

## Implementation stages to the formation of a digital profile for participants in the educational process

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**Abstract.** *In the context of education digitalization, the concept of a digital profile is becoming increasingly vital as a component of digital literacy, personal development, and academic integrity. This article proposes a comprehensive methodological approach to the formation of digital profiles for students and educators. The digital profile is defined as a structured set of data reflecting an individual's identity, activities, achievements, and interactions in digital environments. The paper outlines a four-stage model that includes initial digital hygiene, conscious identity building, academic integration, and long-term professional development. This methodological framework aims to promote the use of digital tools for personalized learning, strategic career planning, and responsible participation in the information society. It highlights the importance of forming digital culture and ethics from an early age and underlines the digital profile as a long-term reputational asset. The proposed approach supports sustainable digital development and provides a foundation for future educational and policy initiatives in digital literacy.*

**Keywords:** *digital profile, digital identity, digital literacy, digital culture, education, personalized learning, digital reputation, learning analytics, academic integrity, sustainable development.*

In the context of education digitalization, the digital profile emerges as a key element of digital literacy and personal development for students and educators. Research shows that digital identity is not merely a tool for accessing learning systems, but a component of social capital enabling educational, networking, and professional opportunities.

Scholars such as Zavolodko and Biletska emphasize the importance of ethical, legal, and environmental considerations in shaping one's digital presence, with digital responsibility forming part of academic integrity from an early age [1-10].

The functional role of the digital profile in higher education is reflected in its application to learning analytics, educational platforms, and digital assessment. Beyond data tracking, it serves as a comprehensive representation of a learner or educator, requiring methodological guidance.

There is a clear need for a systematic approach to digital profile development, accounting for age, personalization, and sustainable digital practices. This approach

helps mitigate disorientation in digital environments and fosters meaningful integration of digital tools into educational and professional growth.

In the context of the digitalization of education and society as a whole, the formation of a digital profile as a structured digital identity for each participant in the educational process (pupil, student, teacher, researcher) is a key factor not only for information security, but also for professional growth, social representation, and effective communication.

A digital profile is a structured set of data that reflects an individual's characteristics, activities, achievements, preferences, and interactions in the digital environment. It is formed in the process of learning, professional activity, communication, and self-presentation on the Internet and on educational or professional platforms.

A digital profile identifies individuals in educational platforms (LMS, e-portfolios, cloud tools), capturing personal data, educational progress, and community activity. It enables access to resources, certification, and learning management, while also shaping the user's digital reputation through recorded achievements and feedback.

This profile supports personalized and adaptive learning, allowing platforms to tailor content based on individual needs. The accumulated data fuels learning analytics, helping to detect barriers and improve outcomes. Additionally, the profile reflects digital culture and academic integrity, requiring ethical behavior, data protection, and respect for intellectual property—key aspects of digital literacy and responsible citizenship.

Thus, a digital profile in modern education is not just a digital business card, but a strategic element of the educational landscape that contributes to personal development, quality education, and the implementation of sustainable digital development principles.

For the effective implementation of approaches to its formation, it is necessary to adhere to a number of methodological principles that ensure pedagogical relevance, ethical sustainability, and practical effectiveness. The key principles underlying a holistic methodological approach are outlined below.

**Graduality.** The formation of a digital profile should be gradual – from basic information hygiene skills to a high level of autonomous digital self-management. Depending on the level of education, not only the complexity of tasks changes, but also the degree of awareness of the actions of the learner in the digital space.

**Reflectiveness.** It is important not only to act in the digital environment, but also to critically reflect on one's own digital activity. Reflection allows you to develop self-awareness, the ability to see the consequences of your actions in the digital environment, predict reputational risks, and make informed decisions.

**Continuity.** A digital profile should be developed and maintained throughout the entire educational trajectory. Its development is a dynamic process that accompanies pupils, students, or teachers at all stages of their professional development, adapting to changes in digital environments and technologies.

**Legal and ethical compliance.** Any activity in the digital environment must comply with applicable laws on personal data protection, copyright, and confidentiality. Ethical principles of online interaction (netiquette, responsibility for content, reputation awareness) should be integrated into the educational process at all levels.

**Integrity.** A digital profile should be consistent with the real achievements of the learner and relevant to their academic and professional identity. This helps create a coherent image of the individual in the digital space and reduces the gap between the virtual and real “I.”

**Subjectivity.** Learners should see themselves not only as objects of digital influence, but as active participants in shaping their own digital presence. This means developing digital self-management skills, strategic online reputation management, and taking responsibility for their digital footprint.

The formation of a digital profile as a component of educational activity is a multi-stage process that accompanies the individual throughout their educational path – from the first steps of digital socialization to the strategic management of their reputation in the scientific and professional environment. The proposed methodological structure consists of four stages and is based on a combination of pedagogical expediency, digital literacy, and the principles of sustainable development of digital culture.

**I. Stage Primary digital socialization (primary and basic education).** This stage is aimed at familiarizing learners with the basics of how the digital space works. Training is provided on creating accounts, using basic communication tools, and introducing the concept of digital hygiene. Particular attention is paid to forming ideas about the boundaries between private and public, safe digital communication, and responsibility for actions in the online environment. This is the foundation for the further conscious development of one's own digital behavior.

**II. Stage Conscious digital identity (high school, youth).** At this stage, the digital profile begins to play an active role in learning and extracurricular activities: students use it within educational platforms, competitions, and project initiatives. They develop self-reflection skills regarding their digital footprint, critical thinking about publications, and privacy settings. They develop the ability to manage the public part of their digital image, which is important for their future educational and professional positioning.

**III. Stage Integration into the academic and professional environment (higher education students).** The digital profile becomes an integral part of academic presence. This involves creating accounts in scientometric systems (ORCID, Scopus, Google Scholar), forming an e-portfolio, and actively participating in digital projects, hackathons, and case competitions. Students learn to align their digital representation with their actual achievements, building a solid academic reputation backed by evidence such as publications, certificates, and teamwork results. This stage lays the foundation for a professional digital image.

IV. Stage Strategic management of digital identity (teachers, researchers). At this level, the digital profile becomes a tool for long-term career development, scientific networking, and institutional growth. It is not only about representation, but also about digital analytics, individual branding, and participation in professional digital communities. The concept of kairos management is introduced – the ability to recognize, seize, and effectively implement successful opportunities in the digital environment in a timely manner. This approach allows actions in the digital space to be integrated with personal goals and audience needs, ensuring adaptability to challenges and strategic consistency in digital development.

This approach fosters the development of individuals capable of critically navigating the information space, distinguishing between virtual and real life, and managing their digital identity. A digital profile becomes not only a technical tool but also a means of self-awareness, representation, and strategic growth. It enables students and educators to access relevant digital resources, build effective relationships, and promote digital culture and ethics.

The proposed methodology addresses the need for a holistic digital identity that integrates openness, responsibility, and professionalism. Developed through phased, ethical, and legally sound processes, the digital profile supports personalized learning and self-management.

In the face of war, hybrid threats, and global change, further research is vital. Key directions include: maintaining profile integrity across platforms, fostering digital ethics, understanding the role of digital reputation, and applying kairos management to digital identity. These efforts can strengthen both educational practices and national digital literacy policies.

### Список використаних джерел

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