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RESEARCH ON THE DEVELOPMENT OF SCIENCE AND THE IMPLEMENTATION OF TECHNOLOGY

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ESSENTIAL MANAGEMENT COMPETENCIES FOR DEVELOPING EFFECTIVE EDUCATIONAL NETWORKS AND ENVIRONMENTS

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The cultivation of effective educational networks and environments in European and Eastern contexts demands a nuanced set of management competencies, particularly when training education managers and fostering creative specialties such as music education. To address the distinctive needs of diverse learners, education managers must integrate cross- and socio-cultural considerations into their leadership approaches, recognizing the pivotal role of identity construction and cultural context in music education [1]. This sensitivity not only enhances inclusivity but also supports the creation of learning spaces where students from varying backgrounds can thrive. Furthermore, the integration of innovative methodologies and the development of dynamic learning environments are essential for equipping individuals with the creative problem-solving skills and adaptive capacity necessary for the evolving demands of the educational landscape [2].

The development of effective educational networks and environments requires a comprehensive set of management competencies that integrate individual managerial capacities with the systemic characteristics of the educational ecosystem. The interrelation between the competencies of the manager and the formative environment in which these competencies are applied constitutes a dynamic feedback loop: the environment provides resources, norms, and opportunities for professional action, while the manager's decisions and behaviors actively shape the quality, inclusiveness, and sustainability of that very environment. Thus, effective management in education cannot be reduced to a set of isolated skills, but rather must be conceptualized as a multi-dimensional competence model that evolves in synergy with institutional and societal conditions.

At the core of such a competence model lies the ability to design and sustain collaborative networks among stakeholders, including educators, students, policymakers, and community partners. This necessitates competencies in strategic thinking, systems analysis, and evidence-based decision-making, enabling managers to align local educational processes with broader national and international frameworks, such as the Sustainable Development Goals (SDGs). Additionally, interpersonal and communication competencies play a pivotal role: the ability to negotiate interests, resolve conflicts, and foster a culture of trust is critical for the long-term resilience of educational networks.

A comprehensive list of essential management competencies for effective governance in education typically includes:

1. **Strategic and analytical competence** – the ability to diagnose systemic problems, set long-term objectives, and formulate coherent development strategies.

2. **Organizational competence** – skills in planning, structuring, and monitoring educational processes to ensure alignment with institutional missions.

3. **Leadership and motivational competence** – capacity to inspire staff, stimulate innovation, and promote collective ownership of goals.

4. **Communicative and intercultural competence** – proficiency in transparent communication and inclusive interaction across diverse educational and cultural settings.

5. **Digital and informational competence** – ability to manage data flows, integrate digital tools, and use educational analytics to improve outcomes.

6. **Ethical and civic competence** – adherence to principles of integrity, equity, and accountability in decision-making [1], [3], [4].

Crucially, research confirms that these competencies are not innate but can be systematically developed. Educational institutions, through their curricula and organizational culture, create structured environments for managerial competence formation. Professional preparation programs in educational management offer coursework in administration, leadership theory, and educational policy analysis, while also embedding students in real-world practice settings such as internships, project work, and collaborative research initiatives. This combination of theoretical and experiential learning allows both aspiring and practicing managers to internalize values, master tools, and refine behaviors that are directly relevant to the contexts in which they will operate.

Finally, the environment in which the manager works continues to serve as a developmental resource throughout their career. Professional learning communities, mentorship programs, and digital knowledge-sharing platforms extend the capacity for lifelong learning and adaptation. The ongoing alignment of individual competencies with the evolving demands of the educational ecosystem ensures that networks and environments remain not only functional but innovative, equitable, and capable of responding to global challenges.

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