



Inclusive digital storytelling: tools for self-recognition in Italian primary education

Narración digital inclusiva: herramientas para el autorreconocimiento en la educación primaria italiana

Rosa Sgambelluri

Department of Human, Philosophical and Educational Sciences (DISUFF), University of Salerno
Salerno, Italy
<https://orcid.org/0000-0002-1943-0989> | rsgambelluri@unisa.it

Francesca Placanica*

Department of Law, Economics and Human Sciences (DiGiES), University of Reggio Calabria
Reggio Calabria, Italy
Department of Education, Cultural Heritage and Tourism, University of Macerata, Italy
<https://orcid.org/0009-0002-1771-6163> | Francesca.placanica@unirc.it; F.placanica@unimc.it

Marianna Capo

Department of Law, Economics and Human Sciences (DiGiES), University of Reggio Calabria
Reggio Calabria, Italy
<https://orcid.org/0009-0008-8796-0720> | Marianna.capo@unirc.it

Received: 29/11/2025 Accepted: 23/03/2026

Abstract

In contemporary education, fostering employability has become a priority to ensure a meaningful future for all individuals. The Life Designing paradigm offers an approach based on adaptability and autobiographical narrative to support resilient identities and life planning. In the Italian educational context, increasing emphasis is placed on inclusive practices and career guidance, particularly in fostering self-awareness and future planning from early education. Within this framework, narrative emerges as a key educational tool for promoting self-awareness and self-realisation. By assigning meaning to personal experiences, narrative enables critical reflection

*Correspondence author

and facilitates the identification of resources essential for addressing future challenges. This theoretical-conceptual contribution presents the pedagogical rationale and early design of an inclusive app for digital storytelling, designed according to Universal Design for Learning. It guides students, including those with disabilities, in constructing a “competence tree”, a metaphorical framework comprising roots (origins), trunk (personal essence), branches (learning opportunities), and leaves (achievements and aspirations). Its intuitive interface integrates assistive technologies, such as speech synthesis, to ensure accessibility. By reviewing the literature on narrative, employability, and inclusive methodologies, this contribution explores the potential of digital storytelling as an educational tool in primary schools. Rather than reporting empirical results, the article aims to systematise the main theoretical foundations underpinning the prototype and to outline its educational and inclusive potential. The proposed app is discussed as a promising inclusive design proposal, while its empirical validation is left to future research.

Keywords

Digital storytelling; self-awareness; inclusive education.

Resumen

En la educación contemporánea, fomentar la empleabilidad se ha convertido en una prioridad para garantizar trayectorias vitales significativas. El paradigma del Life Designing ofrece un enfoque basado en la adaptabilidad y en la narrativa autobiográfica para apoyar identidades resilientes y la planificación del futuro. En el contexto educativo italiano, crece la atención a las prácticas inclusivas y a la orientación desde las primeras etapas escolares, con especial énfasis en la autoconciencia y la proyección de futuro. En este marco, la narración se configura como una herramienta educativa clave, ya que permite atribuir sentido a las experiencias personales, promover la reflexión crítica e identificar recursos para afrontar los desafíos futuros. Esta contribución teórico-conceptual presenta la fundamentación pedagógica y el diseño inicial de una aplicación inclusiva de narración digital, desarrollada según los principios del Diseño Universal para el Aprendizaje. La aplicación guía al alumnado, incluidos los estudiantes con discapacidad, en la construcción de un «árbol de las competencias», compuesto por raíces, tronco, ramas y hojas. Su interfaz intuitiva integra tecnologías de apoyo, como la síntesis de voz, para favorecer la accesibilidad. A partir de una revisión de la literatura sobre narración, empleabilidad e inclusión, el artículo explora el potencial de la narración digital en la escuela primaria y sistematiza los fundamentos teóricos del prototipo, dejando su validación empírica para futuras investigaciones.

Palabras clave

Narración digital; autoconciencia; educación inclusiva.

1. Introduction

In recent decades, the theme of employability has assumed a central role in the international pedagogical debate, as it concerns the possibility for individuals to envisage meaningful future trajectories in social and work contexts characterised by complexity and uncertainty (Cavenago & Martini, 2012; Fugate et al., 2004; Grimaldi et al., 2014; Grimaldi et al., 2015; Hillage & Pollard, 1998; McQuaid & Lindsay, 2005; McQuaid & Lindsay, 2013). From this perspective, the Life Designing paradigm proposes moving beyond linear guidance models centred on the simple “matching” between individual characteristics and occupational roles, in favour of a processual, narrative and project-oriented view of

life and career, in which individuals are called upon to construct and reconstruct over time trajectories consistent with their resources, values and aspirations (Savickas, 2014).

In the Italian school system, these concerns intersect with a well-established tradition of special and inclusive pedagogy, which conceives education as both a fundamental right and an indicator of the democratic quality of society (D'Alonzo, 2018; Canevaro et al., 2022; Cottini, 2016). Within this framework, Ministerial Decree No. 328/2022 of the Ministry of Education and Merit introduced National Guidelines for Guidance, framing educational guidance as an early, continuous and inclusive process throughout the first cycle of schooling (Ministero dell'Istruzione e del Merito, 2022). Primary school thus becomes a crucial context not only for the transmission of disciplinary knowledge, but also for supporting children in beginning to reflect on who they are, what they can do and who they may become.

In this scenario, self-awareness emerges as a key pedagogical and developmental nexus. International literature highlights its transformative value in helping individuals reflect on their identity, recognise resources and limits, and orient educational and vocational choices in rapidly changing contexts (Blustein, 2006; Capo, 2021; Goleman, 1995; Peterson & Seligman, 2004). From this perspective, self-awareness is not merely an intrapsychic dimension, but an epistemic and practical condition for meaningful and sustainable life planning, since it enables the integration of emotional, cognitive and motivational dimensions and supports choices that are coherent with one's values and aspirations (Capo, 2021).

This perspective is closely connected to Life Designing and Career Construction Theory, which interprets guidance as a narrative construction of the self over time, grounded in the continuous reworking of experiences and in the progressive definition of life projects that are both personal and socially situated (Cunti & Priore, 2008; Guichard, 2005; Kolb, 1984; Savickas, 2014). From this standpoint, the task of school – and particularly of primary school – is not simply to prepare children for future choices, but to create the conditions for them to recognise themselves as agentic subjects, capable of attributing meaning to what they experience and of imagining possible future scenarios.

Within this theoretical framework, narrative can be conceived as a privileged educational device. The work of Bruner (1990, 1993) and McAdams (2001) has shown how narrative thinking constitutes a fundamental mode through which human beings organise experience, linking events, emotions and values into meaningful plots. In the pedagogical field, several authors have highlighted the formative and transformative function of narrative, especially when it is oriented towards self-reflection and self-representation (Demetrio, 1996, 2003; Gaspari, 2024; Smorti, 1997). In inclusive education, narrative also acquires ethical and political significance, as it becomes a space of recognition for voices at risk of marginalisation and a context in which identity is constructed in dialogue with others.

The introduction of digital technologies has further expanded this potential in educational contexts. Digital storytelling has been conceptualised as a device capable of integrating textual, visual and auditory languages, thereby enabling experiences to be represented and shared in multimodal forms (De Rossi & Petrucco, 2013; Howland et al., 2013). In this sense, digital narrative can support self-awareness, motivation and

life design, offering concrete tools through which children may begin to organise and communicate their personal story within a coherent developmental continuum (Capo, 2021; Pink, 2011). In the Italian primary school context, however, there is still limited availability of tools specifically designed to connect early guidance, self-recognition and inclusive instructional design.

From a methodological point of view, this contribution is also grounded in Universal Design for Learning (UDL), which is now an essential point of reference in the design of inclusive learning environments. Developed by CAST, UDL promotes the creation of educational contexts based on multiple means of representation, action/engagement and engagement, in order to respond proactively to learner variability (CAST, 2018; 2024). In the Italian debate, several studies have shown how UDL-inspired practices can enhance autonomy, self-efficacy and participation, particularly for pupils with disabilities and special educational needs (Sgambelluri, 2020; Sgambelluri & Placanica, 2025). In this perspective, digital storytelling may be understood as a particularly coherent strategy for operationalising UDL principles, thanks to its multimodal, flexible and expressive nature.

Building on these premises, the present contribution is situated at the intersection of Life Designing, autobiographical narrative, digital storytelling and Universal Design for Learning within the context of Italian primary education. The research question guiding this work is as follows: which pedagogical and design principles can inform the development of a digitally mediated narrative device, grounded in an inclusive perspective, to support primary school children in recognising who they are, what they can do and who they would like to become?

This contribution is theoretical-conceptual in nature. Its purpose is not to report empirical findings, but to systematise the main pedagogical and theoretical foundations underpinning the development of MiRacconto and to outline its educational, inclusive and design potential within Italian primary education. As the prototype is still under development and early experimentation, the article does not present validation data, but rather offers a conceptually grounded framework to inform future empirical research and educational implementation.

2. Self-awareness, employability and life designing: the role of digital storytelling in the construction of the professional self

Understanding and critically reflecting on one's identity, resources and limitations currently represents a central issue in the pedagogical and psychological debate on personal and professional development. In a social and occupational context characterised by rapid and unpredictable change, a deep understanding of oneself becomes an indispensable condition for orientation and for giving direction and meaning to educational and occupational choices. In educational pathways that aim to support employability and life design, attention does not focus solely on the acquisition of technical skills or on adapting to labour market demands, but also on the capacity to attribute meaning to experiences, transform lived experience into processed experience, sustain motivation, and build a dynamic balance between

personal identity, aspirations and context. From this perspective, reflection on oneself acquires a transformative value, as it enables individuals to recognise their potential and translate it into coherent and sustainable pathways of self-realisation.

Self-awareness emerges as a foundational principle, capable of integrating emotional, cognitive and behavioural dimensions and providing a solid basis for subsequent dynamics of learning and development. Within this framework, it should be understood not only as an intrapsychic element, but also as a genuine navigational tool within social and professional complexity, allowing individuals to perceive, recognise and reflect on their own motivations and personal characteristics. Goleman (1995) highlights how self-awareness constitutes one of the fundamental components of emotional intelligence, underscoring its role in fostering and regulating interpersonal interactions and in influencing decision-making in educational and work settings. His conception suggests that individuals cannot fully exercise their potential without deep reflection on their emotions and behaviours, which become the lens through which they read the opportunities and constraints of the surrounding context.

This perspective intersects with the work of Peterson and Seligman (2004), who propose an approach oriented towards the valorisation of personal resources. They argue that self-awareness is not limited to the mere identification of individual characteristics, but constitutes a dynamic process of constructing efficacy and meaning in everyday life. In this sense, recognising one's strengths makes it possible to face challenges with greater confidence, to design coherent pathways of personal growth and to make strategic decisions that authentically reflect one's inclinations. Their analysis also shows how self-awareness is closely linked to the capacity to develop resilience, adaptability and a sense of purpose, all indispensable elements for navigating complex and changing contemporary contexts, both educational and professional. The relationship between these two perspectives suggests that self-awareness is not a one-dimensional concept, but a multidimensional phenomenon capable of shaping the way individuals perceive opportunities, face challenges and structure pathways of personal and professional development.

This capacity for introspection and internal regulation is closely connected to the concept of sustainable employability (Grimaldi et al., 2014, 2015), which represents a natural extension of self-awareness. The notion of employability goes beyond the mere acquisition of technical competences or the ability to enter the labour market and instead centres on a broad set of knowledge and experiences that enable individuals to enter and progress within it. The European Commission defines employability as a multidimensional construct in which technical and transversal components combine to foster adaptation and growth. However, the perspective advanced by Blustein (2006) offers a more articulated reading, shifting the focus from the simple possession of skills to the active construction of meaning in work. According to Blustein, employability transcends the mere acquisition of abilities adaptable to contingent roles. It instead requires a process of conscious reflection on one's motivations, sense of purpose and the opportunities needed to fully express one's individual potential. This approach implies that self-awareness functions as a compass in orienting career choices, making it possible to identify roles and contexts consistent with one's values, motivations and competences.

It follows that the acquisition of professional competences cannot be separated from critical reflection on one's inclinations and aspirations, since meaning-making becomes a central factor for the sustainability and gratification of one's professional pathway. The correlation between self-awareness and employability shows how the capacity for introspection and critical evaluation of one's resources is not only functional to personal growth, but also constitutes a prerequisite for effective and meaningful participation in the world of work.

Life Designing, as theorised by Savickas (2013), represents an additional level of conceptual articulation in which self-awareness and employability are integrated into a process of narrative design of life and career. Career Construction Theory proposes a narrative approach in which identity and career trajectories are not static givens, but are constantly constructed and renegotiated through reflection and action. According to this theory, the individual is not a passive subject reacting to circumstances, but an active agent who continuously structures their identity through the narration of experiences, reflection on values and the definition of goals consistent with their life project. In this context, self-awareness plays a crucial role because it enables individuals to integrate past experiences, present goals and future aspirations into a coherent and meaningful narrative.

In this sense, Life Designing is not a technical approach, but a paradigm that combines self-reflection, intentional planning and targeted action strategies to create coherence between personal, educational and professional dimensions. Experiential learning, as highlighted by Kolb (1984), is a crucial complement to this perspective, as it represents an essential tool for understanding and integrating one's competences and inclinations. Critical reflection on lived experiences makes it possible to identify behavioural patterns, strengths and areas for development that can adapt to changing contexts, transforming events and everyday practices into conscious knowledge. In this way, life and career pathways become not only reactive but also proactive and intentional. The integration between Life Designing and experiential learning thus makes it possible to structure coherent trajectories in which individual experiences feed the construction of meaningful professional competences and identities.

The interconnection between self-awareness, employability and Life Designing finds further amplification through digital storytelling, which emerges as a powerful methodological and theoretical tool capable of supporting and enhancing these processes.

In recent contributions on educational technology and narrative, digital storytelling is described as a device that enables experiences, reflections and competences to be structured in a communicable and shareable form, creating spaces in which individuals can represent their identity and aspirations (Capo, 2021; De Rossi & Petrucco, 2013; Howland et al., 2013; Petrucco & De Rossi, 2009). This mode of expression does not merely document reality, but transforms it into an instrument of analysis and design, wherein reflection on one's personal story becomes a means for planning future pathways and structuring the meaning of experiences, making otherwise intangible elements, such as emotions, values and talents, tangible.

Digital narrative thus functions as a bridge between self-awareness and Life Designing, enabling individuals to consolidate their identity and orient career choices

in line with deep-seated values and motivations. Within an integrated theoretical framework, digital storytelling can therefore be seen as an amplifier of self-awareness, because it offers a concrete modality for organising, communicating and reflecting on one's experiences, bringing into relation the concepts of Life Designing, intrinsic motivation and employability. In this sense, digital storytelling is not a mere technological tool, but an epistemic and pedagogical device that integrates knowledge, experiences and reflections within a coherent continuum.

Intrinsic motivation, a central concept in Pink's (2011) analysis, intersects critically with all the levels described above, representing the driving force that guides choices and sustains the pursuit of goals. The components of autonomy, mastery and purpose highlighted by the author act as regulatory elements that enable individuals to assess the coherence between aspirations, competences and contexts of action, thus fostering the intentional design of life and career. Self-awareness makes it possible to recognise which of these dimensions is predominant and how it can be valorised, orienting choices towards contexts in which one's inclinations and motivations can be fully expressed. Conversely, Life Designing and digital storytelling provide tools to articulate, communicate and plan pathways consistent with these motivational dimensions. Intrinsic motivation therefore not only integrates self-awareness and Life Designing, but also constitutes a dynamic vector for translating competences and experiences into coherent and meaningful occupational trajectories, through an intentional approach grounded in the pursuit of coherence between desires, capabilities and opportunities.

When discussing processes of self-realisation and professional development, the concept of flow, elaborated by Csikszentmihalyi (1990), cannot be overlooked. Flow occurs when the challenges posed by an activity match the individual's competences, generating a state of deep concentration, gratification and creativity. Self-awareness becomes essential in recognising the conditions under which flow can emerge, enabling individuals to select activities and contexts that can fully stimulate their abilities. The connection between flow, intrinsic motivation and Life Designing makes it possible to outline pathways of personal and professional development that go beyond the mere increase of technical competences and instead promote gratification, engagement and subjective fulfilment, thus contributing to the construction of a professional life coherent with one's values and aspirations. This relationship highlights the dynamic and interactive nature of developmental processes, in which competences, motivation and narrative mutually influence one another.

Goldsmith (2007) adds further critical elements by underscoring the importance of identifying limiting habits and behavioural patterns in order to transform awareness into strategic action. Critical reflection on these patterns, combined with Life Designing and experiential learning, makes it possible to generate strategies for overcoming obstacles and enhancing one's resources, thereby showing that the process of personal development is neither linear nor automatic, but requires a constant exercise of critical observation, experimentation and adaptation. The synergy between self-awareness, Life Designing and digital storytelling thus enables the creation of personalised growth pathways in which the individual becomes an active agent in constructing their own life, career and identity.

Finally, the considerations of Heath and Heath (2007) on the role of narrative in communication and learning complete the theoretical framework. They emphasise the importance of the capacity to structure ideas and experiences into coherent, memorable and meaningful stories. Such narratives not only reinforce self-awareness and the capacity to learn from experience, but also make it possible to communicate competences, values and goals effectively to others, integrating the personal and social dimensions of developmental pathways. In this context, digital storytelling assumes a central function, as it enables the integration of experiences, competences and personal reflections into narratives that not only convey and legitimate self-understanding, but also foster the valorisation of one's personal and professional story in educational and work contexts, making the process of Life Designing not only introspective, but also communicative and shareable (Capo, 2021).

Taken together, these perspectives show that self-awareness, employability, Life Designing and digital storytelling are mutually reinforcing processes. Self-awareness supports reflection and agency; employability translates these resources into sustainable opportunities; Life Designing organises them into a meaningful narrative; and digital storytelling makes them visible, communicable and project-oriented. Within this framework, the individual emerges as an active subject in the construction of identity, purpose and developmental trajectories.

3. Universal design for learning and school inclusion in Italy

Universal Design for Learning (UDL) is currently one of the most influential paradigms in rethinking education systems from an inclusive perspective, both internationally and within the Italian context. Originating from the work of CAST and grounded in the recognition of neurocognitive variability as a natural condition of learning, this paradigm calls for a shift in perspective compared to traditional models of managing diversity: rather than intervening "afterwards" by adapting the context to needs considered exceptional, it proposes designing "in advance", creating environments capable of accommodating the plurality of cognitive, linguistic, emotional and social styles present in every class group.

In the Italian school system, which has traditionally been marked by a strong emphasis on inclusion, the UDL framework finds particularly fertile ground. Since the 1970s, Italy has distinguished itself internationally for having adopted an integrated approach to disability, progressively moving beyond the logic of special classes. This pedagogical tradition, supported by a vast body of literature (Canevaro et al., 2022; Cottini, 2016; D'Alonzo, 2018), is based on the idea that school is a place where all students, regardless of their conditions or characteristics, can exercise rights to citizenship, participation and learning. This cultural framework has facilitated the encounter with UDL, as both share a conception of inclusion as a systemic process, rooted in the overall design of the learning environment rather than delegated solely to the individual support teacher.

The contribution of Universal Design for Learning to the Italian school system is twofold: on the one hand, it consolidates inclusive practices already in place; on the other, it introduces a more explicit epistemology of instructional design, thereby narrowing the gap between principles and classroom practice. From a methodological point of view, the three UDL principles are deeply integrated with the principles of Italian inclusive pedagogy.

The first principle, relating to “multiple means of representation”, translates into the possibility of offering content in different forms: simplified texts, images, concept maps, audio support and explanatory videos. This variety is not conceived for a specific group of students, but for everyone, as it allows each learner to activate the channel that is most effective with respect to their cognitive style. The availability of such instructional tools promotes a more inclusive classroom climate because it removes the need to introduce “special” materials only for some, thus avoiding the risk of stigmatisation.

The second principle, concerning “multiple means of action and expression”, is closely intertwined with the perspective of personalised education and with the long-standing Italian tradition of attention to self-assessment and documentation processes. Allowing pupils to express what they have understood through different languages (oral, written, graphic, digital, bodily) broadens the space for participation and valorises individual competences. This didactic opportunity is valuable for all students, as it fosters creativity, cognitive flexibility and intrinsic motivation. Moreover, digital technologies offer new opportunities to transform expression into a multimodal experience, closer to the forms of communication that students spontaneously use in their everyday lives.

The third principle, that of “engagement”, is arguably the most innovative in the Italian didactic landscape, as it introduces systematic reflection on motivational dynamics, emotions and the relational dimension of learning. Universal Design for Learning calls for the design of educational activities that stimulate curiosity, a sense of competence, perceived autonomy and connection with others. This means, for example, offering meaningful tasks connected to pupils’ real-life experiences, allowing for choice, creating cooperative environments and fostering the perception of tangible progress. These elements are particularly important in Italian primary schools, where motivation can easily be undermined by early difficulties and where the construction of academic self-esteem is crucial for subsequent educational pathways.

In recent years, several Italian studies (Sgambelluri, 2020; Sgambelluri & Placanica, 2025) have shown that the application of UDL principles in Italian classrooms produces positive effects on the participation, autonomy and self-efficacy of pupils with disabilities or special educational needs. However, these studies also highlight that such benefits are not limited to these groups: the flexibility introduced by Universal Design for Learning enhances the overall quality of instruction, supporting the learning of students without specific difficulties as well. The UDL paradigm is indeed based on the idea that accessibility is a fundamental condition of learning: when a task is comprehensible, motivating and manageable, all students learn more and better.

Within the framework of Italian education policies, Ministerial Decree No. 328/2022 issued by the Italian Ministry of Education and Merit (Ministero dell’Istruzione e del Merito, 2022) introduces an approach to guidance that is early, continuous and inclusive, and that aligns closely with the logic of the UDL pedagogical paradigm. Although the decree does not explicitly mention UDL, it shares its systemic approach: preventing exclusion, constructing personalised pathways, valorising individual resources and emphasising the centrality of the guidance portfolio. UDL thus offers an operational framework for translating these normative indications into everyday

classroom practice, providing teachers with concrete criteria for designing learning experiences that support pupils' identity, motivation and self-determination.

At the level of pedagogical culture, the introduction of the UDL paradigm into the Italian school system also contributes to renewing the teacher's role, increasingly conceived as that of a designer of learning environments rather than a mere transmitter of content. This transformation requires new professional competences: the ability to analyse class needs, anticipate potential barriers, construct flexible pathways, use digital tools in an inclusive way, and reflect on motivational and relational dynamics. In Italy, many schools have already begun to integrate UDL into their teaching practices, but its diffusion remains uneven and requires system-level strategies in order to become truly structural.

Despite these challenges, the transformative potential of the UDL paradigm for Italian inclusion is considerable. It makes it possible to bring coherence to many practices already in place, to move beyond the logic of ad hoc compensatory interventions, and to design learning pathways that acknowledge the complexity of children in their wholeness. In this sense, UDL offers the Italian education system a valuable opportunity to consolidate its inclusive identity and to respond effectively to the contemporary challenges of primary schooling. Integrated with the national pedagogical tradition, with the current Italian regulatory framework and with the potential of digital technologies, it makes it possible to create environments that welcome diversity as a value and transform it into a resource for learning, thereby strengthening participation and promoting the harmonious development of each student.

4. MiRacconto: design and the metaphor of the competence tree

MiRacconto is situated at the intersection of special pedagogy, guidance from a Life Designing perspective and Universal Design for Learning (UDL), with the aim of making an initial pathway of future-oriented autobiographical narration accessible to Italian primary school children. The application stems from the idea that, within the Italian educational context, guidance cannot be confined to the final stages of schooling, but should instead be conceived as an early, continuous and inclusive process, capable of accompanying each pupil in the progressive construction of their Life Project (Cunti & Priore, 2008; Guichard, 2005; Savickas, 2014). From this perspective, inclusive education is understood not only as the removal of barriers, but as the construction of contexts in which every child can exercise agency, develop self-determination and orient themselves within their own developmental trajectory (Canevaro et al., 2022; Cottini, 2016; D'Alonzo, 2018).

At the policy level, the project is aligned with Ministerial Decree No. 328/2022 of the Ministry of Education and Merit (Ministero dell'Istruzione e del Merito, 2022), which frames guidance as an early, continuous and inclusive process. MiRacconto seeks to translate these indications into a digital narrative environment for Italian primary schools, capable of supporting self-reflection even in the presence of linguistic or cognitive difficulties.

At the heart of the pedagogical design lies the metaphor of the competence tree, which functions both as a symbolic device and as a structure for narrative scaffolding. The

image of the tree, culturally embedded and immediately recognisable, makes it possible to anchor autobiographical reflection to a concrete visual representation, reducing the level of abstraction required of children and making the verbal – or visual – articulation of their own experience more accessible (Bruner, 1990; 1993; Wiele & Ribière, 2014).

The pathway is articulated into four sections, each corresponding to a dimension of children's experience. The roots refer to affective bonds and significant experiences: people, places and situations perceived as fundamental for one's growth. The trunk gathers values, emotions and personal traits, helping children to name how they perceive themselves in the present. The branches represent competences, interests and activities in which children feel capable or simply engaged, placing emphasis on the resources that can be mobilised within a projectual perspective. Finally, the leaves open a space for desires, dreams and aspirations, encouraging children to imagine possible futures without being rigidly bound to current performance or external expectations.

This progression – from roots to leaves – is consistent with the cognitive and emotional development typical of primary school age and with current pedagogical recommendations on identity development in the Italian context. It enables a movement from the recognition of past and present towards projection into the future, while maintaining a strong perceptual and symbolic anchoring. At the same time, the tree supports the perception of continuity in one's life trajectory: what the child has experienced, what they feel they are now and what they wish to become do not appear as isolated fragments, but as parts of a single story that can be narrated, re-narrated and shared. In this sense, the metaphor translates the principles of Life Designing into a device that is accessible even to younger children, without sacrificing the depth of a longitudinal perspective on the life project (McAdams, 2001; Savickas, 2014).

The narrative scaffolding function of the tree is grounded in scholarship on narrative thought, which highlights the role of narrative in meaning-making and in connecting events, emotions and values (Bruner, 1990; 1993). In this perspective, digital technologies expand the expressive possibilities of self-narration by integrating textual, iconic and auditory forms, making autobiographical reflection more accessible also more accessible to children who encounter barriers in traditional writing (De Rossi & Petrucco, 2013; Petrucco & De Rossi, 2009).

Within this symbolic framework, MiRacconto introduces a customisable avatar that accompanies pupils throughout all phases of the narrative pathway. The avatar plays the role of narrative guide: it presents simplified instructions, provides contextualised examples, and offers brief prompting questions within the different sections – roots, trunk, branches, leaves – thereby helping to reduce cognitive load and sustain motivation. From an educational standpoint, this media presence is intended to support processes of identification and continuity: children are not “alone” in front of the screen, but perceive that they are accompanied by an interlocutor who invites them to reflect and to make meaningful choices. In this way, the avatar reinforces the coherence of the pathway and supports children's agency within the digital environment.

Consistent with the Universal Design for Learning approach, and in line with the emphasis on inclusion that characterises the Italian pedagogical debate, the narrative pathway does not require autonomous writing, which would constitute a significant

barrier for many pupils in the age group considered and for those with specific learning disorders or linguistic difficulties. The construction of the competence tree is instead based on guided choices among age-appropriate options, presented in multimodal form: short textual labels, pictograms inspired by Augmentative and Alternative Communication (AAC), icons, and audio support through text-to-speech. High-legibility fonts, simplified layouts and the possibility of adjusting text size further contribute to visual accessibility. These solutions are not conceived as *ex post* adaptations for some pupils, but as structural elements of the design, in line with the idea of by-design accessibility that takes variability as the ordinary condition of learning (CAST, 2018; 2024; Sgambelluri & Placanica, 2025).

The proposed mode of interaction goes beyond mere mechanical selection of elements. In each section of the tree, brief prompts invite children to question the reasons behind their choices: why a certain person or experience is important; in which situations they have felt competent or particularly engaged; which emotions they associate with a given value or activity. In this way, the digital environment is conceived as an opportunity to activate metacognitive and meaning-making processes, turning interaction with the app into a guided exercise in self-exploration rather than a simple act of filling in options.

At the end of the pathway, MiRacconto generates a personalised artefact in the form of a digital tree that visually synthesises the pupil's choices and returns them in a concise autobiographical profile. The final product, which can be exported as a PDF, may be saved, printed or included in the child's e-portfolio. In this way, the digital device is connected to national indications on the use of the guidance portfolio in the Italian school system, which Ministerial Decree 328/2022 (Ministero dell'Istruzione e del Merito, 2022) envisages as a longitudinal tool supporting guidance processes. For the pupil, the tree functions as a symbolic mirror through which to recognise themselves and see themselves represented; for teachers and families, it provides a shared basis for dialogue about the child's experiences, resources and aspirations, and can inform subsequent support and guidance interventions.

5. Conclusions

This contribution has shown how, in the context of Italian primary schooling, the Life Designing paradigm, inclusive pedagogy, Universal Design for Learning (UDL) and Digital Storytelling can be brought into dialogue to support early processes of self-recognition and life design. In this perspective, MiRacconto represents an initial design translation of this framework: through the metaphor of the competence tree and a multimodal, accessible interface, it is intended to engage pupils – with and without disabilities – in a future-oriented autobiographical narration grounded in self-awareness, relationships and guidance.

From a theoretical standpoint, the work contributes to translating and adapting to the first cycle of education Life Designing and Career Construction models traditionally applied to adolescence and adulthood. This process of simplification does not result in a trivialisation of the conceptual underpinnings; on the contrary, the use of concrete metaphors, iconic languages and accessible digital supports shows how the depth of

narrative and project-oriented paradigms can be rendered accessible to children without relinquishing the reflective dimension or the longitudinal perspective on the life project. In this sense, the Italian case may offer insights of interest to educational contexts in other countries facing similar challenges in terms of inclusion, prevention of early school leaving and early guidance.

At the methodological-didactic level, the proposal of a UDL-based teaching unit grounded in Digital Storytelling and the use of MiRacconto highlights several enabling conditions for the construction of genuinely inclusive environments: the possibility of choosing among multiple expressive modalities; the presence of visual and auditory supports that reduce barriers linked to reading and writing; the teacher's role as director of shared narrative pathways rather than mere transmitter of content; and the recognition of each child's stories as a shared heritage of the classroom community. When integrated into the curricula and ordinary practices of Italian primary schools, such a proposal can help transform the classroom into a space of mutual recognition, where diversity is not merely accommodated, but represented, narrated and valued.

At the same time, this work presents limitations that need to be explicitly acknowledged. First, MiRacconto is, at the present stage, a device under development and experimentation in the Italian context: there is, as yet, no extensive empirical evidence on the effects of systematic use of the app in terms of self-awareness, school wellbeing, participation and the development of guidance competences. Second, the didactic proposal outlined in these pages has been designed within a specific framework – that of Italian primary education – and will require adaptation if it is to be transferred to other school levels or education systems. Third, the use of digital technologies, even when conceived from an inclusive perspective, raises practical questions concerning the availability of devices, teacher training, the management of classroom time and the risk of new forms of inequality linked to the digital divide.

These limitations also open up avenues for further research. Future studies should assess the impact of MiRacconto and inclusive Digital Storytelling pathways on variables such as self-esteem, self-efficacy, participation and belonging, while also exploring the transferability of the model to other school levels, educational services and national contexts. A further line of inquiry concerns initial and in-service teacher education, in order to strengthen design competences sensitive to learner variability and capable of integrating narrative, guidance-related and digital dimensions.

In conclusion, the experience presented here invites us to consider Inclusive Digital Storytelling not as a mere technological “add-on” to existing teaching practices, but as a transformative device in which self-recognition, the right to speak, life design and educational justice are interwoven. In the case of Italian primary school, MiRacconto represents a first step in this direction: a micro narrative laboratory in which girls and boys can practise saying “who I am” and “who I would like to become” in an environment that recognises them as competent subjects, in relationship with others and supported by significant adults. The challenge for research and education policy is now to consolidate, extend and place in dialogue experiences such as this, so that the horizon of early guidance and inclusive education does not remain a statement of principle, but becomes everyday practice in schools in Italy and beyond.

Author's contributions

The contribution is the result of shared work. Rosa Sgambelluri scientifically coordinated the study and is the author of Sections 1 and 3; Marianna Capo is the author of Section 2; Francesca Placanica is the author of Section 4. Rosa Sgambelluri and Francesca Placanica also contributed to the drafting of the conclusions and to the final revision of the manuscript.

References

- Blustein, David L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Lawrence Erlbaum Associates.
- Bruner, Jerome. (1990). *Acts of meaning: Four lectures on mind and culture*. Harvard University Press.
- Bruner, Jerome. (1993). *La mente a più dimensioni*. Laterza.
- Canevaro, Andrea, Cibin, Cristina Maria, Bottà, Marino, & Calderoni, Sauro. (2022). *Dalla scuola al lavoro. Verso una realtà inclusiva*. Carocci.
- Capo, Marianna. (2021). *Il racconto di sé tra auto-riconoscimento e promozione*. Pensa Multimedia.
- CAST. (2018). *Universal Design for Learning guidelines version 2.2*. CAST.
- CAST. (2024). *Universal Design for Learning guidelines*. CAST.
- Cavenago, Dario, & Martini, Mattia. (2012). La prospettiva dell'occupabilità: Un nuovo paradigma per affrontare i cambiamenti del mercato del lavoro. In Mezzanzanica, Mario. (Ed.), *Il mercato del lavoro negli anni della crisi. Dinamiche, occupabilità e servizi* (pp. 129-170). Aracne.
- Cottini, Lucio. (2016). *L'autodeterminazione nelle persone con disabilità: Percorsi educativi per svilupparla*. Carocci Faber.
- Csikszentmihalyi, Mihaly. (1990). *Flow: The psychology of optimal experience*. Harper & Row.
- Cunti, Antonia, & Priore, Alessandra. (2008). *Aiutami a scegliere. Percorsi di orientamento per progettare e progettarsi*. Liguori.
- D'Alonzo, Luigi. (2018). *Pedagogia speciale per l'inclusione*. Laterza.
- Demetrio, Duccio. (1996). *Raccontarsi: L'autobiografia come cura di sé*. Raffaello Cortina.
- Demetrio, Duccio. (2003). *Tornare a casa. Itinerari pedagogici nell'interiorità*. Raffaello Cortina.
- De Rossi, Marina, & Petrucco, Corrado. (2013). *Narrativa digitale. Raccontare storie, costruire identità*. Carocci.
- Fugate, Mel, Kinicki, Angelo J., & Ashforth, Blake E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14-38.
- Gaspari, Patrizia. (2024). Narrazione e formazione: Una dialettica circolare per la qualità dell'inclusione. In D'Alonzo, Luigi, & Giaconi, Catia (Eds.), *Manuale per l'inclusione* (pp. 325-346). FrancoAngeli.
- Goldsmith, Marshall. (2007). *What got you here won't get you there: How successful people become even more successful*. Hyperion.
- Goleman, Daniel. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.

- Grimaldi, Anna, Bosca, Maria Antonietta, Porcelli, Rita, & Rossi, Alessia. (2015). AVO: Lo strumento Isfol per l'occupabilità dei giovani. Dalle premesse culturali ai criteri generativi. *Osservatorio Isfol*, 5(1/2), 63-86.
- Grimaldi, Anna, Porcelli, Rita, & Rossi, Alessia. (2014). Orientamento: Dimensioni e strumenti per l'occupabilità. La proposta dell'Isfol al servizio dei giovani. *Osservatorio Isfol*, 4(1/2), 45-63.
- Guichard, Jean. (2005). Life-long self-construction. *International Journal for Educational and Vocational Guidance*, 5(2), 111-124.
- Heath, Chip, & Heath, Dan. (2007). *Made to stick: Why some ideas survive and others die*. Random House.
- Hillage, Jim, & Pollard, Emma. (1998). *Employability: Developing a framework for policy analysis* (DfEE Research Brief No. 85). Department for Education and Employment / Institute for Employment Studies.
- Howland, Jane L., Jonassen, David H., & Marra, Rose M. (2013). *Meaningful learning with technology* (4th ed.). Pearson.
- Kolb, David A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- McAdams, Dan P. (2001). The psychology of life stories. *Review of General Psychology*, 5(2), 100-122.
- McQuaid, Ronald W., & Lindsay, Colin D. (2005). *The concept of employability*. *Urban Studies*, 42(2), 197-219.
- McQuaid, Ronald W., & Lindsay, Colin D. (2013). The concept of employability. In *Employability and local labour markets* (pp. 6-28). Routledge.
- Ministero dell'Istruzione e del Merito. (2022). *Decreto Ministeriale 22 dicembre 2022, n. 328: Linee guida per l'orientamento*. Ministero dell'Istruzione e del Merito.
- Peterson, Christopher, & Seligman, Martin E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford University Press.
- Petrucchio, Corrado, & De Rossi, Marina. (2009). *Narrare con il digital storytelling a scuola e nelle organizzazioni*. Carocci.
- Pink, Daniel H. (2011). *Drive: The surprising truth about what motivates us*. Penguin.
- Savickas, Mark L. (2013). Career construction theory and practice. In Brown, Steven D., & Lent, Robert W. (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147-183). Wiley.
- Savickas, Mark L. (2014). *Career counseling: Guida teorica e metodologica per il XXI secolo*. Erickson.
- Sgambelluri, Rosa. (2020). L'Universal Design for Learning per una didattica a misura dello studente. *Education Sciences & Society*, 11(1), 141-156.
- Sgambelluri, Rosa, & Placanica, Francesca. (2025). Universal Design for Learning and self-determination. A systematic review on educational practices for students with disabilities. *Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva*, 9, 1-21.

- Smorti, Andrea. (1997). *Il pensiero narrativo: Struttura, sviluppo e patologia*. Giunti.
- Wiele, Philippe Vande, & Ribière, Vincent. (2014). Using knowledge visualisation techniques to support the development of curriculum for employability: Exploring the capability tree representation. *International Journal of Knowledge and Learning*, 9(1-2), 43-62.

Biography

Rosa Sgambelluri is Associate Professor of Didactics and Special Pedagogy at the University of Salerno. Her research focuses on inclusive methodologies, with particular attention to Universal Design for Learning (UDL), Life Designing, and the construction of accessible learning environments. She has held important institutional roles at the Università Mediterranea di Reggio Calabria and has served as peer reviewer in the Italian Research Quality Evaluation (VQR). She is the author of numerous publications on inclusion, special pedagogy, and innovative teaching practices, and she is a member of scientific committees and pedagogical associations. Her work examines the relationship between inclusive design, learner variability, and educational participation, with a particular interest in the pedagogical implications of UDL in school and university contexts. In recognition of her scientific contribution, she received the Italian Pedagogy Prize in 2022 and the REN Award in 2024 and 2025.

Francesca Placanica is a PhD candidate in Education (XXXIX cycle) at the University of Macerata, with research activities based at the Università Mediterranea di Reggio Calabria. She is Adjunct Professor of Educational Technologies in the Primary Teacher Education programme at the Università Mediterranea di Reggio Calabria. Her research focuses on inclusive education, with particular attention to Life Designing, Universal Design for Learning (UDL), autobiographical and narrative methodologies, and digital storytelling as a tool to promote self-determination, agency, and early guidance in school contexts. She has presented her work at major national and international conferences, including ATEE, SIPeS, SIPED, ICERI, REN, and SIREM. Her publications include journal articles, book chapters, and conference proceedings on UDL, disability studies, narrative practices, and the educational uses of artificial intelligence and virtual reality. In 2025, she received the REN Award and the Editors' Choice Selection from Computers (MDPI).

Marianna Capo is Senior Researcher in General and Social Pedagogy at the Università Mediterranea di Reggio Calabria. Her research focuses on reflective and transformative learning through autobiographical and narrative methodologies, with particular attention to adult education, guidance, and transitions. She collaborates with INDIRE as an Erasmus+ EDA Ambassador and with the Libera Università dell'Autobiografia. She holds the National Scientific Qualification in Sector 11/D1 – Pedagogy and History of Pedagogy and earned two PhDs from the University of Naples Federico II and the University of Geneva. She currently teaches Social Pedagogy, General Pedagogy, and Guidance. At the international level, she has collaborated on Erasmus+ projects aimed at preventing adolescent addiction through educational initiatives in different European contexts. She is the author of numerous articles and scholarly contributions in pedagogy and is actively involved in scientific associations such as SIPED, SIPEGES, and ESREA. In 2023, she received the SIPED Prize.