

TRAPASSATO FUTURO: INNOVARE LA DIDATTICA DELLA STORIA PER LO SVILUPPO DELLE
SOFT SKILL

Arturo Puoti

Università di Macerata - Università di Messina
arpu00@gmail.com



Sara Gemma

Università di Macerata- Università degli Studi di Napoli "Parthenope"
s.gemma@unimc.it



Marta Raffone

Università degli studi della Campania Luigi Vanvitelli - Università Pegaso
marta.raffone@unicampania.it



Double Blind Peer Review

Citation

Puoti, A., Gemma, S., & Raffone, M. (2025). Past future: innovating history education for soft skill development. *Giornale italiano di educazione alla salute, sport e didattica inclusiva*, 9(2).

Doi:

<https://doi.org/10.32043/gsd.v9i2.1345>

Copyright notice:

© 2025 this is an open access, peer-reviewed article published by Open Journal System and distributed under the terms of the Creative Commons Attribution 4.0 International, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-510-8

ABSTRACT

The *Historia Vivens* project aims to innovate the teaching of history in secondary schools by adopting a narrative and participatory approach based on the use of historical biographies and active methodologies. The workshop, detailed through this paper, was conceptually oriented by social constructivism (Piaget) and gamification. The class was divided into heterogeneous groups based on students' skills in order to stimulate collaborative and inclusive learning. The analysis of the results indicated an improvement in the transversal skills of 80% of students.

Il progetto *Historia Vivens* si propone di innovare l'insegnamento della storia nelle scuole secondarie, adottando un approccio narrativo e partecipativo basato sull'uso di biografie storiche e metodologie attive. Il workshop è stato orientato al costruttivismo sociale (Piaget) e alla gamification. La classe è stata suddivisa in gruppi eterogenei in base alle competenze, per stimolare un apprendimento collaborativo e inclusivo. L'analisi ha mostrato un miglioramento delle competenze trasversali nell'80% degli studenti.

KEYWORDS

Innovation, History, Soft Skills, Assessment, Gamification
Innovazione, Storia, Soft Skills, Valutazione, Gamification

Received 29/04/2025

Accepted 11/06/2025

Published 20/06/2025

1. Mediating learning in times of transitions

We live in an era of continuous and complex transitions that affect all dimensions of individual and collective life: from ecological to digital dimensions, from social changes to transformations in forms of knowledge and communication. In this scenario, education is called upon to rethink its practices and its boundaries, not merely as a tool for transmission but as an instrument of conscious transformation. As Margiotta (2018) argues, the crisis of the “opportune time” compels education to redefine its formative devices, moving beyond frontal and linear models. The very concept of transition, moreover, deserves careful analysis: it is no longer about radical or revolutionary changes, but about gradual, reflective processes constructed through the transformation of existing connections. As Chabot (2021) suggests, “[...] transition is not a rupture, but a slow weaving”, made of subtle and often invisible bonds, which require care, doubt and attention not only directed to ends, but also to means. Transitions, as Jindal-Snape (2021) states, can be simultaneously stimulating and problematic, requiring psychological, educational and social support. In this context, educating means creating learning spaces that can enrich the present, rather than merely preparing for a hypothetical future. Within contemporary debate, particularly in facing the challenges posed by the performative and onlife society, the adequate development of transversal skills or soft skills becomes central. These are true educational 'antibodies' deemed essential in educational, working, and social contexts.

The focus on these competencies has intensified for over a decade, becoming one of the strategic nodes of European educational policies. The metaphor of "antibodies" accurately visualizes this: among all living species, human beings are born with the least genetic protection. Their adaptive and survival capacities derive not from genetic endowment, but from interactions with the environment and the neuronal plasticity that characterizes human beings (Gemma & Salemm, 2025). In response to genetic vulnerability, an implicit bio-educational drive (Frauenfelder et al., 2018) fosters the development of the brain's plasticity. This intertwining of randomness and the adaptive necessity gives rise to the notion of the “social brain” (Brothers, 1990): the network of neural circuits involved in relational dynamics, cognitive processes and emotional elaboration activated through interactions with others. Among the essential skills, the capacity for “learning to learn” stands out, a transversal competence, essential for adaptation and, therefore, social plasticity (Iavarone, 2025), especially in an age marked by rapid digital and technological

acceleration.

One of the major difficulties emerging from scientific debate concerning soft skills lies precisely in the variety of definitions used to teach and recognize them (Cinque, 2016). At an international level, the lack of a common and shared language has led to a proliferation of labels — social skills, generic competences, transversal skills, life skills — often used interchangeably, without real consensus on evaluation and certification procedures. This fragmentation is also reflected in official European and national documents. Although the 2018 EU Council Recommendation relaunched the importance of a holistic, key competence-centered approach, there is still a lack of fully shared and practical operational tools for assessment. European frameworks such as DigComp (2022), EntreComp (2020) and LifeComp (2018) have systematized competence vocabularies but have yet to translate into concrete educational tools, adaptable to diverse contexts. Anticipating the European and global refrain that a few years later would accompany the centrality of these skills in training paths, Nussbaum (2010) stated:

we increasingly treat education as though its primary goal were to teach students to be economically productive rather than to think critically and become knowledgeable and empathetic citizens. This focus on profitable skills has eroded our ability to criticize authority, reduced our sympathy with the marginalized and different, and damaged our competence to deal with complex global problems (M.C. Nussbaum, 2016)

The education of that future that we now think we inhabit, and that perhaps has already passed, must not be limited to training productive workers, but citizens capable of critical thinking, empathy and democratic responsibility. According to a recent analysis by the ManPowerGroup (2024), transversal skills continue to represent a key factor for various professional roles. Operational roles emphasize teamwork and goal orientation; managerial positions require integrating diverse contributions and offering practical solutions to everyday problems. Executive roles, however, demand leadership and strategic vision. Nevertheless, despite growing attention, structured and solid methodologies for assessing and cultivating these skills remain few and fragmented. This scenario underscores the urgent need to identify pedagogical approaches capable of meaningfully integrating transversal skills into school, university and professional curricula. Such integration must go beyond the mere declaration of objectives and lists of competencies and lead instead to the design of concrete, situated and assessable formative devices. In this sense, schools and universities are located at the heart of a structural tension

between permanence and change, between memory and innovation, between rootedness and openness, where, alongside each discipline's learning objectives, mechanisms for certifying the attainment of transversal skills associated with them must also be envisioned. It is in this framework, then, that pedagogy and the teaching of history assume a decisive role, offering tools to understand the past, read the present and imagine the future. The teaching of history cannot be reduced to a sequence of contents to be memorized but must be configured as a space for research and construction of meaning, capable of promoting critical awareness and orientation in complexity in subjects (Morin, 2011). As Borghi (2016) states, history, if taught in a passive and notional way, loses its formative power and is reduced to a sterile chronology. On the contrary, it can become a powerful tool to accompany young people through contemporary transitions. Therefore, the teaching of history, if appropriately rethought, can constitute a privileged context for cultivating authentic transversal skills, based on experience, critical reflection and active participation. As Boffo et al. (2022) underline, this type of soft skills should be recognized as abilities that help people to effectively face change, acting as points of reference for growth. The development and transmission of life skills, therefore, as an expression of resilient traits, is configured as a crucial stage in the transformation paths, a fundamental juncture of the baggage of skills indispensable for conscious participation in social life. From this perspective, life skills take on a key role in educational processes. They intervene in moments of transition as tools for restructuring the self: they allow one to separate from old habits and build new relationships and visions of the self (Schlossberg et al., 1995). Transversal skills in today's society contribute to (re)inventing everyday life (de Certeau, 2009). They can be used to recalibrate trajectories of knowledge that can no longer be pigeonholed into linear theory-practice paths, but which, from time to time, must readapt to a knowledge that is becoming increasingly situational and relational.

For these reasons, this reflection aims to outline a proposal for teaching history as an opportunity for observation and the integrated development of transversal knowledge and skills. The *Historia Vivens* laboratory constitutes a teaching experiment, intended for second-year students of secondary school, with the objective of fostering an innovative, narrative and participatory approach to history education. The research project adopts a biographically oriented methodology (Alheit, 2011), employing historical biographies as pedagogical tools to stimulate active historical awareness among young people, conceptualized as a dynamic

balance between constraints and freedom, authority and possibility. The analysis and study of historical-biographical texts, still a marginal practice within schools, emerges as valuable for constructing educational activities aimed at strengthening both technical-disciplinary competencies and soft skills such as critical thinking, self-awareness and the ability to conduct comparative analyses between past and present. This approach seeks to build a historical consciousness capable of deciphering the present and acting upon it (Famà & Sánchez-Ibáñez, 2023), in line with a “student-friendly school” (Margiotta, 2018) and with the idea of educational empowerment (Mannese, 2019), capable of responding to the challenges posed by global transformations and existential uncertainties (Nuzzaci, 2018). Ultimately, attributing historical relevance entails questioning who and what deserves to be remembered, for what reasons and, consequently, who and what should be the focus of study. This process requires a critical analysis of the social impact of events, the significance they hold for contemporaries, the longevity and persistence of their consequences over time, as well as what such events can reveal about the present (González-González et al., 2022).

History teaching, therefore, if understood as a space for implementing generative learning (Nikolaides, 2015), can contribute decisively towards offering tools for living and understanding, in a collective and plural way, the transitions of our times.

2. The *Historia Vivens* Laboratory: Methodologies and Theoretical Approaches

The heart of this research is the *Historia Vivens* laboratory, which constitutes an innovative educational intervention designed to enhance historical knowledge and awareness. The project arises from the need to make history a moment of human encounter, by identifying common threads with students’ personal life history through a form of teaching capable of freeing itself from traditional methodologies and established models. The general purpose of the laboratory invests in the knowledge of ancient history as a learning process aimed at improving human, social, and existential skills by enhancing the educational value of the discipline. The essential educational objective is to make the laboratory not only a space for “learning the discipline” but also a place to cultivate “mental scenarios” conducive to the development of life skills. Consistent with the research approach of the Humanities, this involves supporting young people in addressing aspects of reality

that implicate fundamental questions for human and social life such as freedom, tolerance, inclusion, and peace. The laboratory has established long-term goals, including fostering cooperation between teachers and students, promoting the acquisition of knowledge and innovative historical research methodologies, and positioning the laboratory itself as a space for educational, cultural, and personal growth.

The recipients of the *Historia Vivens* activity are fifteen-year-old secondary school students, primarily with a historical-humanistic orientation. The laboratory, which aims to create "key skills for full cultural citizenship", was designed in accordance with the Regulation concerning the fulfillment of educational obligations (Ministerial Decree no. 139/2007) and intentionally focuses on the skills of the historical-social cultural axis in order to help students perceive themselves as historical subjects in time and of their own time. The methodological approach of laboratory teaching promotes a deeper understanding of the investigated processes, seeking to bring about a change in the learning of history through the creation of a "learning mind" model and a significant intertwining of historical knowledge and emotional skills, fostering cognitive-human experiences in the young participants.

The theoretical framework of the laboratory draws on social constructivism (Piaget, 1968) and the principles of gamification (Detering et al., 2021), cited in Petruzzi V. (2015). According to social constructivism, learning is a social process in which interactions with others and the environment play a fundamental role. The *Historia Vivens* laboratory therefore seeks to create a collaborative learning environment in which students are encouraged to discuss, compare, negotiate meanings, and construct their own understanding of history together. The teacher adopts the role of facilitator, guiding the learning process by providing support and stimuli, while gamification introduces playful elements and dynamics into non-playful contexts, with the goal of increasing motivation, engagement, and learning. In the laboratory, gamification is used to make lessons more interactive and engaging, transforming learning into a playful and stimulating experience. This is achieved through role-playing games, simulations, challenges, competitions, and reward systems. In particular, the use of Kahoot! at the end of each lesson allows for a dynamic and fun way to verify the skills acquired by students, providing immediate feedback and reinforcing learning outcomes.

The integration of social constructivism with gamification creates an optimal learning environment in which students are actively involved in the construction of their own knowledge, motivated to participate and collaborate, and supported by continuous and stimulating feedback.

The methodological approach is that of mixed methods (Trinchero & Robasto, 2019), integrating both quantitative and qualitative methodologies. With regard to the quantitative dimension, it involves the collection and analysis of data to identify statistically significant patterns, trends, and relationships. In the context of the laboratory, the quantitative methodology is primarily used to evaluate the effectiveness of the teaching intervention. This is achieved through the administration of learning tests (T0 and T1) and the comparative analysis of the results obtained by the students participating in the laboratory (experimental group) and those in a control group. Quantitative data provide an objective measure of the improvement in the students' historical skills, enabling the quantification of the intervention's impact. The qualitative dimension of research focuses on the collection and analysis of non-numerical data, such as interviews, observations, and document analysis. This approach aims to understand the meanings, experiences, and perspectives of participants. Within the laboratory, qualitative methodology is employed to explore in depth the perceptions, motivations, and experiences of students. This is carried out through focus groups, which provide spaces for shared discussion and reflection, and individual interviews, which allow for the collection of more detailed accounts. Qualitative data enrich the analysis, offering a more nuanced and comprehensive picture of the educational intervention's impact, beyond the simple measurement of results.

2.2 Experimentation: structure, tools and evaluation

The laboratory was structured in an initial pilot project of four sessions, each lasting one hour, covering a period of two weeks. This timeframe allowed for gradual and in-depth learning, giving students the opportunity to process the information and consolidate the skills acquired.

Each meeting was organized according to a precise sequence of activities, aimed at promoting active and participatory learning:

1. **Welcome (5 minutes):** The session begins with a welcome moment, during which the objectives and contents of the lesson are presented, creating a positive and learning-friendly climate.
2. **Lesson Phase (45 minutes):** The randomized selection of 6–8 words provides the foundational elements for the creation of a 5–7 minute micro-lesson on a topic related to Roman History, in this case specifically focusing on the empire of Marcus Aurelius.
3. **Verification of outcomes (5 minutes):** A Kahoot! test is administered to verify the knowledge acquired during the lesson. The results are collected at this stage to create a provisional ranking.
4. **Closing of the session (5 minutes):** The meeting concludes with a summary of the topics covered and the presentation of the activities planned for the next session, thereby creating continuity across lessons.

A distinctive feature of the lab is the use of interactive lessons, each beginning with students selecting a word from a set of terms previously prepared by the instructor. The chosen word serves as the starting point for exploring the historical theme, stimulating students' curiosity and interest.

At the end of each lesson, Kahoot! was used to test the skills acquired by students in an interactive and engaging manner. Kahoot! is a game-based learning platform that enables the creation of quizzes and multiple-choice surveys. Its use allows for real-time assessment of students' understanding of the topics covered, providing immediate feedback. The competitive and enjoyable environment fostered by Kahoot! increases student motivation and makes the assessment process a positive and stimulating experience (WiKIT, 2024; Stanford University, 2023).

The experimental design consisted of:

- **Experimental Group:** The experimental group participated in the four *Historia Vivens* laboratory sessions and in the focus groups.
- **Control Group:** Students who continued following the standard school curriculum and did not participate in the laboratory.

Two learning tests were administered to both groups:

- **T0:** An initial test, administered before the start of the laboratory, to assess the students' pre-existing knowledge.
- **T1:** A final test, administered at the conclusion of the laboratory, identical to the T0 test, allowing for the comparison of results and the measurement of any improvements in skills.

The analysis of the quantitative data obtained from the T0 and T1 tests (currently being processed) will allow us to verify whether there is a statistically significant improvement in the historical skills of the students in the experimental group compared to the control group. The qualitative data collected through focus groups and interviews will provide a richer and more detailed picture of the impact of the laboratory on students' learning and motivation.

In summary, the *Historia Vivens* laboratory represents an innovative educational proposal for the teaching of history, characterized by a rigorous methodological approach and a solid theoretical foundation. Its effectiveness will be evaluated through an experimental research design, which will enable the provision of empirical evidence regarding the impact of the didactic intervention on the development of students' historical knowledge and awareness.

3. Measuring competence. A practical approach.

The teaching experiment was carried out as part of the *Dottorato di Interesse Nazionale in Teaching & Learning Sciences: Inclusion, Technologies, Educational Research and Evaluation*, administratively based at the University of Macerata and conducted at the “Vincenzo Cuoco - Tommaso Campanella” Institute in Naples. The experiment involved a second-year class composed of 20 students and was conducted over the period from 02/04 to 10/04/2025. The training intervention aimed to enhance both disciplinary knowledge (hard skills) and transversal skills such as teamwork, time management, critical thinking, and cultural skills.

The students were divided into five groups of four members each. The support of the supervising teacher was essential to ensure group composition aligned with the principles and characteristics identified by Lu and Lin (2025).

The study by Lu, Hsiu-Lien & Lin, Hsiao-Fang (2025) proposes a model for team formation and management useful for structuring educational activities oriented towards the integrated development of skills, values, and attitudes, in accordance with the standards set by the OECD, the WEF, and the EU (European Commission, 2018; OECD, 2019; WEF, 2020). The methodology proposed by Lu & Lin emphasizes the importance of forming heterogeneous groups, capable of tackling complex tasks by balancing:

- technical and practical skills
- creative problem-solving abilities

- collaborative values and attitudes

The balanced distribution of skills was structured to ensure that each group contained a variety of roles and profiles, based on:

1. **Technical Competence** — subject-specific knowledge
2. **Social Competence** — collaboration and communication skills
3. **Critical Thinking** — analytical and problem-solving skills
4. **Organizational Competence** — time and resource management abilities

Group	Student	Prevailing Competence	Reason for the Assignment
1	Student A	Technical	In-depth knowledge of Roman history.
	Student B	Social	Strong mediation and teamwork skills.
	Student C	Critical Thinking	Aptitude for asking questions and solving problems.
	Student D	Organizational	Excellent management of time and resources.
2	Student E	Technical	Accurate approach to the study of historical data.
	Student F	Social	Facilitator of group dynamics.
	Student G	Critical Thinking	Excellent in analyzing sources.
	Student H	Organizational	Planning and coordination of tasks.
3	Student I	Technical	Solid expertise in historical history.
	Student J	Social	Ability to involve classmates.
	Student K	Critical Thinking	Propensity to evaluate different theses.
	Student L	Organizational	Precision in the distribution of tasks.
4	Student M	Technical	Specific knowledge of key events.
	Student N	Social	Listening skills and inclusion.
	Student O	Critical Thinking	Analytical and reflective spirit.
	Student P	Organizational	Leadership in meeting deadlines.
5	Student Q	Technical	In-depth knowledge of primary sources.
	Student R	Social	Strong empathy and conflict-management.
	Student S	Critical Thinking	Excellent in formulating hypotheses.
	Student T	Organizational	Method in coordinating work.

Table 1. Ideal group composition

The table above proposes an ideal model, in which 20 students are perfectly balanced in the groups, in relation to their skills.

Below is the table representing the class group:

Group	Student's Name	Prevailing Skill	Reason for assign
1	Student A	Technical	In-depth knowledge of Roman history.
	Student B	Social	Strong mediation and teamwork skills.
	Student O	Critical Thinking	Analytical and reflective spirit.
	Student P	Organizational	Leadership in meeting deadline.
2	Student E	Technical	Accurate approach to the study of historical data.
	Student R	Social	Strong empathy and conflict management.
	Student S	Critical Thinking	Excellent in formulating hypotheses.
	Student L	Organizational	Precision in the distribution of tasks.
3	Student M	Technical	Specific knowledge of key events.
	Student N	Social	Listening skills and inclusion.
	Student G	Critical Thinking	Excellent in analyzing sources.
	Student T	Organizational	Systematic approach to work coordination
4	Student Q	Technical	In-depth knowledge of primary sources.
	Student F	Social	Facilitator of group dynamics.
	Student K	Critical Thinking	Propensity to evaluate different theses.
	Student H	Organizational	Planning and coordination of tasks.
5	Student I	Technical	Solid expertise in historical history
	Student J	Social	Ability to involve classmates,
	Student C	Critical Thinking	Aptitude for asking questions and solving problems.
	Student D	Organizational	Excellent management of time and resources.

Table 2. Real group composition

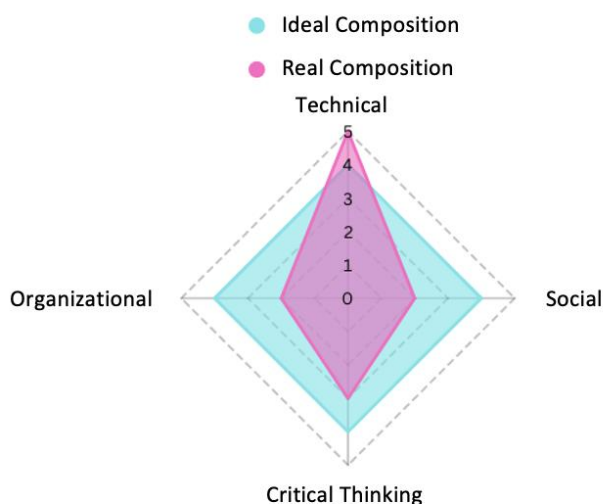


Figure 1. Group composition 5 = very present competence 1= lacking

For the operational phase, the digital tool **Kahoot!** was employed, a platform widely recognized and utilized in educational and training contexts for the design of quizzes, tests, and questionnaires. The tool is interactive and was developed with the aim of stimulating active participation and critical reflection through playful activities, in line with the most prevalent digital entertainment practices among the target group (WiKIT, 2024; Stanford University, 2023). Each group was tasked with obtaining the highest possible number of points by correctly answering a series of questions in a maximum time of **five** minutes. The scoring system followed the following rules:

Response conditions	Awarding of points
Incorrect or no answer provided	0 points
Correct answer	Formula: $P = \frac{K}{t} \cdot T$ Where: P= awarded points K= Maximum score constant T= Time taken to answer (in seconds)

Figure 2. Table of rules. The value of the points assigned for each correct answer is calculated according to a relationship of inverse proportionality with respect to the response time. As the time taken increases, the score progressively decreases, until it disappears near the maximum time

The activity was divided into four sessions. Victory was awarded to the group that, at the end of the four sessions, achieved the highest score. This approach made it possible to integrate elements of competition and cooperation, while stimulating decision-making speed, precision, and critical reflection.

3.2 Comparative analysis and operational selection of transversal skills

Historia Vivens is a teaching activity based on cooperative study and structured as a learning laboratory for skill development. In addition to fostering technical-disciplinary skills in the historical field (hard skills), the activity also aims to stimulate a series of transversal soft skills, considered central both to educational success and to students' personal growth from a European perspective (European Commission, 2018).

The selection of operational definitions of skills was based on a comparative analysis of sources produced by three key international reference organizations: the European Union (EU), the Organization for Economic Co-operation and Development (OECD), and the World Economic Forum (WEF). The choice of these bodies was motivated by criteria of institutional authority, scientific relevance, and educational applicability:

- The EU provides the principal regulatory framework for European education policies and promotes an integrated vision of key competences for lifelong learning.
- The OECD, through initiatives such as the *Learning Compass 2030*, offers evaluation models based on empirical evidence and aimed at improving learning in comparable contexts.
- Finally, the WEF adopts an approach oriented towards the world of work and emerging skills, contributing to the identification of the profiles needed in future employment contexts.

The complementarity of these three approaches ensures a systemic and updated vision of the concept of competence, capable of integrating educational, occupational, and social purposes in accordance with European recommendations and the major international studies on the subject (European Commission, 2018; OECD, 2019; WEF, 2020).

As will be discussed in greater detail later, the indications provided by the identified organizations often lack appreciable operational applicability.

Organization	Goal	Selection criteria	Contribution Type	Operational definition
European Union (EU)	Defining key competences for lifelong learning in member countries	Regulatory authority, coherence with European education systems	Official regulatory framework (e.g. EU Recommendations 2018)	Key competences are a combination of knowledge, skills and attitudes appropriate to the context. They are particularly important for personal fulfillment, social inclusion, active citizenship and employability.
Organization for Economic Co-operation and Development (OECD)	Developing international scale skills measurement and assessment tools	Scientific relevance, evidence-based approach	Evaluation model (Learning Compass 2030, PISA framework)	The Learning Compass 2030 defines competences as a combination of knowledge, skills, attitudes and values that students need to develop to realise their potential and contribute to the well-being of their communities and the planet.
World Economic Forum (WEF)	Identify emerging skills relevant to the world of work	Orientation to the future of work, training adaptability	Prospective and analytical approach (Future of Jobs Reports)	Emerging skills include critical and analytical thinking, complex problem solving, self-management, resilience, stress tolerance, and flexibility.

Table 3. Analysis of international reference sources

Skill	Source	Misurability	Contextual Applicability	Relevance and Completeness	Final Choice
Time Management	EU	Medium	High	Medium	No
Time Management	OECD	Medium	High	High	No
Time Management	WEF	High	High	High	No
Critical Thinking	EU	Medium	High	High	Yes
Critical Thinking	OECD	Medium	High	High	No
Critical Thinking	WEF	High	High	High	No
Team Working	EU	Medium	Medium	Medium	Yes
Team Working	OECD	High	High	High	No
Team Working	WEF	Medium	High	High	No
Cultural Awareness	EU	High	High	High	Yes
Cultural Awareness	OECD	Medium	Medium	Medium	No

Cultural Awareness	WEF	Low	Medium	Medium	No
---------------------------	-----	-----	--------	--------	----

Table 4. Selection grid for skills definitions. **Legend:** **Measurability** = observability and objective evaluability; **Contextual applicability** = relevance for the Historia Vivens project; **Relevance/completeness** = coherence and educational coverage of the definition

Skill	Definition	Organization	Source/Deduction
Time Management	Manage one's own time and workload efficiently, prioritize tasks, meet deadlines and adjust to changing conditions	OECD/WEF/EU	OECD WEF EU
Critical Thinking	Ability to form own opinion from a variety of sources, to think through complex issues in a complex way	EU	EU
Team Working	The ability to communicate constructively in different environments, show tolerance, express and understand different viewpoints, and to collaborate in teams	EU	EU
Cultural awareness	Ability to understand and respect how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms	EU	EU

Table 4. Selected operational definitions

The table below shows how the definition of time management was derived, given that it is not explicitly found in the official documents of the selected organizations,

despite these organizations often identifying this skill as a priority for achieving personal and professional goals.

Skill	Document	Original definition	Deduced definition
Time Management	OECD - Future of Education and Skills 2030 (2019)	"Self-regulation, including self-organization, goal setting, time management and learning strategies."	Manage one's own time and workload efficiently, prioritize tasks, meet deadlines and adjust to changing conditions.
	EU - Key Competences Framework (2018)	"... learn to learn competence requires the ability to effectively manage time and information, both individually and in groups."	
	WEF - Future of Jobs Report (2020)	"Time management, stress tolerance and flexibility"	

Table 5. Operational definition selected in the absence of the official definition

In line with the EU Council Recommendations on key competences for lifelong learning (EU, 2018), the selected skills contribute to the development in students of the historical awareness necessary to foster and consolidate civic consciousness as active citizens of the European Union.

In accordance with the analysis of the selected skills, the composition of the groups and the distribution of tasks were calibrated to ensure a balance among different personal competencies, enabling each student to develop and enhance not only historical knowledge but also collaborative and reflective abilities, essential for the formation of an aware and critical citizenry.

3.3 Measurement of Soft skills

The skills-oriented teaching activity aims to monitor and evaluate the transversal skills identified as increasingly essential for navigating modernity (European Commission, 2018; OECD, 2019; World Economic Forum, 2020). The European Union calls upon education and training stakeholders to create assessment models for skills characterized by volatility, uncertainty, complexity, and ambiguity (European Commission, 2018). In response to this request, a model is presented that breaks down skills into smaller dimensions, their constituent elements, with the aim of making these skills more objectively observable and

measurable, both for the trainer assessing the student's progress and for the student engaging in effective self-assessment.

As part of the experimentation conducted, each skill was semantically analyzed through a process of tokenization and lemmatization. Following this process, lemmas (performance indicators) constituting the evaluation grid were identified. Each indicator was assigned a weight, calculated based on the incidence of the corresponding term within the definition. The percentage weight of each lemma depends on two factors:

- **Relative frequency**, indicating how often a lemma appears in the reference corpus (official EU, OECD, WEF texts that describe the skill).
- **Vector centrality**, measuring how close a lemma is to the semantic center of gravity of the lemmas defining that skill.

The processing was carried out using FastText-based linguistic models, representing the lemmas within a multidimensional semantic space. Each lemma was associated with a raw score (P_i), calculated on the basis of two main components:

- the relative frequency in the reference corpus identified in the official documents of EU, WEF, and OECD
- the semantic centrality, estimated through distributional vector models (FastText).

At this point, it is necessary to clarify several procedural steps that involve the concepts of percentage semantic weight and weighted weight. The combination of these variables, along with the score assigned to the indicator (on a 0-10 scale), allows the trainer to optimize the evaluation of students' actions and behaviours. Accordingly, the percentage semantic weight, consistent and comparable across lemmas, is defined as the result obtained by subjecting the raw scores to linear normalization according to the formula:

$$\text{Lemma } i \text{ percentage weight} = \frac{P_i}{\sum_{j=1}^n P_j} \times 100$$

where:

- P_i is the raw score associated with lemma i
- $\sum_{j=1}^n P_j$ represents the sum of the raw scores of all the η lemmas associated with the skill

The weighted score is obtained by multiplying the score assigned to the indicator (scale from 1 to 10) by the semantic weight of the associated lemma.

A	B	C	D	E
Skill	Performance indicator	Percentage score	Score awarded	Weighted score
Time management	prioritize	11,76	7	0,82299
	meet	11,59	7	0,81102
	Manage	10,91	6	0,65484
	adjust	10,47	6	0,62826
	changing	8,58	5	0,42895
	workload	8,54	5	0,42685
	tasks	8,34	9	0,75096
	conditions	8,28	8	0,66256
	time	7,96	5	0,3982
	deadlines	7,90	5	0,3949
	efficiently	5,67	5	0,2834
Final Score				5,18643

Table 6. Example of filling out the competence assessment grid Time Management

A	B	C	D	E
Skill	Performance indicator	Percentage score	Awred score	Weighted score
Critical thinking	opinion	16,14	7	1,12959
	variety	13,60	7	0,95172
	Ability	12,98	4	0,519
	way	12,33	6	0,73956
	issues	11,92	7	0,83412
	form	10,40	8	0,83232
	sources	9,54	7	0,66794
	think	9,43	5	0,4715
	complex	3,67	9	0,33066
Final Score				6,14575

Table7. Example of filling out the competence assessment grid Critical Thinking

A	B	C	D	E
Skill	Performance Indicator	Percentage score	Awarded score	Weighted Score
Team working	understand	11,16	7	0,7812
	communicate	11,13	7	0,7791
	environments	11,07	6	0,6642
	viewpoints	10,29	5	0,5145
	teams	9,78	6	0,5868
	tolerance	9,71	8	0,7768
	collaborate	9,45	8	0,756
	ability	8,94	6	0,5364
	express	8,20	5	0,41
	constructively	5,51	7	0,3857
	different	4,77	7	0,3339
Final Score				5,395

Table 8. Example of filling out the competence assessment grid Team Working

A	B	C	D	E
Skill	Performance indicator	Percentage score	Awarded score	Weighted score
Cultural awareness	cultures	10,09	8	0,80728
	range	9,45	7	0,66122
	arts	9,05	9	0,81405
	meaning	8,69	6	0,52128
	forms	8,30	7	0,58072
	ideas	8,25	9	0,74277
	Ability	8,04	8	0,6428
	communicated	7,78	9	0,70029
	expressed	7,77	7	0,54404
	understand	7,10	9	0,63882
	respect	7,06	6	0,42366
	different	4,63	8	0,37008
	creatively	3,81	9	0,34281
Final Score				5,47041

Table 9. Example of filling out the competence assessment grid Cultural Awareness

The weighted score is calculated based on the percentage weight (or score) assigned to the performance indicator (X) and the score assigned by the trainer (Y), according to the following formula: $(X/100) * Y$.

General Results

- 80% of students recorded an improvement in their transversal skills.
- 20% of students maintained a stable performance.
- The improvements were observed within a sample of 20 students divided into five work groups.

Skill	Students number	Percentage
Critical Thinking	6	30%
Team Working	5	25%
Time Management	4	20%
Cultural Awareness	5	25%

Table 10. Distribution of Prevalent Skills in the Class Group (Pre-test)

Skill	% Students with Improvement	Average increase
Critical Thinking	83%	+18,4%
Team Working	80%	+16,2%
Time Management	75%	+13,5%
Cultural Awareness	65%	+11,7%

Table 11. Aggregate Changes (Pre/Post) - Percentages of Improvement by Skill

Skill	Improved Indicators	Motivation
Critical Thinking	opinion, variety, form	Better articulation of judgments and use of diversified sources
Team Working	understand, viewpoints, collaborate	Greater openness to discussion and cooperation
Time Management	prioritize, meet, adjust	More efficient management of objectives and deadlines

Table 12. Indicators with the highest increases

Skill	Critical indicators	Observations
Critical Thinking	complex, think	Complex thinking management needs to be strengthened
Team Working	constructively, different	Difficulty in valorising divergent points of view
Time Management	efficiently, deadlines	Need to improve efficiency and punctuality
Cultural Awareness	creatively, different	Low familiarity with intercultural creativity

Table 13. Critical Areas and Indicators to Strengthen

Conclusions

The transformations that characterize the contemporary era underscore the increasing complexity of pedagogical action. The ongoing tension between the need for technical-disciplinary knowledge capable of interpreting reality and the parallel need to cultivate human competencies for conscious living must be systematically integrated into both national and European educational frameworks.

The *Historia Vivens* educational activity has successfully strengthened the technical-disciplinary knowledge (hard skills) associated with the historical-social cultural axis, while the introduction of gamification has fostered more active and engaged student participation.

Furthermore, the experimental implementation has revealed a general improvement in transversal competencies, particularly in the areas of critical thinking and teamwork. Participation in group activities has enhanced students' abilities to interact, organize tasks and engage in reflective practices. Nonetheless, certain areas, such as cultural awareness, remain in need of further improvement, suggesting the urgency to introduce additional targeted training strategies.

Author contributions

The authors collaborated on the development of this paper.

However, each author is responsible for a specific section:

section 1 is attributed to Sara Gemma,

section 2 and 2.2 to Arturo Puoti,

section 3, 3.2 and 3.3 to Marta Raffone.

The conclusions are attributable to all three authors jointly.

References

Alheit, P. (2011). *The biographical approach to lifelong learning*. In *The Routledge international handbook of learning* (pp. 188-195). London: Routledge.

Boffo, V., Iavarone, M. L., & Nuzzaci, A. (2022). Life skills e transizioni umane. *Form@re*, 22, 1-8.

Bohlouli, M., Schikuta, E., & Stengel, I. (2017). Competence-based knowledge space theory for collaborative human resource development. *Expert Systems with Applications*, 89, 335–348. <https://doi.org/10.1016/j.eswa.2017.07.031>

Borghi, B. (2016). Contar a história: reflexões a partir das análises dos manuais didáticos da escola primária. *Okara: Geografia em debate*, v.10, n. 2, p. 345-361.

Brothers L. (1990), The neural basis of primate social communication, «Motiv Emot», 14, 81-91. <https://doi.org/10.1007/BF00991637>

Chabot, P. (2021). *L'epoca delle transizioni. Pensare il mondo a venire*. Roma: Castelvecchi.

Chien, C.-F., Wang, J. C., & Lin, Y. C. (2017). Building an effective human resource development strategy for business excellence: Framework and analysis. *Knowledge-Based Systems*, 129, 83–94. <https://doi.org/10.1016/j.knosys.2016.11.019>

Cinque, M. (2016). “Lost in translation”. Soft skills development in European countries. *Tuning Journal for Higher Education*, 3(2), 389-427.

Council of the European Union (22 May 2018). *Recommendation on key competences for lifelong learning* (2018/C 189/01). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C.2018.189.01.0001.01.ENG&toc=OJ:C:2018:189:TOC>

de Certau, M. (2009). *L'invenzione del quotidiano*. Roma: Edizioni lavoro.

Famà, K. V., & Ibáñez, R. S. (2023). La percepción de los profesores de secundaria italianos sobre la enseñanza de la historia. *Áreas. Revista Internacional de Ciencias Sociales*, (45), 187-201.

Fioretti S. (a cura di), (2023). Il valore educativo del gioco. Gamification e game based learning nei contesti educativi. Milano: Franco Angeli.

Frauenfelder, E. (2001). *Pedagogia e biologia: una possibile "alleanza"*. Napoli: Liguori.

Gemma, S. & Salemm, F.P. (2025). *Il cervello sociale e le sfide per l'adattamento: Formazione continua per educatori dell'emergenza* in "Neotenia e plasticità umana. Una prospettiva transdisciplinare per l'educazione". Milano: FrancoAngeli.

González-González, J. M., Franco-Calvo, J. G., & Español-Solana, D. (2022). Educating in history: Thinking historically through historical reenactment. *Social Sciences*, 11(6), 256.

Iavarone M.L. (2025) (a cura di). *Neotenia e plasticità umana. Una prospettiva transdisciplinare per l'educazione*, Milano: FrancoAngeli.

Jindal-Snape, D., Symonds, J. E., Hannah, E. F., & Barlow, W. (2021). Conceptualising primary-secondary school transitions: A systematic mapping review of world views, theories and frameworks. *Frontiers in Education*, 6.

Lu, Hsiu-Lien & Lin, Hsiao-Fang. (2025). A concept model of competency tasks in competency-based education. *Technology, Pedagogy and Education*. 1-19. 10.1080/1475939X.2025.2461101.

Mannese, E. (2019). *L'orientamento efficace*. Milano: FrancoAngeli.

Margiotto, U. (2018). *La formazione dei talenti*. Milano: FrancoAngeli.

Morin, E. (2011). *La sfida della complessità. Le défi de la complexité*. Italia: Le Lettere.

Nicolaides, A. (2015). *Generative learning: Adults learning within ambiguity*. *Adult Education Quarterly*, 65(3), 179-195.

Nussbaum, M.C. (2016). *Not for Profit: Why Democracy Needs the Humanities*. Princeton: Princeton University Press

Nuzzaci, A. (2024). Cultural heritage education as a tool for resilience: the city and its alphabets/l'educazione al patrimonio culturale come strumento di resilienza: la città ei suoi alfabeti. *European Journal of Alternative Education Studies*, 9(1).

OECD (2021), *Applying Evaluation Criteria Thoughtfully*, OECD Publishing, Paris, <https://doi.org/10.1787/543e84ed-en>.

OECD. (2019). *OECD Learning Compass 2030: A Series of Concept Notes*. Organisation for Economic Co-operation and Development.

Pierce, S., Gould, D., & Camiré, M. (2017). Definition and model of life skills transfer. *International Review of Sport & Exercise Psychology*, 10(1), 186–211.

Sala, A., Punie, Y., Garkov, V. and Cabrera Giraldez, M., *LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence* (2020), EUR 30246 EN, Publications Office of the European Union, Luxembourg, <https://doi.org/10.2760/922681> (ver. 30.12.2022)

Stanford University. (2023). *Utilizing Kahoot! to Assess Understanding*. Stanford Teaching Resources, <https://teachingresources.stanford.edu/resources/utilizing-kahoot-to-assess-understanding/>

Vincenzo Petruzzi, (2015), *Il potere della Gamification: usare il gioco per creare cambiamenti nei comportamenti e nelle performance individuali*. Milano: Franco Angeli.

WiKIT. (2024). Meta-analysis: Kahoot!'s impact on student learning outcomes. Kahoot! Press. <https://kahoot.com/press/2024/03/13/student-learning-outcomes-meta-analysis/>

World Economic Forum. (2020). *The Future of Jobs Report 2020*. Geneva: World Economic Forum.