cultural heritage, social relevance, and ethical inquiry, the Odyssey 2.0 lesson design illustrates how language learning activities can integrate technological innovation while remaining attentive to human values and pedagogical responsibility.

Finally, it is important to acknowledge that the lesson represents a single classroom implementation and is presented primarily as a pedagogical design example. Further work could explore how similar approaches may be adapted across different educational contexts and examine more systematically how teachers and learners experience AI-supported language learning activities

8. Ethical Issues and Limitations

While the integration of AI in the Odyssey 2.0 lesson design offers significant pedagogical benefits, it also raises ethical and practical considerations that require careful attention. Recent international policy work has likewise emphasized the importance of responsible, learner-focused approaches to AI in education, highlighting issues of equity, governance, transparency, and learner protection as central to sustainable educational innovation (OECD, 2023). Facer & Selwyn (2021) advocate that a human-centred approach to AI-enhanced learning necessitates ongoing reflection on issues related to learner protection, equity, and responsible technology use.

One central concern involves data privacy and learner safety. AI-based platforms may collect and process user data, making informed tool selection and responsible classroom use essential. In the context of the present lesson, all digital tools were accessed through school-created accounts set up and managed in the school computer laboratory, ensuring controlled use and institutional oversight. This practice reflects institutional digital policy and aligns with a TPACK-informed approach, as well as with the principles of B2-level ICT teacher training, which emphasize pedagogically grounded, ethically responsible, and context-aware technology integration. Educators, therefore, need to remain attentive to issues of consent, transparency, and data governance, particularly in school contexts involving minors, as highlighted in discussions of digital education governance and data-driven policy instruments (Ben Williamson, 2016).

Algorithmic bias represents a further limitation. AI-generated content may reproduce cultural, social, or linguistic biases embedded in training data, potentially reinforcing narrow representations or dominant norms. The Odyssey 2.0 lesson design addresses this risk by embedding critical digital literacy into practice, encouraging learners to question AI outputs and recognize their limitations (Gee, 2015).

Finally, the potential for overreliance on AI tools must be acknowledged. Excessive dependence may reduce opportunities for sustained cognitive engagement or independent problem-solving, and systematic evidence indicates that over-reliance on AI dialogue systems can negatively affect students' decision-making, critical thinking, and analytical reasoning. Zhai et al. (2024), therefore, emphasize balanced and reflective integration, positioning AI as a scaffold that supports learning without displacing creativity, critical thinking, or human agency.

9. Implications for EFL Teaching and Conclusion

The lesson design presented in this paper illustrates how artificial intelligence can be pedagogically integrated into EFL teaching in ways that support linguistic development, critical digital literacy, and values-based reflection and align technological innovation with curricular coherence and broader educational aims. Its classroom implementation highlights several implications for contemporary language education.

First, EFL curriculum design can benefit from moving beyond isolated skill development toward integrated learning experiences that connect language use with creativity, critical thinking, and reflective engagement. When embedded in coherent pedagogical structures, AI tools can support differentiation, learner autonomy, and sustained engagement, while preserving the central role of the teacher as a pedagogical guide whose feedback, instructional decisions, and professional judgment remain decisive for learning effectiveness (Hattie, 2009).

Second, teacher education and professional development should prioritize reflective competence in AI integration. Educators require not only technical familiarity with emerging tools, but also the pedagogical and ethical understanding necessary to evaluate their educational relevance and limitations. As argued by Godínez Martínez (2018), strengthening teachers' capacity for reflective practice is essential to ensure that technology remains responsive to learning goals.

Third, assessment practices in AI-enhanced learning environments should foreground formative and reflective approaches that capture linguistic development, collaboration, and critical engagement. Such assessment models, as recommended by Black & Wiliam (2018; 1998), support learner agency and emphasize learning processes alongside outcomes, allowing evaluation to function not as a summative mechanism but as an integral component of learning.

Recent OECD (OECD, 2026) analysis emphasizes that the educational value of generative artificial intelligence depends primarily on teachers' pedagogical mediation and its alignment with clear learning goals. Within this perspective, the lesson design presented in this paper illustrates how artificial intelligence can support language learning by fostering creativity, critical digital literacy, reflective engagement and social awareness. Artificial intelligence should therefore be understood as a pedagogical resource that expands educational possibilities while preserving the essential human dimensions of teaching.

References

Anastasiades, P., Kotsidis, K., Stratikopoulos, K. & Pananakakis, N. (2024). Human-Centered Artificial Intelligence in Education. The critical role of the educational community and the necessity of building a holistic pedagogical framework for the use of HCAI in education sector. *Open Education-The Journal for Open and Distance Education and Educational Technology, 20(1),* 29–51. https://doi.org/10.12681/jode.36612

Black, P. J., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice, 25(1),* 1–25. https://doi.org/10.1080/0969594X.2018.1441807

Black, P.J., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice, 5*(1), 7–74. https://doi.org/10.1080/0969595980050102

Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Council of Europe (2020) *Common European Framework of Reference for Languages: Learning, teaching, assessment-Companion volume*. Strasbourg: Council of Europe.

Dewey, J. (1938). *Experience and education*. N.Y: Macmillan.

European Commission. (2022). *Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators*. Luxembourg: Publications Office of the European Union.

Facer, K., & Selwyn, N. (2021). Digital Technology and the Futures of Education: Towards 'Non-Stupid' Optimism. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000377071

Fitzpatrick, S. (2026). Phase II: What needs to come next. Substack. https://fitzyhistory.substack.com/p/phase-ii-what-needs-to-come-next

Frøsig, T. B., & Romero, M. (2024). *Teacher agency in the age of generative AI: Towards a framework of hybrid intelligence for learning design.* arXiv. https://doi.org/10.48550/arXiv.2407.06655

Gee, J. P. (2015). *Social linguistics and literacies: Ideology in discourses* (5th ed.). https://doi.org/10.4324/9781315722511

Godínez Martínez, J. M. (2018). How effective is collaborative reflective practice in enabling cognitive transformation in English language teachers? *Reflective Practice, 19*(4), 427–446. https://doi.org/10.1080/14623943.2018.1479688

Godwin-Jones, R. (2024). Distributed agency in language learning and teaching through generative AI. Language Learning & Technology, 28(2), 5–30. https://doi.org/10.64152/10125/73570

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses related to achievement.* London: Routledge.

Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review, 16*(3), 235–266. https://doi.org/10.1023/B:EDPR.0000034022.16470.f3,

Holmes, W., Bialik, M. and Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Boston, MA: Center for Curriculum Redesign.

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher, 38*(5), 365–379. https://doi.org/10.3102/0013189X09339057

Kern, R. (2015). Language, literacy, and technology. *Cambridge: Cambridge University Press.*

Knobel, M., & Lankshear, C. (2006). Digital Literacy and Digital Literacies: Policy, Pedagogy and Research Considerations for Education. *Nordic Journal of Digital Literacy, 1*(1), 12–24. https://doi.org/10.18261/ISSN1891-943X-2006-01-03

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.https://doi.org/10.4324/9780203970034

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London: Routledge.

Lazcano-Quintana, I. (2024). Values-based education and the promotion of social participation: Evidence from educational leisure contexts in Spain. *Education Sciences, 14(4),* 430. https://doi.org/10.3390/educsci14040430

Luckin, R. (2018). *Machine learning and human intelligence: The future of education for the 21st century*. London: UCL Institute of Education Press.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. http://dx.doi.org/10.1111/j.1467-9620.2006.00684.x

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education, 31*(2), 199–218. https://doi.org/10.1080/03075070600572090

OECD (2026), *OECD Digital Education Outlook 2026: Exploring Effective Uses of Generative AI in Education*, OECD Publishing, Paris, https://doi.org/10.1787/062a7394-en,

OECD. (2023). *Artificial intelligence in education: Challenges and opportunities*. Paris: OECD Publishing. https://doi.org/10.1787/9c1d8c9f-en

Potkalitsky, N. (2025). *In praise of assistance*. Substack. https://nickpotkalitsky.substack.com

Puentedura, R.R. (2013). SAMR: Moving from enhancement to transformation. Available at: http://www.hippasus.com/rrpweblog/

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books. https://doi.org/10.4324/9781315237473

Schmager, S., Pappas, I. O., & Vassilakopoulou, P. (2025). Understanding human-centred AI: A review of its defining elements and a research agenda. Behaviour & Information Technology, https://doi.org/10.1080/0144929X.2024.2448719

Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Cambridge: Polity Press.

UNESCO. (2023). *Guidance for generative AI in education and research*. Paris: UNESCO Publishing. https://doi.org/10.54675/EWZM9535

UNESCO. (2021). *AI and education: Guidance for policy-makers*. Paris: UNESCO Publishing. https://doi.org/10.54675/PCSP7350

Vedder-Weiss, D., Roth, G. and Mishaeli, Y. (2025) 'Supporting teacher reflection and motivation through psychological needs satisfaction in collaborative reflection-based PD', *Journal of Experimental Education, 93*(2), pp. 320–339. https://doi.org/10.1080/00220973.2024.2309920

Voogt, J., Erstad, O., Dede, C. & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning, 29*(5). https://doi.org/10.1111/jcal.12029

Vieriu, A. M., & Petrea, G. (2025). The Impact of Artificial Intelligence (AI) on Students' Academic Development. *Education Sciences, 15,* Article No. 343. https://doi.org/10.3390/educsci15030343

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

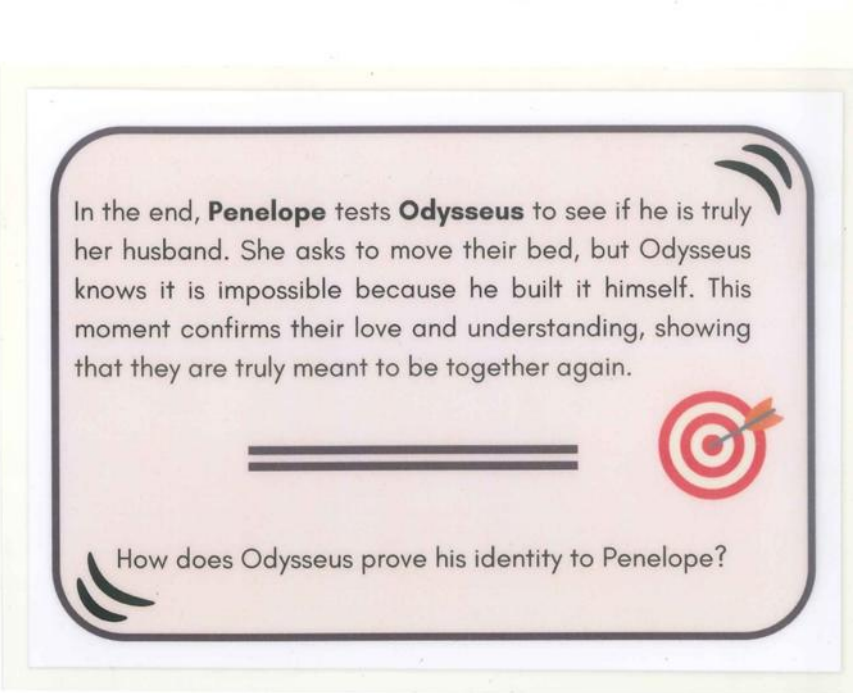
Warschauer, M., & Kern, R. (2000). *Network-based language teaching: Concepts and practice*. Cambridge: Cambridge University Press.

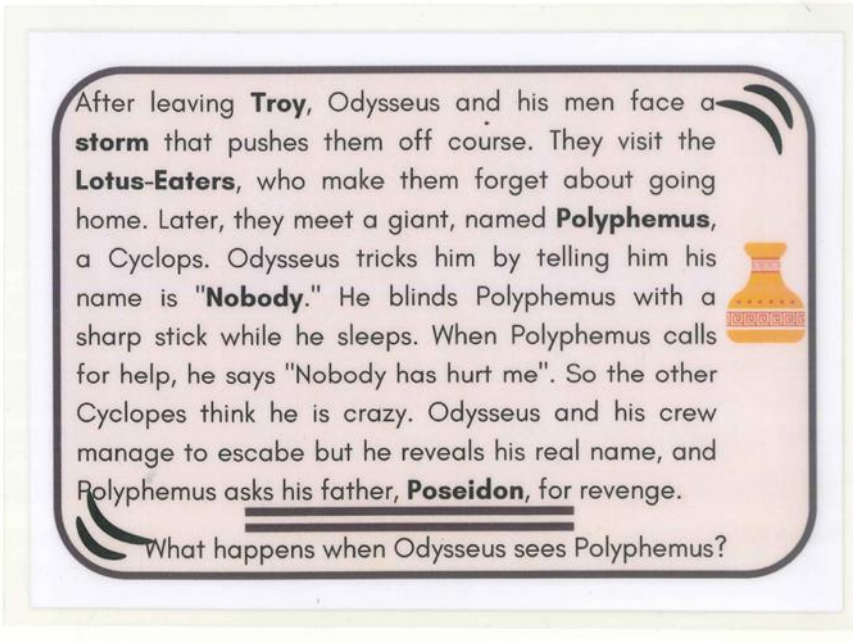
Williamson, B. (2016). Digital education governance: data visualization, predictive analytics, and "real-time" policy instruments. *Journal of Education Policy, 31*(2), 123–141. https://doi.org/10.1080/02680939.2015.1035758

Zhai, C. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: A systematic review. *Smart Learning Environments, 11*(1). https://doi.org/10.1186/s40561-024-00316-7

Appendix A: Adapted Narrative Texts on Odysseus' Journey (Journey Timeline Activity)

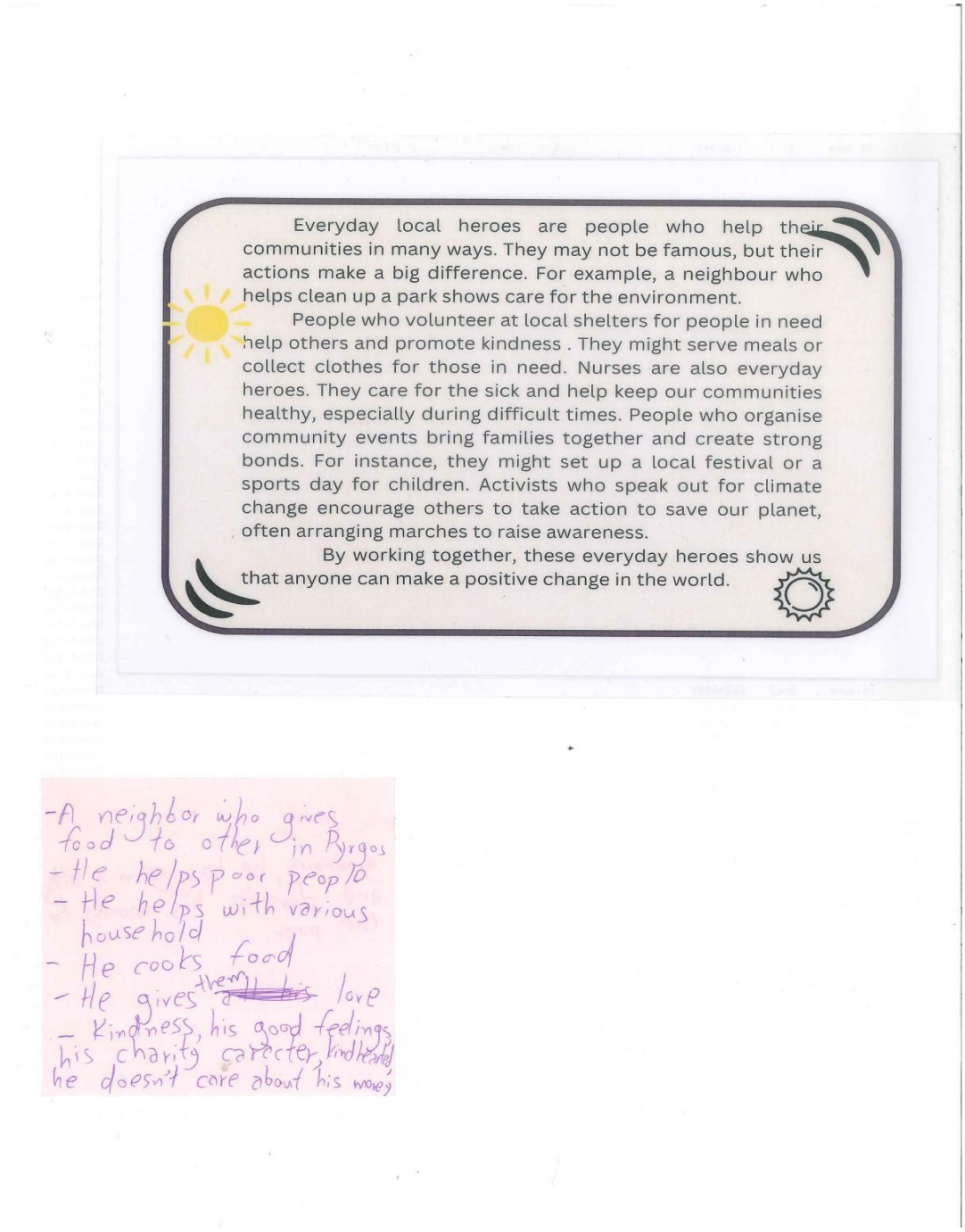
All student artifacts included in this appendix have been fully anonymised. Permission for their use was obtained in accordance with school and educational guidelines.





Appendix B: AI-Generated Informational Text and Sample Learner Notes on Community Heroes

All student artifacts presented in this appendix have been fully anonymised.



Everyday local heroes are people who help their communities in many ways. They may not be famous, but their actions make a big difference. For example, a neighbour who helps clean up a park shows care for the environment.

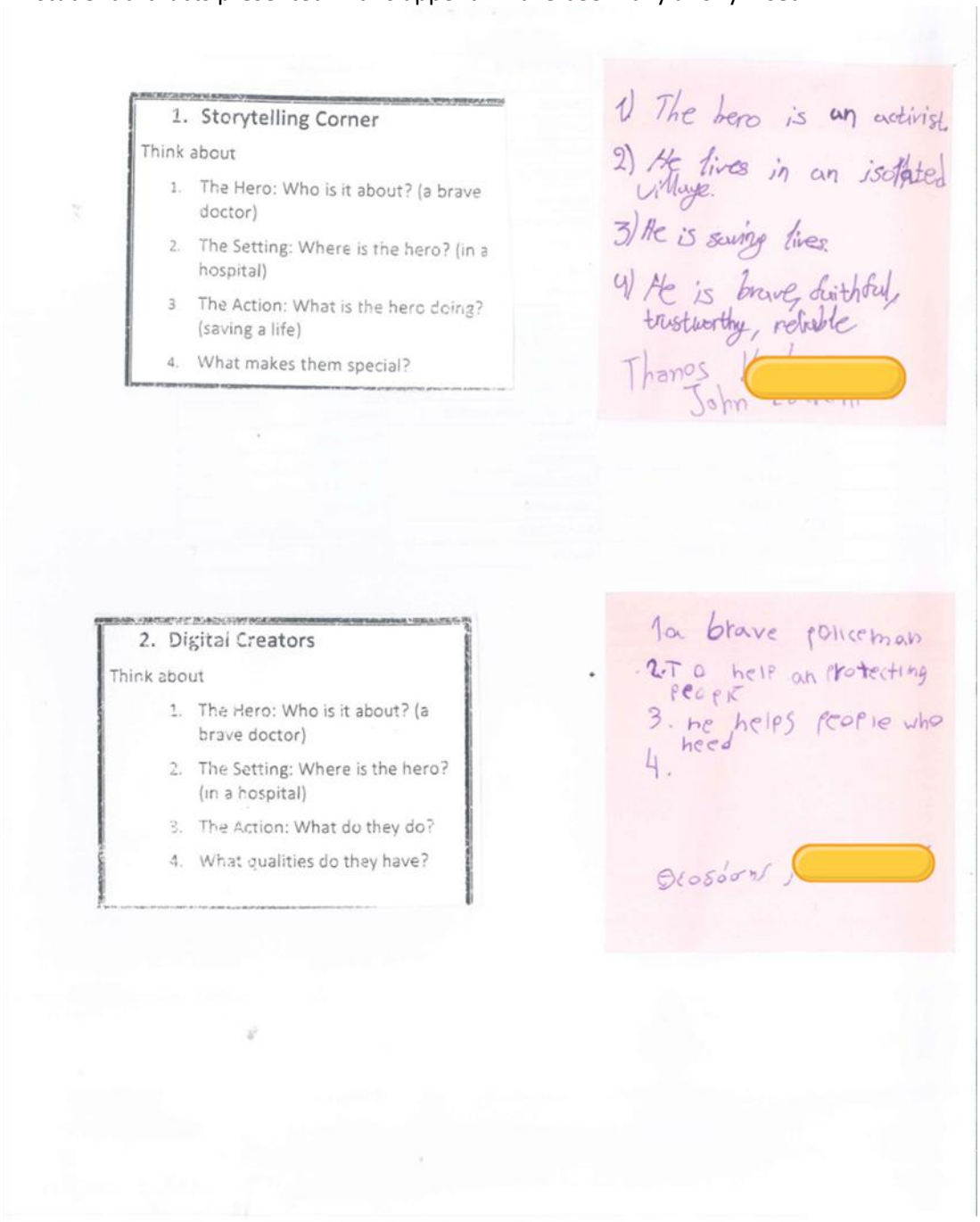
People who volunteer at local shelters for people in need help others and promote kindness . They might serve meals or collect clothes for those in need. Nurses are also everyday heroes. They care for the sick and help keep our communities healthy, especially during difficult times. People who organise community events bring families together and create strong bonds. For instance, they might set up a local festival or a sports day for children. Activists who speak out for climate change encourage others to take action to save our planet, often arranging marches to raise awareness.

By working together, these everyday heroes show us that anyone can make a positive change in the world.

-A neighbor who gives food to other in Pyrgos
-He helps poor people
- He helps with various household
- He cooks food
- He gives them ~~all his~~ love
- Kindness, his good feelings his charity carecter, kindhearted he doesn't care about his money

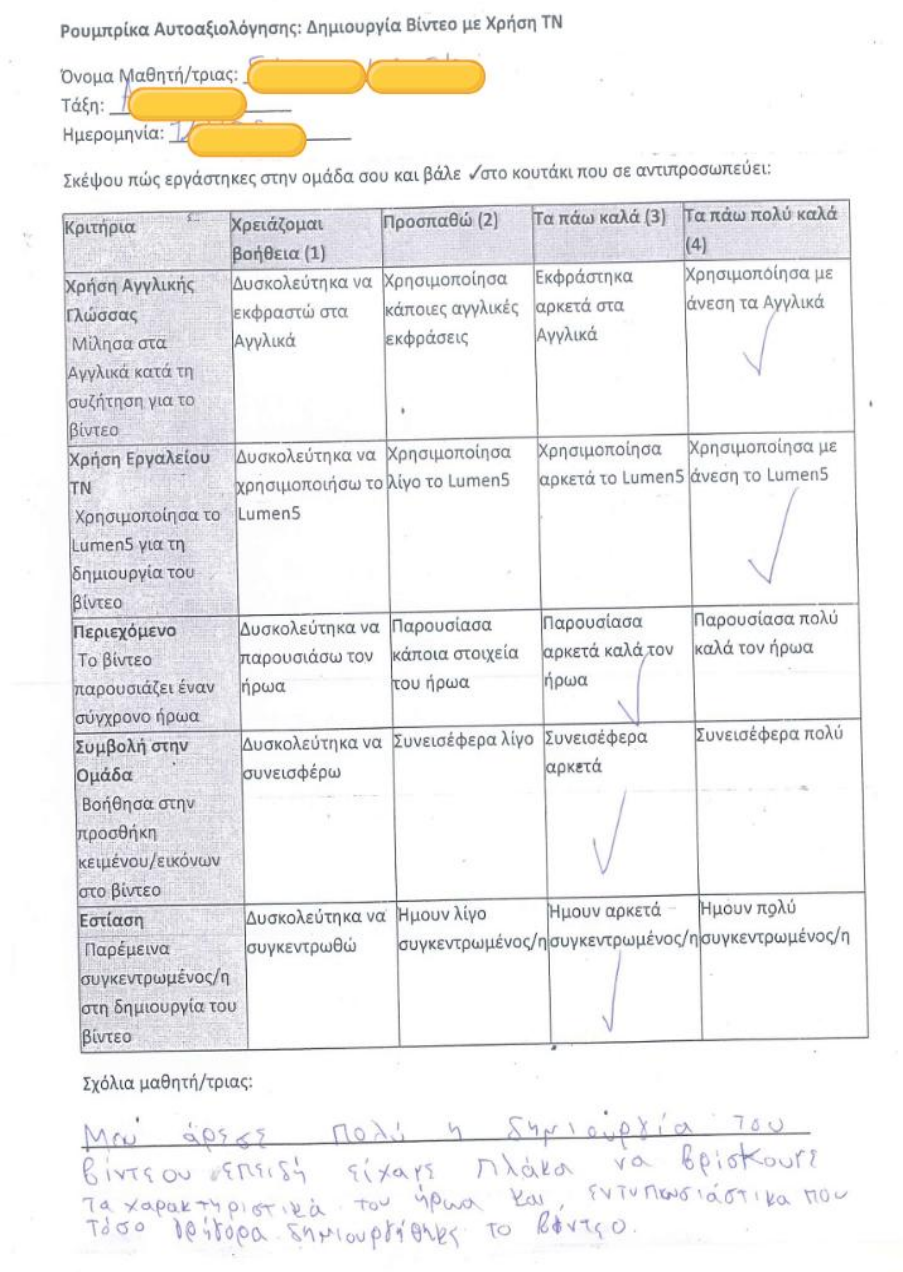
Appendix C: Examples of Anonymised Student Work from Learning Stations

All student artifacts presented in this appendix have been fully anonymised.



Appendix D: Examples of Anonymised Student Self-Assessment and Reflective Feedback

All student artifacts presented in this appendix have been fully anonymised.



Ρουμπρίκα Αυτοαξιολόγησης: Δημιουργία Βίντεο με Χρήση ΤΝ

Όνομα Μαθητή/τριας: [redacted]
Τάξη: [redacted]
Ημερομηνία: [redacted]

Σκέψου πώς εργάστηκες στην ομάδα σου και βάλε ✓στο κουτάκι που σε αντιπροσωπεύει:

Κριτήρια	Χρειάζομαι βοήθεια (1)	Προσπαθώ (2)	Τα πάω καλά (3)	Τα πάω πολύ καλά (4)
Χρήση Αγγλικής Γλώσσας Μίλησα στα Αγγλικά κατά τη συζήτηση για το βίντεο	Δυσκολεύτηκα να εκφραστώ στα Αγγλικά	Χρησιμοποίησα κάποιες αγγλικές εκφράσεις	Εκφράστηκα αρκετά στα Αγγλικά	Χρησιμοποίησα με άνεση τα Αγγλικά ✓
Χρήση Εργαλείου ΤΝ Χρησιμοποίησα το Lumen5 για τη δημιουργία του βίντεο	Δυσκολεύτηκα να χρησιμοποιήσω το Lumen5	Χρησιμοποίησα λίγο το Lumen5	Χρησιμοποίησα αρκετά το Lumen5	Χρησιμοποίησα με άνεση το Lumen5 ✓
Περιεχόμενο Το βίντεο παρουσιάζει έναν σύγχρονο ήρωα	Δυσκολεύτηκα να παρουσιάσω τον ήρωα	Παρουσίασα κάποια στοιχεία του ήρωα	Παρουσίασα αρκετά καλά τον ήρωα ✓	Παρουσίασα πολύ καλά τον ήρωα
Συμβολή στην Ομάδα Βοήθησα στην προσθήκη κειμένου/εικόνων στο βίντεο	Δυσκολεύτηκα να συνεισφέρω	Συνεισέφερα λίγο	Συνεισέφερα αρκετά ✓	Συνεισέφερα πολύ
Εστίαση Παρέμεινα συγκεντρωμένος/η στη δημιουργία του βίντεο	Δυσκολεύτηκα να συγκεντρωθώ	Ημουν λίγο συγκεντρωμένος/η	Ημουν αρκετά συγκεντρωμένος/η ✓	Ημουν πολύ συγκεντρωμένος/η

Σχόλια μαθητή/τριας:

Μου άρεσε πολύ η δημιουργία του βίντεο επειδή είχαμε πλάκα να βρίσκουμε τα χαρακτηριστικά του ήρωα και, εντυπωσιάστηκα που τόσο γρήγορα δημιουργήθηκε το βίντεο.

Sophia Kouzouli (sophiakouz@yahoo.com) is an Education Consultant for EFL teachers in the Directorates of Primary and Secondary Education of Ilia, Zakynthos, Kefalonia-Ithaca & Achaia. She holds a B.A. in English Language and Literature from the National and Kapodistrian University of Athens and a M.Ed. in Teaching English as a Foreign Language from the Hellenic Open University. She is a certified B-Level ICT trainer in Foreign Languages and has contributed to teacher professional development programmes organised by the Institute of Educational Policy. She has participated in the development of eTwinning MOOCs for teacher professional

learning. She is a member of the Greek National Support Organisation of the eTwinning action. Her professional and research interests include EFL pedagogy, artificial intelligence in education, educational technology, digital and critical literacy, values-based education, and teacher professional development.