Transnational Network of Integrated Planning Labs: co-creating knowledge on forward-looking transdisciplinary planning perspectives addressing climate change and urban life in the post-pandemic city.

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Annotating key concepts of integrated spatial planning

Green digital skills

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Mainstream/Conventional Definition

Green skills are the combination of knowledge, abilities, values and attitudes required in order to live in, develop and support a sustainable and resource efficient society. Digital skills refer to the ability to effectively use digital technologies, including basic information and communication technologies, data literacy and advanced competencies such as programming, AI and spatial data analysis. In the context of integrated spatial planning, both green and digital skills are vital in order to address climate challenges and to enable inclusive, evidence-based decision-making.

Contested Meanings / Debates in the Literature

EU policy initiatives have put great focus on the promotion of green and digital skills, including the European Green Deal and the Digital Decade. In these contexts, these skills are framed as essential to the proposed green and digital transitions. However, critics have highlighted that the terms are often used in overly technocratic manners, at the risk of sidelining their social and political dimensions. For example, "green skills" often refer to the narrow confines of competencies required for green jobs, leaving out broader civic and relational capacities such as environmental stewardship, intergenerational justice and participatory governance. In a similar manner, "digital skills" often focus on the upskilling of individuals rather than existing structural digital divides, data ethics or algorithmic governance which particularly impacts marginalized groups.

In a global context, these terms can carry different implications. In the global South, green and digital transitions often intersect with colonial legacy, extractivism and infrastructural inequalities. Critical scholars have argued for decolonizing both concepts, grounding them in local knowledge systems and innovation driven by the community instead of top-down technological transfers. There has also been a debate around the depoliticization of green and digital discourses, which carries the risk of reducing structural issues of inequality, labour and power down to individual skill differences.

Applications in Practice

EU-Funded Education & Training Programs

Green and digital skills are core to initiatives like Erasmus+ InPlaLabs, which support cross-disciplinary training in sustainable and data-informed spatial planning.

Urban Climate Strategies & Professional Development

Cities use these skillsets to train staff in green infrastructure, energy-efficient design, and nature-based solutions aligned with climate goals.

Participatory GIS & Open Planning Tools

Tools like participatory GIS and digital twins enable broader access to spatial data, fostering transparency and co-creation in planning processes.

Municipal Upskilling & Digital Inclusion Programs

Local governments run training and literacy programs to ensure diverse communities can

engage in digital planning platforms and civic tech.

Selected References & Key Readings

European Commission (2023). Green Skills for Sustainable and Just Transitions. climate-pact.europa.eu

➔ Overview of EU policy framing on green skills and training needs.

European Commission (2023). Digital Skills and Jobs Platform. digital-strategy.ec.europa.eu

➔ Strategic goals for digital skills development in Europe.

Kontokosta, C. E. (2021). "Urban Informatics in the Science and Practice of Planning." Journal of the American Planning Association.

➔ Articulates digital competencies required for modern urban planning and civic analytics.

Batty, M. (2021). "Planning education in the digital age." *Environment and Planning B: Urban Analytics and City Science*.

➔ Discusses the evolving skillsets—digital, quantitative, computational—that planners need today.

Urban Informatics editorial (2022). "The digital transformation of cities." *Urban Informatics*.

➔ Frames the intersection of digital skills and green planning within fields like AI, data analytics, and sustainability.

Selwyn, N. (2016). Is Technology Good for Education? Polity Press.

➔ Critique of digital skills narratives in educational and policy contexts.

Associated/Related Concepts (if any)

- **Just Transition** – Linking green skills to equity and labor justice.
- **Digital Divide** – Highlights unequal access to digital tools and literacy.
- **Climate Literacy** – Broader civic knowledge required for sustainable urban planning.
- **Participatory Digital Tools** – Technologies (e.g. GIS, open data) used in inclusive planning.